

March 21, 2025 (**REVISED JULY 23, 2025**)

Justin Starr
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 12th Floor
625 Broadway
Albany, New York 12233-7012

Attention: Justin Starr

Subject: **Pre-Design Investigation Report**
Irvington Rugs and Cleaners Site (Site 360175)
Work Assignment # D009809-28
Earth Environment Engineering and Geology, P.C., Project # US-EI
3616216144

Dear Mr. Starr,

Earth Environment Engineering and Geology, P.C. (EEE&G; Formerly MACTEC Engineering and Geology, PC [MACTEC]) is submitting this Pre-Design Investigation Report for the Irvington Rugs and Cleaners Site (Site) (WA Issuance D009809-28).

To help refine FS alternatives and evaluate potential remedial options (i.e., in-situ chemical oxidation and in situ bioremediation), EEE&G conducted the PDI to evaluate:

- the soil oxidant demand at the site in both the source area and background areas,
- current soil and groundwater concentrations below the basement slab at 49 Main Street,
- the ability to inject amendment into the water table below the slab of 49 Main Street, and
- the hydraulic conductivity of the overburden.

Work was conducted per the Field Activities Plan (EEEG, 2024) as described below. Locations are shown on Figure 1. Field data records for boring logs, hydraulic testing, and injection testing are included in Attachment 1. Daily Field Activity Reports are included in Attachment 2.

49 Main Street Basement Sampling.

To evaluate the contaminants of concern, and the ability to inject amendment into the identified contaminant source area, one test point (DP-18) was conducted in the basement of 49 Main Street, in the vicinity of previous sample GW-02-16 (shown on Figure 1). This location was approximately 18 feet east of the brick sump (labeled as “Dry Sump” on Figure 1) and 2 feet west of the step down from the upper height level of the basement.

Well Installation and Sampling:

- 1) Cored an approximate 6-inch hole through the concrete slab at location DP-18.
- 2) Collected one groundwater sample using tubing and a peristaltic pump from just below the slab for analysis of Volatile Organic Compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260, as well as a sample for inclusion with the Soil Oxidant Demand (SOD) test listed below.
- 3) Collected one soil sample from soil just below the basement slab (estimated at four-inches thick) for analysis of:
 - i. SOD testing in source area (shipped to Evonik for “Klozur® Soil Oxidant Demand Test);
 - ii. VOCs by USEPA Method 8260; and,
 - iii. Gasoline Range Organics and Diesel Range Organics (GRO/DRO) by USEPA Method 8015.
- 4) Completed one soil boring (DP-18) through the cored hole to ten feet below the top of slab (refusal on assumed bedrock). Collected the following additional soil samples:
 - i. Sample from approximately 1-4 feet deep: Submitted for grainsize analysis
 - ii. Sample from 4-feet deep - VOCs, DRO, and GRO as per methods above; and
 - iii. Samples from 7 and 9-feet deep – VOCs.
- 5) Collected a groundwater sample from the bottom of the boring for analysis of VOCs. The sample was collected by lowering tubing to the bottom of the direct push rods and using a peristaltic pump (water recharging around bottom of rods).

- 6) The bottom 7 feet of the borehole was filled with soil cuttings, then a water injection/sampling point was installed into the top of the boring to a depth of three feet below top of slab. The three-foot-long point consisted of a one-inch inside diameter PVC pipe with a two-foot screen and one foot riser. Number #0 sand was placed around the well screen to just above the well screen, and bentonite chips and then a hydraulic cement was used to seal the riser within the concrete floor. The well was finished with a six-inch flush mount casing to prevent tripping hazards.

Injection Testing:

Conducted an injection test by gravity feeding potable water into the injection point DP-18. The test was conducted by:

- 1) Mixing 450 gallons in two 275-gallon totes of potable water with approximately one ounce of Bright Dyes® yellow-green fluorescent dye. The totes were located in the back of a box-car truck outside the building.
- 2) Connecting a hose equipped with a flow meter and shut-off valve from the tank to the injection point.
- 3) Gravity feeding the water into DP-18, measuring flow rate and pressure.
- 4) Monitoring during the injection at the following locations:
 - i. The floor for potential leaks of water from hose or upwelling from beneath the slab.
 - ii. The brick sump in the basement for signs of increased water flow and dyed water* ("Dry Sump" on Figure 1) (water in this sump gravity flows to the sewer through a P-trap).
 - iii. The active sump in the basement (DW-02) for signs of dye*.
 - iv. The active sump in the basement of 53 Main Street (Irvington Rugs and Cleaners) (DW-01) for signs of dye*.
 - v. Water levels in DP-05, located in the yard outside the basement.
- (* = Water in sumps was viewed for visible signs of dye, as well as occasionally with a fluorometer).
- 5) Upon completion of test, basement sumps/covers were resealed with joint sealant.

49 and 53 Main Street Exterior Hydraulic Conductivity Testing.

Hydraulic conductivity testing was conducted in the two microwells in the backyard of 49 Main Street, DP-04 and DP-05 (Figure 1). Testing was conducted using a pressure transducer (recording

at one second intervals) to monitor the well while pumping at multiple rates to evaluate both steady state draw down levels, as well as rebound rates post pumping (i.e., rising head test).

53 Main Street SOD Soil Sampling.

To evaluate background SOD, one soil boring (DP-02A) was completed in the vicinity of DP-02 using direct push technology. Soil cores were observed, and one soil sample was collected from approximately six to eight feet below ground surface for total oxidant demand testing by Evonik. In addition, one liter of water was purged from nearby DP-02 for inclusion in the background SOD test.

Contaminants of Concern Analytical Results.

Soil and groundwater samples (other than SOD testing) were analyzed by Eurofins. The results were reviewed by a chemist and a data usability summary report (DUSR) was completed. The data was found usable as presented in this report (The DUSR and complete results, including geotechnical results are included in Attachment 3).

VOC groundwater results from DP-18 are presented in Table 1. Results are similar to those collected previously, with PCE detected in water just below the slab at 2,590 micrograms per liter ($\mu\text{g/L}$) (2,880 $\mu\text{g/L}$ in the duplicate sample at this location). Concentrations of PCE were an order of magnitude lower (227 $\mu\text{g/L}$) in groundwater at 8-feet below the slab, just above apparent bedrock.

VOC soil results are presented in Table 2. Soil results were also similar to those detected previously, with concentrations of PCE detected slightly above the soil cleanup objectives (SCO) for residential use immediately below the slab (max concentration of 8.46 milligrams per kilogram [mg/kg]), and detected at low concentrations (below the SCOs for unrestricted use) at four feet and deeper.

The groundwater and soil VOC results are in line with the conceptual site model that postulates VOC contamination is primarily shallow and did not migrate deeper into the aquifer as a dense non-aqueous phase liquid.

DRO, likely from a historic fuel oil release, were also detected in soil immediately below the slab at a concentration of 366 mg/kg , with lower concentrations of 33.1 mg/kg detected at 4-feet below the slab. Although not a concern from a regulatory perspective, the presence of DRO will increase the

required quantity of an oxidant if it is chosen for a remedy, and these concentrations can be used for dosing calculations.

SOD Results.

One of the potential remedies being considered is injection of a chemical oxidant into the saturated overburden to oxidize the contaminants. Because introduced oxidants will not just target the contaminants of concern, but will also be consumed to oxidize naturally occurring organic species such as soil organics and reduced metals, it is necessary to determine the background SOD. Most oxidant is typically consumed by the natural SOD, and therefore it is necessary to evaluate the background SOD to properly calculate the oxidant needed to overcome the SOD and the contaminants of concern. In addition, if the SOD is high, in-situ chemical oxidation may not be an applicable remedy due to both the extra cost and the difficulty in overcoming the natural SOD.

Due to the contaminant type and the need to inject below a residential building, an alkaline activated persulfate was deemed an applicable oxidant for this site. Therefore, samples were analyzed by Evonik using their Klozur® activated persulfate, which is an alkaline activated persulfate. The SOD test is referred to as Klozur® Demand Test, or KDT. Testing was also conducted for base buffering capacity (BBC) to evaluate the amount of sodium hydroxide (NaOH) necessary to increase the soil pH to 10.5, which is necessary for the Klozur® activation.

Samples were analyzed from a background location (DP-02A) and a source area location (DP-18). The background KDT test indicated a demand of 0.61 grams sodium persulfate per kilogram of dry soil after 48 hours and 1.29 grams of sodium persulfate per kilogram of dry soil after 168 hours (7 days) and a BBC of 0.93 grams 25 percent NaOH per kilogram of dry soil. As would be expected the KTD for the source area sample was higher (primarily due to the presence of the DRO). The complete Evonik results are included in Attachment 4.

These results are in the low oxidant demand range, indicating that the use of persulfate would be viable at the Site.

Hydraulic Conductivity Results

Pressure transducer data from DP-02 and DP-05 were uploaded into Aqtesolv, an advanced aquifer test analysis software, for calculation of hydraulic conductivity (K). The rising head tests from the groundwater rebound post pumping were evaluated using Bouwer and Rice and Hvorslev solutions to obtain K values. In addition, the pumping data from DP-02 was evaluated in Aqtesolv using the Cooper-Jacobs and Theis solutions to estimate a transmissivity for the aquifer. The abbreviated pumping test was also analyzed as a two-step drawdown test to evaluate transmissivity using Driscoll equations (Driscoll, 1986). Aqtesolv outputs and hydraulic gradient calculations are included in Attachment 5.

K estimates from Aqtesolv and resulting flow velocities are presented in Table 3 and estimated transmissivity, as well as additional flow velocities are presented in Table 4. Hydraulic conductivity values for DP-02 ranged from 1.2 to 2.8 feet per day, resulting in a flow velocity of approximately 170 to 310 feet per year assuming an effective porosity of 0.2 and a hydraulic gradient of 0.623 feet per foot. Values were lower for DP-05, screened slightly lower than DP-02, with K values ranging from 0.3 to 0.4 feet/day and resulting flow velocities of 40 to 50 feet per year, using the same effective porosity and hydraulic gradient assumptions above. Hydraulic gradient calculations are included in Attachment 5. Transmissivity values for DP-02 ranged from 16.34 to 45 ft squared per day, depending on calculation method used.

Although the saturated overburden consists of primarily sand and gravel (sieve analysis from DP-18 included in Attachment 3 indicated 32.7% gravel and 67.3 % mixed sand), the hydraulic data collected indicates there is some heterogeneity in the formation resulting in variability in hydraulic conductivity across the Site.

Injection Testing

Water was initially injected by gravity feed into DP-18 with flow valves fully open from a water tote located in a box truck on North Dutcher Street. Water flow was approximately 4-gallons per minute (gpm). After approximately 100 gallons had been injected, slight water seepage was observed around cracks in the floor at 49 Main Street and the flow valves were closed. Injections were restarted with valves slightly closed for a flow rate of 2 gpm. The gravity flow rate slowly decreased, possibly from air bubbles in the flow lines and injections were continued at 2 gpm with a pump and a maximum

pressure of 6 pounds per square inch. No additional water breakout was observed in the basement floor. A total of 423 gallons of water were successfully injected into DP-18.

Other observations during injections:

- No observable change in flow (slight trickle before and during injections) into the brick sump, located approximately 18 feet west of DP-18; however, the fluorometer appeared to indicate a slight detection of dye (1.2 parts per billion [ppb]) after 300 gallons had been injected. This is in comparison to 15.1 ppb for the dyed injection water and -0.3 ppb for undyed water. Dye was slightly visible after 365 gallons had been injected (fluorometer reading of 1.9 ppb).
- The active sump DW-02, located approximately 23 feet north (cross gradient) of DP-18, was observed to be pumping intermittently, at a rate comparable to 0.2 gallons per minute, or 7 gallons per hour. Dye was not detected with the fluorometer in DW-02 during the injection test.
- The sump DW-01, located approximately 35 feet east of DP-18 in the basement of 53 Main Street, was not observed to be pumping during the injection test. Dye was also not detected with the fluorometer in DW-01 during the injection test.
- Stormwater catch basins at corner of North Dutcher and Main Street were observed for evidence of increased flow or tracer dye; no evidence of water flow or dye were observed during the injection test; however, storm drains were approximately six feet deep and anticipated to be above the water table.

Conclusions

Key findings of the pre-design investigations include:

- Soil and groundwater Analytical results from below the basement slab of 49 Main Street are consistent with the conceptual site model that contamination is primarily in shallow overburden and it does not appear that it has migrated deeper down through the overburden to bedrock as a DNAPL (highest concentrations of PCE in soil and groundwater were detected just below the basement slab at 8.46 mg/kg and 2,880 µg/L (in duplicate sample), respectively).
- DRO was also present in shallow sub-slab soil at a maximum concentration of 366 mg/kg.
- The SOD test results for Klozur® by Evonic (KDT) indicated a background demand of 1.29 grams of sodium persulfate per kilogram of dry soil after 7 days and a BBC of 0.93 grams 25 percent NaOH per kilogram of dry soil. These results indicate that the background soil

demand for sodium persulfate is in a low range and that sodium persulfate could be a viable remedial alternative at the Site.

- Hydraulic testing indicated:
 - K values for DP-02 ranged from 1.2 to 2.8 feet per day, resulting in a flow velocity of approximately 170 to 310 feet per year.
 - K values for DP-05, closer to the source area, ranging from 0.3 to 0.4 feet/day and resulting flow velocities of 40 to 50 feet per year.
 - Transmissivity values for DP-02 ranged from 16.34 to 45 feet squared per day.
 - Although overburden is primarily sand and gravel, heterogeneity results in variable K values.
- Water can successfully be injected into the overburden below the basement slab at a flow rate of 2 gpm; 427 gallons was injected into DP-18. Due to observations of dye 18 feet away and assumed porosity of 0.2, this injection could have resulted in displacement of groundwater over an approximate area three feet deep, by five feet wide, by 18 feet long.

Please let us know if you have any questions or need any additional information.

Sincerely,

Earth Environment Engineering and Geology, P.C.



Jamie Welch
Project Engineer



Charles Staples, P.G.
Project Manager

Enclosures (13):

- Table 1 – Groundwater VOC Results
- Table 2 – Soil VOC Results
- Table 3 – Hydraulic Conductivity
- Table 4 – Hydraulic Transmissivity Calculations
- Figure 1 – Sampling Locations

Attachment 1A – FDR Field Boring-Well Log (DP-18)

Attachment 1B – FDR Field Boring Log (DP-02A)

Attachment 1C – FDR Injection Test FDR (DP-18)

Attachment 2 – Daily Inspection Reports

Attachment 3A – Data Usability Summary Report (DUSR) & Analytical Data

Attachment 3B – Geotechnical Data

Attachment 4 – EVONIK Report

Attachment 5 – Aqutesolv Solutions

References:

Driscoll, F.G., 1986, Groundwater and Wells, Second Edition, Published by Johnson Filtration Systems Inc.

Earth Environment Engineering and Geology, PC (EEEG), 2024. Remedial Investigation Field Activities Plan Addendum Four for the Irvington Rugs and Cleaners Site. August 16, 2024.

TABLES

Table 1: Groundwater VOC Results

Parameter	Location		DP-18		DP-18		DP-18	
	Field Sample Date		8/20/2024		8/20/2024		8/20/2024	
	Field Sample ID		360175-DP018001-GW		360175-DP018001D-GW		360175-DP018008	
	Depth (ft tos)		1		1		8	
Parameter	Qc Code		FS		FD		FS	
	GA	GV	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs (ug/L)								
2-Butanone	NS	50	2 U		2 UJ		1.88 J	
Acetone	NS	50	10 U		10 UJ		14.9	
cis-1,2-Dichloroethene	5	NS	22.9		11.6		5.78	
Ethanol	NS	NS	200 U		200 UJ		14 J	
Naphthalene	NS	10	2 U		2 UJ		0.874 J	
Tetrachloroethene	5	NS	2590		2880		227	
trans-1,2-Dichloroethene	5	NS	0.265 J		1 U		1 U	
Trichloroethene	5	NS	59.6		31		10.9	

Notes:

Results reported in micrograms per liter (µg/L)

VOCs = Volatile Organic Compounds

Samples analyzed by EPA Method SW8260B

Only detected compounds shown

Bold = Compound detected in sample

ft tos = feet below top of slab

QC Code: FS = Field Sample; FD = Field Duplicate

Qualifiers:

U = Not detected greater than the reporting limit

J = Estimated value

GA = Class GA Groundwater Standard

GV = Groundwater Guidance Value

NS = No Standard/Guidance

Highlighted results exceed GA Standard

Table 2: Soil VOC Results

	Location			DP-18		DP-18		DP-18		DP-18		DP-18	
	Sample Date			8/20/2024		8/20/2024		8/20/2024		8/20/2024		8/20/2024	
	Field Sample ID			360175-DP018001-Soil		360175-DP018001D-Soil		360175-DP018004		360175-DP018007		360175-DP018009	
	Sample Depth (ft btos)			1		1		4		7		9	
	QC Code			FS		FD		FS		FS		FS	
	PGW	RES	COM	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Volatile Organic Compounds (mg/Kg)													
1,3,5-Trichlorobenzene	8.4	47	190	0.0628 U		0.0573 U		0.044 U		0.0437 U		0.0105 J	
Bromomethane	NS	NS	NS	0.0588 J		0.115 U		0.0341 J		0.0362 J-		0.0352 J	
cis-1,2-Dichloroethene	0.25	59	500	0.98		0.784		0.044 U		0.0437 U		0.0419 U	
Hexachlorobutadiene	NS	NS	NS	0.0628 U		0.0573 U		0.044 U		0.0437 U		0.0327 J	
Naphthalene	12	100	500	0.126 UJ		0.115 U		0.088 UJ		0.0874 UJ		0.021 J	
Tetrachloroethene	1.3	5.5	150	8.46		5.87		0.166		0.0495 U		0.202	
Trichloroethene	0.47	10	200	1.54 J		0.457 J		0.00824 J		0.0437 U		0.0419 U	
Other (mg/Kg)													
Diesel Range Organics	NS	NS	NS	366		NA		33.1		NA		NA	
Gasoline Range Organics	NS	NS	NS	5 U		NA		5 U		NA		NA	
Percent Solids (Percent)	NS	NS	NS	78.3		77.4		90.8		91.5		90	

Notes:

mg/Kg = milligrams per kilogram

FS = field sample, FD = field duplicate

Part 375 Soil Cleanup Objectives (SCO):

PGW = New York State Protection of Ground Water Standards

RES = New York State Residential Use Standards

COM = New York State Commercial Use Standards

NS = No Standard

Bold result indicates detection

Colored result indicates exceedence of matching SCO.

Qualifier: U = not detected; J = estimated value

Table 3: Hydraulic Conductivity

Well ID	Test Name	Hydraulic Conductivity from Aqtesolv				K values		v (ft/year)
		Bouwer & Rice (cm/sec)	Hvorslev (cm/sec)	Bouwer & Rice (ft/day)	Hvorslev (ft/day)	Geometric mean (ft/day)	v = Ki/n _e (ft/day)	
DP-02	RHT #1	4.2E-04	6.1E-04	1.2	1.7	1.5	0.46	170
	RHT #2	4.4E-04	6.4E-04	1.3	1.8			
DP-05	RHT #1	1.2E-04	1.5E-04	0.3	0.4	0.4	0.12	40

Notes:

K=horizontal hydraulic conductivity L/T

FHT = Falling Head Test

K=Hydraulic Conductivity

RHT = Rising Head Test

Q=steady state flow rate (L³/T)

D=casing diameter

L=screen length

H=steady state drawdown

v=velocity

i=hydraulic gradient (assumed 0.62 - see next page)

n_e=effective porosity (assumed 0.2)

Table 4: Hydraulic Transmissivity Calculations

Well	Start Depth (ft bgs)	Stabilized Depth (ft bgs)	Drawdown (ft)	Pumping Rate (L/min)	Pumping Rate (gal/min)	Specific Capacity (gal/min/ft)	Transmissivity (gpd/ft)*	Hydraulic Conductivity (ft/day)	Hydraulic Conductivity (cm/sec)	Calculated Velocity (ft/day)	Calculated Velocity (ft/year)
DP-2	4.29	4.92	0.63	0.5	0.13	0.21	310	2.8	9.7E-04	0.86	310
	4.29	5.44	1.15	0.85	0.22	0.20	290	2.6	9.1E-04	0.80	290
DP-5	7.15	10.25	3.1	0.4	0.11	0.03	50	0.4	1.6E-04	0.14	50

Notes:

ft = feet

bgs = below ground surface

L = liters

min = minutes

gal = gallons

gpd = gallons per day

* Transmissivity (T) for unconfined aquifer assumes specific capacity times 1500 (Driscoll, 1986)

** Hydraulic conductivity (K) = T/aquifer thickness (assumed 15 ft)

Flow Rate = Ki/n ; i = gradient and n = porosity

i (gradient) = 0.062 ft/ft

n (porosity) = 0.2

Other Aqtesolv Transmissivity Calculations:

Transmissivity from Single well Pump Test at DP-02 using Cooper Jacob = 16.34 ft² per day

Transmissivity from Single well Pump Test at DP-02 using Theis = 45 ft² per day

Well	Transmissivity (ft ² /day)	Transmissivity (gpd/ft)*	Hydraulic Conductivity (ft/day)	Hydraulic Conductivity (cm/sec)	Calculated Velocity (ft/day)	Calculated Velocity (ft/year)
DP-2	16	122	1.1	3.8E-04	0.34	120
	45	337	3.0	1.1E-03	0.93	340

Note: Hydraulic conductivity and flow velocities here are calculated here from the Aqtesolv transmissivity as a check against the hydraulic conductivities in Tables 3 and 4.

FIGURES



Prepared/Date: MCB 11-27-24 Checked/Date: 11-27-24

Legend

Sampling Locations:

●

Soil Boring

⊕

Microwell

■

Sump

■

Dry Sump

●

Previous Soil

●

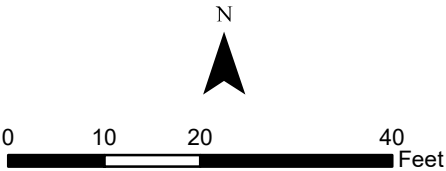
Previous Soil and Groundwater

Site Boundary

Parcel

NYSDEC Site # 360175
Irvington Rugs and Cleaners
Irvington, New York

Notes:
1. Imagery - Westchester County color digital orthoimagery (2016) obtained from New York State GIS Clearinghouse at: gis.ny.gov



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ENVIRONMENT**

Engineering and Geology P.C.

Sampling Locations

Project 3616216144

Figure 1

ATTACHMENT 1
FIELD DATA RECORDS

Attachment 1A - FDR Field Boring-Well Log (DP-18)

Attachment 1B - FDR Field Boring Log (DP-02A)

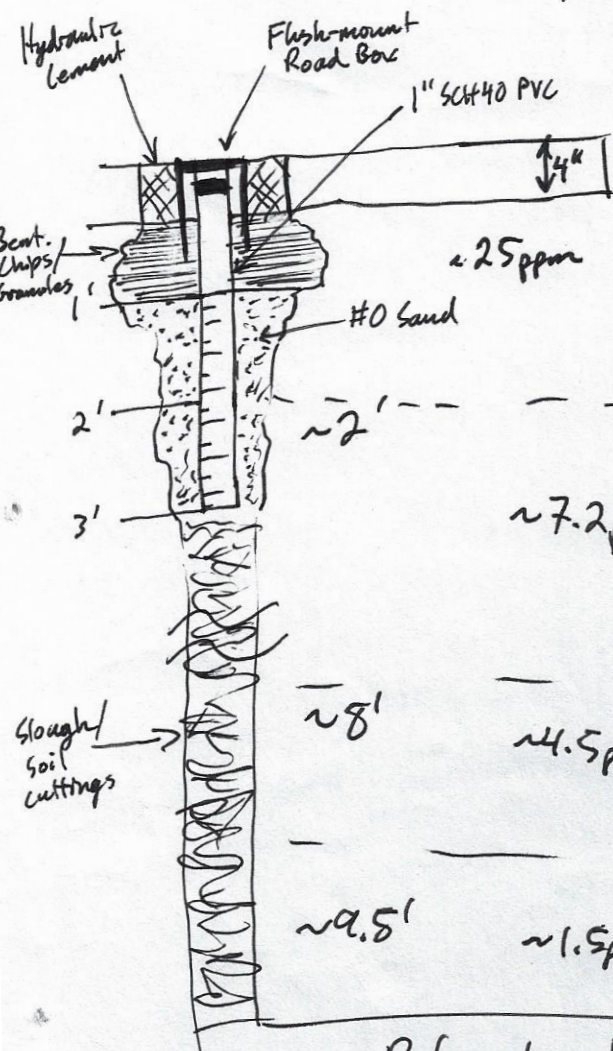
Attachment 1C - DR Injection Test FDR (DP-18)

Water at ~0.75' bgs

DP-018

8-20-2024

ATN



Concrete

Fill; angular fine sand to gravel with angular cobbles/bricks, wet, mod fuel oil odor
*Boulder pulled from boring after second core to widen, depth of 16" after

Silty sand; fine sand, brown, wet, slight odor

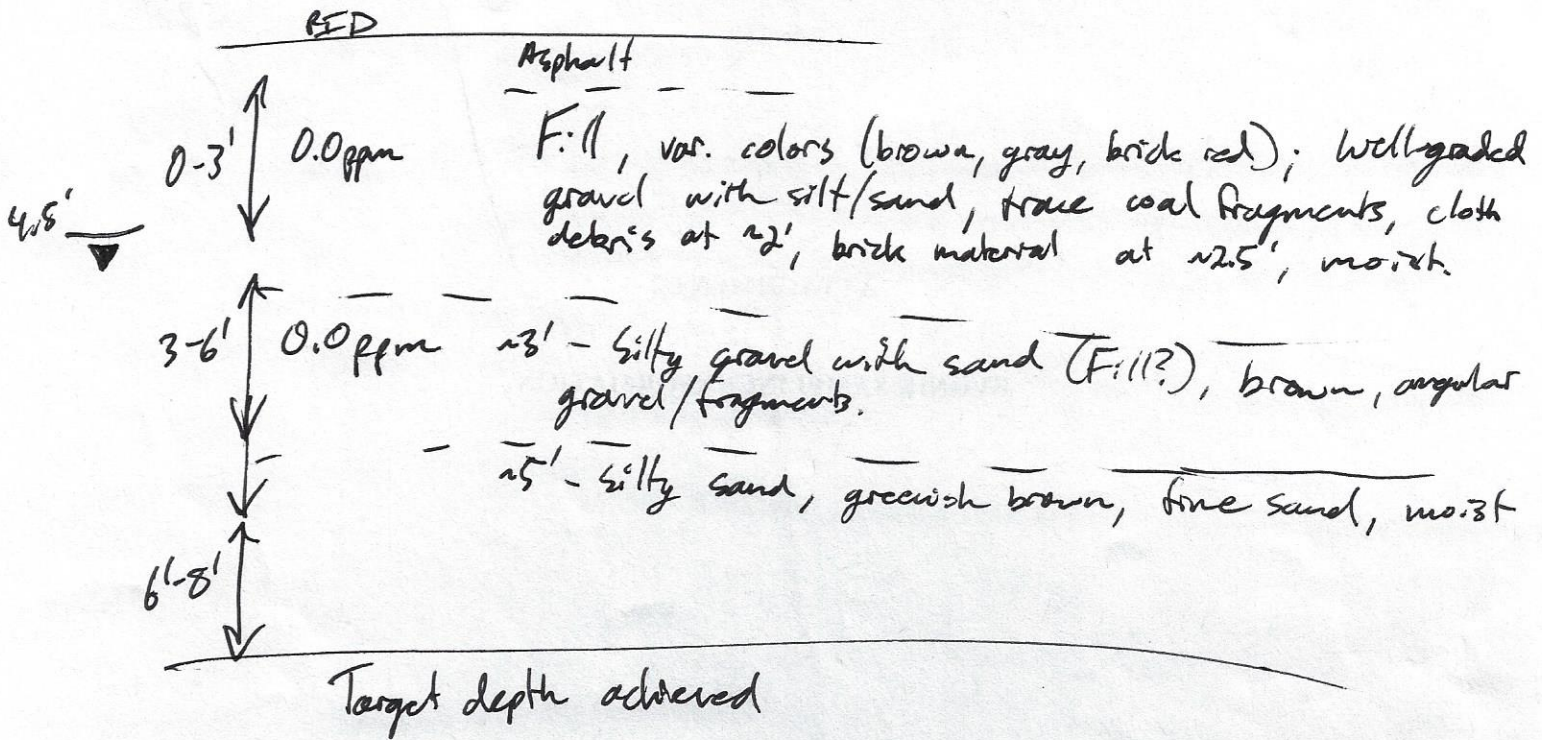
Silty sand with gravel (fine), brown, wet no odor

well-graded Gravel with silt and sand, brown, moist, no odor

Refusal at 10' bgs, bedrock suspected but not observed.

DP-02A

8-21-2024
AJN



~~Handwritten signature~~
A.N.
4.2

(at surface) Totalizer Start = 4935957 Injection Testing Field Data Record

Totalizer Reading (gal)	8-21-2024 Time	Injection Pressure (pounds per square inch)	Injection Flow Rate (gallons per minute)	Cumulative Flow (gallons)	Brick Sump Observations	DW-02 Observations	DW-01 Observations	Notes/Observations
4935957	1135	<1	4.5	—	Slight trickle (same as prior to start)	Normal cycling/no increase	No obs. cycling	
—	1150	<1	4.1	—	"	"	"	No obs. flow into storm drains
4936058	1200	<1	0.0	101	"	"	"	Slow leaks obs in cracks at 4936058
—	1220	<1	0.0	—	Restarted but no indicated flow, start trouble shooting.	"	"	
—	1300	<1	1.9	—	Force water through hose, no debris but lots of air - flowing freely after.	"	"	
4936101	1325	<1	1.9	144	Slight trickle/no change	cycling/no observed increase	No obs. cycling	No flow obs. at storm drains
4936129	1340	<1	1.8	172	"	F=0.135	"	F=-1.410
4936166	1400	<1	2.0	209	"	F=-0.629	"	F=-1.136
4936205	1420	<1	1.7	248	"	F=0.127	"	F=-1.127
4936237	1445-4440 AM	<1	0.8	280	"	F=0.273	"	F=-0.895
4936260	1520	<1	0.4	303	"	F=0.323	"	F=-
—	—	—	—	—	"	F=1.212	"	F=-0.328
—	—	—	—	—	Low flow rate noted, attempted to clear air from lines by pumping at ~2 gpm for several minutes and then back to gravity feed - no improvement in flow noted.	—	—	F=-0.764
4936266	1530	5.0	2.0	309	Start injection via active pump set at 2.0 gpm.	—	—	—
4936322	1600	5.5	2.0	365	dye slightly visible	F=1.864	cycling/no increase	F=-1.26
4936355	1615	6.0	2.1	398	"	F=2.433	"	F=-1.343
4936384	1630	0.0	0.0	Stop Injection	"	F=2.562	"	F=-1.533
TOTAL VOL INJECTED = 427 GALLONS						F=-1.501	"	F=-1.426

NOTES: F = flow reading (F=15.18 for inj water, F=-0.294 for distilled water)

• No observed pump cycles at DW-01; however, constant trickle into sump from boiler room condensation and constant noise made observation difficult.

• DW-02 sump pump cycling once every ~12.5 min (pumps for ~3 sec), drawing water from 8.5" level to 4.5" level.

WA D009809-28, Irvington Rugs and Cleaners- PDI Report

March 2025

NYSDEC – Site No. 360175


Earth Environment Engineering and Geology, P.C., Project No. US-EI-3616216144

ATTACHMENT 2

DAILY INSPECTION REPORTS

DAILY INSPECTION REPORT

Report No. 01 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/19/2024

NYSDEC Division of Environmental Remediation				Department of Environmental Conservation		Contract No. D009809-28 DEC PM – Justin Starr Consultant PM – Chuck Staples Consultant Site Inspector – Adam Norvelle		
Site Location: Village of Irvington, New York								
Weather Conditions								
General Description	Mostly Cloudy	AM	Partly Cloudy	PM				
Temperature	67°F	AM	82°F	PM				
Wind	WNW 6 MPH	AM	WNW 7 MPH	PM				
Health & Safety If any box below is checked “Yes”, provide explanation under “Health & Safety Comments”.								
Were there any changes to the Health & Safety Plan?						Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were there any exceedances of the perimeter air monitoring reported on this date?						Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Were there any nuisance issues reported/observed on this date?						Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Health & Safety Comments								
Reviewed Health and Safety Plan and Job Hazard Analysis with all on-site personnel.								
Summary of Work Performed		Arrived at site:		1015	Departed Site:		1600	
<u>Work Performed Today:</u> ➤ Site reconnaissance completed in basement at 49 Main St. and in alley and yard behind 49 and 53 Main St for PDI drilling and injection work starting tomorrow. ➤ Coordinated parking with Police Department for LaBella trucks/trailer arriving tomorrow. ➤ Completed PDI hydraulic testing and datalogging at monitoring wells DP-02 and DP-05.								
Equipment/Material Tracking If any box below is checked “Yes”, provide explanation under “Material Tracking Comments”.								
Were there any vehicles which did not display proper D.O.T numbers and placards?						Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Were there any vehicles which were not tarped?						Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Were there any vehicles which were not decontaminated prior to exiting the work site?						Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Personnel and Equipment								
Individual		Company		Trade / Role				
Adam Norvelle		EEEE		Geologist				
Tyler Badger		EEEE		Geologist				
Equipment Description		Contractor/Vendor			Quantity	Used		
Geotech Geopump		EEEE/Eco-Rental			1	Yes		
Heron Water Level Meter		EEEE/Eco-Rental			1	Yes		
In-Situ Transducer		EEEE/Eco-Rental			1	Yes		
MiniRAE 3000 PID		EEEE/Eco-Rental			1	Yes		
Daily Material Summary								
Material Description	Imported/D elivered to Site	Exported off Site	Waste Profile (If Applicable)	Source or Disposal Facility (If Applicable)	Daily Loads	Daily Weight (tons)*		
Investigation Tracking								
Activity	Total This Workday			Total To Date				
Visitors to Site								
Name	Representing			Entered Exclusion/CRZ Zone				
				Yes <input type="checkbox"/> No <input type="checkbox"/>				

DAILY INSPECTION REPORT

Report No. 01 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/19/2024

		Yes <input type="checkbox"/>	No <input type="checkbox"/>
Site Representatives			
Name		Representing	
Project Schedule Comments			
➤ None.			
Issues Pending/Site Comments			
➤ Access to 53 Main St. basement pending owner notification request (see notes below for property owner interaction).			
Interaction with Public, Property Owners, Media, etc.			
<ul style="list-style-type: none">➤ Contacted property management at 49 Main St. (Andy Lamberti) for access to basement; access to basement via lower door will be provided 8/19 through 8/22.➤ Contacted Village of Irvington Police Department to request special parking order to accommodate LaBella trucks/trailer; four spaces marked/reserved for 8/20 through 8/22 next to 49 Main St. building on N. Dutcher St.➤ Informed employees at rear of 53 Main St building about ongoing work in parking/alley area.➤ Talked to employee at front desk for Irvington Rugs and Cleaners and was put on phone with owner (Lisa Kim); owner indicated she was unaware of planned work and requested notification for access be provided directly by NYSDEC; owner request passed along to NYSDEC.			

Site Inspector(s): Adam Norvelle	Date: 8/19/24
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DAILY INSPECTION REPORT

Report No. 01 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/19/2024

DAILY HEALTH CHECKLIST

Is social distancing being practiced?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the tail gate safety meeting held outdoors?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are remote/call in job meetings being held in lieu of meeting in person where possible?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Were personal protective gloves, masks, and eye protection being used?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are sanitizing wipes, wash stations or spray available?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Have any workers/visitors been excluded based on close contact with individuals diagnosed with COVID-19, have recently traveled to restricted areas or countries, or are symptomatic (fever, chills, cough/shortness of breath)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<u>Comments:</u> None.		

REMEDIAL ACTIVITIES AT PROPERTIES

1. Have anyone at this location been tested and confirmed to have COVID-19?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2. Is anyone at this location isolated or quarantined for COVID-19?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. Has anyone at this location had contact with anyone known to have COVID-19 in the past 14 days?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
4. Does anyone at this location have any symptoms of a respiratory infection (e.g., cough, sore throat, fever, or shortness of breath)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
5. Does the Department and its contractors have your permission to enter the property currently?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If Yes to <u>any</u> of 1-4 above: <ul style="list-style-type: none">If it is <u>not</u> critical that service/entry be carried out immediately and can be postponed until the risk of COVID-19 is lower, or can be accomplished remotely/without entry, postpone, or conduct service without entry.If it <u>is</u> critical that service/entry be carried out immediately, advise occupants that as a precaution and for our own protection, project personnel will be donning appropriate PPE* (including respiratory protection) - and do so prior to entry.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>Comments:</u> None.		

DAILY INSPECTION REPORT

Report No. 01 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/19/2024

On-Site Waste Storage

Drums, roll offs and piles are staged in secure areas?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Liners and berms have been installed if necessary to prevent cross contamination of clean areas?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Containers are in good condition or properly overpacked?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Waste materials are scheduled to be properly characterized and disposed of prior to demobilization?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Complying with RCRA 90-day storage limitation for hazardous waste?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Piles are securely covered when not in use?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Containers are closed when not in use.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Staging areas should be inspected periodically, and any issues addressed immediately?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Signage and labeling comply with RCRA requirements for all staging areas and containers?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
If any issues noted, has Contractor been notified?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
<u>Comments:</u> None.			

NUISANCE CHECKLIST

Were there any community complaints related to work on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Were there any odors detected on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Was noise outside specification and/or above background on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Were vibration readings outside specification and/or above background on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Any visible dust observed beyond the work perimeter on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Any visible contrast (turbidity) beyond engineering controls observed on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Was turbidity checked at the outfall(s)?	AM <input type="checkbox"/>	PM <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Were any property owners NOT provided advance notice for work performed on this property on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Was the temporary fabric structure closed at the end of the day?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Has Contractor failed to protect all foundations and structures adjacent to and adjoining the site which are affected by the excavations or other operations connected with performance of the Work?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
If yes, has Contractor been notified?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
<u>Comments:</u> None.			

DAILY INSPECTION REPORT

Report No. 01 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/19/2024

RESILIENCE/GREEN REMEDIATION CHECKLIST

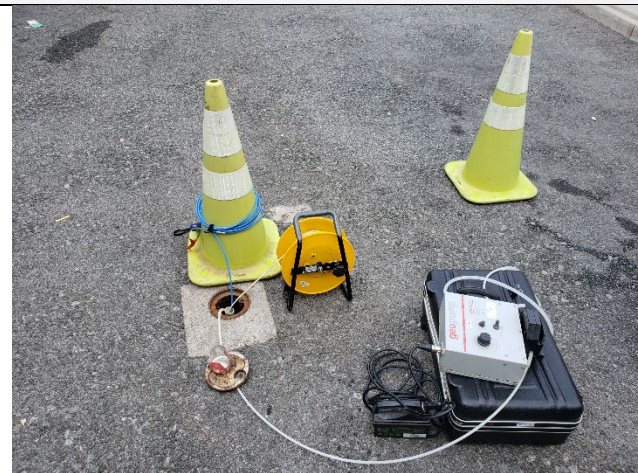
Is site power procured from renewable energy sources (e.g., solar, wind, geothermal, biomass and biogas)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is the Contractor employing 2007 or newer or retrofitted (BART*) diesel on-road trucks and non-road equipment?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is vehicle idling adequately reduced per 6NYCRR Part 217-3?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Have equipment operators been trained in the idling requirements of 6NYCRR Part 217-3?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is BART-equipped equipment properly maintained and working?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is work being sequenced to avoid double handling?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is there an onsite recycling program for CONTRACTOR-generated wastes and is it complied with?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are office trailer heating and cooling systems maintained at efficient set points, have programable thermostats been installed?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are products and materials used in performance of the work appropriately certified (e.g., LEED, Energy Star, Sustainable Forestry Initiative®, etc.)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are resiliency features included in the design, or completed remedy properly installed and/or maintained (flood control, storm water controls, erosion measures, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are green remediation elements included in the design, or completed remedy properly installed and/or maintained (e.g., porous pavement, geothermal, variable speed drives, native plantings, natural stream bank restoration, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Has Contractor been notified of any deficiencies?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input checked="" type="checkbox"/>
<u>Comments:</u> None.			

* BART – Best Available Retrofit Technology

DAILY INSPECTION REPORT

Report No. 01 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/19/2024


Site Photographs (Descriptions Below)



Hydraulic testing and level datalogging in progress at DP-02.

DAILY INSPECTION REPORT

Report No. 02 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/20/2024

NYSDEC Division of Environmental Remediation				Department of Environmental Conservation		Contract No. D009809-28 DEC PM – Justin Starr Consultant PM – Chuck Staples Consultant Site Inspector – Adam Norvelle		
Site Location: Village of Irvington, New York								
Weather Conditions								
General Description	Mostly Cloudy	AM	Mostly Cloudy		PM			
Temperature	62°F	AM	70°F		PM			
Wind	NW 12 MPH	AM	N 15 MPH		PM			
Health & Safety If any box below is checked “Yes”, provide explanation under “Health & Safety Comments”.								
Were there any changes to the Health & Safety Plan?						Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were there any exceedances of the perimeter air monitoring reported on this date?						Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Were there any nuisance issues reported/observed on this date?						Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Health & Safety Comments								
Reviewed Health and Safety Plan and Job Hazard Analysis with all on-site personnel; tailgate meeting with drilling crew.								
Summary of Work Performed		Arrived at site:		0715	Departed Site:		1600	
<u>Work Performed Today:</u> <ul style="list-style-type: none">➤ Cored basement slab at 49 Main St. and completed soil boring to refusal at 10 feet below slab; installed injection/test point DP-18 with 1-inch PVC screen set at 1-3 feet below slab and flush-mount road box sealed to slab with hydraulic cement.➤ Collected soil samples from DP-18 for analysis of VOCs at depths of 1, 4, 7, and 9 feet below slab.➤ Collected soil samples from DP-18 for analysis of GRO/DRO at depths of 1 and 4 feet below slab.➤ Collected soil sample from DP-18 for analysis of grain size at depths of 1 to 4 feet (composite) below slab.➤ Collected grab groundwater samples from DP-18 for analysis of VOCs at depths of 1 and 8 feet below slab.➤ Collected soil (from a depth of 1 to 4 feet) and groundwater (from a depth of 1 foot) for SOD testing by Evonik.								
Equipment/Material Tracking If any box below is checked “Yes”, provide explanation under “Material Tracking Comments”.								
Were there any vehicles which did not display proper D.O.T numbers and placards?						Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were there any vehicles which were not tarped?						Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Were there any vehicles which were not decontaminated prior to exiting the work site?						Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Personnel and Equipment								
Individual		Company		Trade / Role				
Adam Norvelle		EEEG		Geologist				
Tyler Badger		EEEG		Geologist				
Mike Dayette		LaBella		Driller				
Jeff Morgan		LaBella		Driller				
Equipment Description		Contractor/Vendor			Quantity	Used		
Geotech Geopump		EEEG/Eco-Rental			1	Yes		
Heron Water Level Meter		EEEG/Eco-Rental			1	Yes		
In-Situ Level Transducer		EEEG/Eco-Rental			1	No		
PPBRae PID		EEEG/Eco-Rental			1	Yes		
Geoprobe 420M		LaBella			1	Yes		
Injection Equipment		LaBella			1	No		
Daily Material Summary								
Material Description	Imported/D elivered to Site	Exported off Site	Waste Profile (If Applicable)	Source or Disposal Facility (If Applicable)	Daily Loads	Daily Weight (tons)*		

DAILY INSPECTION REPORT

Report No. 02 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/20/2024

Investigation Tracking			
Activity	Total This Workday	Total To Date	
Visitors to Site			
Name	Representing	Entered Exclusion/CRZ Zone	
		Yes <input type="checkbox"/>	No <input type="checkbox"/>
		Yes <input type="checkbox"/>	No <input type="checkbox"/>
Site Representatives			
Name	Representing		
Justin Starr	NYSDEC		
Project Schedule Comments			
➤ None.			
Issues Pending/Site Comments			
➤ Justin Starr (NYSDEC) spoke with property owner of Irvington Rugs and Cleaners and confirmed that access will be provided to the basement during injection testing scheduled for tomorrow.			
Interaction with Public, Property Owners, Media, etc.			
➤ Contacted Village of Irvington Police Department, at start of workday, for assistance clearing parked vehicles from special parking area.			

Site Inspector(s): Adam Norvelle	Date: 8/20/24
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DAILY INSPECTION REPORT

Report No. 02 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/20/2024

DAILY HEALTH CHECKLIST

Is social distancing being practiced?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the tail gate safety meeting held outdoors?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are remote/call in job meetings being held in lieu of meeting in person where possible?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Were personal protective gloves, masks, and eye protection being used?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are sanitizing wipes, wash stations or spray available?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Have any workers/visitors been excluded based on close contact with individuals diagnosed with COVID-19, have recently traveled to restricted areas or countries, or are symptomatic (fever, chills, cough/shortness of breath)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<u>Comments:</u> None.		

REMEDIAL ACTIVITIES AT PROPERTIES

1. Have anyone at this location been tested and confirmed to have COVID-19?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2. Is anyone at this location isolated or quarantined for COVID-19?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. Has anyone at this location had contact with anyone known to have COVID-19 in the past 14 days?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
4. Does anyone at this location have any symptoms of a respiratory infection (e.g., cough, sore throat, fever, or shortness of breath)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
5. Does the Department and its contractors have your permission to enter the property currently?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If Yes to <u>any</u> of 1-4 above: <ul style="list-style-type: none">If it is <u>not</u> critical that service/entry be carried out immediately and can be postponed until the risk of COVID-19 is lower, or can be accomplished remotely/without entry, postpone, or conduct service without entry.If it <u>is</u> critical that service/entry be carried out immediately, advise occupants that as a precaution and for our own protection, project personnel will be donning appropriate PPE* (including respiratory protection) - and do so prior to entry.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>Comments:</u> None.		

DAILY INSPECTION REPORT

Report No. 02 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/20/2024

On-Site Waste Storage

Drums, roll offs and piles are staged in secure areas?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Liners and berms have been installed if necessary to prevent cross contamination of clean areas?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Containers are in good condition or properly overpacked?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Waste materials are scheduled to be properly characterized and disposed of prior to demobilization?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Complying with RCRA 90-day storage limitation for hazardous waste?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Piles are securely covered when not in use?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Containers are closed when not in use.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Staging areas should be inspected periodically, and any issues addressed immediately?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Signage and labeling comply with RCRA requirements for all staging areas and containers?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
If any issues noted, has Contractor been notified?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
<u>Comments:</u> None.			

NUISANCE CHECKLIST

Were there any community complaints related to work on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Were there any odors detected on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Was noise outside specification and/or above background on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Were vibration readings outside specification and/or above background on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Any visible dust observed beyond the work perimeter on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Any visible contrast (turbidity) beyond engineering controls observed on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Was turbidity checked at the outfall(s)?	AM <input type="checkbox"/>	PM <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Were any property owners NOT provided advance notice for work performed on this property on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Was the temporary fabric structure closed at the end of the day?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Has Contractor failed to protect all foundations and structures adjacent to and adjoining the site which are affected by the excavations or other operations connected with performance of the Work?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
If yes, has Contractor been notified?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
<u>Comments:</u> None.			

DAILY INSPECTION REPORT

Report No. 02 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/20/2024

RESILIENCE/GREEN REMEDIATION CHECKLIST

Is site power procured from renewable energy sources (e.g., solar, wind, geothermal, biomass and biogas)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is the Contractor employing 2007 or newer or retrofitted (BART*) diesel on-road trucks and non-road equipment?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is vehicle idling adequately reduced per 6NYCRR Part 217-3?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Have equipment operators been trained in the idling requirements of 6NYCRR Part 217-3?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is BART-equipped equipment properly maintained and working?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is work being sequenced to avoid double handling?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is there an onsite recycling program for CONTRACTOR-generated wastes and is it complied with?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are office trailer heating and cooling systems maintained at efficient set points, have programable thermostats been installed?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are products and materials used in performance of the work appropriately certified (e.g., LEED, Energy Star, Sustainable Forestry Initiative®, etc.)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are resiliency features included in the design, or completed remedy properly installed and/or maintained (flood control, storm water controls, erosion measures, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are green remediation elements included in the design, or completed remedy properly installed and/or maintained (e.g., porous pavement, geothermal, variable speed drives, native plantings, natural stream bank restoration, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Has Contractor been notified of any deficiencies?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input checked="" type="checkbox"/>
<u>Comments:</u> None.			

* BART – Best Available Retrofit Technology

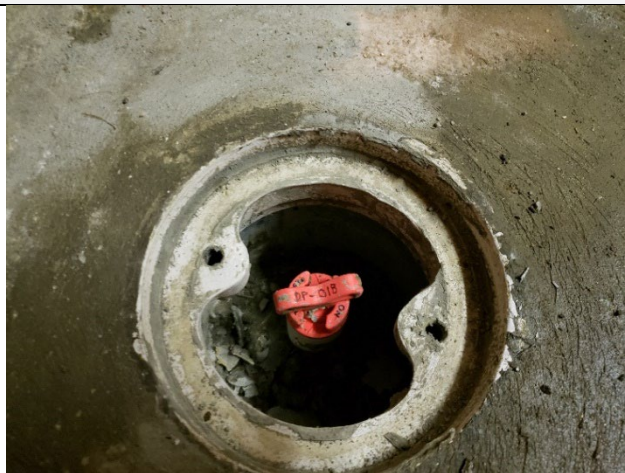
DAILY INSPECTION REPORT

Report No. 02 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/20/2024

Site Photographs (Descriptions Below)



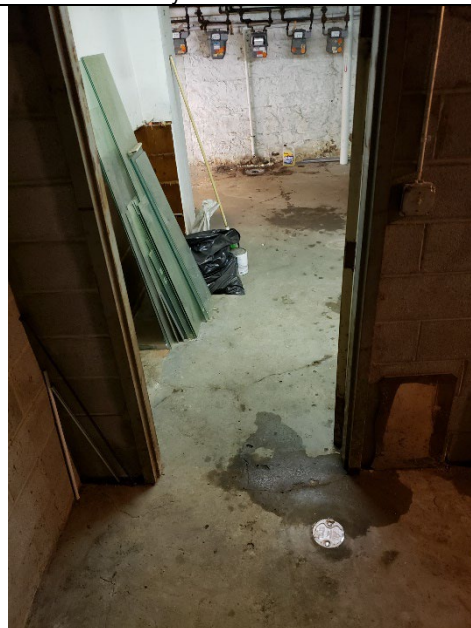
Boulder removed from approximately 1 foot below the slab after concrete coring at DP-18.



DP-18 riser with plug inside flush-mount road box sealed with hydraulic cement.




Completed DP-18 flush-mount road box with cover.



Completed injection point DP-18 located between step down and lower doorway in basement at 49 Main St.

DAILY INSPECTION REPORT

Report No. 03 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/21/2024

NYSDEC Division of Environmental Remediation				Department of Environmental Conservation		Contract No. D009809-28 DEC PM – Justin Starr Consultant PM – Chuck Staples Consultant Site Inspector – Adam Norvelle	
Site Location: Village of Irvington, New York							
Weather Conditions							
General Description	Fair	AM	Mostly Cloudy/Light Rain		PM		
Temperature	56°F	AM	70°F		PM		
Wind	NW 10 MPH	AM	WNW 14 MPH		PM		
Health & Safety If any box below is checked "Yes", provide explanation under "Health & Safety Comments".							
Were there any changes to the Health & Safety Plan?					Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were there any exceedances of the perimeter air monitoring reported on this date?					Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Were there any nuisance issues reported/observed on this date?					Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Health & Safety Comments							
Tailgate meeting with drilling crew.							
Summary of Work Performed		Arrived at site:		0715	Departed Site:		1800
<u>Work Performed Today:</u> <ul style="list-style-type: none">➤ Completed soil boring DP-02A, approximately 5 feet NNE of DP-02, to total depth of 8 feet below grade; collected soil (from a depth of 6 to 8 feet) and groundwater (from adjacent well DP-02) for SOD testing by Evonik.➤ Setup for injection testing at DP-18:<ul style="list-style-type: none">• Prepared injection test water with approximately 500 gallons potable water (2 x 275-gallon totes) and ¾-ounce of Bright Dyes Fluorescent FLT Yellow/Green tracing dye.• Installed ball-valve, flow meter, and pressure gauge at water tank effluent.• Ran garden hose from LaBella box truck (parked on N. Dutcher St.) to DP-18 wellhead through conduit access point into basement in building wall at ground level.• Removed sump cover from DW-02 and removed drain assembly at brick sump to allow for observations and fluorescence measurements.➤ Completed injection of 427 gallons of test water into DP-18 over approximately 5 hours with the following conditions/changes:<ul style="list-style-type: none">• Gravity feed flowing at 4 to 4.5 gpm at start of test; stopped after 25 minutes due to leaks observed in basement slab at 49 Main St.• Air trapped in hose prevented restart of gravity feed; used pump to clear line and restarted gravity feed with flow reduced to 2 gpm via ball valve; no leaking in slab observed at 2 gpm.• Gravity feed slows to less than 0.5 gpm with valve fully open after approximately 2.5 hours at 2 gpm; attempted to clear line with pump but no improvement observed in gravity feed flow rate.• Switch to injection via active pumping at 2 gpm for one additional hour.➤ Monitored sumps at 49 Main St. (brick sump and DW-02) and 53 Main St. (DW-01) for increases in flow and evidence of tracing dye; no increase in flow was observed at any of the pumps; fluorescence was not detected (from flourometer readings) nor observed in DW-01 and DW-02 for the duration of the injection test; increasing fluorescence (from flourometer readings) was detected in the brick sump and was visually observable at the end of the injection test.➤ Monitored stormwater catch basin at corner of Main St and N. Dutcher St. for evidence of tracing dye and increases in flow; no flow and no dye were observed in the stormwater catch basin during the injection test.➤ Replaced and resealed sump cover at DW-02 using polyurethane sealant and replaced drain valve assembly at brick sump (no additional sealant was needed) following completion of observations during injection test.							
Equipment/Material Tracking If any box below is checked "Yes", provide explanation under "Material Tracking Comments".							
Were there any vehicles which did not display proper D.O.T numbers and placards?					Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were there any vehicles which were not tarped?					Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

DAILY INSPECTION REPORT

Report No. 03 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/21/2024

Were there any vehicles which were not decontaminated prior to exiting the work site?				Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Personnel and Equipment						
Individual	Company		Trade / Role			
Adam Norvelle	EEEG		Geologist			
Mike Dayette	LaBella		Driller			
Jeff Morgan	LaBella		Driller			
Equipment Description	Contractor/Vendor			Quantity	Used	
Geotech Geopump	EEEG/Eco-Rental			1	Yes	
Heron Water Level Meter	EEEG/Eco-Rental			1	Yes	
In-Situ Level Transducer	EEEG/Eco-Rental			1	No	
PPBRae PID	EEEG/Eco-Rental			1	Yes	
Geoprobe 420M	LaBella			1	Yes	
Injection Equipment	LaBella			1	Yes	
AquaFlour Fluorometer	EEEG/Pine			1	Yes	
Daily Material Summary						
Material Description	Imported/Delivered to Site	Exported off Site	Waste Profile (If Applicable)	Source or Disposal Facility (If Applicable)	Daily Loads	Daily Weight (tons)*
Investigation Tracking						
Activity	Total This Workday			Total To Date		
Visitors to Site						
Name	Representing			Entered Exclusion/CRZ Zone		
				Yes <input type="checkbox"/> No <input type="checkbox"/>		
				Yes <input type="checkbox"/> No <input type="checkbox"/>		
Site Representatives						
Name				Representing		
Project Schedule Comments						
➤ None.						
Issues Pending/Site Comments						
➤ None.						
Interaction with Public, Property Owners, Media, etc.						
<ul style="list-style-type: none">➤ Contacted Village of Irvington Police Department, at start of workday, for assistance clearing parked vehicles from special parking area; unable to find owner for one vehicle but LaBella able to park truck/trailer along Main St and enough parking available on N. Dutcher St. for box truck with injection equipment.➤ Informed property management at 49 Main St. (Andy Lamberti), at end of workday, that work is complete and basement door is locked.➤ Informed employee at front desk for Irvington Rugs and Cleaners, at end of workday, that work is complete and basement access is no longer required.➤ Contacted Village of Irvington Police Department, at end of workday, to notify that work is complete and special parking order is not needed for tomorrow.						

Site Inspector(s): Adam Norvelle	Date: 8/21/24
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DAILY INSPECTION REPORT

Report No. 03 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/21/2024

DAILY HEALTH CHECKLIST

Is social distancing being practiced?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the tail gate safety meeting held outdoors?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are remote/call in job meetings being held in lieu of meeting in person where possible?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Were personal protective gloves, masks, and eye protection being used?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are sanitizing wipes, wash stations or spray available?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Have any workers/visitors been excluded based on close contact with individuals diagnosed with COVID-19, have recently traveled to restricted areas or countries, or are symptomatic (fever, chills, cough/shortness of breath)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<u>Comments:</u> None.		

REMEDIAL ACTIVITIES AT PROPERTIES

1. Have anyone at this location been tested and confirmed to have COVID-19?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2. Is anyone at this location isolated or quarantined for COVID-19?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. Has anyone at this location had contact with anyone known to have COVID-19 in the past 14 days?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
4. Does anyone at this location have any symptoms of a respiratory infection (e.g., cough, sore throat, fever, or shortness of breath)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
5. Does the Department and its contractors have your permission to enter the property currently?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If Yes to <u>any</u> of 1-4 above: <ul style="list-style-type: none">If it is <u>not</u> critical that service/entry be carried out immediately and can be postponed until the risk of COVID-19 is lower, or can be accomplished remotely/without entry, postpone, or conduct service without entry.If it <u>is</u> critical that service/entry be carried out immediately, advise occupants that as a precaution and for our own protection, project personnel will be donning appropriate PPE* (including respiratory protection) - and do so prior to entry.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>Comments:</u> None.		

DAILY INSPECTION REPORT

Report No. 03 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/21/2024

On-Site Waste Storage

Drums, roll offs and piles are staged in secure areas?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Liners and berms have been installed if necessary to prevent cross contamination of clean areas?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Containers are in good condition or properly overpacked?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Waste materials are scheduled to be properly characterized and disposed of prior to demobilization?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Complying with RCRA 90-day storage limitation for hazardous waste?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Piles are securely covered when not in use?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Containers are closed when not in use.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Staging areas should be inspected periodically, and any issues addressed immediately?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Signage and labeling comply with RCRA requirements for all staging areas and containers?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
If any issues noted, has Contractor been notified?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
<u>Comments:</u> None.			

NUISANCE CHECKLIST

Were there any community complaints related to work on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Were there any odors detected on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Was noise outside specification and/or above background on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Were vibration readings outside specification and/or above background on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Any visible dust observed beyond the work perimeter on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Any visible contrast (turbidity) beyond engineering controls observed on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Was turbidity checked at the outfall(s)?	AM <input type="checkbox"/>	PM <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Were any property owners NOT provided advance notice for work performed on this property on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Was the temporary fabric structure closed at the end of the day?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Has Contractor failed to protect all foundations and structures adjacent to and adjoining the site which are affected by the excavations or other operations connected with performance of the Work?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
If yes, has Contractor been notified?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
<u>Comments:</u> None.			

DAILY INSPECTION REPORT

Report No. 03 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/21/2024

RESILIENCE/GREEN REMEDIATION CHECKLIST

Is site power procured from renewable energy sources (e.g., solar, wind, geothermal, biomass and biogas)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is the Contractor employing 2007 or newer or retrofitted (BART*) diesel on-road trucks and non-road equipment?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is vehicle idling adequately reduced per 6NYCRR Part 217-3?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Have equipment operators been trained in the idling requirements of 6NYCRR Part 217-3?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is BART-equipped equipment properly maintained and working?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is work being sequenced to avoid double handling?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is there an onsite recycling program for CONTRACTOR-generated wastes and is it complied with?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are office trailer heating and cooling systems maintained at efficient set points, have programable thermostats been installed?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are products and materials used in performance of the work appropriately certified (e.g., LEED, Energy Star, Sustainable Forestry Initiative®, etc.)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are resiliency features included in the design, or completed remedy properly installed and/or maintained (flood control, storm water controls, erosion measures, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are green remediation elements included in the design, or completed remedy properly installed and/or maintained (e.g., porous pavement, geothermal, variable speed drives, native plantings, natural stream bank restoration, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Has Contractor been notified of any deficiencies?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input checked="" type="checkbox"/>
<u>Comments:</u> None.			

* BART – Best Available Retrofit Technology

DAILY INSPECTION REPORT

Report No. 03 **Irvington Rugs and Cleaners - NYSDEC Site No. 360175** Date: 08/21/2024

Site Photographs (Descriptions Below)



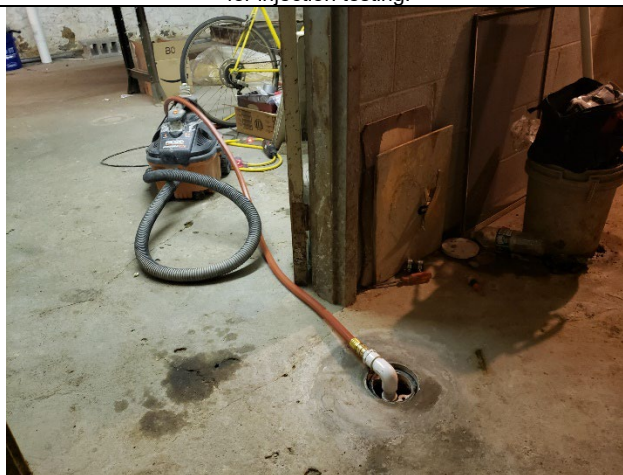
Completed soil boring DP-02A (center) located NNW of DP-02 (center right)



Flow meter and pressure gauge installed downstream of water tank for injection testing.



Injection equipment staged in LaBella box truck on N. Dutcher St.; hose entering basement through conduit access point at street level.



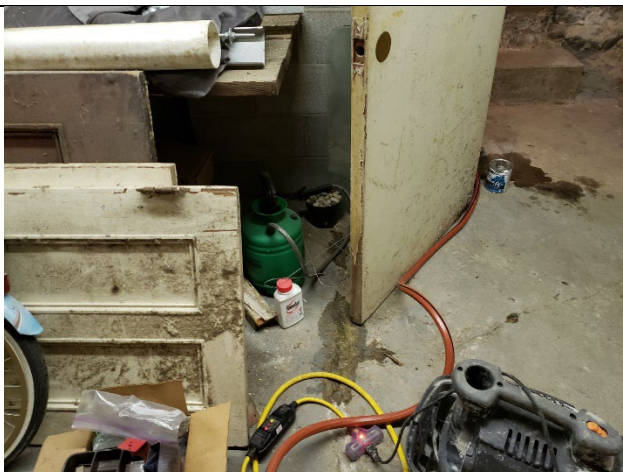
Injection hose secured to DP-18 wellhead in basement at 59 Main St.

DAILY INSPECTION REPORT

Report No. 03 Irvington Rugs and Cleaners - NYSDEC Site No. 360175 Date: 08/21/2024



Leaking from slab (likely at connection with field stone wall) in utility hallway in basement at 49 Main St.



Leaking from existing cracks in basement slab (see dark area at left end of door) at 49 Main St.



Re-sealed sump cover at DW-02



One-way drain valve (black circle at center) re-installed at brick sump in basement at 49 Main St.

ATTACHMENT 3

Attachment 3A - DATA USABILITY SUMMARY REPORT & ANALYTICAL DATA

Attachment 3B - GEOTECHNICAL DATA

**DATA USABILITY SUMMARY REPORT
AUGUST 2024 SAMPLING EVENT
IRVINGTON RUGS AND CLEANERS
IRVINGTON, NEW YORK**

1.0 INTRODUCTION

Groundwater samples were collected in August 2024 at the Irvington Rugs and Cleaners Site in Irvington, New York, and shipped to Eurofins Rhode Island located in North Kingstown, RI, for analysis. Samples were analyzed by the following methods:

- VOCs by USEPA Method 8260C
- Gasoline Range Organics by SW846 8015D
- Diesel Range Organics by SW846 8015D
- General Chemistry by ASTM D422 and

Results were reported in the following sample delivery group (SDG):

- 620-20506-1

A Data Usability Summary Report (DUSR) review was completed based on the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation guidance (NYSDEC, 2010). Sample event information included in this DUSR is presented in the following tables:

- Table 1 – Summary of Samples and Analytical Methods
- Table 2 – Summary of Analytical Results
- Table 3 – Qualification Action Summary

A summary of table notes applicable to Tables 1, 2, and 3 is presented just before Table 1.

Laboratory deliverables included:

- Category B deliverables as defined in the NYSDEC Analytical Services Protocols (NYSDEC, 2005).

The DUSR review included the following evaluations as applicable. A table of the project control limits for PFAS is presented in Attachment A. DUSR review checklists and applicable laboratory QC summary forms are included in Attachment B to document QC outliers associated with qualification actions.

- Lab Report Narrative Review
- Data Package Completeness and COC records (Table 1 verification)
- Sample Preservation and Holding Times
- Instrument Calibration (report narrative/lab-qualifier evaluation)
- QC Blanks
- Laboratory Control Samples (LCS)
- Matrix Spike/Matrix Spike Duplicates (MS/MSD)

- Surrogate Spikes (if applicable)
- Internal Standards (if applicable)
- Field Duplicates
- Target Analyte Identification and Quantitation
- Raw Data (chromatograms), Calculation Checks and Transcription Verifications
- Reporting Limits
- Electronic Data Qualification and Verification

Data qualification actions were based on general procedures identified in the NYSDEC validation guideline for PFAS (NYSDEC, 2023). The following laboratory or data review qualifiers are used in the final data presentation:

U = target analyte is not detected above the reported detection limit

J = concentration is estimated

UJ = target analyte is not detected, value is estimated

J- = concentration is estimated and potentially bias low

Results are interpreted to be usable as reported by the laboratory unless discussed in the following sections.

2.0 POTENTIAL DATA LIMITATIONS

Based on the DUSR review the majority of data meet the data quality objectives; however, the following potential limitations were identified.

VOCs

The results for trichloroethene in samples 360175-DP018008-Soil and 360175-DP018008D-Soil was qualified as estimated with potential bias (J) based on the field duplicate percent difference that were greater than QC limits. The qualified results are included in Table 3 with reason code FD.

The results for 2-butanone, acetone, bromomethane, chloroethane, ethanol, trichlorofluoromethane in sample 360175-DP018007 were qualified as estimated with potential low bias (J-) based on percent recoveries in the associated MS/MSD that were greater than QC limits. The qualified results are included in Table 3 with reason code MSL.

The results for dichlorodifluoromethane in samples 360175-DP018001-GW and 360175-DP018008 were qualified as estimated with potential bias (UJ/J) based on percent recoveries in the associated initial calibration verification (ICV) and continuing calibration verification (CCV) percent differences that were greater than QC limits. The qualified results are included in Table 3 with reason codes ICV%D and CCV%D.

The results for dichlorofluoromethane, chloromethane, ethanol in samples 360175-DP018001-Soil, 360175-DP018004, 360175-DP018007, 360175-DP018009, and 360175-DP018001D-GW were qualified as estimated with potential bias (UJ/J) based on percent recoveries in the associated ICV that were greater than QC limits. The qualified results are included in Table 3 with reason code ICV%D.

The results for dichloromethane, ethanol, acetone, tert-butanol, ethyl tert-butyl ether, tetrahydrofuran, 2-butanone, 1, 4-dioxane, 4-methyl-2-pentanone, 2-hexanone, 1, 2-dibromo-3-chloropropane, 1, 2, 4-trichlorobenzene, naphthalene, and 1, 2, 3-trichlorobenzene in sample 360175-DP018001D-GW was qualified as estimate with potential bias (UJ/J) based on percent recoveries in the associated CCV that were greater than QC limits. The qualified results are included in Table 3 with reason code CCV%D.

The results for dichlorodifluoromethane, vinyl chloride, chloroethane, ethane, tert-butanol, 1, 4-dioxane, ethylbenzene, n-propylbenzene, 2-chlorotoluene, 4-chlorotoluene, 1, 3-dichlorobenzene, and naphthalene in samples 360175-DP018001-Soil, 360175-DP018004, 360175-DP018007, and 360175-DP018009 were qualified as estimate with potential bias (UJ/J) based on percent recoveries in the associated CCV that were greater than QC limits. The qualified results are included in Table 3 with reason code CCV%D.

The results for dichlorodifluoromethane in samples 360175-DP018001-GW and 360175-DP018008 were qualified as estimated with potential low bias (UJ/J-) based on percent recoveries in the associated LCS and LCSD that were less than QC limits. The qualified results are included in Table 3 with reason code LCSL.

The results for 2-butanone, 2-hexanone, acetone, and dichlorodifluoromethane in sample 360175-DP018001D-GW were qualified as estimate with potential low bias (UJ/J-) based on percent recoveries in the associated LCS and LCSD that were less than QC limits. The qualified results are included in Table 3 with reason code LCSL.

3.0 ADDITIONAL QC EXCEEDANCES AND OBSERVATIONS

There were no additional observations or quality control exceedances not specifically addressed above (Section 2.0).

Reference:

NYSDEC, 2005. "Analytical Services Protocols"; July 2005.

NYSDEC, 2010. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; DER-10; Division of Environmental Remediation; May 2010.

NYSDEC, 2023. "Data Review Guidelines for Analysis of PFAS in Non-Potable Water and Solids; April 2023.

Data Validator: Tara LePage

October 30, 2024



Reviewed by: Greg Lull

November 4, 2024



Standard Table Notes:

Sample Type (QC Code)

FS – field sample

FD – field duplicate

TB – trip blank

EB – equipment blank

FB – field blank

Matrix

GW – ground water

BW – blank water

TW – tap water

SV – soil vapor

SED – sediment

SW – surface water

S – soil

L – water

Units

mg/L – milligrams per liter

ng/L – nanograms per liter

µg/L – micrograms per liter

mg/kg – milligrams per kilogram

µg/kg – micrograms per kilogram

µg/m³ – micrograms per cubic meter

Qualifiers

U – not detected above quantitation limit

J – estimated quantity

J+ - estimated quantity, biased high

J- - estimated quantity, biased low

R – data unusable

Fraction

T – total

D – dissolved

N – normal

Qualification Reason Codes

BL1 – method blank qualifier

BL2 – field or trip blank qualifier

CCV – continuing calibration verification recovery outside limits

CCV%D – continuing calibration verification percent difference exceeds goal

CCVRRF – continuing calibration relative response factor low

CI – chromatographic interference present

DCPD – dual column percent difference exceeds limit

E – result exceeds calibration range

EIS - extracted internal standard outside of acceptance criteria

FD – field duplicate precision goal exceeded

FP – false positive interference

HT – holding time for prep or analysis exceeded

HTG – holding time for prep or analysis grossly exceeded

ICV – initial calibration verification recovery outside limit

ICVRRF – initial calibration verification relative response factor low

ICVRSRSD – initial calibration verification % relative standard deviation exceeds goal

IR – ion ratio was outside of acceptance criteria

ISH – internal standard response greater than limit

ISL – internal standard response less than limit

LCSH – laboratory control sample recovery high

LCSL – laboratory control sample recovery low

LCSRSD – laboratory control sample/duplicate relative % difference precision goal exceeded

LD – lab duplicate precision goal exceeded

MSH – matrix spike and/or MS duplicate recovery high

MSL – matrix spike and/or MS duplicate recovery low

MSRPD – matrix spike/duplicate relative % difference precision goal exceeded

N – analyte identification is not certain

PEM – performance evaluation mixture exceeds limit

PM – sample percent moisture exceeds EPA guideline

SD – serial dilution result exceeds percent difference limit

SP – sample preservation/collection does not meet method requirement

SSH – surrogate recovery high

SSL – surrogate recovery low

TD – dissolved concentration exceeds total

PAHs – polycyclic aromatic hydrocarbons

TABLE 1 - SUMMARY OF SAMPLES AND ANALYTICAL METHODS
DATA USABILITY SUMMARY REPORT
AUGUST 2024 SAMPLING EVENT
IRVINGTON RUGS AND CLEANERS
IRVINGTON, NEW YORK

Lab SDG	Media	Location	Field Sample ID	Sample Date	Lab Sample ID	Qc Code	Lab Id	Eurofins	Eurofins	Eurofins	LANCAST
							Method Class	VOCs	Moisture	Organic Range	Grain Size
							Analysis Method	8260C	Moisture	8015D	D422
							Fraction	N	N	N	N
								Parameters	Parameters	Parameters	Parameters
620-20506-1	GW	DP-18	360175-DP018001-GW	8/20/2024	620-20506-7	FS		77			
620-20506-1	GW	DP-18	360175-DP018001D-GW	8/20/2024	620-20506-9	FD		77			
620-20506-1	GW	DP-18	360175-DP018008	8/20/2024	620-20506-8	FS		77			
620-20506-1	BS	QC	360175-TB002	8/21/2024	620-20506-6	TB		77			
620-20506-1	BW	QC	360175-TB001	8/21/2024	620-20506-10	TB		77			
620-20506-1	SOIL	DP-18	360175-DP018001-Soil	8/20/2024	620-20506-1	FS		77	2	2	
620-20506-1	SOIL	DP-18	360175-DP018001D-Soil	8/20/2024	620-20506-4	FD		77	2		
620-20506-1	SOIL	DP-18	360175-DP018004	8/20/2024	620-20506-2	FS		77	2	2	27
620-20506-1	SOIL	DP-18	360175-DP018007	8/20/2024	620-20506-3	FS		77	2		
620-20506-1	SOIL	DP-18	360175-DP018009	8/20/2024	620-20506-5	FS		77	2		

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
 DATA USABILITY SUMMARY REPORT
 SEPTEMBER 2024 SAMPLING EVENT
 IRVINGTON RUGS AND CLEANERS
 IRVINGTON, NEW YORK

					Location	DP-18		DP-18		DP-18		DP-18		DP-18	
					Lab Sample Delivery Group	620-20506-1		620-20506-1		620-20506-1		620-20506-1		620-20506-1	
					Field Sample Date	8/20/2024		8/20/2024		8/20/2024		8/20/2024		8/20/2024	
					Field Sample ID	360175-DP018001-GW		360175-DP018001-Soil		360175-DP018001D-GW		360175-DP018001D-Soil		360175-DP018004	
					Qc Code	FS		FS		FD		FD		FS	
Matrix	Method Class	Method	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L	VOCs	8260C	N	1,1,1,2-Tetrachloroethane	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,1,1-Trichloroethane	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,1,2,2-Tetrachloroethane	UG/L	0.5 U				0.5 U					
L	VOCs	8260C	N	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,1,2-Trichloroethane	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,1-Dichloroethane	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,1-Dichloroethene	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,1-Dichloropropene	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,2,3-Trichlorobenzene	UG/L	1 U				1 UJ					
L	VOCs	8260C	N	1,2,3-Trichloropropane	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,2,4-Trichlorobenzene	UG/L	1 U				1 UJ					
L	VOCs	8260C	N	1,2,4-Trimethylbenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,2-Dibromo-3-chloropropane	UG/L	2 U				2 UJ					
L	VOCs	8260C	N	1,2-Dibromoethane	UG/L	0.5 U				0.5 U					
L	VOCs	8260C	N	1,2-Dichlorobenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,2-Dichloroethane	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,2-Dichloropropane	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,3,5-Trichlorobenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,3,5-Trimethylbenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,3-Dichlorobenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,3-Dichloropropane	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,4-Dichlorobenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	1,4-Dioxane	UG/L	50 U				50 UJ					
L	VOCs	8260C	N	2,2-Dichloropropane	UG/L	1 U				1 U					
L	VOCs	8260C	N	2-Butanone	UG/L	2 U				2 UJ					
L	VOCs	8260C	N	2-Chlorotoluene	UG/L	1 U				1 U					
L	VOCs	8260C	N	2-Hexanone	UG/L	2 U				2 UJ					
L	VOCs	8260C	N	4-Chlorotoluene	UG/L	1 U				1 U					
L	VOCs	8260C	N	4-iso-Propyltoluene	UG/L	1 U				1 U					
L	VOCs	8260C	N	4-Methyl-2-pentanone	UG/L	2 U				2 UJ					
L	VOCs	8260C	N	Acetone	UG/L	10 U				10 UJ					
L	VOCs	8260C	N	Acrylonitrile	UG/L	1 U				1 U					
L	VOCs	8260C	N	Benzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	Bromobenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	Bromochloromethane	UG/L	1 U				1 U					
L	VOCs	8260C	N	Bromodichloromethane	UG/L	0.5 U				0.5 U					

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SEPTEMBER 2024 SAMPLING EVENT
IRVINGTON RUGS AND CLEANERS
IRVINGTON, NEW YORK

					Location	DP-18		DP-18		DP-18		DP-18		DP-18	
					Lab Sample Delivery Group	620-20506-1		620-20506-1		620-20506-1		620-20506-1		620-20506-1	
					Field Sample Date	8/20/2024		8/20/2024		8/20/2024		8/20/2024		8/20/2024	
					Field Sample ID	360175-DP018001-GW		360175-DP018001-Soil		360175-DP018001D-GW		360175-DP018001D-Soil		360175-DP018004	
					Qc Code	FS		FS		FD		FD		FS	
Matrix	Method Class	Method	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L	VOCs	8260C	N	Bromoform	UG/L	1 U				1 U					
L	VOCs	8260C	N	Bromomethane	UG/L	2 U				2 U					
L	VOCs	8260C	N	Butane, 2-methoxy-2-methyl-	UG/L	1 U				1 U					
L	VOCs	8260C	N	Carbon disulfide	UG/L	2 U				2 U					
L	VOCs	8260C	N	Carbon tetrachloride	UG/L	1 U				1 U					
L	VOCs	8260C	N	Chlorobenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	Chloroethane	UG/L	2 U				2 U					
L	VOCs	8260C	N	Chloroform	UG/L	1 U				1 U					
L	VOCs	8260C	N	Chloromethane	UG/L	2 U				2 UJ					
L	VOCs	8260C	N	cis-1,2-Dichloroethene	UG/L	22.9				11.6					
L	VOCs	8260C	N	cis-1,3-Dichloropropene	UG/L	0.5 U				0.5 U					
L	VOCs	8260C	N	Dibromochloromethane	UG/L	0.5 U				0.5 U					
L	VOCs	8260C	N	Dibromomethane	UG/L	1 U				1 U					
L	VOCs	8260C	N	Dichlorodifluoromethane	UG/L	2 UJ				2 UJ					
L	VOCs	8260C	N	Diethyl ether	UG/L	1 U				1 U					
L	VOCs	8260C	N	Ethanol	UG/L	200 U				200 UJ					
L	VOCs	8260C	N	Ethyl-t-Butyl Ether	UG/L	1 U				1 UJ					
L	VOCs	8260C	N	Ethylbenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	Hexachlorobutadiene	UG/L	1 U				1 U					
L	VOCs	8260C	N	Isopropyl ether	UG/L	1 U				1 U					
L	VOCs	8260C	N	Isopropylbenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	Methyl Tertbutyl Ether	UG/L	1 U				1 U					
L	VOCs	8260C	N	Methylene chloride	UG/L	2 U				2 U					
L	VOCs	8260C	N	n-Butylbenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	Naphthalene	UG/L	2 U				2 UJ					
L	VOCs	8260C	N	Propylbenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	sec-Butylbenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	Styrene	UG/L	1 U				1 U					
L	VOCs	8260C	N	t-Butyl alcohol	UG/L	10 U				10 UJ					
L	VOCs	8260C	N	tert-Butylbenzene	UG/L	1 U				1 U					
L	VOCs	8260C	N	Tetrachloroethene	UG/L	2590				2880					
L	VOCs	8260C	N	Tetrahydrofuran	UG/L	2 U				2 UJ					
L	VOCs	8260C	N	Toluene	UG/L	1 U				1 U					
L	VOCs	8260C	N	trans-1,2-Dichloroethene	UG/L	0.265 J				1 U					
L	VOCs	8260C	N	trans-1,3-Dichloropropene	UG/L	0.5 U				0.5 U					
L	VOCs	8260C	N	trans-1,4-Dichloro-2-butene	UG/L	5 U				5 U					

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
 DATA USABILITY SUMMARY REPORT
 SEPTEMBER 2024 SAMPLING EVENT
 IRVINGTON RUGS AND CLEANERS
 IRVINGTON, NEW YORK

					Location	DP-18		DP-18		DP-18		DP-18		DP-18	
					Lab Sample Delivery Group	620-20506-1		620-20506-1		620-20506-1		620-20506-1		620-20506-1	
					Field Sample Date	8/20/2024		8/20/2024		8/20/2024		8/20/2024		8/20/2024	
					Field Sample ID	360175-DP018001-GW		360175-DP018001-Soil		360175-DP018001D-GW		360175-DP018001D-Soil		360175-DP018004	
					Qc Code	FS		FS		FD		FD		FS	
Matrix	Method Class	Method	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L	VOCs	8260C	N	Trichloroethene	UG/L	59.6				31					
L	VOCs	8260C	N	Trichlorofluoromethane	UG/L	1 U				1 U					
L	VOCs	8260C	N	Vinyl chloride	UG/L	1 U				1 U					
L	VOCs	8260C	N	Xylene, o	UG/L	1 U				1 U					
L	VOCs	8260C	N	Xylenes (m&p)	UG/L	1 U				1 U					
S	VOCs	8260C	N	1,1,1,2-Tetrachloroethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,1,1-Trichloroethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,1,2,2-Tetrachloroethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,1,2-Trichloroethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,1-Dichloroethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,1-Dichloroethene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,1-Dichloropropene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,2,3-Trichlorobenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,2,3-Trichloropropane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,2,4-Trichlorobenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,2,4-Trimethylbenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,2-Dibromo-3-chloropropane	UG/KG			126 U				115 U		88 U	
S	VOCs	8260C	N	1,2-Dibromoethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,2-Dichlorobenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,2-Dichloroethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,2-Dichloropropane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,3,5-Trichlorobenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,3,5-Trimethylbenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,3-Dichlorobenzene	UG/KG			62.8 UJ				57.3 U		44 UJ	
S	VOCs	8260C	N	1,3-Dichloropropane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,4-Dichlorobenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	1,4-Dioxane	UG/KG			1260 UJ				1150 U		880 UJ	
S	VOCs	8260C	N	2,2-Dichloropropane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	2-Butanone	UG/KG			126 U				115 U		88 U	
S	VOCs	8260C	N	2-Chlorotoluene	UG/KG			62.8 UJ				57.3 U		44 UJ	
S	VOCs	8260C	N	2-Hexanone	UG/KG			126 U				115 U		88 U	
S	VOCs	8260C	N	4-Chlorotoluene	UG/KG			62.8 UJ				57.3 U		44 UJ	
S	VOCs	8260C	N	4-iso-Propyltoluene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	4-Methyl-2-pentanone	UG/KG			126 U				115 U		88 U	
S	VOCs	8260C	N	Acetone	UG/KG			628 U				573 U		440 U	

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
 DATA USABILITY SUMMARY REPORT
 SEPTEMBER 2024 SAMPLING EVENT
 IRVINGTON RUGS AND CLEANERS
 IRVINGTON, NEW YORK

					Location	DP-18		DP-18		DP-18		DP-18		DP-18	
					Lab Sample Delivery Group	620-20506-1		620-20506-1		620-20506-1		620-20506-1		620-20506-1	
					Field Sample Date	8/20/2024		8/20/2024		8/20/2024		8/20/2024		8/20/2024	
					Field Sample ID	360175-DP018001-GW		360175-DP018001-Soil		360175-DP018001D-GW		360175-DP018001D-Soil		360175-DP018004	
					Qc Code	FS		FS		FD		FD		FS	
Matrix	Method Class	Method	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
S	VOCs	8260C	N	Acrylonitrile	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Benzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Bromobenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Bromochloromethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Bromodichloromethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Bromoform	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Bromomethane	UG/KG			58.8 J				115 U		34.1 J	
S	VOCs	8260C	N	Butane, 2-methoxy-2-methyl-	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Carbon disulfide	UG/KG			126 U				115 U		88 U	
S	VOCs	8260C	N	Carbon tetrachloride	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Chlorobenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Chloroethane	UG/KG			126 UJ				115 U		88 UJ	
S	VOCs	8260C	N	Chloroform	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Chloromethane	UG/KG			126 UJ				115 U		88 UJ	
S	VOCs	8260C	N	cis-1,2-Dichloroethene	UG/KG			980				784		44 U	
S	VOCs	8260C	N	cis-1,3-Dichloropropene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Dibromochloromethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Dibromomethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Dichlorodifluoromethane	UG/KG			126 UJ				115 U		88 UJ	
S	VOCs	8260C	N	Diethyl ether	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Ethanol	UG/KG			12600 UJ				11500 U		8800 UJ	
S	VOCs	8260C	N	Ethyl-t-Butyl Ether	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Ethylbenzene	UG/KG			62.8 UJ				57.3 U		44 UJ	
S	VOCs	8260C	N	Hexachlorobutadiene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Isopropyl ether	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Isopropylbenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Methyl Tertbutyl Ether	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Methylene chloride	UG/KG			126 U				115 U		88 U	
S	VOCs	8260C	N	n-Butylbenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Naphthalene	UG/KG			126 UJ				115 U		88 UJ	
S	VOCs	8260C	N	Propylbenzene	UG/KG			62.8 UJ				57.3 U		44 UJ	
S	VOCs	8260C	N	sec-Butylbenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Styrene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	t-Butyl alcohol	UG/KG			1260 UJ				1150 U		880 UJ	
S	VOCs	8260C	N	tert-Butylbenzene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Tetrachloroethene	UG/KG			8460				5870		166	

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SEPTEMBER 2024 SAMPLING EVENT
IRVINGTON RUGS AND CLEANERS
IRVINGTON, NEW YORK

					Location	DP-18		DP-18		DP-18		DP-18		DP-18	
					Lab Sample Delivery Group	620-20506-1		620-20506-1		620-20506-1		620-20506-1		620-20506-1	
					Field Sample Date	8/20/2024		8/20/2024		8/20/2024		8/20/2024		8/20/2024	
					Field Sample ID	360175-DP018001-GW		360175-DP018001-Soil		360175-DP018001D-GW		360175-DP018001D-Soil		360175-DP018004	
					Qc Code	FS		FS		FD		FD		FS	
Matrix	Method Class	Method	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
S	VOCs	8260C	N	Tetrahydrofuran	UG/KG			126 U				115 U		88 U	
S	VOCs	8260C	N	Toluene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	trans-1,2-Dichloroethene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	trans-1,3-Dichloropropene	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	trans-1,4-Dichloro-2-butene	UG/KG			314 U				287 U		220 U	
S	VOCs	8260C	N	Trichloroethene	UG/KG			1540 J				457 J		8.24 J	
S	VOCs	8260C	N	Trichlorofluoromethane	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Vinyl chloride	UG/KG			62.8 UJ				57.3 U		44 UJ	
S	VOCs	8260C	N	Xylene, o	UG/KG			62.8 U				57.3 U		44 U	
S	VOCs	8260C	N	Xylenes (m&p)	UG/KG			62.8 U				57.3 U		44 U	
S	Grain Size	D422	N	0.075mm sieve	% FINER									0	
S	Grain Size	D422	N	0.15mm sieve	% FINER									10.6	
S	Grain Size	D422	N	0.25mm sieve	% FINER									21.5	
S	Grain Size	D422	N	0.425mm sieve	% FINER									35	
S	Grain Size	D422	N	0.85mm sieve	% FINER									47.3	
S	Grain Size	D422	N	2.0mm sieve	% FINER									55.3	
S	Grain Size	D422	N	4.75mm sieve	% FINER									67.3	
S	Grain Size	D422	N	9.5mm sieve	% FINER									80.9	
S	Grain Size	D422	N	Clay	PERCENT									0	
S	Grain Size	D422	N	Coarse Sand	PERCENT									12	
S	Grain Size	D422	N	Fine Sand	PERCENT									35	
S	Grain Size	D422	N	Gravel	PERCENT									32.7	
S	Grain Size	D422	N	Hydrometer Reading 1 - Percent Finer	% FINER									0	
S	Grain Size	D422	N	Hydrometer Reading 2 - Percent Finer	% FINER									0	
S	Grain Size	D422	N	Hydrometer Reading 3 - Percent Finer	% FINER									0	
S	Grain Size	D422	N	Hydrometer Reading 4 - Percent Finer	% FINER									0	
S	Grain Size	D422	N	Hydrometer Reading 5 - Percent Finer	% FINER									0	
S	Grain Size	D422	N	Hydrometer Reading 6 - Percent Finer	% FINER									0	
S	Grain Size	D422	N	Hydrometer Reading 7 - Percent Finer	% FINER									0	
S	Grain Size	D422	N	Medium Sand	PERCENT									20.3	
S	Grain Size	D422	N	Sand	PERCENT									67.3	
S	Grain Size	D422	N	Sieve Size #80	% FINER									13.2	
S	Grain Size	D422	N	Sieve Size 0.75 inch	% FINER									100	
S	Grain Size	D422	N	Sieve Size 1 inch	% FINER									100	
S	Grain Size	D422	N	Sieve Size 1.5 inch	% FINER									100	
S	Grain Size	D422	N	Sieve Size 2 inch	% FINER									100	
S	Grain Size	D422	N	Silt	PERCENT									0	
S	Moisture	Moisture	N	Percent Moisture	PERCENT			21.7				22.6		9.2	
S	Moisture	Moisture	N	Percent Solids	PERCENT			78.3				77.4		90.8	
S	Organic Range	8015D	N	Diesel Range Organics	MG/KG			366						33.1	
S	Organic Range	8015D	N	Gasoline Range Organics	MG/KG			5 U						5 U	

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SEPTEMBER 2024 SAMPLING EVENT
IRVINGTON RUGS AND CLEANERS
IRVINGTON, NEW YORK

				DP-18		DP-18		DP-18		QC		QC	
				620-20506-1		620-20506-1		620-20506-1		620-20506-1		620-20506-1	
				8/20/2024		8/20/2024		8/20/2024		8/21/2024		8/21/2024	
				360175-DP018007		360175-DP018009		360175-DP018008		360175-TB001		360175-TB002	
				FS		FS		FS		TB		TB	
				Qc Code		Qc Code		Qc Code		Qc Code		Qc Code	
Method	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8260C	N	1,1,1,2-Tetrachloroethane	UG/L					1 U		1 U			
8260C	N	1,1,1-Trichloroethane	UG/L					1 U		1 U			
8260C	N	1,1,2,2-Tetrachloroethane	UG/L					0.5 U		0.5 U			
8260C	N	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/L					1 U		1 U			
8260C	N	1,1,2-Trichloroethane	UG/L					1 U		1 U			
8260C	N	1,1-Dichloroethane	UG/L					1 U		1 U			
8260C	N	1,1-Dichloroethene	UG/L					1 U		1 U			
8260C	N	1,1-Dichloropropene	UG/L					1 U		1 U			
8260C	N	1,2,3-Trichlorobenzene	UG/L					1 U		1 U			
8260C	N	1,2,3-Trichloropropane	UG/L					1 U		1 U			
8260C	N	1,2,4-Trichlorobenzene	UG/L					1 U		1 U			
8260C	N	1,2,4-Trimethylbenzene	UG/L					1 U		1 U			
8260C	N	1,2-Dibromo-3-chloropropane	UG/L					2 U		2 U			
8260C	N	1,2-Dibromoethane	UG/L					0.5 U		0.5 U			
8260C	N	1,2-Dichlorobenzene	UG/L					1 U		1 U			
8260C	N	1,2-Dichloroethane	UG/L					1 U		1 U			
8260C	N	1,2-Dichloropropane	UG/L					1 U		1 U			
8260C	N	1,3,5-Trichlorobenzene	UG/L					1 U		1 U			
8260C	N	1,3,5-Trimethylbenzene	UG/L					1 U		1 U			
8260C	N	1,3-Dichlorobenzene	UG/L					1 U		1 U			
8260C	N	1,3-Dichloropropane	UG/L					1 U		1 U			
8260C	N	1,4-Dichlorobenzene	UG/L					1 U		1 U			
8260C	N	1,4-Dioxane	UG/L					50 U		50 U			
8260C	N	2,2-Dichloropropane	UG/L					1 U		1 U			
8260C	N	2-Butanone	UG/L					1.88 J		2 U			
8260C	N	2-Chlorotoluene	UG/L					1 U		1 U			
8260C	N	2-Hexanone	UG/L					2 U		2 U			
8260C	N	4-Chlorotoluene	UG/L					1 U		1 U			
8260C	N	4-iso-Propyltoluene	UG/L					1 U		1 U			
8260C	N	4-Methyl-2-pentanone	UG/L					2 U		2 U			
8260C	N	Acetone	UG/L					14.9		3.17 J			
8260C	N	Acrylonitrile	UG/L					1 U		1 U			
8260C	N	Benzene	UG/L					1 U		1 U			
8260C	N	Bromobenzene	UG/L					1 U		1 U			
8260C	N	Bromochloromethane	UG/L					1 U		1 U			
8260C	N	Bromodichloromethane	UG/L					0.5 U		0.5 U			

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SEPTEMBER 2024 SAMPLING EVENT
IRVINGTON RUGS AND CLEANERS
IRVINGTON, NEW YORK

			Location	DP-18		DP-18		DP-18		QC		QC	
			Lab Sample Delivery Group	620-20506-1		620-20506-1		620-20506-1		620-20506-1		620-20506-1	
			Field Sample Date	8/20/2024		8/20/2024		8/20/2024		8/21/2024		8/21/2024	
			Field Sample ID	360175-DP018007		360175-DP018009		360175-DP018008		360175-TB001		360175-TB002	
			Qc Code	FS		FS		FS		TB		TB	
Method	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8260C	N	Bromoform	UG/L					1 U		1 U			
8260C	N	Bromomethane	UG/L					2 U		2 U			
8260C	N	Butane, 2-methoxy-2-methyl-	UG/L					1 U		1 U			
8260C	N	Carbon disulfide	UG/L					2 U		2 U			
8260C	N	Carbon tetrachloride	UG/L					1 U		1 U			
8260C	N	Chlorobenzene	UG/L					1 U		1 U			
8260C	N	Chloroethane	UG/L					2 U		2 U			
8260C	N	Chloroform	UG/L					1 U		1 U			
8260C	N	Chloromethane	UG/L					2 U		2 U			
8260C	N	cis-1,2-Dichloroethene	UG/L					5.78		1 U			
8260C	N	cis-1,3-Dichloropropene	UG/L					0.5 U		0.5 U			
8260C	N	Dibromochloromethane	UG/L					0.5 U		0.5 U			
8260C	N	Dibromomethane	UG/L					1 U		1 U			
8260C	N	Dichlorodifluoromethane	UG/L					2 UJ		2 U			
8260C	N	Diethyl ether	UG/L					1 U		1 U			
8260C	N	Ethanol	UG/L					14 J		200 U			
8260C	N	Ethyl-t-Butyl Ether	UG/L					1 U		1 U			
8260C	N	Ethylbenzene	UG/L					1 U		1 U			
8260C	N	Hexachlorobutadiene	UG/L					1 U		1 U			
8260C	N	Isopropyl ether	UG/L					1 U		1 U			
8260C	N	Isopropylbenzene	UG/L					1 U		1 U			
8260C	N	Methyl Tertbutyl Ether	UG/L					1 U		1 U			
8260C	N	Methylene chloride	UG/L					2 U		2 U			
8260C	N	n-Butylbenzene	UG/L					1 U		1 U			
8260C	N	Naphthalene	UG/L					0.874 J		2 U			
8260C	N	Propylbenzene	UG/L					1 U		1 U			
8260C	N	sec-Butylbenzene	UG/L					1 U		1 U			
8260C	N	Styrene	UG/L					1 U		1 U			
8260C	N	t-Butyl alcohol	UG/L					10 U		10 U			
8260C	N	tert-Butylbenzene	UG/L					1 U		1 U			
8260C	N	Tetrachloroethene	UG/L					227		1 U			
8260C	N	Tetrahydrofuran	UG/L					2 U		2 U			
8260C	N	Toluene	UG/L					1 U		1 U			
8260C	N	trans-1,2-Dichloroethene	UG/L					1 U		1 U			
8260C	N	trans-1,3-Dichloropropene	UG/L					0.5 U		0.5 U			
8260C	N	trans-1,4-Dichloro-2-butene	UG/L					5 U		5 U			

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
 DATA USABILITY SUMMARY REPORT
 SEPTEMBER 2024 SAMPLING EVENT
 IRVINGTON RUGS AND CLEANERS
 IRVINGTON, NEW YORK

			Location	DP-18		DP-18		DP-18		QC		QC	
			Lab Sample Delivery Group	620-20506-1		620-20506-1		620-20506-1		620-20506-1		620-20506-1	
			Field Sample Date	8/20/2024		8/20/2024		8/20/2024		8/21/2024		8/21/2024	
			Field Sample ID	360175-DP018007		360175-DP018009		360175-DP018008		360175-TB001		360175-TB002	
			Qc Code	FS		FS		FS		TB		TB	
Method	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8260C	N	Trichloroethene	UG/L					10.9		1 U			
8260C	N	Trichlorofluoromethane	UG/L					1 U		1 U			
8260C	N	Vinyl chloride	UG/L					1 U		1 U			
8260C	N	Xylene, o	UG/L					1 U		1 U			
8260C	N	Xylenes (m&p)	UG/L					1 U		1 U			
8260C	N	1,1,1,2-Tetrachloroethane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,1,1-Trichloroethane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,1,2,2-Tetrachloroethane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,1,2-Trichloroethane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,1-Dichloroethane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,1-Dichloroethene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,1-Dichloropropene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,2,3-Trichlorobenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,2,3-Trichloropropane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,2,4-Trichlorobenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,2,4-Trimethylbenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,2-Dibromo-3-chloropropane	UG/KG	87.4	U	83.8	U					100	U
8260C	N	1,2-Dibromoethane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,2-Dichlorobenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,2-Dichloroethane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,2-Dichloropropane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,3,5-Trichlorobenzene	UG/KG	43.7	U	10.5	J					50	U
8260C	N	1,3,5-Trimethylbenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,3-Dichlorobenzene	UG/KG	43.7	UJ	41.9	UJ					50	U
8260C	N	1,3-Dichloropropane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,4-Dichlorobenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	1,4-Dioxane	UG/KG	874	UJ	838	UJ					1000	U
8260C	N	2,2-Dichloropropane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	2-Butanone	UG/KG	87.4	UJ	83.8	U					100	U
8260C	N	2-Chlorotoluene	UG/KG	43.7	UJ	41.9	UJ					50	U
8260C	N	2-Hexanone	UG/KG	87.4	U	83.8	U					100	U
8260C	N	4-Chlorotoluene	UG/KG	43.7	UJ	41.9	UJ					50	U
8260C	N	4-iso-Propyltoluene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	4-Methyl-2-pentanone	UG/KG	87.4	U	83.8	U					100	U
8260C	N	Acetone	UG/KG	437	UJ	419	U					70.5	J

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
 DATA USABILITY SUMMARY REPORT
 SEPTEMBER 2024 SAMPLING EVENT
 IRVINGTON RUGS AND CLEANERS
 IRVINGTON, NEW YORK

			Location	DP-18		DP-18		DP-18		QC		QC	
			Lab Sample Delivery Group	620-20506-1		620-20506-1		620-20506-1		620-20506-1		620-20506-1	
			Field Sample Date	8/20/2024		8/20/2024		8/20/2024		8/21/2024		8/21/2024	
			Field Sample ID	360175-DP018007		360175-DP018009		360175-DP018008		360175-TB001		360175-TB002	
			Qc Code	FS		FS		FS		TB		TB	
Method	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8260C	N	Acrylonitrile	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Benzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Bromobenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Bromochloromethane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Bromodichloromethane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Bromoform	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Bromomethane	UG/KG	36.2	J	35.2	J					100	U
8260C	N	Butane, 2-methoxy-2-methyl-	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Carbon disulfide	UG/KG	87.4	U	83.8	U					100	U
8260C	N	Carbon tetrachloride	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Chlorobenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Chloroethane	UG/KG	87.4	UJ	83.8	UJ					100	U
8260C	N	Chloroform	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Chloromethane	UG/KG	87.4	UJ	83.8	UJ					100	U
8260C	N	cis-1,2-Dichloroethene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	cis-1,3-Dichloropropene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Dibromochloromethane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Dibromomethane	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Dichlorodifluoromethane	UG/KG	87.4	UJ	83.8	UJ					100	U
8260C	N	Diethyl ether	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Ethanol	UG/KG	8740	UJ	8380	UJ					10000	U
8260C	N	Ethyl-t-Butyl Ether	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Ethylbenzene	UG/KG	43.7	UJ	41.9	UJ					50	U
8260C	N	Hexachlorobutadiene	UG/KG	43.7	U	32.7	J					50	U
8260C	N	Isopropyl ether	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Isopropylbenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Methyl Tertbutyl Ether	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Methylene chloride	UG/KG	87.4	U	83.8	U					100	U
8260C	N	n-Butylbenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Naphthalene	UG/KG	87.4	UJ	21	J					100	U
8260C	N	Propylbenzene	UG/KG	43.7	UJ	41.9	UJ					50	U
8260C	N	sec-Butylbenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Styrene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	t-Butyl alcohol	UG/KG	874	UJ	838	UJ					1000	U
8260C	N	tert-Butylbenzene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Tetrachloroethene	UG/KG	49.5	U	202						50	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SEPTEMBER 2024 SAMPLING EVENT
IRVINGTON RUGS AND CLEANERS
IRVINGTON, NEW YORK

			Location	DP-18		DP-18		DP-18		QC		QC	
			Lab Sample Delivery Group	620-20506-1		620-20506-1		620-20506-1		620-20506-1		620-20506-1	
			Field Sample Date	8/20/2024		8/20/2024		8/20/2024		8/21/2024		8/21/2024	
			Field Sample ID	360175-DP018007		360175-DP018009		360175-DP018008		360175-TB001		360175-TB002	
			Qc Code	FS		FS		FS		TB		TB	
Method	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8260C	N	Tetrahydrofuran	UG/KG	87.4	U	83.8	U					100	U
8260C	N	Toluene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	trans-1,2-Dichloroethene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	trans-1,3-Dichloropropene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	trans-1,4-Dichloro-2-butene	UG/KG	218	U	210	U					250	U
8260C	N	Trichloroethene	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Trichlorofluoromethane	UG/KG	43.7	UJ	41.9	U					50	U
8260C	N	Vinyl chloride	UG/KG	43.7	UJ	41.9	UJ					50	U
8260C	N	Xylene, o	UG/KG	43.7	U	41.9	U					50	U
8260C	N	Xylenes (m&p)	UG/KG	43.7	U	41.9	U					50	U
D422	N	0.075mm sieve	% FINER										
D422	N	0.15mm sieve	% FINER										
D422	N	0.25mm sieve	% FINER										
D422	N	0.425mm sieve	% FINER										
D422	N	0.85mm sieve	% FINER										
D422	N	2.0mm sieve	% FINER										
D422	N	4.75mm sieve	% FINER										
D422	N	9.5mm sieve	% FINER										
D422	N	Clay	PERCENT										
D422	N	Coarse Sand	PERCENT										
D422	N	Fine Sand	PERCENT										
D422	N	Gravel	PERCENT										
D422	N	Hydrometer Reading 1 - Percent Finer	% FINER										
D422	N	Hydrometer Reading 2 - Percent Finer	% FINER										
D422	N	Hydrometer Reading 3 - Percent Finer	% FINER										
D422	N	Hydrometer Reading 4 - Percent Finer	% FINER										
D422	N	Hydrometer Reading 5 - Percent Finer	% FINER										
D422	N	Hydrometer Reading 6 - Percent Finer	% FINER										
D422	N	Hydrometer Reading 7 - Percent Finer	% FINER										
D422	N	Medium Sand	PERCENT										
D422	N	Sand	PERCENT										
D422	N	Sieve Size #80	% FINER										
D422	N	Sieve Size 0.75 inch	% FINER										
D422	N	Sieve Size 1 inch	% FINER										
D422	N	Sieve Size 1.5 inch	% FINER										
D422	N	Sieve Size 2 inch	% FINER										
D422	N	Silt	PERCENT										
Moisture	N	Percent Moisture	PERCENT	8.5		10							
Moisture	N	Percent Solids	PERCENT	91.5		90							
8015D	N	Diesel Range Organics	MG/KG										
8015D	N	Gasoline Range Organics	MG/KG										

TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS
DATA USABILITY SUMMARY REPORT
SEPTEMBER 2024 SAMPLING EVENT
IRVINGTON RUGS AND CLEANERS
IRVINGTON, NEW YORK

Lab SDG	Lab Sample ID	Field Sample ID	Method	Fraction	Parameter	Lab Result	Lab Qualifier	Final Result	Final Qualifier	Val Reason Code	Units	Lab ID
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	Ethylbenzene	62.8	U	62.8	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	Dichlorodifluoromethane	126	U	126	UJ	ICV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	t-Butyl alcohol	1260	U *-	1260	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	1,4-Dioxane	1260	U	1260	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	2-Chlorotoluene	62.8	U *+	62.8	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	Naphthalene	126	U	126	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	Trichloroethene	1540		1540	J	FD	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	Chloroethane	126	U	126	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	Chloromethane	126	U	126	UJ	ICV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	Ethanol	12600	U *-	12600	UJ	ICV%D, CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	1,3-Dichlorobenzene	62.8	U	62.8	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	4-Chlorotoluene	62.8	U *+	62.8	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	Propylbenzene	62.8	U *+	62.8	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-1	360175-DP018001-Soil	8260C	N	Vinyl chloride	62.8	U	62.8	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	4-Chlorotoluene	44	U *+	44	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	1,3-Dichlorobenzene	44	U	44	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	Ethanol	8800	U *-	8800	UJ	ICV%D, CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	Naphthalene	88	U	88	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	Vinyl chloride	44	U	44	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	2-Chlorotoluene	44	U *+	44	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	Propylbenzene	44	U *+	44	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	Chloromethane	88	U	88	UJ	ICV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	Ethylbenzene	44	U	44	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	1,4-Dioxane	880	U	880	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	Dichlorodifluoromethane	88	U	88	UJ	ICV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	t-Butyl alcohol	880	U *-	880	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-2	360175-DP018004	8260C	N	Chloroethane	88	U	88	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	2-Butanone	87.4	U F1 F2	87.4	UJ	MSL	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	1,4-Dioxane	87.4	U F1 F2	87.4	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	Chloroethane	87.4	U F1 F2	87.4	UJ	CCV%D, MSL	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	Trichlorofluoromethane	43.7	U F1 F2	43.7	UJ	MSL	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	1,3-Dichlorobenzene	43.7	U F2	43.7	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	Chloromethane	87.4	U F2	87.4	UJ	ICV%D	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	4-Chlorotoluene	43.7	U *+ F2	43.7	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	Vinyl chloride	43.7	U F2	43.7	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	2-Chlorotoluene	43.7	U *+ F2	43.7	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	Naphthalene	87.4	U F2	87.4	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	Ethanol	8740	U *- F1	8740	UJ	ICV%D, CCV%D, MSL	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	Propylbenzene	43.7	U *+	43.7	UJ	CCV%D	UG/KG	Eurofins

TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS
DATA USABILITY SUMMARY REPORT
SEPTEMBER 2024 SAMPLING EVENT
IRVINGTON RUGS AND CLEANERS
IRVINGTON, NEW YORK

Lab SDG	Lab Sample ID	Field Sample ID	Method	Fraction	Parameter	Lab Result	Lab Qualifier	Final Result	Final Qualifier	Val Reason Code	Units	Lab ID
620-20506-1	620-20506-3	360175-DP018007	8260C	N	Bromomethane	36.2	J F1 F2	36.2	J-	MSL	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	Dichlorodifluoromethane	87.4	U F2	87.4	UJ	ICV%D, CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	Ethylbenzene	43.7	U F2	43.7	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	Acetone	437	U F1 F2	437	UJ	MSL	UG/KG	Eurofins
620-20506-1	620-20506-3	360175-DP018007	8260C	N	t-Butyl alcohol	874	U *- F1 F2	874	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-4	360175-DP018001D-Soil	8260C	N	Trichloroethene	457	J	457	J	FD	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	1,4-Dioxane	838	U	838	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	2-Chlorotoluene	41.9	U *+	41.9	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	Naphthalene	21	J	21	J	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	Vinyl chloride	41.9	U	41.9	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	Chloromethane	83.8	U	83.8	UJ	ICV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	1,3-Dichlorobenzene	41.9	U	41.9	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	4-Chlorotoluene	41.9	U *+	41.9	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	Propylbenzene	41.9	U *+	41.9	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	Ethylbenzene	41.9	U	41.9	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	t-Butyl alcohol	838	U *-	838	UJ	CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	Chloroethane	83.8	U	83.8	UJ	ICV%D, CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	Ethanol	8380	U *-	8380	UJ	ICV%D, CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-5	360175-DP018009	8260C	N	Dichlorodifluoromethane	83.8	U	83.8	UJ	ICV%D, CCV%D	UG/KG	Eurofins
620-20506-1	620-20506-6	360175-TB002	8260C	N	Ethanol	10000	U *-	10000	U	U	UG/KG	Eurofins
620-20506-1	620-20506-6	360175-TB002	8260C	N	Dichlorodifluoromethane	100	U	100	U	U	UG/KG	Eurofins
620-20506-1	620-20506-6	360175-TB002	8260C	N	Chloromethane	100	U	100	U	U	UG/KG	Eurofins
620-20506-1	620-20506-7	360175-DP018001-GW	8260C	N	Dichlorodifluoromethane	2	U	2	UJ	ICV%D, CCV%D, LCSL	UG/L	Eurofins
620-20506-1	620-20506-8	360175-DP018008	8260C	N	Dichlorodifluoromethane	2	U	2	UJ	ICV%D, CCV%D, LCSL	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	1,2-Dibromo-3-chloropropane	2	U	2	UJ	CCV%D	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	Tetrahydrofuran	2	U	2	UJ	CCV%D	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	1,2,4-Trichlorobenzene	1	U	1	UJ	CCV%D	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	Ethanol	200	U	200	UJ	ICV%D, CCV%D	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	Chloromethane	2	U	2	UJ	ICV%D	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	2-Butanone	2	U	2	UJ	CCV%D, LCSL	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	Naphthalene	2	U	2	UJ	CCV%D	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	4-Methyl-2-pentanone	2	U	2	UJ	CCV%D	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	1,4-Dioxane	50	U	50	UJ	CCV%D	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	2-Hexanone	2	U	2	UJ	CCV%D, LCSL	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	Ethyl-t-Butyl Ether	1	U	1	UJ	CCV%D	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	Acetone	1.86	J B	10	UJ	CCV%D, LCSL	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	Dichlorodifluoromethane	2	U	2	UJ	ICV%D, CCV%D LCSL	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	1,2,3-Trichlorobenzene	1	U	1	UJ	CCV%D	UG/L	Eurofins
620-20506-1	620-20506-9	360175-DP018001D-GW	8260C	N	t-Butyl alcohol	10	U	10	UJ	CCV%D	UG/L	Eurofins

**DATA USABILITY SUMMARY REPORT
AUGUST 2024 SAMPLING EVENT
IRVINGTON RUGS AND CLEANERS
IRVINGTON, NEW YORK**

ATTACHMENT B

GENERAL CHEMISTRY

NYSDEC DUSR PROJECT CHEMIST REVIEW RECORD

Project: Irvington Rugs August 2024

Method: D422 Grain Size, Moisture

Laboratory: Eurofins Rhode Island

SDG(s): 620-20506-1

Date: 10/11/2024

Reviewer: Tara LePage

Review Level ☒ NYSDEC DUSR ☐ USEPA Region II Guideline

1. ☐ **Case Narrative Review and Data Package Completeness** COMMENTS
Were problems noted? Yes
Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one)
Are Field Sample IDs and Locations assigned correctly? YES NO (circle one)
2. ☐ **Holding time and Sample Collection**
Were all samples prepared and analyzed with the method holding time? YES NO
3. ☐ **QC Blanks**
Are method blanks clean? YES NO NA (circle one)
Are Initial and continuing calibration blanks clean? YES NO NA (circle one)
4. ☐ **Instrument Calibration – Data Package Narrative Review**
Did the laboratory narrative identify analytes that were not within criteria in the initial and/or continuing calibration standards? YES NO
Did the laboratory qualify results based on initial/continuing calibration exceedances? YES NO
If yes to above, use professional judgment to evaluate data and qualify results if needed
5. ☐ **Laboratory Control Sample Results**
Were all results within 80-120% limits? YES NO NA (circle one)
6. ☐ **Matrix Spike**
Were MS/MSDs submitted/analyzed? YES NO NA (circle one)

Were all results within nominal 75-125% limits? YES NO NA (circle one)
7. ☐ **Duplicates**
Were Field Duplicates submitted/analyzed? YES NO
360175-DP018001D-Soil
Aqueous RPD within limit? (20%) YES NO NA (circle one)
Soil RPD within limit? (35%) YES NO NA (circle one)
Lab dup RPD <20% for water, 35% for soil values > 5X the CRQL (or ± CRQL) YES NO NA
8. ☐ Were both **Total and Dissolved** parameters reported? YES NO NA (circle one)
If the dissolved concentration is > 20% of the total concentration then estimate (J) both results
9. ☐ **Percent Solids** < 50% for any soil/sediment sample? YES NO NA (circle one)
If yes, use professional judgment
10. ☐ **Raw Data Review and Calculation Checks**
11. ☐ **Electronic Data Review and Edits**

Does the EDD match the Form Is? YES NO (circle one)
12. ☐ **DUSR Table Review**
Table 1 (Samples and Analytical Methods)

Table 2 (Analytical Results)

Table 3 (Qualification Actions)

Were all tables produced and reviewed? YES NO (circle one)

SVOC as DRO

NYSDEC DUSR PROJECT CHEMIST REVIEW RECORD

Project: Irvington Rugs August 2024

Method: 8015D DRO

Laboratory: Eurofins Rhode Island

SDG(s): 620-20506-1

Date: 10/11/2024

Reviewer: Tara LePage

Review Level ☒ NYSDEC DUSR ☐ USEPA Region II Guideline

1. ☐ **Case Narrative Review and Data Package Completeness** COMMENTS
Were problems noted? No
Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one)
Are Field Sample IDs and Locations assigned correctly? YES NO (circle one)
2. ☐ **Holding time and Sample Collection**
Soil: 14 days from collection to extraction; 40 days from extraction to analysis
Water: 7 days from collection to extraction; 40 days from extraction to analysis
Hold time met for all samples? YES NO (circle one)
3. ☐ **QC Blanks**
Are method blanks free of contamination? YES NO (circle one)
Are Rinse blanks free of contamination? YES NO NA (circle one)
4. ☐ **Instrument Tuning – Data Package Narrative Review**
Did the laboratory narrative identify any results that were not within method criteria? YES NO (circle one)
If yes, use professional judgment to evaluate data and qualify results if needed
5. ☐ **Internal Standards – Data Package Narrative Review**
(Area Limits = -50% to +100%, RTs within 30 seconds of daily CCAL standard (or ICAL mid-point if samples follow ICAL))
Did the laboratory narrative identify any sample internal standards that were not within criteria? YES NO (circle one)

Did the laboratory qualify results based on internal standard exceedances? YES NO
If yes to above, use professional judgment to evaluate data and qualify results if needed
6. ☐ **Instrument Calibration – Data Package Narrative Review**
Did the laboratory narrative identify compounds that were not within criteria in the initial and/or continuing calibration standards? YES NO (circle one)

Control Limits (USEPA Region 2 HW-22): Initial Calibration %RSD <20, Continuing Calibration %D ≤20. Average RRF should be ≥ 0.05 (Use professional judgment J/UJ or J/R)

Did the laboratory qualify results based on initial or continuing calibration exceedances? YES NO
If yes to above, use professional judgment to evaluate data and qualify results if needed
7. ☐ **Surrogate Recovery** (Nominal water and soil limits for SVOCs: Base/Neutral 50-140%, Acid 30-140%)
Were all results within limits? YES NO (circle one)
Were any recoveries < 10%? (Reject fraction compounds if recoveries are < 10%)
8. ☐ **Matrix Spike** (Nominal water & soil limits for SVOCs: Base/Neutral 50-140%, Acid 30-140%) (RPD soil=35, water=20)
Were MS/MSDs submitted/analyzed? YES NO

Were all results within limits? YES NO **NA** (circle one)

9. ☐ **Duplicates** (RPD limits = water:50, soil:100)

Were Field Duplicates submitted/analyzed? YES **NO**

Were RPDs within criteria? YES NO **NA** (circle one)

10. ☐ **Laboratory Control Sample Results** (Nominal water & soil limits for SVOCs: Base/Neutral 50-140%,
Acid 30-140%)

Were all results within limits? **YES** NO (circle one)

11. ☐ **Raw Data Review and Calculation Checks**

12. ☐ **Electronic Data Review and Edits**

Does the EDD match the Form Is? YES NO (circle one)

13. ☐ **Tables and TIC Review**

Table 1 (Samples and Analytical Methods)

Table 2 (Analytical Results)

Table 3 (Qualification Actions)

Were all tables produced and reviewed? YES NO (circle one)

Table 4 (TICs) Did lab report TICs? YES NO (circle one)

VOCs

NYSDEC DUSR PROJECT CHEMIST REVIEW RECORD

Project: Irvington Rugs August 2024

Method: 8015D (GRO)

Laboratory: Eurofins Rhode Island

SDG(s): 620-20506-1

Date: 10/11/2024

Reviewer: Tara LePage

Review Level ☒ NYSDEC DUSR

☐ USEPA Region II Guideline

1. ☒ **Case Narrative Review and COC/Data Package Completeness** COMMENTS
Were problems noted? Yes, see backup
Are Field Sample IDs and Locations assigned correctly? YES NO (circle one)
Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one)
2. ☒ **Holding time and Sample Collection**
All samples were analyzed within the 14 day holding time. YES NO (circle one)
3. ☒ **QC Blanks**
Are method blanks free of contamination? YES NO (circle one)
See backup, both MB and sample result were less than the reporting limit. Sample result was raised to the reporting limit with a U qualifier as per NFG guidelines.
Are Trip blanks free of contamination? YES NO NA (circle one)
Are Rinse blanks free of contamination? YES NO NA (circle one)
4. ☒ **Instrument Tuning – Data Package Narrative Review**
Did the laboratory narrative identify any results that were not within method criteria? YES NO (circle one)
If yes, use professional judgment to evaluate data and qualify results if needed
5. ☒ **Instrument Calibration – Data Package Narrative Review**
Did the laboratory narrative identify compounds that were not within criteria in the initial and/or continuing calibration standards? YES NO (circle one)

Initial Calibration %RSD = 20% (30% for 1,1-DCE, chloroform, 1,2-DCP, toluene, ethylbenzene, VC)
Initial Avg RRF and Continuing RRF should be ≥ 0.05 and 0.10 for Chloromethane, 1,1-Dichloroethane, Bromoform and 0.30 for Chlorobenzene and 1,1,2,2-Tetrachloroethane

Continuing Calibration %D = 20%

Did the laboratory qualify results based on initial or continuing calibration exceedances? YES NO
If yes to above, use professional judgment to evaluate data and qualify results if needed
6. ☒ **Internal Standards – Data Package Narrative Review**
(Area Limits = -50% to +100%, RTs within 30 seconds of daily CCAL standard (or ICAL mid-point if samples follow ICAL))
Did the laboratory narrative identify any sample internal standards that were not within criteria? YES NO (circle one)

Did the laboratory qualify results based on internal standard exceedances? YES NO
If yes to above, use professional judgment to evaluate data and qualify results if needed
7. ☒ **Surrogate Recovery - Region II limits (water 80-120%, soil 70-130%)**

Were all results within Region II limits? YES NO (circle one)
See backup.
8. ☒ **Matrix Spike - Region II limits (water and soil 70-130%, water RPD 20, soil RPD 35)**

Were MS/MSDs submitted/analyzed? YES NO

9. ☒ **Duplicates** - Region II Limits (water RPD 50, soil RPD 100)

Were Field Duplicates submitted/analyzed? YES **NO**

Were all results within Region II limits? (soil RPD<100, water RPD<50) YES NO **NA**

10. ☒ **Laboratory Control Sample Results** - Region II (Water and soil 70-130%)

Were all results within Region II control limits? **YES** NO (circle one)

11. ☒ **Reporting Limits:** Were samples analyzed at a dilution? YES **NO** (circle one)

12. ☐ **Raw Data Review and Calculation Checks**

Unsure if I should run calc checks for this method;
there are no internal standards in the quant report (1228)

13. ☒ **Electronic Data Review and Edits**

Does the EDD match the Form Is? **YES** NO (circle one)

14. ☐ **Tables and TIC Review**

Table 1 (Samples and Analytical Methods)

Table 2 (Analytical Results)

Table 3 (Qualification Actions)

Were all tables produced and reviewed? YES NO (circle one)

Table 4 (TICs) Did lab report TICs? YES NO (circle one)

analytes were biased high/low in the LCSD but recovered within 70-130%. According to 8260C requirements, analytes are allowed to recover outside in-house control limits as long as recovery is within the method limit of 70-130%; therefore, the data have been reported.

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

Gasoline Range Organics

Method 8015D GRO: Surrogate recovery for the following sample was outside control limits: 360175-DP018001 (620-20506-1). Evidence of pattern interference is present; therefore, re-extraction and/or re-analysis was not performed. no quals

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

Diesel Range Organics

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

General Chemistry

Method Moisture: The sample duplicate (DUP) precision for analytical batch 620-38165 was outside control limits. Sample non-homogeneity is suspected.

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

Geotechnical

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

Surrogate Summary

Client: WSP USA Environment & Infrastructure Inc.

Job ID: 620-20506-1

Project/Site: Irvington R&C

TOL = Toluene-d8 (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	25DBTf1 (70-130)	
620-20506-1	360175-DP018001	208 S1+	potential high bias, all samples ND, no quals
620-20506-2	360175-DP018004	84	
LCS 620-38385/1-A	Lab Control Sample	95	
LCSD 620-38385/2-A	Lab Control Sample Dup	94	
MB 620-38385/3-A	Method Blank	84	
Surrogate Legend			
25DBTf = 2,5-Dibromotoluene (fid)			

Method: 8015D - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	OTPH (40-140)	1COD (40-140)
620-20506-1	360175-DP018001	68	95
620-20506-2	360175-DP018004	68	101
LCS 620-38241/2-A	Lab Control Sample	68	78
LCSD 620-38241/3-A	Lab Control Sample Dup	75	83
MB 620-38241/1-A	Method Blank	54	81
Surrogate Legend			
OTPH = o-Terphenyl			
1COD = 1-Chlorooctadecane			

QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: LCSD 620-38433/2-A
Matrix: Solid
Analysis Batch: 38400

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38433

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 620-38385/3-A
Matrix: Solid
Analysis Batch: 38363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38385

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	blank<RL, samples<RL, samples raised to RL with U, no quals	0.6654 J	5.00	0.0555	mg/Kg		08/29/24 08:00	08/29/24 14:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	84		70 - 130				08/29/24 08:00	08/29/24 14:24	1

Lab Sample ID: LCS 620-38385/1-A
Matrix: Solid
Analysis Batch: 38363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38385

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec	Limits	
C6-C10	12.5	12.44		mg/Kg		100	70 - 130		
Surrogate	%Recovery	Qualifier	Limits						
2,5-Dibromotoluene (fid)	95		70 - 130						

Lab Sample ID: LCSD 620-38385/2-A
Matrix: Solid
Analysis Batch: 38363

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38385

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	Limit
C6-C10	12.5	12.44		mg/Kg		100	70 - 130	0	25
Surrogate	%Recovery	Qualifier	Limits						
2,5-Dibromotoluene (fid)	94		70 - 130						

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 620-38241/1-A
Matrix: Solid
Analysis Batch: 38342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38241

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	ND	U	13.3	11.8	mg/Kg		08/27/24 09:04	08/29/24 10:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	54		40 - 140				08/27/24 09:04	08/29/24 10:41	1

Eurofins Rhode Island

VOCs

NYSDEC DUSR PROJECT CHEMIST REVIEW RECORD

Project: Irvington Rugs August 2024

Method: 8260C

Laboratory: Eurofins Rhode Island

SDG(s): 620-20506-1

Date: 10/7/2024

Reviewer: Tara LePage

Review Level ☒ NYSDEC DUSR

USEPA Region II Guideline

1. ☒ **Case Narrative Review and COC/Data Package Completeness** COMMENTS
Were problems noted? Yes, see backup
Are Field Sample IDs and Locations assigned correctly? YES NO (circle one)
Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one)
2. ☒ **Holding time and Sample Collection**
All samples were analyzed within the 14 day holding time. YES NO (circle one)
3. ☒ **QC Blanks**
Are method blanks free of contamination? YES NO (circle one)
See backup, both MB and sample result were less than the reporting limit. Sample result was raised to the reporting limit with a U qualifier as per NFG guidelines.
Are Trip blanks free of contamination? YES NO (circle one)
See backup, TB-01 and TB-02 both had reported results for acetone under the RL. Sample results for the associated TB were raised to the reporting limit with a U qualifier and ND results were not affected as per NFG Guidelines
Are Rinse blanks free of contamination? YES NO NA (circle one)
4. ☒ **Instrument Tuning – Data Package Narrative Review**
Did the laboratory narrative identify any results that were not within method criteria? YES NO (circle one)
If yes, use professional judgment to evaluate data and qualify results if needed
5. ☒ **Instrument Calibration – Data Package Narrative Review**
Did the laboratory narrative identify compounds that were not within criteria in the initial and/or continuing calibration standards? YES NO (circle one)

Initial Calibration %RSD = 20% (30% for 1,1-DCE, chloroform, 1,2-DCP, toluene, ethylbenzene, VC)
Initial Avg RRF and Continuing RRF should be ≥ 0.05 and 0.10 for Chloromethane, 1,1-Dichloroethane, Bromoform and 0.30 for Chlorobenzene and 1,1,2,2-Tetrachloroethane

Continuing Calibration %D = 20%
See backup for qualifications
Did the laboratory qualify results based on initial or continuing calibration exceedances? YES NO
If yes to above, use professional judgment to evaluate data and qualify results if needed
6. ☒ **Internal Standards – Data Package Narrative Review**
(Area Limits = -50% to +100%, RTs within 30 seconds of daily CCAL standard (or ICAL mid-point if samples follow ICAL))
Did the laboratory narrative identify any sample internal standards that were not within criteria? YES NO (circle one)

Did the laboratory qualify results based on internal standard exceedances? YES NO
If yes to above, use professional judgment to evaluate data and qualify results if needed
7. ☒ **Surrogate Recovery - Region II limits (water 80-120%, soil 70-130%)**

Were all results within Region II limits? YES NO (circle one)
8. ☒ **Matrix Spike - Region II limits (water and soil 70-130%, water RPD 20, soil RPD 35)**

Were MS/MSDs submitted/analyzed? **YES** NO

360175-DP18007 was submitted by WSP and analyzed

Were all results within the Region II limits? YES **NO** NA (circle one)

See backup; low %Recovery for 2-Butanone, Acetone, Bromomethane, Chloroethane, and Ethanol; RPD greater than 35 for multiple parameters but all results at reporting limits, no qualifications

9. ☒ **Duplicates** - Region II Limits (water RPD 50, soil RPD 100)

Were Field Duplicates submitted/analyzed? **YES** NO

360175-DP018001-GW and 360175-DP018001D-GW

360175-DP018001-SOIL and 360175-DP018001D-SOIL

Were all results within Region II limits? (soil RPD<100, water RPD<50) YES **NO** NA

See calculations in backup; trichloroethene RPD 108% for 360175-DP018001-SOIL

10. ☒ **Laboratory Control Sample Results** - Region II (Water and soil 70-130%)

Were all results within Region II control limits? YES **NO** (circle one)

See backup for qualifications

11. ☒ **Reporting Limits:** Were samples analyzed at a dilution? **YES** NO (circle one)
Samples were analyzed at a dilution but were not in the reported results.

12. ☒ **Raw Data Review and Calculation Checks**

13. ☒ **Electronic Data Review and Edits**

Does the EDD match the Form Is? YES NO (circle one)

14. ☐ **Tables and TIC Review**

Table 1 (Samples and Analytical Methods)

Table 2 (Analytical Results)

Table 3 (Qualification Actions)

Were all tables produced and reviewed? YES NO (circle one)

Table 4 (TICs) Did lab report TICs? YES NO (circle one)

Case Narrative

Client: WSP USA Environment & Infrastructure Inc.
Project: Irvington R&C

Job ID: 620-20506-1

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Job Narrative 620-20506-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 8/23/2024 10:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.6°C.

Receipt Exceptions

The following samples were received with insufficient time remaining to freeze within 48 hours, as required for samples collected in water preserved TerraCores: 360175-DP018001 (620-20506-1), 360175-DP018004 (620-20506-2), 360175-DP018007 (620-20506-3), 360175-DP018007 (620-20506-3[MSJ]), 360175-DP018007 (620-20506-3[MSD]), 360175-DP018001D (620-20506-4), 360175-DP018009 (620-20506-5), 360175-TB002 (620-20506-6), 360175-DP018001 (620-20506-7), 360175-DP018008 (620-20506-8), 360175-DP018001D (620-20506-9) and 360175-TB001 (620-20506-10). The sample(s) was collected on August 20, 2024. The sample(s) was received on August 23, 2024 at 10:35. Per client, the laboratory is to run the methanol vials only.

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The analysis listed on the COC is VOC 8260 STARS. Per client, the 8260 should be full list.

GC/MS VOA

Method 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 620-38145 recovered outside control limits for the following analyte: Chlorobenzene. This analyte was biased low in the LCS and was not detected in the associated samples. According to 8260C requirements, <10% of analytes are allowed to recover outside control limits; therefore, the data have been reported.

no quals

CCV%D, UJ/J

Method 8260C: The continuing calibration verification (CCV) associated with batch 620-38190 exhibited % difference of > 30% for the following analytes: 1,2-Dibromo-3-Chloropropane, 1,2,4-Trichlorobenzene, Tetrahydrofuran and Ethyl tert-butyl ether; however, the results of the LCS were within the CCV acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 20% difference from the initial calibration. According to the laboratory standard operating procedure, the LCS is acceptable if it meets the CCV acceptance criteria.

Method 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes (biased low): 2-Methyl-2-propanol, Naphthalene, and 1,2,3-Trichlorobenzene.

CCV%D, UJ/J

no quals

Method 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 620-38190 recovered outside control limits for the following analytes: Trichlorofluoromethane (Freon 11). This analyte was biased low in the LCSD and was not detected in the associated samples. According to 8260C requirements, <10% of analytes are allowed to recover outside control limits; therefore, the data have been reported.

Method 8260C: The continuing calibration verification (CCV) associated with batch 620-38227 exhibited % difference of > 20% for the following analytes: Naphthalene, 1,2,3-Trichlorobenzene and tert-Butanol; however, the results of the LCS were within the CCV acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 20% difference from the initial calibration. According to the laboratory standard operating procedure, the LCS is acceptable if it meets the CCV acceptance criteria.

no quals

TML 10/10/24

Eurofins Rhode Island

Case Narrative

Client: WSP USA Environment & Infrastructure Inc.
Project: Irvington R&C

Job ID: 620-20506-1

Job ID: 620-20506-1 (Continued)

Eurofins Rhode Island

Method 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 620-38227 recovered outside control limits for the following analyte: 2-Chlorotoluene. This analyte was biased high in the LCS and was not detected in the associated samples. According to 8260C requirements, <10% of analytes are allowed to recover outside control limits; therefore, the data have been reported. **no quals**

Method 8260C: The continuing calibration verification (CCV) associated with batch 620-38400 exhibited % difference of > 20% for the following analytes: 1,2-Dibromo-3-Chloropropane, Naphthalene, 1,2,3-Trichlorobenzene, Tetrahydrofuran, tert-Butanol and trans-1,4-Dichloro-2-butene; however, the results of the LCS were within the CCV acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 20% difference from the initial calibration. According to the laboratory standard operating procedure, the LCS is acceptable if it meets the CCV acceptance criteria. **no quals**

Method 8260C: The laboratory control sample (LCS) for preparation batch 620-38433 and analytical batch 620-38400 recovered outside in-house control limits for the following analytes: 1,2-Dibromo-3-Chloropropane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,2,3-Trichloropropane and tert-Butanol. These analytes were biased low in the LCS, but recovered within 70-130%. According to 8260C requirements, analytes are allowed to recover outside in-house control limits as long as recovery is within the method limit of 70-130%; therefore, the data have been reported. **no quals**

Method 8260C: The laboratory control sample duplicate (LCSD) for preparation batch 620-38433 and analytical batch 620-38400 recovered outside in-house control limits for the following analytes: 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,2,3-Trichloropropane and tert-Butanol. These analytes were biased low in the LCSD but recovered within 70-130%. According to 8260C requirements, analytes are allowed to recover outside in-house control limits as long as recovery is within the method limit of 70-130%; therefore, the data have been reported. **no quals**

Method 8260C: The laboratory control sample (LCS) for preparation batch 620-38433 and analytical batch 620-38400 recovered outside control limits for the following analyte: Ethanol, which has been identified as a poor performing analyte when analyzed using this method. According to 8260C requirements, poor performers are allowed to recover within 50-150%; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified. **LCSL, UJ/J-**

Method 8260C: The laboratory control sample duplicate (LCSD) for preparation batch 620-38433 and analytical batch 620-38400 recovered outside control limits for the following analytes: 2-Butanone (MEK) and Ethanol, which have been identified as poor performing analytes when analyzed using this method. According to 8260C requirements, poor performers are allowed to recover within 50-150%; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified. **LCSL, UJ/J-**

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 620-38310 and analytical batch 620-38284 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits. **MSL, UJ/J-**

Method 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes (biased high): Vinyl chloride, 2-Chlorotoluene, and 4-Chlorotoluene. **CCV%D, UJ/J**
(CCVIS 620-38284/3)

Method 8260C: The continuing calibration verification (CCV) associated with batch 620-38284 exhibited % difference of > 20% for the following analytes: 1,3-Dichlorobenzene, Ethylbenzene, Naphthalene, N-Propylbenzene and tert-Butanol; however, the results of the LCS were within the CCV acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 20% difference from the initial calibration. According to the laboratory standard operating procedure, the LCS is acceptable if it meets the CCV acceptance criteria.

Method 8260C: The laboratory control sample (LCS) for preparation batch 620-38310 and analytical batch 620-38284 recovered outside in-house control limits for the following analytes: 2-Chlorotoluene, 4-Chlorotoluene, N-Propylbenzene, tert-Butanol and Ethanol. These analytes were biased high/low in the LCS but recovered within 70-130%. According to 8260C requirements, analytes are allowed to recover outside in-house control limits as long as recovery is within the method limit of 70-130%; therefore, the data have been reported. **no quals**

Method 8260C: The laboratory control sample duplicate (LCSD) for preparation batch 620-38310 and analytical batch 620-38284 recovered outside in-house control limits for the following analytes: 2-Chlorotoluene and Ethanol. These analytes were biased high/low in the LCSD but recovered within 70-130%. According to 8260C requirements, analytes are allowed to recover outside in-house control limits as long as recovery is within the method limit of 70-130%; therefore, the data have been reported. **no quals**

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Client Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

Client Sample ID: 360175-DP018009

Lab Sample ID: 620-20506-5

Date Collected: 08/20/24 13:30

Matrix: Solid

Date Received: 08/23/24 10:35

Percent Solids: 90.0

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane (Freon 11)	ND	U	41.9	18.9	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
1,2,3-Trichloropropane	ND	U	41.9	19.3	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
1,2,4-Trimethylbenzene	ND	U	41.9	10.6	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
1,3,5-Trimethylbenzene	ND	U	41.9	8.76	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
Vinyl chloride	ND	U	41.9	20.6	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
m,p-Xylene	ND	U	41.9	24.7	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
o-Xylene	ND	U	41.9	12.9	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
Tetrahydrofuran	ND	U	83.8	30.6	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
Ethyl ether	ND	U	41.9	11.4	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
Tert-amyl methyl ether	ND	U	41.9	23.2	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
Ethyl tert-butyl ether	ND	U	41.9	11.6	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
di-Isopropyl ether	ND	U	41.9	13.5	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
tert-Butanol	ND	U *	838	595	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
1,4-Dioxane	ND	U	838	247	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
trans-1,4-Dichloro-2-butene	ND	U	210	27.7	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1
Ethanol	ND	U *	8380	721	ug/Kg	☆	08/28/24 12:06	08/28/24 16:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	08/28/24 12:06	08/28/24 16:59	1
Toluene-d8 (Surr)	98		70 - 130	08/28/24 12:06	08/28/24 16:59	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 130	08/28/24 12:06	08/28/24 16:59	1
Dibromofluoromethane (Surr)	97		70 - 130	08/28/24 12:06	08/28/24 16:59	1

Client Sample ID: 360175-TB002

Lab Sample ID: 620-20506-6

Date Collected: 08/21/24 00:00

Matrix: Solid

Date Received: 08/23/24 10:35

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	U	50.0	27.4	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Acetone	70.5	J	500	63.0	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Acrylonitrile	ND	U	50.0	18.1	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Benzene	ND	U	50.0	8.00	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Bromobenzene	ND	U	50.0	11.3	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Bromochloromethane	ND	U	50.0	7.15	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Bromodichloromethane	ND	U	50.0	12.9	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Bromoform	ND	U	50.0	10.7	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Bromomethane	ND	U	100	24.7	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
2-Butanone (MEK)	ND	U	100	22.9	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
n-Butylbenzene	ND	U	50.0	20.0	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
sec-Butylbenzene	ND	U	50.0	15.4	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
tert-Butylbenzene	ND	U	50.0	20.4	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Carbon disulfide	ND	U	100	18.5	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Carbon tetrachloride	ND	U	50.0	15.0	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Chlorobenzene	ND	U	50.0	6.05	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Chloroethane	ND	U	100	22.3	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Chloroform	ND	U	50.0	5.90	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
Chloromethane	ND	U	100	59.5	ug/Kg		08/28/24 12:06	08/28/24 13:42	1
2-Chlorotoluene	ND	U **	50.0	12.4	ug/Kg		08/28/24 12:06	08/28/24 13:42	1

TML 10/10/24

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Client Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

Client Sample ID: 360175-DP018001D

Lab Sample ID: 620-20506-9

Date Collected: 08/20/24 10:00

Matrix: Water

Date Received: 08/23/24 10:35

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130		08/26/24 21:15	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 130		08/26/24 21:15	1
Dibromofluoromethane (Surr)	99		70 - 130		08/26/24 21:15	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	2880		100	36.4	ug/L			08/27/24 12:00	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130					08/27/24 12:00	100
Toluene-d8 (Surr)	99		70 - 130					08/27/24 12:00	100
1,2-Dichloroethane-d4 (Surr)	100		70 - 130					08/27/24 12:00	100
Dibromofluoromethane (Surr)	105		70 - 130					08/27/24 12:00	100

Client Sample ID: 360175-TB001

Lab Sample ID: 620-20506-10

Date Collected: 08/21/24 00:00

Matrix: Water

Date Received: 08/23/24 10:35

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	U	1.00	0.202	ug/L			08/26/24 13:12	1
Acetone	3.17	J B	10.0	0.902	ug/L			08/26/24 13:12	1
Acrylonitrile	ND	U	1.00	0.356	ug/L			08/26/24 13:12	1
Benzene	ND	U	1.00	0.250	ug/L			08/26/24 13:12	1
Bromobenzene	ND	U	1.00	0.403	ug/L			08/26/24 13:12	1
Bromochloromethane	ND	U	1.00	0.391	ug/L			08/26/24 13:12	1
Bromodichloromethane	ND	U	0.500	0.334	ug/L			08/26/24 13:12	1
Bromoform	ND	U	1.00	0.454	ug/L			08/26/24 13:12	1
Bromomethane	ND	U	2.00	0.627	ug/L			08/26/24 13:12	1
2-Butanone (MEK)	ND	U	2.00	0.577	ug/L			08/26/24 13:12	1
n-Butylbenzene	ND	U	1.00	0.450	ug/L			08/26/24 13:12	1
sec-Butylbenzene	ND	U	1.00	0.401	ug/L			08/26/24 13:12	1
tert-Butylbenzene	ND	U	1.00	0.400	ug/L			08/26/24 13:12	1
Carbon disulfide	ND	U	2.00	0.438	ug/L			08/26/24 13:12	1
Carbon tetrachloride	ND	U	1.00	0.246	ug/L			08/26/24 13:12	1
Chlorobenzene	ND	U	1.00	0.417	ug/L			08/26/24 13:12	1
Chloroethane	ND	U	2.00	0.405	ug/L			08/26/24 13:12	1
Chloroform	ND	U	1.00	0.297	ug/L			08/26/24 13:12	1
Chloromethane	ND	U	2.00	0.485	ug/L			08/26/24 13:12	1
2-Chlorotoluene	ND	U	1.00	0.429	ug/L			08/26/24 13:12	1
4-Chlorotoluene	ND	U	1.00	0.416	ug/L			08/26/24 13:12	1
1,2-Dibromo-3-Chloropropane	ND	U	2.00	0.511	ug/L			08/26/24 13:12	1
Dibromochloromethane	ND	U	0.500	0.326	ug/L			08/26/24 13:12	1
1,2-Dibromoethane (EDB)	ND	U	0.500	0.339	ug/L			08/26/24 13:12	1
Dibromomethane	ND	U	1.00	0.364	ug/L			08/26/24 13:12	1
1,2-Dichlorobenzene	ND	U	1.00	0.480	ug/L			08/26/24 13:12	1
1,3-Dichlorobenzene	ND	U	1.00	0.500	ug/L			08/26/24 13:12	1
1,4-Dichlorobenzene	ND	U	1.00	0.487	ug/L			08/26/24 13:12	1
Dichlorodifluoromethane (Freon 12)	ND	U	2.00	0.289	ug/L			08/26/24 13:12	1

TML 10/10/24

Eurofins Rhode Island

QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: LCSD 620-38145/5

Matrix: Water

Analysis Batch: 38145

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide	20.0	23.27		ug/L		116	69 - 150	3	20
Carbon tetrachloride	20.0	19.86		ug/L		99	84 - 123	4	20
Chlorobenzene	20.0	18.33	*-	ug/L		92	93 - 115	1	20
Chloroethane	20.0	15.96		ug/L		80	56 - 155	3	20
Chloroform	20.0	19.78		ug/L		99	84 - 116	3	20
Chloromethane	20.0	15.44		ug/L		77	45 - 138	3	20
2-Chlorotoluene	20.0	18.85		ug/L		94	88 - 116	2	20
4-Chlorotoluene	20.0	18.62		ug/L		93	81 - 128	1	20
1,2-Dibromo-3-Chloropropane	20.0	18.45		ug/L		92	70 - 139	2	20
Dibromochloromethane	20.0	20.12		ug/L		101	83 - 132	4	20
1,2-Dibromoethane (EDB)	20.0	20.31		ug/L		102	82 - 125	3	20
Dibromomethane	20.0	20.05		ug/L		100	80 - 125	2	20
1,2-Dichlorobenzene	20.0	19.72		ug/L		99	84 - 128	1	20
1,3-Dichlorobenzene	20.0	18.61		ug/L		93	85 - 120	1	20
1,4-Dichlorobenzene	20.0	19.34		ug/L		97	86 - 116	1	20
Dichlorodifluoromethane (Freon 12)	20.0	13.05		ug/L		65	36 - 131	9	20
1,1-Dichloroethane	20.0	20.10		ug/L		101	81 - 120	1	20
1,2-Dichloroethane	20.0	17.97		ug/L		90	82 - 116	3	20
1,1-Dichloroethene	20.0	20.12		ug/L		101	83 - 120	2	20
cis-1,2-Dichloroethene	20.0	20.19		ug/L		101	81 - 124	0	20
trans-1,2-Dichloroethene	20.0	20.03		ug/L		100	81 - 127	3	20
1,2-Dichloropropane	20.0	19.79		ug/L		99	76 - 132	2	20
1,3-Dichloropropane	20.0	18.91		ug/L		95	74 - 122	2	20
2,2-Dichloropropane	20.0	19.49		ug/L		97	77 - 130	3	20
1,1-Dichloropropene	20.0	18.08		ug/L		90	81 - 115	2	20
cis-1,3-Dichloropropene	20.0	20.82		ug/L		104	74 - 129	2	20
trans-1,3-Dichloropropene	20.0	21.14		ug/L		106	78 - 126	5	20
Ethylbenzene	20.0	18.89		ug/L		94	89 - 117	2	20
Hexachlorobutadiene	20.0	20.84		ug/L		104	77 - 118	2	20
2-Hexanone (MBK)	20.0	18.15		ug/L		91	37 - 123	2	20
Isopropylbenzene	20.0	17.99		ug/L		90	83 - 117	1	20
4-Isopropyltoluene	20.0	20.53		ug/L		103	83 - 124	0	20
Methyl tert-butyl ether	20.0	19.10		ug/L		96	70 - 126	1	20
4-Methyl-2-pentanone (MIBK)	20.0	19.69		ug/L		98	59 - 118	2	20
Methylene Chloride	20.0	18.72		ug/L		94	75 - 121	6	20
Naphthalene	20.0	21.29		ug/L		106	67 - 123	1	20
N-Propylbenzene	20.0	19.61		ug/L		98	84 - 128	3	20
Styrene	20.0	19.57		ug/L		98	78 - 127	1	20
1,1,1,2-Tetrachloroethane	20.0	19.04		ug/L		95	91 - 118	0	20
1,1,2,2-Tetrachloroethane	20.0	17.81		ug/L		89	77 - 129	1	20
Tetrachloroethene	20.0	19.44		ug/L		97	85 - 116	2	20
Toluene	20.0	19.33		ug/L		97	88 - 109	1	20
1,2,3-Trichlorobenzene	20.0	20.07		ug/L		100	67 - 134	0	20
1,2,4-Trichlorobenzene	20.0	19.59		ug/L		98	78 - 133	1	20
1,3,5-Trichlorobenzene	20.0	20.71		ug/L		104	77 - 127	1	20
1,1,1-Trichloroethane	20.0	19.63		ug/L		98	83 - 124	2	20
1,1,2-Trichloroethane	20.0	20.39		ug/L		102	84 - 132	2	20
Trichloroethene	20.0	18.92		ug/L		95	74 - 118	1	20

LCSL, UJ

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QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: LCSD 620-38145/5

Matrix: Water

Analysis Batch: 38145

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)	20.0	18.39		ug/L		92	82 - 126	4	20
1,2,3-Trichloropropane	20.0	17.89		ug/L		89	77 - 124	1	20
1,2,4-Trimethylbenzene	20.0	19.71		ug/L		99	89 - 126	2	20
1,3,5-Trimethylbenzene	20.0	19.65		ug/L		98	89 - 125	2	20
Vinyl chloride	20.0	16.59		ug/L		83	62 - 130	3	20
m,p-Xylene	40.0	39.30		ug/L		98	85 - 123	1	20
o-Xylene	20.0	19.32		ug/L		97	85 - 119	0	20
Tetrahydrofuran	20.0	19.55		ug/L		98	60 - 133	0	20
Ethyl ether	20.0	17.67		ug/L		88	69 - 122	3	20
Tert-amyl methyl ether	20.0	18.46		ug/L		92	50 - 140	4	20
Ethyl tert-butyl ether	20.0	18.64		ug/L		93	60 - 131	2	20
di-Isopropyl ether	20.0	17.94		ug/L		90	67 - 125	3	20
tert-Butanol	200	208.7		ug/L		104	50 - 169	4	20
1,4-Dioxane	200	193.9		ug/L		97	28 - 150	13	20
trans-1,4-Dichloro-2-butene	20.0	22.32		ug/L		112	48 - 153	5	20
Ethanol	400	422.6		ug/L		106	47 - 170	5	20

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

Lab Sample ID: MB 620-38190/7

Matrix: Water

Analysis Batch: 38190

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	U	1.00	0.202	ug/L			08/26/24 12:18	1
Acetone	2.278	J	10.0	0.902	ug/L			08/26/24 12:18	1
Acrylonitrile	ND	U	1.00	0.356	ug/L			08/26/24 12:18	1
Benzene	ND	U	1.00	0.250	ug/L			08/26/24 12:18	1
Bromobenzene	ND	U	1.00	0.403	ug/L			08/26/24 12:18	1
Bromochloromethane	ND	U	1.00	0.391	ug/L			08/26/24 12:18	1
Bromodichloromethane	ND	U	0.500	0.334	ug/L			08/26/24 12:18	1
Bromoform	ND	U	1.00	0.454	ug/L			08/26/24 12:18	1
Bromomethane	ND	U	2.00	0.627	ug/L			08/26/24 12:18	1
2-Butanone (MEK)	ND	U	2.00	0.577	ug/L			08/26/24 12:18	1
n-Butylbenzene	ND	U	1.00	0.450	ug/L			08/26/24 12:18	1
sec-Butylbenzene	ND	U	1.00	0.401	ug/L			08/26/24 12:18	1
tert-Butylbenzene	ND	U	1.00	0.400	ug/L			08/26/24 12:18	1
Carbon disulfide	ND	U	2.00	0.438	ug/L			08/26/24 12:18	1
Carbon tetrachloride	ND	U	1.00	0.246	ug/L			08/26/24 12:18	1
Chlorobenzene	ND	U	1.00	0.417	ug/L			08/26/24 12:18	1
Chloroethane	ND	U	2.00	0.405	ug/L			08/26/24 12:18	1
Chloroform	ND	U	1.00	0.297	ug/L			08/26/24 12:18	1
Chloromethane	ND	U	2.00	0.485	ug/L			08/26/24 12:18	1

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QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: MB 620-38190/7

Matrix: Water

Analysis Batch: 38190

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	ND	U	2.00	0.704	ug/L			08/26/24 12:18	1
Ethyl ether	ND	U	1.00	0.421	ug/L			08/26/24 12:18	1
Tert-amyl methyl ether	ND	U	1.00	0.260	ug/L			08/26/24 12:18	1
Ethyl tert-butyl ether	ND	U	1.00	0.293	ug/L			08/26/24 12:18	1
di-Isopropyl ether	ND	U	1.00	0.260	ug/L			08/26/24 12:18	1
tert-Butanol	ND	U	10.0	8.52	ug/L			08/26/24 12:18	1
1,4-Dioxane	ND	U	50.0	7.43	ug/L			08/26/24 12:18	1
trans-1,4-Dichloro-2-butene	ND	U	5.00	0.806	ug/L			08/26/24 12:18	1
Ethanol	ND	U	200	9.08	ug/L			08/26/24 12:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130		08/26/24 12:18	1
Toluene-d8 (Surr)	100		70 - 130		08/26/24 12:18	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 130		08/26/24 12:18	1
Dibromofluoromethane (Surr)	102		70 - 130		08/26/24 12:18	1

Lab Sample ID: LCS 620-38190/4

Matrix: Water

Analysis Batch: 38190

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Limits: 70-130	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)		20.0	18.97		ug/L		95	85 - 124
Acetone	LCSL, UJ	20.0	13.33		ug/L		67	14 - 133
Acrylonitrile		20.0	19.70		ug/L		98	62 - 134
Benzene		20.0	21.64		ug/L		108	86 - 111
Bromobenzene		20.0	20.90		ug/L		104	82 - 120
Bromochloromethane		20.0	21.78		ug/L		109	83 - 123
Bromodichloromethane		20.0	19.84		ug/L		99	83 - 137
Bromoform		20.0	19.04		ug/L		95	91 - 137
Bromomethane		20.0	19.87		ug/L		99	29 - 148
2-Butanone (MEK)	LCSL, UJ	20.0	12.39		ug/L		62	10 - 200
n-Butylbenzene		20.0	18.60		ug/L		93	85 - 138
sec-Butylbenzene		20.0	20.21		ug/L		101	75 - 118
tert-Butylbenzene		20.0	19.01		ug/L		95	85 - 122
Carbon disulfide		20.0	20.44		ug/L		102	69 - 150
Carbon tetrachloride		20.0	18.09		ug/L		90	84 - 123
Chlorobenzene		20.0	20.03		ug/L		100	93 - 115
Chloroethane		20.0	21.07		ug/L		105	56 - 155
Chloroform		20.0	20.82		ug/L		104	84 - 116
Chloromethane		20.0	16.81		ug/L		84	45 - 138
2-Chlorotoluene		20.0	23.15		ug/L		116	88 - 116
4-Chlorotoluene		20.0	22.33		ug/L		112	81 - 128
1,2-Dibromo-3-Chloropropane		20.0	15.75		ug/L		79	70 - 139
Dibromochloromethane		20.0	17.04		ug/L		85	83 - 132
1,2-Dibromoethane (EDB)		20.0	18.39		ug/L		92	82 - 125
Dibromomethane		20.0	19.12		ug/L		96	80 - 125
1,2-Dichlorobenzene		20.0	21.89		ug/L		109	84 - 128
1,3-Dichlorobenzene		20.0	22.44		ug/L		112	85 - 120

TML 10/10/24

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QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: LCS 620-38190/4

Matrix: Water

Analysis Batch: 38190

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

Analyte	Limits: 70-130	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene		20.0	22.06		ug/L		110	86 - 116
Dichlorodifluoromethane (Freon 12)	LCSL, UJ	20.0	12.33		ug/L		62	36 - 131
1,1-Dichloroethane		20.0	20.80		ug/L		104	81 - 120
1,2-Dichloroethane		20.0	17.66		ug/L		88	82 - 116
1,1-Dichloroethene		20.0	20.69		ug/L		103	83 - 120
cis-1,2-Dichloroethene		20.0	19.94		ug/L		100	81 - 124
trans-1,2-Dichloroethene		20.0	20.31		ug/L		102	81 - 127
1,2-Dichloropropane		20.0	20.78		ug/L		104	76 - 132
1,3-Dichloropropane		20.0	19.42		ug/L		97	74 - 122
2,2-Dichloropropane		20.0	18.79		ug/L		94	77 - 130
1,1-Dichloropropene		20.0	20.69		ug/L		103	81 - 115
cis-1,3-Dichloropropene		20.0	19.17		ug/L		96	74 - 129
trans-1,3-Dichloropropene		20.0	19.81		ug/L		99	78 - 126
Ethylbenzene		20.0	22.34		ug/L		112	89 - 117
Hexachlorobutadiene		20.0	18.22		ug/L		91	77 - 118
2-Hexanone (MBK)	LCSL, UJ	20.0	13.17		ug/L		66	37 - 123
Isopropylbenzene		20.0	20.62		ug/L		103	83 - 117
4-Isopropyltoluene		20.0	19.74		ug/L		99	83 - 124
Methyl tert-butyl ether		20.0	17.64		ug/L		88	70 - 126
4-Methyl-2-pentanone (MIBK)		20.0	16.15		ug/L		81	59 - 118
Methylene Chloride		20.0	21.08		ug/L		105	75 - 121
Naphthalene		20.0	15.01		ug/L		75	67 - 123
N-Propylbenzene		20.0	22.46		ug/L		112	84 - 128
Styrene		20.0	21.27		ug/L		106	78 - 127
1,1,1,2-Tetrachloroethane		20.0	20.25		ug/L		101	91 - 118
1,1,2,2-Tetrachloroethane		20.0	19.12		ug/L		96	77 - 129
Tetrachloroethene		20.0	19.72		ug/L		99	85 - 116
Toluene		20.0	20.26		ug/L		101	88 - 109
1,2,3-Trichlorobenzene		20.0	15.53		ug/L		78	67 - 134
1,2,4-Trichlorobenzene		20.0	16.94		ug/L		85	78 - 133
1,3,5-Trichlorobenzene		20.0	19.55		ug/L		98	77 - 127
1,1,1-Trichloroethane		20.0	18.22		ug/L		91	83 - 124
1,1,2-Trichloroethane		20.0	18.76		ug/L		94	84 - 132
Trichloroethene		20.0	18.76		ug/L		94	74 - 118
Trichlorofluoromethane (Freon 11)		20.0	17.90		ug/L		90	82 - 126
1,2,3-Trichloropropane		20.0	18.61		ug/L		93	77 - 124
1,2,4-Trimethylbenzene		20.0	19.74		ug/L		99	89 - 126
1,3,5-Trimethylbenzene		20.0	19.10		ug/L		96	89 - 125
Vinyl chloride		20.0	21.28		ug/L		106	62 - 130
m,p-Xylene		20.0	20.41		ug/L		102	85 - 123
o-Xylene		20.0	20.12		ug/L		101	85 - 119
Tetrahydrofuran		20.0	17.13		ug/L		86	60 - 133
Ethyl ether		20.0	19.00		ug/L		95	69 - 122
Tert-amyl methyl ether		20.0	17.93		ug/L		90	50 - 140
Ethyl tert-butyl ether		20.0	16.90		ug/L		85	60 - 131
di-Isopropyl ether		20.0	18.23		ug/L		91	67 - 125
tert-Butanol		200	147.6		ug/L		74	50 - 169

TML 10/10/24

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QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: LCS 620-38190/4

Matrix: Water

Analysis Batch: 38190

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	200	171.7		ug/L		86	28 - 150
trans-1,4-Dichloro-2-butene	20.0	17.74		ug/L		89	48 - 153
Ethanol	400	392.8		ug/L		98	47 - 170

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
Toluene-d8 (Surr)	99		70 - 130
1,2-Dichloroethane-d4 (Surr)	91		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130

Lab Sample ID: LCSD 620-38190/5

Matrix: Water

Analysis Batch: 38190

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	17.31		ug/L		87	85 - 124	9	20
Acetone LCSL,UJ	20.0	13.23		ug/L		66	14 - 133	1	20
Acrylonitrile	20.0	18.28		ug/L		91	62 - 134	7	20
Benzene	20.0	21.41		ug/L		107	86 - 111	1	20
Bromobenzene	20.0	19.69		ug/L		98	82 - 120	6	20
Bromochloromethane	20.0	20.86		ug/L		104	83 - 123	4	20
Bromodichloromethane	20.0	19.33		ug/L		97	83 - 137	3	20
Bromoform	20.0	18.23		ug/L		91	91 - 137	4	20
Bromomethane	20.0	19.89		ug/L		99	29 - 148	0	20
2-Butanone (MEK) LCSL, UJ	20.0	12.46		ug/L		62	10 - 200	1	20
n-Butylbenzene	20.0	18.56		ug/L		93	85 - 138	0	20
sec-Butylbenzene	20.0	19.57		ug/L		98	75 - 118	3	20
tert-Butylbenzene	20.0	19.05		ug/L		95	85 - 122	0	20
Carbon disulfide	20.0	19.52		ug/L		98	69 - 150	5	20
Carbon tetrachloride	20.0	16.77		ug/L		84	84 - 123	8	20
Chlorobenzene	20.0	19.37		ug/L		97	93 - 115	3	20
Chloroethane	20.0	21.09		ug/L		105	56 - 155	0	20
Chloroform	20.0	20.46		ug/L		102	84 - 116	2	20
Chloromethane	20.0	16.03		ug/L		80	45 - 138	5	20
2-Chlorotoluene	20.0	22.46		ug/L		112	88 - 116	3	20
4-Chlorotoluene	20.0	21.76		ug/L		109	81 - 128	3	20
1,2-Dibromo-3-Chloropropane	20.0	15.93		ug/L		80	70 - 139	1	20
Dibromochloromethane	20.0	16.72		ug/L		84	83 - 132	2	20
1,2-Dibromoethane (EDB)	20.0	18.23		ug/L		91	82 - 125	1	20
Dibromomethane	20.0	18.13		ug/L		91	80 - 125	5	20
1,2-Dichlorobenzene	20.0	21.72		ug/L		109	84 - 128	1	20
1,3-Dichlorobenzene	20.0	21.37		ug/L		107	85 - 120	5	20
1,4-Dichlorobenzene	20.0	21.24		ug/L		106	86 - 116	4	20
Dichlorodifluoromethane (Freon 12) LCSL, UJ	20.0	11.28		ug/L		56	36 - 131	9	20
1,1-Dichloroethane	20.0	20.36		ug/L		102	81 - 120	2	20
1,2-Dichloroethane	20.0	16.87		ug/L		84	82 - 116	5	20
1,1-Dichloroethene	20.0	19.48		ug/L		97	83 - 120	6	20

TML 10/10/24

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QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: LCSD 620-38190/5

Matrix: Water

Analysis Batch: 38190

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Limits: 70-130	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene		20.0	19.96		ug/L		100	81 - 124	0	20
trans-1,2-Dichloroethene		20.0	19.72		ug/L		99	81 - 127	3	20
1,2-Dichloropropane		20.0	20.91		ug/L		105	76 - 132	1	20
1,3-Dichloropropane		20.0	19.20		ug/L		96	74 - 122	1	20
2,2-Dichloropropane		20.0	18.28		ug/L		91	77 - 130	3	20
1,1-Dichloropropene		20.0	20.61		ug/L		103	81 - 115	0	20
cis-1,3-Dichloropropene		20.0	19.50		ug/L		97	74 - 129	2	20
trans-1,3-Dichloropropene		20.0	19.76		ug/L		99	78 - 126	0	20
Ethylbenzene		20.0	21.90		ug/L		109	89 - 117	2	20
Hexachlorobutadiene		20.0	17.96		ug/L		90	77 - 118	1	20
2-Hexanone (MBK)	LCSL, UJ	20.0	13.57		ug/L		68	37 - 123	3	20
Isopropylbenzene		20.0	20.35		ug/L		102	83 - 117	1	20
4-Isopropyltoluene		20.0	19.90		ug/L		99	83 - 124	1	20
Methyl tert-butyl ether		20.0	17.64		ug/L		88	70 - 126	0	20
4-Methyl-2-pentanone (MIBK)		20.0	17.08		ug/L		85	59 - 118	6	20
Methylene Chloride		20.0	21.14		ug/L		106	75 - 121	0	20
Naphthalene		20.0	15.57		ug/L		78	67 - 123	4	20
N-Propylbenzene		20.0	21.79		ug/L		109	84 - 128	3	20
Styrene		20.0	21.25		ug/L		106	78 - 127	0	20
1,1,1,2-Tetrachloroethane		20.0	19.10		ug/L		95	91 - 118	6	20
1,1,2,2-Tetrachloroethane		20.0	18.35		ug/L		92	77 - 129	4	20
Tetrachloroethene		20.0	19.48		ug/L		97	85 - 116	1	20
Toluene		20.0	19.92		ug/L		100	88 - 109	2	20
1,2,3-Trichlorobenzene		20.0	15.56		ug/L		78	67 - 134	0	20
1,2,4-Trichlorobenzene		20.0	16.48		ug/L		82	78 - 133	3	20
1,3,5-Trichlorobenzene		20.0	19.64		ug/L		98	77 - 127	0	20
1,1,1-Trichloroethane		20.0	17.60		ug/L		88	83 - 124	3	20
1,1,2-Trichloroethane		20.0	17.93		ug/L		90	84 - 132	5	20
Trichloroethene		20.0	18.07		ug/L		90	74 - 118	4	20
Trichlorofluoromethane (Freon 11)		20.0	16.19	*-	ug/L		81	82 - 126	10	20
1,2,3-Trichloropropane		20.0	17.51		ug/L		88	77 - 124	6	20
1,2,4-Trimethylbenzene		20.0	19.36		ug/L		97	89 - 126	2	20
1,3,5-Trimethylbenzene		20.0	18.59		ug/L		93	89 - 125	3	20
Vinyl chloride		20.0	20.07		ug/L		100	62 - 130	6	20
m,p-Xylene		20.0	20.36		ug/L		102	85 - 123	0	20
o-Xylene		20.0	20.20		ug/L		101	85 - 119	0	20
Tetrahydrofuran		20.0	17.18		ug/L		86	60 - 133	0	20
Ethyl ether		20.0	18.65		ug/L		93	69 - 122	2	20
Tert-amyl methyl ether		20.0	18.01		ug/L		90	50 - 140	0	20
Ethyl tert-butyl ether		20.0	17.27		ug/L		86	60 - 131	2	20
di-Isopropyl ether		20.0	18.82		ug/L		94	67 - 125	3	20
tert-Butanol		200	143.3		ug/L		72	50 - 169	3	20
1,4-Dioxane		200	150.0		ug/L		75	28 - 150	13	20
trans-1,4-Dichloro-2-butene		20.0	17.17		ug/L		86	48 - 153	3	20
Ethanol		400	327.1		ug/L		82	47 - 170	18	20

TML 10/10/24

Eurofins Rhode Island

QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: 620-20506-3 MS

Matrix: Solid

Analysis Batch: 38284

Limits: 70-130

Client Sample ID: 360175-DP018007

Prep Type: Total/NA

Prep Batch: 38310

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromochloromethane	ND	U F2	885	799.6		ug/Kg	✱	90	70 - 130
Bromodichloromethane	ND	U F2	885	701.3		ug/Kg	✱	79	70 - 130
Bromoform	ND	U F2	885	719.5		ug/Kg	✱	81	70 - 130
Bromomethane	36.2	J F1 F2	885	634.2	F1	ug/Kg	✱	68	70 - 130
2-Butanone (MEK)	ND	U F1 F2	885	595.2	F1	ug/Kg	✱	67	70 - 130
n-Butylbenzene	ND	U	885	758.2		ug/Kg	✱	86	70 - 130
sec-Butylbenzene	ND	U	885	779.3		ug/Kg	✱	88	70 - 130
tert-Butylbenzene	ND	U	885	775.3		ug/Kg	✱	88	70 - 130
Carbon disulfide	ND	U F2	885	779.5		ug/Kg	✱	88	70 - 130
Carbon tetrachloride	ND	U F2	885	722.3		ug/Kg	✱	82	70 - 130
Chlorobenzene	ND	U F2	885	752.9		ug/Kg	✱	85	70 - 130
Chloroethane	ND	U F1 F2	885	284.6	F1	ug/Kg	✱	32	70 - 130
Chloroform	ND	U F2	885	764.9		ug/Kg	✱	86	70 - 130
Chloromethane	ND	U F2	885	717.1		ug/Kg	✱	81	70 - 130
2-Chlorotoluene	ND	U *+ F2	885	872.2		ug/Kg	✱	99	70 - 130
4-Chlorotoluene	ND	U *+ F2	885	832.2		ug/Kg	✱	94	70 - 130
1,2-Dibromo-3-Chloropropane	ND	U F2	885	822.7		ug/Kg	✱	93	70 - 130
Dibromochloromethane	ND	U F2	885	639.7		ug/Kg	✱	72	70 - 130
1,2-Dibromoethane (EDB)	ND	U F2	885	774.5		ug/Kg	✱	87	70 - 130
Dibromomethane	ND	U F2	885	709.6		ug/Kg	✱	80	70 - 130
1,2-Dichlorobenzene	ND	U	885	861.9		ug/Kg	✱	97	70 - 130
1,3-Dichlorobenzene	ND	U F2	885	839.6		ug/Kg	✱	95	70 - 130
1,4-Dichlorobenzene	ND	U F2	885	818.8		ug/Kg	✱	92	70 - 130
Dichlorodifluoromethane (Freon 12)	ND	U F2	885	921.9		ug/Kg	✱	104	70 - 130
1,1-Dichloroethane	ND	U F2	885	774.9		ug/Kg	✱	88	70 - 130
1,2-Dichloroethane	ND	U F2	885	655.6		ug/Kg	✱	74	70 - 130
1,1-Dichloroethene	ND	U F2	885	872.5		ug/Kg	✱	99	70 - 130
cis-1,2-Dichloroethene	ND	U F2	885	850.4		ug/Kg	✱	96	70 - 130
trans-1,2-Dichloroethene	ND	U	885	877.6		ug/Kg	✱	99	70 - 130
1,2-Dichloropropane	ND	U F2	885	785.7		ug/Kg	✱	89	70 - 130
1,3-Dichloropropane	ND	U F2	885	759.8		ug/Kg	✱	86	70 - 130
2,2-Dichloropropane	ND	U F2	885	771.7		ug/Kg	✱	87	70 - 130
1,1-Dichloropropene	ND	U	885	880.2		ug/Kg	✱	99	70 - 130
cis-1,3-Dichloropropene	ND	U	885	810.4		ug/Kg	✱	92	70 - 130
trans-1,3-Dichloropropene	ND	U F2	885	788.6		ug/Kg	✱	89	70 - 130
Ethylbenzene	ND	U F2	885	856.8		ug/Kg	✱	97	70 - 130
Hexachlorobutadiene	ND	U	885	756.1		ug/Kg	✱	85	70 - 130
2-Hexanone (MBK)	ND	U	885	669.8		ug/Kg	✱	76	70 - 130
Isopropylbenzene	ND	U F2	885	841.7		ug/Kg	✱	95	70 - 130
4-Isopropyltoluene	ND	U	885	810.6		ug/Kg	✱	92	70 - 130
Methyl tert-butyl ether	ND	U F2	885	877.2		ug/Kg	✱	99	70 - 130
4-Methyl-2-pentanone (MIBK)	ND	U F2	885	809.1		ug/Kg	✱	91	70 - 130
Methylene Chloride	ND	U F2	885	783.6		ug/Kg	✱	89	70 - 130
Naphthalene	ND	U F2	885	909.4		ug/Kg	✱	103	70 - 130
N-Propylbenzene	ND	U *+	885	834.4		ug/Kg	✱	94	70 - 130
Styrene	ND	U F2	885	854.0		ug/Kg	✱	96	70 - 130
1,1,1,2-Tetrachloroethane	ND	U F2	885	756.5		ug/Kg	✱	85	70 - 130
1,1,2,2-Tetrachloroethane	ND	U F2	885	722.1		ug/Kg	✱	82	70 - 130

TML 10/10/24

Eurofins Rhode Island

QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: 620-20506-3 MS

Matrix: Solid

Analysis Batch: 38284

Client Sample ID: 360175-DP018007

Prep Type: Total/NA

Prep Batch: 38310

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	49.5	F2	885	981.9		ug/Kg	✖	105	70 - 130
Toluene	ND	U F2	885	781.6		ug/Kg	✖	88	70 - 130
1,2,3-Trichlorobenzene	ND	U F2	885	747.3		ug/Kg	✖	84	70 - 130
1,2,4-Trichlorobenzene	ND	U	885	790.5		ug/Kg	✖	89	70 - 130
1,3,5-Trichlorobenzene	ND	U	885	838.4		ug/Kg	✖	95	70 - 130
1,1,1-Trichloroethane	ND	U F2	885	732.3		ug/Kg	✖	83	70 - 130
1,1,2-Trichloroethane	ND	U F2	885	700.5		ug/Kg	✖	79	70 - 130
Trichloroethene	ND	U F2	885	708.5		ug/Kg	✖	80	70 - 130
Trichlorofluoromethane (Freon 11)	ND	U F1 F2	885	204.6	F1	ug/Kg	✖	23	70 - 130
1,2,3-Trichloropropane	ND	U F2	885	742.0		ug/Kg	✖	84	70 - 130
1,2,4-Trimethylbenzene	ND	U F2	885	764.5		ug/Kg	✖	86	70 - 130
1,3,5-Trimethylbenzene	ND	U F2	885	738.6		ug/Kg	✖	83	70 - 130
Vinyl chloride	ND	U F2	885	957.1		ug/Kg	✖	108	70 - 130
m,p-Xylene	ND	U F2	885	819.0		ug/Kg	✖	93	70 - 130
o-Xylene	ND	U	885	832.9		ug/Kg	✖	94	70 - 130
Tetrahydrofuran	ND	U F2	885	878.7		ug/Kg	✖	99	70 - 130
Ethyl ether	ND	U F2	885	830.3		ug/Kg	✖	94	70 - 130
Tert-amyl methyl ether	ND	U	885	823.3		ug/Kg	✖	93	70 - 130
Ethyl tert-butyl ether	ND	U	885	793.7		ug/Kg	✖	90	70 - 130
di-Isopropyl ether	ND	U	885	794.6		ug/Kg	✖	90	70 - 130
tert-Butanol	ND	U *- F1 F2	8850	5533	F1	ug/Kg	✖	62	70 - 130
1,4-Dioxane	ND	U F1 F2	8850	3247	F1	ug/Kg	✖	37	70 - 130
trans-1,4-Dichloro-2-butene	ND	U F2	885	697.0		ug/Kg	✖	79	70 - 130
Ethanol	MSL, UJ/J-	ND U *- F1	17700	4168	J F1	ug/Kg	✖	24	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
Toluene-d8 (Surr)	97		70 - 130
1,2-Dichloroethane-d4 (Surr)	87		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130

Lab Sample ID: 620-20506-3 MSD

Matrix: Solid

Analysis Batch: 38284

%R Limits: 70-130

RPD Limits: >35

all highlighted samples are ND, no quals

Client Sample ID: 360175-DP018007

Prep Type: Total/NA

Prep Batch: 38310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	U F2	642	550.6	F2	ug/Kg	✖	86	70 - 130	38	30
Acetone	MSL, UJ/J-	ND U F1 F2	642	403.9	F1 F2	ug/Kg	✖	63	70 - 130	45	30
Acrylonitrile	ND	U F2	642	601.5	F2	ug/Kg	✖	94	70 - 130	35	30
Benzene	ND	U F2	642	641.6	F2	ug/Kg	✖	100	70 - 130	31	30
Bromobenzene	ND	U F2	642	570.8	F2	ug/Kg	✖	89	70 - 130	32	30
Bromochloromethane	ND	U F2	642	571.2	F2	ug/Kg	✖	89	70 - 130	33	30
Bromodichloromethane	ND	U F2	642	511.5	F2	ug/Kg	✖	80	70 - 130	31	30
Bromoform	ND	U F2	642	519.3	F2	ug/Kg	✖	81	70 - 130	32	30
Bromomethane	MSL, UJ/J-	36.2 J F1 F2	642	394.0	F1 F2	ug/Kg	✖	56	70 - 130	47	30
2-Butanone (MEK)	ND	U F1 F2	642	410.2	F1 F2	ug/Kg	✖	64	70 - 130	37	30
n-Butylbenzene	ND	U	642	559.5		ug/Kg	✖	87	70 - 130	30	30

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TML 10/10/24

QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: 620-20506-3 MSD

Matrix: Solid

Analysis Batch: 38284

Client Sample ID: 360175-DP018007

Prep Type: Total/NA

Prep Batch: 38310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
sec-Butylbenzene	ND	U	642	577.1		ug/Kg	✖	90	70 - 130	30	30
tert-Butylbenzene	ND	U	642	571.8		ug/Kg	✖	89	70 - 130	30	30
Carbon disulfide	ND	U F2	642	550.3	F2	ug/Kg	✖	86	70 - 130	34	30
Carbon tetrachloride	ND	U F2	642	494.3	F2	ug/Kg	✖	77	70 - 130	37	30
Chlorobenzene	ND	U F2	642	539.1	F2	ug/Kg	✖	84	70 - 130	33	30
Chloroethane MSL, UJ/J-	ND	U F1 F2	642	199.0	F1 F2	ug/Kg	✖	31	70 - 130	35	30
Chloroform	ND	U F2	642	543.8	F2	ug/Kg	✖	85	70 - 130	34	30
Chloromethane	ND	U F2	642	506.8	F2	ug/Kg	✖	79	70 - 130	34	30
2-Chlorotoluene	ND	U *+ F2	642	639.4	F2	ug/Kg	✖	100	70 - 130	31	30
4-Chlorotoluene	ND	U *+ F2	642	610.5	F2	ug/Kg	✖	95	70 - 130	31	30
1,2-Dibromo-3-Chloropropane	ND	U F2	642	505.9	F2	ug/Kg	✖	79	70 - 130	48	30
Dibromochloromethane	ND	U F2	642	456.1	F2	ug/Kg	✖	71	70 - 130	34	30
1,2-Dibromoethane (EDB)	ND	U F2	642	548.4	F2	ug/Kg	✖	85	70 - 130	34	30
Dibromomethane	ND	U F2	642	511.9	F2	ug/Kg	✖	80	70 - 130	32	30
1,2-Dichlorobenzene	ND	U	642	639.0		ug/Kg	✖	100	70 - 130	30	30
1,3-Dichlorobenzene	ND	U F2	642	605.0	F2	ug/Kg	✖	94	70 - 130	32	30
1,4-Dichlorobenzene	ND	U F2	642	601.6	F2	ug/Kg	✖	94	70 - 130	31	30
Dichlorodifluoromethane (Freon 12)	ND	U F2	642	619.4	F2	ug/Kg	✖	97	70 - 130	39	30
1,1-Dichloroethane	ND	U F2	642	567.3	F2	ug/Kg	✖	88	70 - 130	31	30
1,2-Dichloroethane	ND	U F2	642	464.5	F2	ug/Kg	✖	72	70 - 130	34	30
1,1-Dichloroethene	ND	U F2	642	634.1	F2	ug/Kg	✖	99	70 - 130	32	30
cis-1,2-Dichloroethene	ND	U F2	642	617.7	F2	ug/Kg	✖	96	70 - 130	32	30
trans-1,2-Dichloroethene	ND	U	642	648.6		ug/Kg	✖	101	70 - 130	30	30
1,2-Dichloropropane	ND	U F2	642	575.2	F2	ug/Kg	✖	90	70 - 130	31	30
1,3-Dichloropropane	ND	U F2	642	549.6	F2	ug/Kg	✖	86	70 - 130	32	30
2,2-Dichloropropane	ND	U F2	642	551.4	F2	ug/Kg	✖	86	70 - 130	33	30
1,1-Dichloropropene	ND	U	642	654.1		ug/Kg	✖	102	70 - 130	29	30
cis-1,3-Dichloropropene	ND	U	642	606.9		ug/Kg	✖	95	70 - 130	29	30
trans-1,3-Dichloropropene	ND	U F2	642	571.3	F2	ug/Kg	✖	89	70 - 130	32	30
Ethylbenzene	ND	U F2	642	618.7	F2	ug/Kg	✖	96	70 - 130	32	30
Hexachlorobutadiene	ND	U	642	572.3		ug/Kg	✖	89	70 - 130	28	30
2-Hexanone (MBK)	ND	U	642	505.4		ug/Kg	✖	79	70 - 130	28	30
Isopropylbenzene	ND	U F2	642	618.5	F2	ug/Kg	✖	96	70 - 130	31	30
4-Isopropyltoluene	ND	U	642	596.2		ug/Kg	✖	93	70 - 130	30	30
Methyl tert-butyl ether	ND	U F2	642	638.5	F2	ug/Kg	✖	100	70 - 130	32	30
4-Methyl-2-pentanone (MIBK)	ND	U F2	642	575.6	F2	ug/Kg	✖	90	70 - 130	34	30
Methylene Chloride	ND	U F2	642	574.5	F2	ug/Kg	✖	90	70 - 130	31	30
Naphthalene	ND	U F2	642	662.5	F2	ug/Kg	✖	103	70 - 130	31	30
N-Propylbenzene	ND	U *+	642	616.0		ug/Kg	✖	96	70 - 130	30	30
Styrene	ND	U F2	642	610.3	F2	ug/Kg	✖	95	70 - 130	33	30
1,1,1,2-Tetrachloroethane	ND	U F2	642	545.8	F2	ug/Kg	✖	85	70 - 130	32	30
1,1,2,2-Tetrachloroethane	ND	U F2	642	506.1	F2	ug/Kg	✖	79	70 - 130	35	30
Tetrachloroethene	49.5	F2	642	709.7	F2	ug/Kg	✖	103	70 - 130	32	30
Toluene	ND	U F2	642	574.6	F2	ug/Kg	✖	90	70 - 130	31	30
1,2,3-Trichlorobenzene	ND	U F2	642	540.8	F2	ug/Kg	✖	84	70 - 130	32	30
1,2,4-Trichlorobenzene	ND	U	642	585.7		ug/Kg	✖	91	70 - 130	30	30
1,3,5-Trichlorobenzene	ND	U	642	634.2		ug/Kg	✖	99	70 - 130	28	30
1,1,1-Trichloroethane	ND	U F2	642	514.0	F2	ug/Kg	✖	80	70 - 130	35	30

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QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: 620-20506-3 MSD

Matrix: Solid

Analysis Batch: 38284

RPD Limits: >35

%R Limits: 70-130

all highlighted samples are ND, no quals

Client Sample ID: 360175-DP018007

Prep Type: Total/NA

Prep Batch: 38310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichloroethane	ND	U F2	642	503.0	F2	ug/Kg	✖	78	70 - 130	33	30
Trichloroethene	ND	U F2	642	499.8	F2	ug/Kg	✖	78	70 - 130	35	30
Trichlorofluoromethane (Freon 11) MSL, UJ/J-	ND	U F1 F2	642	130.4	F1 F2	ug/Kg	✖	20	70 - 130	44	30
1,2,3-Trichloropropane	ND	U F2	642	516.0	F2	ug/Kg	✖	80	70 - 130	36	30
1,2,4-Trimethylbenzene	ND	U F2	642	553.5	F2	ug/Kg	✖	86	70 - 130	32	30
1,3,5-Trimethylbenzene	ND	U F2	642	530.9	F2	ug/Kg	✖	83	70 - 130	33	30
Vinyl chloride	ND	U F2	642	655.5	F2	ug/Kg	✖	102	70 - 130	37	30
m,p-Xylene	ND	U F2	642	599.2	F2	ug/Kg	✖	93	70 - 130	31	30
o-Xylene	ND	U	642	612.7		ug/Kg	✖	95	70 - 130	30	30
Tetrahydrofuran	ND	U F2	642	613.0	F2	ug/Kg	✖	96	70 - 130	36	30
Ethyl ether	ND	U F2	642	584.5	F2	ug/Kg	✖	91	70 - 130	35	30
Tert-amyl methyl ether	ND	U	642	612.2		ug/Kg	✖	95	70 - 130	29	30
Ethyl tert-butyl ether	ND	U	642	588.5		ug/Kg	✖	92	70 - 130	30	30
di-Isopropyl ether	ND	U	642	587.2		ug/Kg	✖	92	70 - 130	30	30
tert-Butanol	ND	U *- F1 F2	6420	3571	F1 F2	ug/Kg	✖	56	70 - 130	43	30
1,4-Dioxane	ND	U F1 F2	6420	5992	F2	ug/Kg	✖	93	70 - 130	59	30
trans-1,4-Dichloro-2-butene	ND	U F2	642	479.8	F2	ug/Kg	✖	75	70 - 130	37	30
Ethanol MSL, UJ/J-	ND	U *- F1	12800	ND	U F1	ug/Kg	✖	0	70 - 130	NC	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
Toluene-d8 (Surr)	98		70 - 130
1,2-Dichloroethane-d4 (Surr)	88		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130

Lab Sample ID: MB 620-38433/3-A

Matrix: Solid

Analysis Batch: 38400

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	U	50.0	27.4	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Acetone	ND	U	500	63.0	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Acrylonitrile	ND	U	50.0	18.1	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Benzene	ND	U	50.0	8.00	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Bromobenzene	ND	U	50.0	11.3	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Bromochloromethane	ND	U	50.0	7.15	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Bromodichloromethane	ND	U	50.0	12.9	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Bromoform	ND	U	50.0	10.7	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Bromomethane	ND	U	100	24.7	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
2-Butanone (MEK)	ND	U	100	22.9	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
n-Butylbenzene	ND	U	50.0	20.0	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
sec-Butylbenzene	ND	U	50.0	15.4	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
tert-Butylbenzene	ND	U	50.0	20.4	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Carbon disulfide	ND	U	100	18.5	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Carbon tetrachloride	ND	U	50.0	15.0	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Chlorobenzene	ND	U	50.0	6.05	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Chloroethane	ND	U	100	22.3	ug/Kg		08/30/24 08:00	08/30/24 11:07	1

TML 10/10/24

Eurofins Rhode Island

QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: MB 620-38433/3-A

Matrix: Solid

Analysis Batch: 38400

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	ND	U	50.0	29.4	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
o-Xylene	ND	U	50.0	15.4	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Tetrahydrofuran	ND	U	100	36.6	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Ethyl ether	ND	U	50.0	13.6	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Tert-amyl methyl ether	ND	U	50.0	27.7	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Ethyl tert-butyl ether	ND	U	50.0	13.9	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
di-Isopropyl ether	ND	U	50.0	16.2	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
tert-Butanol	ND	U	1000	710	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
1,4-Dioxane	ND	U	1000	295	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
trans-1,4-Dichloro-2-butene	ND	U	250	33.0	ug/Kg		08/30/24 08:00	08/30/24 11:07	1
Ethanol	ND	U	10000	860	ug/Kg		08/30/24 08:00	08/30/24 11:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	08/30/24 08:00	08/30/24 11:07	1
Toluene-d8 (Surr)	99		70 - 130	08/30/24 08:00	08/30/24 11:07	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	08/30/24 08:00	08/30/24 11:07	1
Dibromofluoromethane (Surr)	105		70 - 130	08/30/24 08:00	08/30/24 11:07	1

Lab Sample ID: LCS 620-38433/1-A

Matrix: Solid

Analysis Batch: 38400

Limits: 70-130

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	1000	926.6		ug/Kg		93	91 - 125
Acetone	1000	712.1		ug/Kg		71	47 - 157
Acrylonitrile	1000	902.3		ug/Kg		90	79 - 129
Benzene	1000	1048		ug/Kg		105	88 - 130
Bromobenzene	1000	990.8		ug/Kg		99	81 - 125
Bromochloromethane	1000	1036		ug/Kg		104	85 - 139
Bromodichloromethane	1000	991.1		ug/Kg		99	84 - 134
Bromoform	1000	932.2		ug/Kg		93	83 - 131
Bromomethane	1000	1246		ug/Kg		125	63 - 157
2-Butanone (MEK)	1000	589.8		ug/Kg		59	58 - 161
n-Butylbenzene	1000	916.7		ug/Kg		92	83 - 137
sec-Butylbenzene	1000	963.7		ug/Kg		96	79 - 131
tert-Butylbenzene	1000	976.4		ug/Kg		98	82 - 131
Carbon disulfide	1000	991.2		ug/Kg		99	82 - 135
Carbon tetrachloride	1000	940.9		ug/Kg		94	77 - 139
Chlorobenzene	1000	931.1		ug/Kg		93	85 - 121
Chloroethane	1000	1177		ug/Kg		118	61 - 156
Chloroform	1000	1026		ug/Kg		103	89 - 123
Chloromethane	1000	837.8		ug/Kg		84	81 - 130
2-Chlorotoluene	1000	1104		ug/Kg		110	90 - 117
4-Chlorotoluene	1000	1085		ug/Kg		109	88 - 121
1,2-Dibromo-3-Chloropropane	1000	725.4	*-	ug/Kg		73	75 - 142
Dibromochloromethane	1000	855.4		ug/Kg		86	85 - 131
1,2-Dibromoethane (EDB)	1000	914.1		ug/Kg		91	85 - 133
Dibromomethane	1000	926.5		ug/Kg		93	90 - 128

TML 10/10/24

Eurofins Rhode Island

QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: LCS 620-38433/1-A

Matrix: Solid

Analysis Batch: 38400

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38433

Analyte	Limits: 70-130	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene		1000	1032		ug/Kg		103	88 - 128
1,3-Dichlorobenzene		1000	1065		ug/Kg		106	78 - 133
1,4-Dichlorobenzene		1000	1025		ug/Kg		102	88 - 121
Dichlorodifluoromethane (Freon 12)		1000	984.2		ug/Kg		98	55 - 159
1,1-Dichloroethane		1000	985.9		ug/Kg		99	89 - 129
1,2-Dichloroethane		1000	913.9		ug/Kg		91	82 - 137
1,1-Dichloroethene		1000	1020		ug/Kg		102	82 - 138
cis-1,2-Dichloroethene		1000	998.3		ug/Kg		100	79 - 133
trans-1,2-Dichloroethene		1000	1010		ug/Kg		101	81 - 137
1,2-Dichloropropane		1000	953.3		ug/Kg		95	89 - 128
1,3-Dichloropropane		1000	933.0		ug/Kg		93	86 - 133
2,2-Dichloropropane		1000	997.6		ug/Kg		100	91 - 131
1,1-Dichloropropene		1000	1042		ug/Kg		104	75 - 137
cis-1,3-Dichloropropene		1000	967.1		ug/Kg		97	84 - 122
trans-1,3-Dichloropropene		1000	1000		ug/Kg		100	90 - 121
Ethylbenzene		1000	1056		ug/Kg		106	89 - 126
Hexachlorobutadiene		1000	921.0		ug/Kg		92	74 - 131
2-Hexanone (MBK)	LCSL, UJ/J-	1000	645.1		ug/Kg		65	41 - 167
Isopropylbenzene		1000	1028		ug/Kg		103	88 - 125
4-Isopropyltoluene		1000	962.2		ug/Kg		96	86 - 128
Methyl tert-butyl ether		1000	948.6		ug/Kg		95	74 - 144
4-Methyl-2-pentanone (MIBK)		1000	819.4		ug/Kg		82	80 - 135
Methylene Chloride		1000	1018		ug/Kg		102	87 - 119
Naphthalene		1000	763.9		ug/Kg		76	60 - 145
N-Propylbenzene		1000	1056		ug/Kg		106	87 - 120
Styrene		1000	1046		ug/Kg		105	88 - 125
1,1,1,2-Tetrachloroethane		1000	985.9		ug/Kg		99	81 - 128
1,1,1,2,2-Tetrachloroethane		1000	850.8	*-	ug/Kg		85	88 - 126
Tetrachloroethene		1000	1015		ug/Kg		101	81 - 124
Toluene		1000	980.2		ug/Kg		98	84 - 124
1,2,3-Trichlorobenzene		1000	767.5		ug/Kg		77	68 - 145
1,2,4-Trichlorobenzene		1000	860.6		ug/Kg		86	57 - 141
1,3,5-Trichlorobenzene		1000	981.7		ug/Kg		98	70 - 137
1,1,1-Trichloroethane		1000	949.9		ug/Kg		95	88 - 131
1,1,2-Trichloroethane		1000	897.7	*-	ug/Kg		90	91 - 129
Trichloroethene		1000	933.1		ug/Kg		93	88 - 131
Trichlorofluoromethane (Freon 11)		1000	1024		ug/Kg		102	86 - 130
1,2,3-Trichloropropane		1000	855.4	*-	ug/Kg		86	92 - 126
1,2,4-Trimethylbenzene		1000	970.3		ug/Kg		97	87 - 126
1,3,5-Trimethylbenzene		1000	924.4		ug/Kg		92	90 - 125
Vinyl chloride		1000	1182		ug/Kg		118	73 - 145
m,p-Xylene		1000	1017		ug/Kg		102	83 - 122
o-Xylene		1000	1020		ug/Kg		102	87 - 122
Tetrahydrofuran		1000	869.5		ug/Kg		87	81 - 134
Ethyl ether		1000	945.4		ug/Kg		95	84 - 144
Tert-amyl methyl ether		1000	940.1		ug/Kg		94	69 - 151
Ethyl tert-butyl ether		1000	893.6		ug/Kg		89	75 - 128

TML 10/10/24

Eurofins Rhode Island

QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: LCS 620-38433/1-A

Matrix: Solid

Analysis Batch: 38400

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38433

Analyte	Limits: 70-130	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
di-Isopropyl ether		1000	896.0		ug/Kg		90	82 - 131
tert-Butanol		10000	7770	*	ug/Kg		78	85 - 148
1,4-Dioxane		10000	7409		ug/Kg		74	10 - 178
trans-1,4-Dichloro-2-butene		1000	891.3		ug/Kg		89	74 - 151
Ethanol	LCSL, UJ/J-	20000	12870	*	ug/Kg		64	83 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130

Lab Sample ID: LCSD 620-38433/2-A

Matrix: Solid

Analysis Batch: 38400

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38433

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	1000	937.9		ug/Kg		94	91 - 125	1	30
Acetone	1000	649.5		ug/Kg		65	47 - 157	9	30
Acrylonitrile	1000	931.6		ug/Kg		93	79 - 129	3	30
Benzene	1000	1058		ug/Kg		106	88 - 130	1	30
Bromobenzene	1000	1029		ug/Kg		103	81 - 125	4	30
Bromochloromethane	1000	1045		ug/Kg		104	85 - 139	1	30
Bromodichloromethane	1000	1024		ug/Kg		102	84 - 134	3	30
Bromoform	1000	972.2		ug/Kg		97	83 - 131	4	30
Bromomethane	1000	1220		ug/Kg		122	63 - 157	2	30
2-Butanone (MEK)	1000	557.6	*	ug/Kg		56	58 - 161	6	30
n-Butylbenzene	1000	933.5		ug/Kg		93	83 - 137	2	30
sec-Butylbenzene	1000	990.5		ug/Kg		99	79 - 131	3	30
tert-Butylbenzene	1000	983.6		ug/Kg		98	82 - 131	1	30
Carbon disulfide	1000	1005		ug/Kg		101	82 - 135	1	30
Carbon tetrachloride	1000	962.4		ug/Kg		96	77 - 139	2	30
Chlorobenzene	1000	956.1		ug/Kg		96	85 - 121	3	30
Chloroethane	1000	1176		ug/Kg		118	61 - 156	0	30
Chloroform	1000	1062		ug/Kg		106	89 - 123	3	30
Chloromethane	1000	849.6		ug/Kg		85	81 - 130	1	30
2-Chlorotoluene	1000	1154		ug/Kg		115	90 - 117	4	30
4-Chlorotoluene	1000	1109		ug/Kg		111	88 - 121	2	30
1,2-Dibromo-3-Chloropropane	1000	824.1		ug/Kg		82	75 - 142	13	30
Dibromochloromethane	1000	899.0		ug/Kg		90	85 - 131	5	30
1,2-Dibromoethane (EDB)	1000	943.4		ug/Kg		94	85 - 133	3	30
Dibromomethane	1000	958.3		ug/Kg		96	90 - 128	3	30
1,2-Dichlorobenzene	1000	1099		ug/Kg		110	88 - 128	6	30
1,3-Dichlorobenzene	1000	1091		ug/Kg		109	78 - 133	2	30
1,4-Dichlorobenzene	1000	1072		ug/Kg		107	88 - 121	5	30
Dichlorodifluoromethane (Freon 12)	1000	985.9		ug/Kg		99	55 - 159	0	30
1,1-Dichloroethane	1000	993.6		ug/Kg		99	89 - 129	1	30

TML 10/10/24

Eurofins Rhode Island

QC Sample Results

Client: WSP USA Environment & Infrastructure Inc.
Project/Site: Irvington R&C

Job ID: 620-20506-1

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

Lab Sample ID: LCSD 620-38433/2-A

Matrix: Solid

Analysis Batch: 38400

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38433

Analyte	Limits: 70-130	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichloroethane		1000	930.6		ug/Kg		93	82 - 137	2	30
1,1-Dichloroethene		1000	1001		ug/Kg		100	82 - 138	2	30
cis-1,2-Dichloroethene		1000	1019		ug/Kg		102	79 - 133	2	30
trans-1,2-Dichloroethene		1000	1062		ug/Kg		106	81 - 137	5	30
1,2-Dichloropropane		1000	1020		ug/Kg		102	89 - 128	7	30
1,3-Dichloropropane		1000	970.2		ug/Kg		97	86 - 133	4	30
2,2-Dichloropropane		1000	995.3		ug/Kg		100	91 - 131	0	30
1,1-Dichloropropene		1000	1085		ug/Kg		108	75 - 137	4	30
cis-1,3-Dichloropropene		1000	1031		ug/Kg		103	84 - 122	6	30
trans-1,3-Dichloropropene		1000	1025		ug/Kg		103	90 - 121	2	30
Ethylbenzene		1000	1093		ug/Kg		109	89 - 126	3	30
Hexachlorobutadiene		1000	970.5		ug/Kg		97	74 - 131	5	30
2-Hexanone (MBK)	LCSL, UJ/J-	1000	596.4		ug/Kg		60	41 - 167	8	30
Isopropylbenzene		1000	1045		ug/Kg		104	88 - 125	2	30
4-Isopropyltoluene		1000	1006		ug/Kg		101	86 - 128	4	30
Methyl tert-butyl ether		1000	982.1		ug/Kg		98	74 - 144	3	30
4-Methyl-2-pentanone (MIBK)		1000	808.5		ug/Kg		81	80 - 135	1	30
Methylene Chloride		1000	1033		ug/Kg		103	87 - 119	1	30
Naphthalene		1000	820.1		ug/Kg		82	60 - 145	7	30
N-Propylbenzene		1000	1078		ug/Kg		108	87 - 120	2	30
Styrene		1000	1048		ug/Kg		105	88 - 125	0	30
1,1,1,2-Tetrachloroethane		1000	1004		ug/Kg		100	81 - 128	2	30
1,1,2,2-Tetrachloroethane		1000	868.3	*-	ug/Kg		87	88 - 126	2	30
Tetrachloroethene		1000	1021		ug/Kg		102	81 - 124	1	30
Toluene		1000	999.2		ug/Kg		100	84 - 124	2	30
1,2,3-Trichlorobenzene		1000	803.5		ug/Kg		80	68 - 145	5	30
1,2,4-Trichlorobenzene		1000	894.3		ug/Kg		89	57 - 141	4	30
1,3,5-Trichlorobenzene		1000	1007		ug/Kg		101	70 - 137	3	30
1,1,1-Trichloroethane		1000	951.1		ug/Kg		95	88 - 131	0	30
1,1,2-Trichloroethane		1000	865.5	*-	ug/Kg		87	91 - 129	4	30
Trichloroethene		1000	918.1		ug/Kg		92	88 - 131	2	30
Trichlorofluoromethane (Freon 11)		1000	963.4		ug/Kg		96	86 - 130	6	30
1,2,3-Trichloropropane		1000	867.6	*-	ug/Kg		87	92 - 126	1	30
1,2,4-Trimethylbenzene		1000	982.0		ug/Kg		98	87 - 126	1	30
1,3,5-Trimethylbenzene		1000	942.9		ug/Kg		94	90 - 125	2	30
Vinyl chloride		1000	1141		ug/Kg		114	73 - 145	4	30
m,p-Xylene		1000	1043		ug/Kg		104	83 - 122	3	30
o-Xylene		1000	1057		ug/Kg		106	87 - 122	4	30
Tetrahydrofuran		1000	863.9		ug/Kg		86	81 - 134	1	30
Ethyl ether		1000	934.1		ug/Kg		93	84 - 144	1	30
Tert-amyl methyl ether		1000	976.0		ug/Kg		98	69 - 151	4	30
Ethyl tert-butyl ether		1000	934.0		ug/Kg		93	75 - 128	4	30
di-Isopropyl ether		1000	928.4		ug/Kg		93	82 - 131	4	30
tert-Butanol		10000	8255	*-	ug/Kg		83	85 - 148	6	30
1,4-Dioxane		10000	8393		ug/Kg		84	10 - 178	12	30
trans-1,4-Dichloro-2-butene		1000	884.2		ug/Kg		88	74 - 151	1	30
Ethanol	LCSL, UJ/J-	20000	13770	*-	ug/Kg		69	83 - 135	7	30

TML 10/10/24

Eurofins Rhode Island

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Rhode Island Job No.: 620-20506-1

SDG No.: _____

Lab Sample ID: ICV 620-38019/14 Calibration Date: 08/21/2024 15:09

Instrument ID: HPV4 Calib Start Date: 08/21/2024 09:40

GC Column: DB-VRX ID: 0.18 (mm) Calib End Date: 08/21/2024 13:03

Lab File ID: V4-082124-14.D Conc. Units: ug/L Heated Purge: (Y/N) N

Limit: <20%

ANALYTE ICV%D, UJ/J	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane (Freon 12)	Ave	0.1285	0.0913	0.0100	14.2	20.0	-29.0	50.0
Chloromethane	Ave	0.2353	0.2025	0.0500	17.2	20.0	-13.9	20.0
Vinyl chloride	Ave	0.1966	0.1727	0.0500	17.6	20.0	-12.2	20.0
Bromomethane	Lin1		0.1363	0.0100	16.9	20.0	-15.8	50.0
Chloroethane	Ave	0.1423	0.1243	0.0830	17.5	20.0	-12.7	50.0
Ethanol	Ave	0.0031	0.0027	0.0023	348	400	-13.1	20.0
Trichlorofluoromethane (Freon 11)	Ave	0.4605	0.4461	0.0500	19.4	20.0	-3.1	20.0
Acetone	Ave	0.1552	0.1404	0.0870	18.1	20.0	-9.6	50.0
Ethyl ether	Ave	0.2187	0.2012	0.0500	18.4	20.0	-8.0	20.0
1,1-Dichloroethene	Ave	0.2228	0.2458	0.0500	22.1	20.0	10.3	20.0
Iodomethane	Lin1		0.2546	0.0500	17.2	20.0	-14.2	20.0
tert-Butanol	Ave	0.0346	0.0292	0.0080	169	200	-15.5	20.0
Acrylonitrile	Ave	0.1358	0.1253	0.0430	18.5	20.0	-7.7	20.0
Methylene Chloride	Ave	0.2677	0.2818	0.0500	21.1	20.0	5.2	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.2884	0.2755	0.0500	19.1	20.0	-4.5	20.0
Methyl acetate	Ave	0.2626	0.2183	0.0500	16.6	20.0	-16.8	20.0
Carbon disulfide	Ave	0.6025	0.6881	0.0500	22.8	20.0	14.2	20.0
trans-1,2-Dichloroethene	Ave	0.2360	0.2558	0.0500	21.7	20.0	8.4	20.0
Methyl tert-butyl ether	Ave	0.7091	0.6804	0.0500	19.2	20.0	-4.0	20.0
1,1-Dichloroethane	Ave	0.4758	0.5024	0.0500	21.1	20.0	5.6	20.0
2-Butanone (MEK)	Lin1		0.1124	0.0950	14.1	20.0	-29.6	50.0
di-Isopropyl ether	Ave	0.8830	0.8378	0.0500	19.0	20.0	-5.1	20.0
cis-1,2-Dichloroethene	Ave	0.2657	0.2828	0.0500	21.3	20.0	6.5	20.0
Bromochloromethane	Ave	0.1371	0.1380	0.0900	20.1	20.0	0.6	20.0
Chloroform	Lin1		0.5182	0.0500	20.4	20.0	2.2	20.0
2,2-Dichloropropane	Ave	0.3878	0.4009	0.0500	20.7	20.0	3.4	20.0
Ethyl tert-butyl ether	Ave	0.7910	0.7530	0.0500	19.0	20.0	-4.8	20.0
Tetrahydrofuran	Ave	0.1036	0.0909	0.0290	17.6	20.0	-12.2	20.0
1,2-Dichloroethane	Ave	0.4331	0.3825	0.0500	17.7	20.0	-11.7	20.0
1,1,1-Trichloroethane	Ave	0.4343	0.4346	0.0500	20.0	20.0	0.0	20.0
1,1-Dichloropropene	Ave	0.3554	0.3399	0.0500	19.1	20.0	-4.4	20.0
Cyclohexane	Ave	0.4734	0.4398	0.0500	18.6	20.0	-7.1	20.0
Carbon tetrachloride	Ave	0.3786	0.3869	0.0500	20.4	20.0	2.2	20.0
Benzene	Ave	0.9322	0.9453	0.0500	20.3	20.0	1.4	20.0
Tert-amyl methyl ether	Lin1		0.6321	0.0500	18.6	20.0	-7.1	20.0
Dibromomethane	Ave	0.1675	0.1677	0.1100	20.0	20.0	0.1	20.0
1,2-Dichloropropane	Ave	0.2536	0.2712	0.0500	21.4	20.0	6.9	20.0
Trichloroethene	Ave	0.2850	0.2794	0.0500	19.6	20.0	-2.0	20.0
Bromodichloromethane	Ave	0.3552	0.3416	0.0500	19.2	20.0	-3.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Limit: <20%

Lab Name: Eurofins Rhode Island Job No.: 620-20506-1

SDG No.: _____

Lab Sample ID: CCVIS 620-38145/3 Calibration Date: 08/23/2024 11:06

Instrument ID: HPV4 Calib Start Date: 08/21/2024 09:40

GC Column: DB-VRX ID: 0.18 (mm) Calib End Date: 08/21/2024 13:03

Lab File ID: V4-082324-03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE CCV%D, UJ/J	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane (Freon 12)	Ave	0.1285	0.0926	0.0100	14.4	20.0	-27.9	50.0
Chloromethane	Ave	0.2353	0.1995	0.0500	17.0	20.0	-15.2	50.0
Vinyl chloride	Ave	0.1966	0.1710	0.0500	17.4	20.0	-13.0	20.0
Bromomethane	Lin1		0.1296	0.0100	16.0	20.0	-20.2	50.0
Chloroethane	Ave	0.1423	0.1186	0.0830	16.7	20.0	-16.6	50.0
Ethanol	Ave	0.0031	0.0033	0.0023	426	400	6.4	50.0
Trichlorofluoromethane (Freon 11)	Ave	0.4605	0.4473	0.0500	19.4	20.0	-2.9	20.0
Acetone	Ave	0.1552	0.1251	0.0870	16.1	20.0	-19.4	50.0
Ethyl ether	Ave	0.2187	0.1939	0.0500	17.7	20.0	-11.3	20.0
1,1-Dichloroethene	Ave	0.2228	0.2263	0.0500	20.3	20.0	1.6	20.0
Iodomethane	Lin1		0.2444	0.0500	16.6	20.0	-17.2	20.0
tert-Butanol	Ave	0.0346	0.0365	0.0080	211	200	5.5	20.0
Acrylonitrile	Ave	0.1358	0.1345	0.0430	19.8	20.0	-0.9	20.0
Methylene Chloride	Ave	0.2677	0.2710	0.0500	20.3	20.0	1.2	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.2884	0.2606	0.0500	18.1	20.0	-9.6	20.0
Methyl acetate	Ave	0.2626	0.2349	0.0500	17.9	20.0	-10.5	20.0
Carbon disulfide	Ave	0.6025	0.6502	0.0500	21.6	20.0	7.9	20.0
trans-1,2-Dichloroethene	Ave	0.2360	0.2435	0.0500	20.6	20.0	3.2	20.0
Methyl tert-butyl ether	Ave	0.7091	0.6912	0.0500	19.5	20.0	-2.5	20.0
1,1-Dichloroethane	Ave	0.4758	0.4906	0.0500	20.6	20.0	3.1	20.0
2-Butanone (MEK)	Lin1		0.1400	0.0950	17.3	20.0	-13.5	50.0
di-Isopropyl ether	Ave	0.8830	0.8218	0.0500	18.6	20.0	-6.9	20.0
cis-1,2-Dichloroethene	Ave	0.2657	0.2730	0.0500	20.6	20.0	2.8	20.0
Bromochloromethane	Ave	0.1371	0.1421	0.0900	20.7	20.0	3.6	50.0
Chloroform	Lin1		0.5300	0.0500	20.9	20.0	4.6	20.0
2,2-Dichloropropane	Ave	0.3878	0.3965	0.0500	20.5	20.0	2.2	20.0
Ethyl tert-butyl ether	Ave	0.7910	0.7646	0.0500	19.3	20.0	-3.3	20.0
Tetrahydrofuran	Ave	0.1036	0.1047	0.0290	20.2	20.0	1.1	20.0
1,2-Dichloroethane	Ave	0.4331	0.4084	0.0500	18.9	20.0	-5.7	20.0
1,1,1-Trichloroethane	Ave	0.4343	0.4424	0.0500	20.4	20.0	1.9	20.0
1,1-Dichloropropene	Ave	0.3554	0.3288	0.0500	18.5	20.0	-7.5	20.0
Cyclohexane	Ave	0.4734	0.4117	0.0500	17.4	20.0	-13.0	20.0
Carbon tetrachloride	Ave	0.3786	0.3894	0.0500	20.6	20.0	2.9	20.0
Benzene	Ave	0.9322	0.8956	0.0500	19.2	20.0	-3.9	20.0
Tert-amyl methyl ether	Lin1		0.6454	0.0500	19.0	20.0	-5.1	20.0
Dibromomethane	Ave	0.1675	0.1733	0.1100	20.7	20.0	3.5	20.0
1,2-Dichloropropane	Ave	0.2536	0.2601	0.0500	20.5	20.0	2.6	20.0
Trichloroethene	Ave	0.2850	0.2726	0.0500	19.1	20.0	-4.4	20.0
Bromodichloromethane	Ave	0.3552	0.3505	0.0500	19.7	20.0	-1.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Rhode Island Job No.: 620-20506-1

SDG No.: _____

Lab Sample ID: ICV 620-36778/15 Calibration Date: 07/18/2024 16:20

Instrument ID: HPV5 Calib Start Date: 07/18/2024 11:15

GC Column: RTX-VMS ID: 0.25 (mm) Calib End Date: 07/18/2024 14:38

Lab File ID: V5-071824-17.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane (Freon 12) ICV%D, UJ/J	Ave	0.1895	0.1187	0.0100	12.5	20.0	-37.3	50.0
Chloromethane	Ave	0.2389	0.1758	0.0500	14.7	20.0	-26.4*	20.0
Vinyl chloride	Ave	0.1579	0.1350	0.0500	17.1	20.0	-14.5	20.0
Bromomethane	Ave	0.0718	0.0663	0.0100	18.5	20.0	-7.6	50.0
Chloroethane	Ave	0.0837	0.0670*	0.0830	16.0	20.0	-19.9	50.0
Trichlorofluoromethane (Freon 11)	Ave	0.3555	0.3259	0.0500	18.3	20.0	-8.3	20.0
Ethyl ether	Ave	0.1626	0.1682	0.0500	20.7	20.0	3.5	20.0
Ethanol ICV%D, UJ/J	Ave	0.0022	0.0016*	0.0023	286	400	-28.5*	20.0
1,1-Dichloroethene	Ave	0.1522	0.1735	0.0500	22.8	20.0	14.0	20.0
Carbon disulfide	Ave	0.5724	0.5295	0.0500	18.5	20.0	-7.5	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.1977	0.1828	0.0500	18.5	20.0	-7.5	20.0
Iodomethane	Qual		0.1589	0.0500	17.6	20.0	-12.0	20.0
Methylene Chloride	Ave	0.1878	0.1891	0.0500	20.1	20.0	0.7	20.0
Acetone	Ave	0.1007	0.0945	0.0870	18.8	20.0	-6.2	50.0
trans-1,2-Dichloroethene	Ave	0.1524	0.1805	0.0500	23.7	20.0	18.4	20.0
Methyl acetate	Ave	0.1446	0.1498	0.0500	20.7	20.0	3.6	20.0
Methyl tert-butyl ether	Ave	0.4486	0.5184	0.0500	23.1	20.0	15.6	20.0
tert-Butanol	Ave	0.0138	0.0155	0.0080	224	200	12.0	20.0
di-Isopropyl ether	Qual		0.5382	0.0500	20.3	20.0	1.7	20.0
1,1-Dichloroethane	Ave	0.3487	0.3679	0.0500	21.1	20.0	5.5	20.0
Acrylonitrile	Qual		0.0705	0.0430	22.2	20.0	10.9	20.0
Ethyl tert-butyl ether	Qual		0.4918	0.0500	20.7	20.0	3.4	20.0
cis-1,2-Dichloroethene	Ave	0.1604	0.1821	0.0500	22.7	20.0	13.6	20.0
2,2-Dichloropropane	Ave	0.3177	0.3282	0.0500	20.7	20.0	3.3	20.0
Bromochloromethane	Ave	0.0956	0.0997	0.0900	20.9	20.0	4.3	20.0
Cyclohexane	Lin1		0.2227	0.0500	19.1	20.0	-4.5	20.0
Chloroform	Lin1		0.4150	0.0500	20.8	20.0	3.9	20.0
Carbon tetrachloride	Ave	0.3314	0.3216	0.0500	19.4	20.0	-2.9	20.0
Tetrahydrofuran	Ave	0.0434	0.0495	0.0290	22.8	20.0	14.0	20.0
1,1,1-Trichloroethane	Ave	0.3847	0.3772	0.0500	19.6	20.0	-2.0	20.0
2-Butanone (MEK)	Ave	0.1300	0.1102	0.0950	17.0	20.0	-15.2	50.0
1,1-Dichloropropene	Ave	0.2183	0.2517	0.0500	23.1	20.0	15.3	20.0
Benzene	Ave	0.6175	0.7107	0.0500	23.0	20.0	15.1	20.0
Tert-amyl methyl ether	Ave	0.3791	0.4143	0.0500	21.9	20.0	9.3	20.0
1,2-Dichloroethane	Ave	0.4053	0.3785	0.0500	18.7	20.0	-6.6	20.0
Methylcyclohexane	Ave	0.1771	0.1875	0.0500	21.2	20.0	5.9	20.0
Trichloroethene	Ave	0.2227	0.2168	0.0500	19.5	20.0	-2.7	20.0
Dibromomethane	Ave	0.1403	0.1449	0.1100	20.6	20.0	3.2	20.0
1,2-Dichloropropane	Ave	0.1674	0.1835	0.0500	21.9	20.0	9.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Limit: <20%

Lab Name: Eurofins Rhode Island Job No.: 620-20506-1

SDG No.: _____

Lab Sample ID: CCVIS 620-38190/3 Calibration Date: 08/26/2024 10:30

Instrument ID: HPV5 Calib Start Date: 07/18/2024 11:15

GC Column: RTX-VMS ID: 0.25 (mm) Calib End Date: 07/18/2024 14:38

Lab File ID: V5-082624-03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane (Freon 12) CCV%D, UJ/J	Ave	0.1895	0.1245	0.0100	13.1	20.0	-34.3	50.0
Chloromethane	Ave	0.2389	0.2052	0.0500	17.2	20.0	-14.1	50.0
Vinyl chloride	Ave	0.1579	0.1693	0.0500	21.5	20.0	7.3	20.0
Bromomethane	Ave	0.0718	0.0691	0.0100	19.3	20.0	-3.7	50.0
Chloroethane	Ave	0.0837	0.0957	0.0830	22.9	20.0	14.4	50.0
Trichlorofluoromethane (Freon 11)	Ave	0.3555	0.3399	0.0500	19.1	20.0	-4.4	20.0
Ethyl ether	Ave	0.1626	0.1429	0.0500	17.6	20.0	-12.1	20.0
Ethanol CCV%D, UJ/J	Ave	0.0022	0.0017*	0.0023	295	400	-26.2	50.0
1,1-Dichloroethene	Ave	0.1522	0.1485	0.0500	19.5	20.0	-2.4	20.0
Carbon disulfide	Ave	0.5724	0.6296	0.0500	22.0	20.0	10.0	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.1977	0.1942	0.0500	19.7	20.0	-1.8	20.0
Iodomethane	Qual		0.1553	0.0500	17.2	20.0	-13.8	20.0
Methylene Chloride	Ave	0.1878	0.2014	0.0500	21.4	20.0	7.2	20.0
Acetone CCV%D, UJ/J	Ave	0.1007	0.0683*	0.0870	13.6	20.0	-32.2	50.0
trans-1,2-Dichloroethene	Ave	0.1524	0.1449	0.0500	19.0	20.0	-5.0	20.0
Methyl acetate	Ave	0.1446	0.1196	0.0500	16.5	20.0	-17.3	20.0
Methyl tert-butyl ether	Ave	0.4486	0.3650	0.0500	16.3	20.0	-18.6	20.0
tert-Butanol CCV%D, UJ/J	Ave	0.0138	0.0084	0.0080	122	200	-39.0*	20.0
di-Isopropyl ether	Qual		0.4471	0.0500	17.1	20.0	-14.5	20.0
1,1-Dichloroethane	Ave	0.3487	0.3650	0.0500	20.9	20.0	4.7	20.0
Acrylonitrile CCV%D, UJ/J	Qual		0.0578	0.0430	18.4	20.0	-8.0	20.0
Ethyl tert-butyl ether	Qual		0.3702	0.0500	15.9	20.0	-20.6*	20.0
cis-1,2-Dichloroethene	Ave	0.1604	0.1521	0.0500	19.0	20.0	-5.2	20.0
2,2-Dichloropropane	Ave	0.3177	0.3037	0.0500	19.1	20.0	-4.4	20.0
Bromochloromethane	Ave	0.0956	0.1043	0.0900	21.8	20.0	9.1	50.0
Cyclohexane	Lin1		0.2355	0.0500	20.1	20.0	0.6	20.0
Chloroform	Lin1		0.4283	0.0500	21.5	20.0	7.4	20.0
Carbon tetrachloride	Ave	0.3314	0.3105	0.0500	18.7	20.0	-6.3	20.0
Tetrahydrofuran CCV%D, UJ/J	Ave	0.0434	0.0337	0.0290	15.5	20.0	-22.5*	20.0
1,1,1-Trichloroethane	Ave	0.3847	0.3591	0.0500	18.7	20.0	-6.6	20.0
2-Butanone (MEK) CCV%D, UJ/J	Ave	0.1300	0.0897*	0.0950	13.8	20.0	-31.0	50.0
1,1-Dichloropropene	Ave	0.2183	0.2194	0.0500	20.1	20.0	0.5	20.0
Benzene	Ave	0.6175	0.6800	0.0500	22.0	20.0	10.1	20.0
Tert-amyl methyl ether	Ave	0.3791	0.3233	0.0500	17.1	20.0	-14.7	20.0
1,2-Dichloroethane	Ave	0.4053	0.3665	0.0500	18.1	20.0	-9.6	20.0
Methylcyclohexane	Ave	0.1771	0.1879	0.0500	21.2	20.0	6.1	20.0
Trichloroethene	Ave	0.2227	0.2135	0.0500	19.2	20.0	-4.2	20.0
Dibromomethane	Ave	0.1403	0.1298	0.1100	18.5	20.0	-7.5	20.0
1,2-Dichloropropane	Ave	0.1674	0.1700	0.0500	20.3	20.0	1.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Limit: <20%

Lab Name: Eurofins Rhode Island Job No.: 620-20506-1

SDG No.: _____

Lab Sample ID: CCVIS 620-38190/3 Calibration Date: 08/26/2024 10:30

Instrument ID: HPV5 Calib Start Date: 07/18/2024 11:15

GC Column: RTX-VMS ID: 0.25 (mm) Calib End Date: 07/18/2024 14:38

Lab File ID: V5-082624-03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bromodichloromethane	Lin1		0.2999	0.0500	20.3	20.0	1.5	20.0
1,4-Dioxane CCV%D, UJ/J	Qual		0.0009*	0.0010	137	200	-31.6	50.0
cis-1,3-Dichloropropene	Ave	0.2400	0.2199	0.0500	18.3	20.0	-8.4	20.0
Toluene	Ave	0.3970	0.4255	0.0500	21.4	20.0	7.2	20.0
Tetrachloroethene CCV%D, UJ/J	Ave	0.1901	0.1908	0.0500	20.1	20.0	0.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1500	0.1159	0.0990	15.5	20.0	-22.7	50.0
trans-1,3-Dichloropropene	Ave	0.2732	0.2751	0.0500	20.1	20.0	0.7	20.0
1,1,2-Trichloroethane	Ave	0.1590	0.1504	0.0500	18.9	20.0	-5.5	20.0
Dibromochloromethane	Ave	0.2260	0.1920	0.0500	17.0	20.0	-15.0	20.0
1,3-Dichloropropane	Ave	0.2857	0.2703	0.0500	18.9	20.0	-5.4	20.0
1,2-Dibromoethane (EDB)	Ave	0.1799	0.1609	0.0500	17.9	20.0	-10.6	20.0
2-Hexanone (MBK) CCV%D, UJ/J	Ave	0.1013	0.0730*	0.0860	14.4	20.0	-27.9	50.0
Chlorobenzene	Ave	0.6441	0.6461	0.0500	20.1	20.0	0.3	20.0
Ethylbenzene	Ave	0.9726	1.096	0.0500	22.5	20.0	12.7	20.0
1,1,1,2-Tetrachloroethane	Lin1		0.2749	0.0500	20.3	20.0	1.4	20.0
m,p-Xylene	Qual		0.7585	0.0500	20.3	20.0	1.5	20.0
o-Xylene	Qual		0.6892	0.0500	19.5	20.0	-2.5	20.0
Styrene	Qual		0.6206	0.0500	21.2	20.0	5.9	20.0
Bromoform	Ave	0.2186	0.2037	0.0500	18.6	20.0	-6.8	50.0
Isopropylbenzene	Qual		0.9148	0.0500	20.3	20.0	1.6	20.0
Bromobenzene	Ave	0.3044	0.3139	0.0500	20.6	20.0	3.1	20.0
N-Propylbenzene	Ave	1.048	1.205	0.0500	23.0	20.0	14.9	20.0
1,1,2,2-Tetrachloroethane	Qual		0.3449	0.0500	19.1	20.0	-4.3	20.0
2-Chlorotoluene	Ave	0.6369	0.7157	0.0500	22.5	20.0	12.4	20.0
1,2,3-Trichloropropane	Ave	0.3277	0.2966	0.0500	18.1	20.0	-9.5	20.0
1,3,5-Trimethylbenzene	Lin1		0.8377	0.0500	19.0	20.0	-4.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0594	0.0518*	0.0910	17.4	20.0	-12.9	20.0
4-Chlorotoluene	Ave	0.7126	0.7946	0.0500	22.3	20.0	11.5	20.0
tert-Butylbenzene	Qual		0.4085	0.0500	19.4	20.0	-3.1	20.0
1,2,4-Trimethylbenzene	Qual		0.8134	0.0500	20.0	20.0	0.0	20.0
sec-Butylbenzene	Qual		0.9345	0.0500	20.2	20.0	1.0	20.0
4-Isopropyltoluene	Qual		1.187	0.0500	18.9	20.0	-5.7	20.0
1,3-Dichlorobenzene	Ave	0.4909	0.5588	0.0500	22.8	20.0	13.9	20.0
1,4-Dichlorobenzene	Lin1		0.9534	0.0500	21.3	20.0	6.6	20.0
n-Butylbenzene	Qual		0.8871	0.0500	17.8	20.0	-11.3	20.0
1,2-Dichlorobenzene CCV%D, UJ/J	Ave	0.7904	0.8322	0.0500	21.1	20.0	5.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1186	0.0854	0.0630	14.4	20.0	-28.0*	20.0
1,3,5-Trichlorobenzene	Ave	0.5169	0.4729	0.0500	18.3	20.0	-8.5	20.0
Hexachlorobutadiene	Ave	0.2724	0.2319	0.0500	17.0	20.0	-14.9	20.0
1,2,4-Trichlorobenzene	Qual		0.2033	0.0500	15.7	20.0	-21.4*	20.0
Naphthalene	Qual		0.5868	0.0500	12.4	20.0	-37.8*	20.0

CCV%D, UJ/J

TML 10/10/24

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Limit: <20%

Lab Name: Eurofins Rhode Island Job No.: 620-20506-1
SDG No.: _____
Lab Sample ID: CCVIS 620-38190/3 Calibration Date: 08/26/2024 10:30
Instrument ID: HPV5 Calib Start Date: 07/18/2024 11:15
GC Column: RTX-VMS ID: 0.25 (mm) Calib End Date: 07/18/2024 14:38
Lab File ID: V5-082624-03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE CCV%D, UJ/J	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Lin1		0.3676	0.0500	13.9	20.0	-30.4*	20.0
Dibromofluoromethane (Surr)	Ave	0.2969	0.3033	0.0500	51.1	50.0	2.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4383	0.4118	0.0500	47.0	50.0	-6.0	20.0
Toluene-d8 (Surr)	Ave	0.9281	0.9398	0.0500	50.6	50.0	1.3	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5210	0.5052	0.0500	48.5	50.0	-3.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Limit: <20%

Lab Name: Eurofins Rhode Island Job No.: 620-20506-1

SDG No.: _____

Lab Sample ID: CCVIS 620-38284/3 Calibration Date: 08/28/2024 11:20

Instrument ID: HPV5 Calib Start Date: 07/18/2024 11:15

GC Column: RTX-VMS ID: 0.25 (mm) Calib End Date: 07/18/2024 14:38

Lab File ID: V5-082824-03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE CCV%D, UJ/J	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane (Freon 12)	Ave	0.1895	0.2367	0.0100	25.0	20.0	24.9	50.0
Chloromethane	Ave	0.2389	0.2489	0.0500	20.8	20.0	4.2	50.0
Vinyl chloride CCV%D, UJ/J	Ave	0.1579	0.2047	0.0500	25.9	20.0	29.6*	20.0
Bromomethane	Ave	0.0718	0.0785	0.0100	21.9	20.0	9.3	50.0
Chloroethane CCV%D, UJ/J	Ave	0.0837	0.1152	0.0830	27.5	20.0	37.6	50.0
Trichlorofluoromethane (Freon 11)	Ave	0.3555	0.4069	0.0500	22.9	20.0	14.5	20.0
Ethyl ether	Ave	0.1626	0.1549	0.0500	19.1	20.0	-4.7	20.0
Ethanol CCV%D, UJ/J	Ave	0.0022	0.0016*	0.0023	280	400	-30.0	50.0
1,1-Dichloroethene	Ave	0.1522	0.1645	0.0500	21.6	20.0	8.1	20.0
Carbon disulfide	Ave	0.5724	0.6746	0.0500	23.6	20.0	17.8	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.1977	0.2215	0.0500	22.4	20.0	12.0	20.0
Iodomethane	Qual		0.1789	0.0500	19.5	20.0	-2.5	20.0
Methylene Chloride	Ave	0.1878	0.2089	0.0500	22.2	20.0	11.2	20.0
Acetone	Ave	0.1007	0.1002	0.0870	19.9	20.0	-0.5	50.0
trans-1,2-Dichloroethene	Ave	0.1524	0.1603	0.0500	21.0	20.0	5.2	20.0
Methyl acetate	Ave	0.1446	0.1400	0.0500	19.4	20.0	-3.2	20.0
Methyl tert-butyl ether	Ave	0.4486	0.4143	0.0500	18.5	20.0	-7.6	20.0
tert-Butanol CCV%D, UJ/J	Ave	0.0138	0.0103	0.0080	149	200	-25.4*	20.0
di-Isopropyl ether	Qual		0.4546	0.0500	17.4	20.0	-13.2	20.0
1,1-Dichloroethane	Ave	0.3487	0.3830	0.0500	22.0	20.0	9.9	20.0
Acrylonitrile	Qual		0.0603	0.0430	19.1	20.0	-4.3	20.0
Ethyl tert-butyl ether	Qual		0.4037	0.0500	17.2	20.0	-13.9	20.0
cis-1,2-Dichloroethene	Ave	0.1604	0.1597	0.0500	19.9	20.0	-0.4	20.0
2,2-Dichloropropane	Ave	0.3177	0.3375	0.0500	21.3	20.0	6.3	20.0
Bromochloromethane	Ave	0.0956	0.1130	0.0900	23.6	20.0	18.2	50.0
Cyclohexane	Lin1		0.2465	0.0500	21.0	20.0	5.1	20.0
Chloroform	Lin1		0.4633	0.0500	23.3	20.0	16.6	20.0
Carbon tetrachloride	Ave	0.3314	0.3602	0.0500	21.7	20.0	8.7	20.0
Tetrahydrofuran	Ave	0.0434	0.0387	0.0290	17.8	20.0	-10.9	20.0
1,1,1-Trichloroethane	Ave	0.3847	0.4096	0.0500	21.3	20.0	6.5	20.0
2-Butanone (MEK)	Ave	0.1300	0.1080	0.0950	16.6	20.0	-16.9	50.0
1,1-Dichloropropene	Ave	0.2183	0.2425	0.0500	22.2	20.0	11.1	20.0
Benzene	Ave	0.6175	0.6930	0.0500	22.4	20.0	12.2	20.0
Tert-amyl methyl ether	Ave	0.3791	0.3627	0.0500	19.1	20.0	-4.3	20.0
1,2-Dichloroethane	Ave	0.4053	0.4149	0.0500	20.5	20.0	2.4	20.0
Methylcyclohexane	Ave	0.1771	0.2035	0.0500	23.0	20.0	14.9	20.0
Trichloroethene	Ave	0.2227	0.2299	0.0500	20.6	20.0	3.2	20.0
Dibromomethane	Ave	0.1403	0.1450	0.1100	20.7	20.0	3.3	20.0
1,2-Dichloropropane	Ave	0.1674	0.1715	0.0500	20.5	20.0	2.4	20.0

TML 10/10/24

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Limit: <20%

Lab Name: Eurofins Rhode Island

Job No.: 620-20506-1

SDG No.:

Lab Sample ID: CCVIS 620-38284/3

Calibration Date: 08/28/2024 11:20

Instrument ID: HPV5

Calib Start Date: 07/18/2024 11:15

GC Column: RTX-VMS ID: 0.25 (mm)

Calib End Date: 07/18/2024 14:38

Lab File ID: V5-082824-03.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bromodichloromethane	Lin1		0.3278	0.0500	22.2	20.0	11.1	20.0
1,4-Dioxane CCV%D, UJ/J	Qual		0.0009*	0.0010	139	200	-30.7	50.0
cis-1,3-Dichloropropene	Ave	0.2400	0.2269	0.0500	18.9	20.0	-5.5	20.0
Toluene	Ave	0.3970	0.4350	0.0500	21.9	20.0	9.6	20.0
Tetrachloroethene	Ave	0.1901	0.2087	0.0500	22.0	20.0	9.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1500	0.1333	0.0990	17.8	20.0	-11.1	50.0
trans-1,3-Dichloropropene	Ave	0.2732	0.2955	0.0500	21.6	20.0	8.2	20.0
1,1,2-Trichloroethane	Ave	0.1590	0.1594	0.0500	20.1	20.0	0.2	20.0
Dibromochloromethane	Ave	0.2260	0.2175	0.0500	19.3	20.0	-3.8	20.0
1,3-Dichloropropane	Ave	0.2857	0.2907	0.0500	20.4	20.0	1.8	20.0
1,2-Dibromoethane (EDB)	Ave	0.1799	0.1796	0.0500	20.0	20.0	-0.2	20.0
2-Hexanone (MBK)	Ave	0.1013	0.0878	0.0860	17.3	20.0	-13.3	50.0
Chlorobenzene	Ave	0.6441	0.6906	0.0500	21.5	20.0	7.2	20.0
Ethylbenzene CCV%D, UJ/J	Ave	0.9726	1.189	0.0500	24.5	20.0	22.2*	20.0
1,1,1,2-Tetrachloroethane	Lin1		0.3098	0.0500	22.9	20.0	14.6	20.0
m,p-Xylene	Qual		0.8418	0.0500	22.4	20.0	12.0	20.0
o-Xylene	Qual		0.7678	0.0500	21.6	20.0	7.8	20.0
Styrene	Qual		0.6900	0.0500	23.4	20.0	16.9	20.0
Bromoform	Ave	0.2186	0.2447	0.0500	22.4	20.0	11.9	50.0
Isopropylbenzene	Qual		1.033	0.0500	22.8	20.0	13.8	20.0
Bromobenzene	Ave	0.3044	0.3567	0.0500	23.4	20.0	17.2	20.0
N-Propylbenzene CCV%D, UJ/J	Ave	1.048	1.307	0.0500	25.0	20.0	24.8*	20.0
1,1,2,2-Tetrachloroethane	Qual		0.3883	0.0500	21.8	20.0	8.8	20.0
2-Chlorotoluene CCV%D, UJ/J	Ave	0.6369	0.8130	0.0500	25.5	20.0	27.7*	20.0
1,2,3-Trichloropropane	Ave	0.3277	0.3516	0.0500	21.5	20.0	7.3	20.0
1,3,5-Trimethylbenzene	Lin1		0.9661	0.0500	21.8	20.0	9.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0594	0.0602*	0.0910	20.3	20.0	1.3	20.0
4-Chlorotoluene CCV%D, UJ/J	Ave	0.7126	0.9055	0.0500	25.4	20.0	27.1*	20.0
tert-Butylbenzene	Qual		0.4578	0.0500	21.5	20.0	7.7	20.0
1,2,4-Trimethylbenzene	Qual		0.9246	0.0500	22.6	20.0	12.8	20.0
sec-Butylbenzene	Qual		1.057	0.0500	22.7	20.0	13.5	20.0
4-Isopropyltoluene CCV%D, UJ/J	Qual		1.346	0.0500	21.2	20.0	6.0	20.0
1,3-Dichlorobenzene	Ave	0.4909	0.6216	0.0500	25.3	20.0	26.6*	20.0
1,4-Dichlorobenzene	Lin1		1.050	0.0500	23.5	20.0	17.7	20.0
n-Butylbenzene	Qual		0.9891	0.0500	19.6	20.0	-2.0	20.0
1,2-Dichlorobenzene	Ave	0.7904	0.8957	0.0500	22.7	20.0	13.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1186	0.1012	0.0630	17.1	20.0	-14.6	20.0
1,3,5-Trichlorobenzene	Ave	0.5169	0.5247	0.0500	20.3	20.0	1.5	20.0
Hexachlorobutadiene	Ave	0.2724	0.2617	0.0500	19.2	20.0	-3.9	20.0
1,2,4-Trichlorobenzene	Qual		0.2375	0.0500	18.1	20.0	-9.5	20.0
Naphthalene CCV%D, UJ/J	Qual		0.7568	0.0500	15.7	20.0	-21.5*	20.0

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NYSDEC Irvington Rugs and Cleaners

Tara LePage

10/11/2024

Sample ID: 360175-DP018001-GW

TC: Trichloroethene

ICAL Level: 2

Val File Result for TC: 59.6

Ical Calc

ICAL p560

ICV Quant Report
p 584

Area TC	4833	1	0.2954
Area IS	824360	2	0.2931
		3	0.2837
Conc TC	1	4	0.2876
Conc IS	50	5	0.2882
		6	0.2843
RRF =	0.293136	7	0.2731
		8	0.2865
		9	0.2727
		10	
		Avg RRF =	0.284956
		Std Dev =	0.007811
		%RSD =	2.741097

Notes:

Green = matched reported value

Red = did not match reported value

sample Quant Report
p 415

Sample Calc

Area TC	239136	DF	1
Area IS	703795	Initial Vol	NA
		Final Vol	NA
Conc IS	50		
Avg RRF	0.284956		
Conc TC =	59.61996		

Run log p1165

Field DUP

360175-DP018001D-GW				360175-DP018001-GW			
Parameter	Result	Qual		Result	Qual		
cis-1,2-Dichloroethene	11.6			22.9		-65.5072	
Tetrachloroethene	1770			2220		-22.5564	
Trichloroethene	31			59.6		-63.1347	
360175-DP018001D-SOIL				360175-DP018001-SOIL			
Parameter	Result	Qual		Result	Qual		
cis-1,2-Dichloroethene	784			980		-22.2222	
Tetrachloroethene	8180			12200		-39.4504	
Trichloroethene	457			1540		-108.463	

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Rhode Island Job No.: 620-20506-1 Analy Batch No.: 38019

SDG No.: _____

Instrument ID: HPV4 GC Column: DB-VRX ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/21/2024 09:40 Calibration End Date: 08/21/2024 13:03 Calibration ID: 8105

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.3395 0.3675	0.3434 0.3553	0.3453 0.3669	0.3598 0.3548	0.3661	Ave		0.355 4			0.0500	3.0		20.0			
Cyclohexane	0.4639 0.4941	0.4653 0.4725	0.4571 0.4830	0.4762 0.4569	0.4919	Ave		0.473 4			0.0500	3.0		20.0			
Carbon tetrachloride	0.3488 0.3997	0.3555 0.3934	0.3447 0.4069	0.3713 0.3991	0.3878	Ave		0.378 6			0.0500	6.3		20.0			
Benzene	0.9818 0.9375	0.9736 0.8967	0.9315 0.9117	0.9368 0.8849	0.9354	Ave		0.932 2			0.0500	3.4		20.0			
Tert-amyl methyl ether	2.0360 0.6811	1.3269 0.6634	0.9624 0.6560	0.7649 0.6530	0.6956	Lin1	0.676 2	0.644 3			0.0500				1.0000		0.9900
Dibromomethane	0.1641 0.1703	0.1729 0.1662	0.1643 0.1675	0.1696 0.1641	0.1684	Ave		0.167 5			0.1100	1.9		20.0			
1,2-Dichloropropane	0.2532 0.2577	0.2562 0.2498	0.2534 0.2544	0.2537 0.2469	0.2567	Ave		0.253 6			0.0500	1.3		20.0			
Trichloroethene	0.2954 0.2843	0.2931 0.2731	0.2837 0.2865	0.2876 0.2727	0.2882	Ave		0.285 0			0.0500	2.7		20.0			
Bromodichloromethane	0.4300 0.3494	0.3601 0.3562	0.3284 0.3516	0.3349 0.3456	0.3403	Ave		0.355 2			0.0500	8.4		20.0			
1,4-Dioxane	++++ 0.0038	0.0029 0.0037	0.0028 0.0038	0.0035 0.0038	0.0030	Ave		0.003 4			0.0010	13.1		20.0			
Methylcyclohexane	0.3909 0.4552	0.4087 0.4410	0.3875 0.4530	0.4114 0.4448	0.4403	Ave		0.425 9			0.0500	6.2		20.0			
cis-1,3-Dichloropropene	0.3051 0.3952	0.3149 0.4048	0.3103 0.4118	0.3543 0.4119	0.3724	Ave		0.364 5			0.0500	12.3		20.0			
4-Methyl-2-pentanone (MIBK)	0.2473 0.3254	0.3144 0.3252	0.2993 0.3241	0.3162 0.3150	0.2819	Ave		0.305 4			0.0990	8.5		20.0			
trans-1,3-Dichloropropene	0.2630 0.3720	0.2758 0.3822	0.2741 0.3883	0.3149 0.3928	0.3433	Ave		0.334 0			0.0500	15.9		20.0			
1,1,2-Trichloroethane	0.1860 0.1979	0.1958 0.1943	0.1948 0.1930	0.1983 0.1871	0.1971	Ave		0.193 8			0.0500	2.3		20.0			
Toluene	0.6123 0.6162	0.6284 0.5948	0.6080 0.5987	0.6222 0.5782	0.6043	Ave		0.607 0			0.0500	2.5		20.0			
1,3-Dichloropropane	0.3892 0.3945	0.3979 0.3859	0.3958 0.3837	0.4129 0.3740	0.3918	Ave		0.391 8			0.0500	2.8		20.0			
Dibromochloromethane	0.2721 0.2612	0.2442 0.2647	0.2171 0.2718	0.2232 0.2770	0.2355	Ave		0.251 9			0.0500	8.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

Eurofins Rhode Island
Target Compound Quantitation Report

Data File: \\ChromFS\Spectrum\ChromData\HPV4\20240821-10045.b\V4-082124-04.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 21-Aug-2024 10:03:30 ALS Bottle#: 2 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic I2
 Misc. Info.: 620-0010045-004
 Operator ID: CLR Instrument ID: HPV4
 Sublist: chrom-MSVOA_HP4*sub1
 Method: \\ChromFS\Spectrum\ChromData\HPV4\20240821-10045.b\MSVOA_HP4.m
 Limit Group: MSV - 8260C
 Last Update: 26-Aug-2024 15:18:21 Calib Date: 21-Aug-2024 13:03:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromFS\Spectrum\ChromData\HPV4\20240821-10045.b\V4-082124-11.D
 Column 1 : Agilent DB-VRX (0.18 mm) Det: MS SCAN
 Process Host: CTX1685

First Level Reviewer: QFC8

Date: 21-Aug-2024 12:38:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	0.765	0.765	0.000	97	2148	1.00	1.01	
2 Chloromethane	50	0.854	0.849	0.005	98	4255	1.00	1.10	
3 Vinyl chloride	62	0.886	0.886	0.000	97	3762	1.00	1.16	
4 Bromomethane	96	1.022	1.022	0.000	96	4703	1.00	0.7961	M
5 Chloroethane	64	1.074	1.074	0.000	97	2581	1.00	1.10	M
6 Ethanol	45	1.106	1.106	0.000	98	1063	20.0	20.7	
7 Trichlorofluoromethane	101	1.300	1.300	0.000	99	7771	1.00	1.02	
8 Acetone	43	1.368	1.368	0.000	98	3844	1.00	1.50	
9 Ethyl ether	59	1.426	1.426	0.000	93	3628	1.00	1.01	
10 1,1-Dichloroethene	96	1.546	1.551	-0.005	97	3619	1.00	0.9852	
11 Iodomethane	142	1.573	1.557	0.016	23	512	1.00	2.11	M
12 2-Methyl-2-propanol	59	1.593	1.599	-0.006	96	6850	10.0	12.0	
13 Acrylonitrile	53	1.609	1.609	0.000	91	2306	1.00	1.03	
14 Methylene Chloride	84	1.641	1.641	0.000	96	4755	1.00	1.08	
15 1,1,2-Trichloro-1,2,2-trifluoroethane	101	1.672	1.672	0.000	97	4976	1.00	1.05	
16 Methyl acetate	43	1.693	1.693	0.000	97	4801	1.00	1.11	
17 Carbon disulfide	76	1.709	1.709	0.000	100	9039	1.00	0.9100	
18 trans-1,2-Dichloroethene	96	2.034	2.039	-0.005	96	3942	1.00	1.01	
19 Methyl tert-butyl ether	73	2.144	2.144	0.000	96	11762	1.00	1.01	
20 1,1-Dichloroethane	63	2.212	2.212	0.000	99	8084	1.00	1.03	
22 2-Butanone (MEK)	43	2.632	2.616	0.016	92	2266	1.00	1.78	M
23 Isopropyl ether	45	2.658	2.658	0.000	97	14483	1.00	0.99	
24 cis-1,2-Dichloroethene	96	2.695	2.694	0.001	95	4334	1.00	0.9894	
25 Chlorobromomethane	128	2.831	2.831	0.000	93	2348	1.00	1.04	
26 Chloroform	83	2.899	2.899	0.000	96	15191	1.00	0.9755	
27 2,2-Dichloropropane	77	2.957	2.957	0.000	94	5973	1.00	0.9343	
\$ 28 Dibromofluoromethane (Surr)	111	3.025	3.025	0.000	97	240151	50.0	49.8	
29 Tert-butyl ethyl ether	59	3.056	3.056	0.000	98	12923	1.00	0.99	
30 Tetrahydrofuran	42	3.245	3.240	0.005	91	1869	1.00	1.09	
\$ 31 1,2-Dichloroethane-d4 (Surr)	65	3.539	3.539	0.000	0	315452	50.0	51.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 1,2-Dichloroethane	62	3.638	3.638	0.000	97	7964	1.00	1.12	
33 1,1,1-Trichloroethane	97	3.733	3.733	0.000	95	7189	1.00	1.00	
34 1,1-Dichloropropene	75	4.037	4.037	0.000	95	5661	1.00	0.9661	
35 Cyclohexane	56	4.073	4.079	-0.006	95	7672	1.00	0.9829	
36 Carbon tetrachloride	117	4.236	4.236	0.000	97	5861	1.00	0.9390	
37 Benzene	78	4.346	4.341	0.005	98	16052	1.00	1.04	
* 38 Fluorobenzene	96	4.776	4.776	0.000	98	824360	50.0	50.0	
39 Tert-amyl methyl ether	73	4.792	4.807	-0.015	91	21877	1.00	1.01	
40 Dibromomethane	93	5.253	5.248	0.005	95	2851	1.00	1.03	
41 1,2-Dichloropropane	63	5.337	5.337	0.000	85	4224	1.00	1.01	
42 Trichloroethene	95	5.421	5.421	0.000	98	4833	1.00	1.03	
43 Dichlorobromomethane	83	5.489	5.489	0.000	99	5937	1.00	1.01	
44 1,4-Dioxane	88	5.772	5.767	0.005	1	479	10.0	8.51	
45 Methylcyclohexane	83	6.092	6.097	-0.005	93	6738	1.00	0.9597	
46 cis-1,3-Dichloropropene	75	6.511	6.511	0.000	95	5191	1.00	0.8638	
47 4-Methyl-2-pentanone (MIBK)	43	6.795	6.789	0.006	99	5183	1.00	1.03	
48 trans-1,3-Dichloropropene	75	7.151	7.146	0.005	99	4547	1.00	0.8256	
49 1,1,2-Trichloroethane	83	7.266	7.266	0.000	98	3228	1.00	1.01	
\$ 50 Toluene-d8 (Surr)	98	7.408	7.408	0.000	99	792803	50.0	49.8	
51 Toluene	92	7.492	7.492	0.000	93	10360	1.00	1.04	
52 1,3-Dichloropropane	76	7.586	7.586	0.000	95	6561	1.00	1.02	
53 Chlorodibromomethane	129	7.806	7.806	0.000	98	4026	1.00	0.9695	
54 2-Hexanone	43	7.959	7.948	0.011	91	3621	1.00	0.9098	
55 Ethylene Dibromide	107	8.084	8.084	0.000	98	3969	1.00	0.9502	
56 Tetrachloroethene	166	8.352	8.346	0.006	97	5511	1.00	1.01	
57 1,1,1,2-Tetrachloroethane	131	9.086	9.091	-0.005	79	3916	1.00	0.9571	a
* 58 Chlorobenzene-d5	117	9.123	9.128	-0.006	87	621980	50.0	50.0	
59 Chlorobenzene	112	9.159	9.159	0.000	97	12003	1.00	1.08	
60 Ethylbenzene	91	9.474	9.474	0.000	99	18047	1.00	0.9867	
61 Bromoform	173	9.673	9.673	0.000	94	2374	1.00	0.8987	
62 m-Xylene & p-Xylene	91	9.731	9.731	0.000	0	13944	1.00	0.9769	
63 Styrene	104	10.082	10.082	0.000	99	9433	1.00	0.8867	
64 1,1,2,2-Tetrachloroethane	83	10.145	10.145	0.000	97	6044	1.00	1.14	
65 o-Xylene	91	10.150	10.150	0.000	98	14825	1.00	0.9848	
66 1,2,3-Trichloropropane	75	10.286	10.286	0.000	96	5026	1.00	1.10	
67 trans-1,4-Dichloro-2-butene	53	10.397	10.396	0.001	74	1101	1.00	0.8303	
\$ 68 4-Bromofluorobenzene (Surr)	95	10.522	10.522	0.000	93	313583	50.0	51.0	
69 Isopropylbenzene	105	10.533	10.538	-0.005	95	21422	1.00	1.06	
70 Bromobenzene	156	10.659	10.659	0.000	96	5626	1.00	1.04	
71 N-Propylbenzene	91	10.937	10.937	0.001	99	22625	1.00	0.9411	M
72 2-Chlorotoluene	126	10.963	10.963	0.000	94	4802	1.00	1.01	
73 4-Chlorotoluene	91	11.041	11.041	0.000	99	14250	1.00	1.01	
74 1,3,5-Trimethylbenzene	105	11.230	11.230	0.000	93	14524	1.00	0.9420	
75 tert-Butylbenzene	119	11.403	11.398	0.005	96	13525	1.00	0.9365	
76 1,2,4-Trimethylbenzene	105	11.513	11.513	0.000	98	14303	1.00	0.9453	
80 1,3-Dichlorobenzene	146	11.571	11.566	0.005	97	10423	1.00	1.05	
77 sec-Butylbenzene	105	11.571	11.571	0.000	98	19634	1.00	1.00	
* 79 1,4-Dichlorobenzene-d4	152	11.608	11.608	0.000	95	362726	50.0	50.0	
78 1,4-Dichlorobenzene	146	11.623	11.629	-0.006	94	10823	1.00	1.05	
81 4-Isopropyltoluene	119	11.739	11.739	0.000	98	16564	1.00	0.9267	
82 1,2-Dichlorobenzene	146	11.870	11.870	0.000	96	9205	1.00	1.00	
83 n-Butylbenzene	91	12.022	12.022	0.000	98	12213	1.00	0.8739	

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Rhode Island

Job No.: 620-20506-1

SDG No.:

Instrument ID: HPV4

Start Date: 08/23/2024 10:43

Analysis Batch Number: 38145

End Date: 08/23/2024 21:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 620-38145/2		08/23/2024 10:43	1	V4-082324-02.D	DB-VRX 0.18 (mm)
CCVIS 620-38145/3		08/23/2024 11:06	1	V4-082324-03.D	DB-VRX 0.18 (mm)
LCS 620-38145/4		08/23/2024 11:29	1	V4-082324-04.D	DB-VRX 0.18 (mm)
LCSD 620-38145/5		08/23/2024 11:52	1	V4-082324-05.D	DB-VRX 0.18 (mm)
MB 620-38145/7		08/23/2024 12:37	1	V4-082324-07.D	DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 13:48	1		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 14:11	1		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 14:34	10		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 14:57	10		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 15:20	10		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 15:43	1		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 16:05	1		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 16:28	1		DB-VRX 0.18 (mm)
620-20506-7	360175-DP018001	08/23/2024 17:14	1	V4-082324-17.D	DB-VRX 0.18 (mm)
620-20506-8	360175-DP018008	08/23/2024 17:37	1	V4-082324-18.D	DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 18:00	1		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 18:22	1		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 18:45	1		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 19:08	1		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 19:31	1		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 20:16	1		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 20:39	1		DB-VRX 0.18 (mm)
ZZZZZ		08/23/2024 21:02	1		DB-VRX 0.18 (mm)

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
36 Carbon tetrachloride	117		4.236				ND	
37 Benzene	78		4.341				ND	
* 38 Fluorobenzene	96	4.776	4.771	0.005	98	703795	50.0	
39 Tert-amyl methyl ether	73		4.807				ND	
40 Dibromomethane	93		5.248				ND	
41 1,2-Dichloropropane	63		5.337				ND	
42 Trichloroethene	95	5.421	5.421	0.000	97	239136	59.6	
43 Dichlorobromomethane	83		5.489				ND	U
44 1,4-Dioxane	88		5.767				ND	
46 cis-1,3-Dichloropropene	75		6.511				ND	
47 4-Methyl-2-pentanone (MIBK)	43		6.789				ND	
48 trans-1,3-Dichloropropene	75		7.146				ND	
49 1,1,2-Trichloroethane	83		7.266				ND	
\$ 50 Toluene-d8 (Surr)	98	7.408	7.408	0.000	99	678579	49.9	
51 Toluene	92		7.492				ND	
52 1,3-Dichloropropane	76		7.586				ND	
53 Chlorodibromomethane	129		7.806				ND	
54 2-Hexanone	43		7.948				ND	
55 Ethylene Dibromide	107		8.084				ND	
56 Tetrachloroethene	166	8.378	8.346	0.032	99	10384960	2223.1	E
57 1,1,1,2-Tetrachloroethane	131		9.091				ND	
* 58 Chlorobenzene-d5	117	9.128	9.123	0.005	88	531621	50.0	
59 Chlorobenzene	112		9.159				ND	
60 Ethylbenzene	91		9.474				ND	
61 Bromoform	173		9.673				ND	
62 m-Xylene & p-Xylene	91		9.731				ND	
63 Styrene	104		10.082				ND	
64 1,1,2,2-Tetrachloroethane	83		10.145				ND	
65 o-Xylene	91		10.150				ND	
66 1,2,3-Trichloropropane	75		10.286				ND	
67 trans-1,4-Dichloro-2-butene	53		10.396				ND	
\$ 68 4-Bromofluorobenzene (Surr)	95	10.522	10.522	0.000	93	270741	51.5	
69 Isopropylbenzene	105		10.538				ND	
70 Bromobenzene	156		10.659				ND	
71 N-Propylbenzene	91		10.937				ND	
72 2-Chlorotoluene	126		10.963				ND	
73 4-Chlorotoluene	91		11.041				ND	
74 1,3,5-Trimethylbenzene	105		11.230				ND	
75 tert-Butylbenzene	119		11.398				ND	
76 1,2,4-Trimethylbenzene	105		11.513				ND	U
80 1,3-Dichlorobenzene	146		11.566				ND	
77 sec-Butylbenzene	105		11.571				ND	
* 79 1,4-Dichlorobenzene-d4	152	11.608	11.608	0.000	95	316475	50.0	
78 1,4-Dichlorobenzene	146		11.629				ND	U
81 4-Isopropyltoluene	119		11.739				ND	
82 1,2-Dichlorobenzene	146		11.870				ND	U
83 n-Butylbenzene	91		12.022				ND	
84 1,2-Dibromo-3-Chloropropane	75		12.200				ND	
85 1,3,5-Trichlorobenzene	180		12.761				ND	
86 1,2,4-Trichlorobenzene	180		13.091				ND	
87 Naphthalene	128	13.238	13.233	0.005	98	2521	0.1895	
88 Hexachlorobutadiene	225		13.306				ND	

NYSDEC Irvington Rugs and Cleaners

Tara LePage

10/11/2024

Sample ID: 360175-DP018001-GW

TC: Trichloroethene

ICAL Level: 2

Val File Result for TC: 59.6

Ical Calc

ICAL p560

ICV Quant Report
p 584

Area TC	4833	1	0.2954
Area IS	824360	2	0.2931
		3	0.2837
Conc TC	1	4	0.2876
Conc IS	50	5	0.2882
		6	0.2843
RRF =	0.293136	7	0.2731
		8	0.2865
		9	0.2727
		10	
		Avg RRF =	0.284956
		Std Dev =	0.007811
		%RSD =	2.741097

Notes:

Green = matched reported value

Red = did not match reported value

sample Quant Report
p 415

Sample Calc

Area TC	239136	DF	1
Area IS	703795	Initial Vol	NA
		Final Vol	NA
Conc IS	50		
Avg RRF	0.284956		
Conc TC =	59.61996		

Run log p1165

Field DUP

360175-DP018001D-GW				360175-DP018001-GW			
Parameter	Result	Qual		Result	Qual		
cis-1,2-Dichloroethene	11.6			22.9		-65.5072	
Tetrachloroethene	1770			2220		-22.5564	
Trichloroethene	31			59.6		-63.1347	
360175-DP018001D-SOIL				360175-DP018001-SOIL			
Parameter	Result	Qual		Result	Qual		
cis-1,2-Dichloroethene	784			980		-22.2222	
Tetrachloroethene	8180			12200		-39.4504	
Trichloroethene	457			1540		-108.463	

Particle Size of Soils by ASTM D422

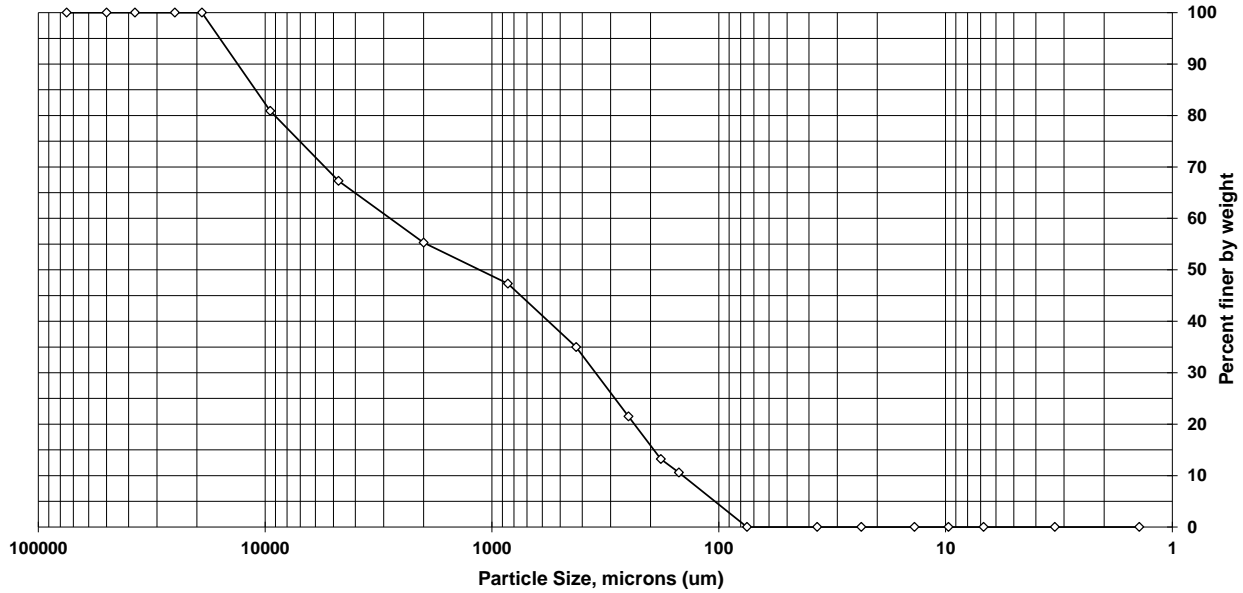
Sample ID: 0 Percent Solids: 90.4% Date Received: 1/0/1900
Lab ID: 620-20506-H-2 Specific Gravity: 2.650 Start Date: 8/29/2024
End Date: 8/31/2024

Field Sample DP-18

Shape (> #10):

Non-soil material:

Hardness (> #10):



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	80.9	19.1
#4	4750	67.3	13.6
#10	2000	55.3	12.0
#20	850	47.3	8.0
#40	425	35.0	12.3
#60	250	21.5	13.5
#80	180	13.2	8.3
#100	150	10.6	2.6
#200	75	0.0	10.6
Hyd1	36.8	0.0	0.0
Hyd2	23.5	0.0	0.0
Hyd3	13.7	0.0	0.0
Hyd4	9.7	0.0	0.0
Hyd5	6.8	0.0	0.0
Hyd6	3.3	0.0	0.0
Hyd7	1.4	0.0	0.0

Soil Classification	Percent of sample
Gravel	32.7
Sand	67.3
Coarse Sand	12.0
Medium Sand	20.3
Fine Sand	35.0
Silt	0.0
Clay	0.0

Eurofins Lancaster Laboratories Environment Testing, LLC

Sediment Grain Size - D422

Client		Date Received	
Client Sample ID		Start Date	08/29/2024 9:54
Lab Sample ID	620-20506-H-2	End Date	08/31/2024 16:56

Dry Weight Determination

Tin Weight	0.80 g
Wet Sample + Tin	6.55 g
Dry Sample + Tin	6.00 g
% Moisture	9.57 %

Non-soil material:

Shape (> #10):
Hardness (> #10):

Date/Time in oven	08/30/2024 13:19
Date/Time out of oven	08/31/2024 11:55

Sample Weights

	Tare (g)	Pan+Sample (g)	Sample (g)
Sample Weight (Wet)	134.51	201.97	67.46
Sample Weight (Oven Dried)			61

Sample Split (oven dried)

	Tare (g)	Pan+Sample (g)	Sample (g)
Sample >=#10			27.3
Sample <#10			33.7
% Passing #10			50

Hydrometer Data

Serial Number	444745
Calib. Date (mm/dd/yyyy)	04/26/2024
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	23.0
Reading at High Temp	1.0035
Hydrometer Cal Slope	-8.33333E-05
Hydrometer Cal Intercept	1.005416667
Default Soil Gravity	2.6500

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample	% Finer	Classification	Sub Class
3 inch	75000			0.00 g	100.0	Gravel	
2 inch	50000			0.00 g	100.0	Gravel	
1.5 inch	37500			0.00 g	100.0	Gravel	
1 inch	25000			0.00 g	100.0	Gravel	
3/4 inch	19000			0.00 g	100.0	Gravel	
3/8 inch	9500	556.64	568.29	11.65 g	80.9	Gravel	
#4	4750	502.85	511.12	8.27 g	67.3	Gravel	
#10	2000	450.87	458.22	7.35 g	55.3	Sand	Coarse
#20	850	339.97	344.86	4.89 g	47.3	Sand	Medium
#40	425	347.50	355.01	7.51 g	35.0	Sand	Medium
#60	250	329.21	337.44	8.23 g	21.5	Sand	Fine
#80	180	325.29	330.33	5.04 g	13.2	Sand	Fine
#100	150	317.24	318.80	1.56 g	10.6	Sand	Fine
#200	75	308.00	316.21	8.21 g	-2.9	Sand	Fine
				0.00 g	-2.9		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	61
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Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0040	22.0	36.8	1.1	Silt	
5	5	1.0030	22.0	23.5	-1.54	Silt	
15	15	1.0020	22.0	13.7	-4.17	Silt	
30	30	1.0020	22.0	9.7	-4.17	Silt	
60	60	1.0020	22.0	6.8	-4.17	Silt	
250	250	1.0020	22.0	3.3	-4.17	Clay	
1440	1440	1.0010	22.0	1.4	-6.8	Clay	

WA D009809-28, Irvington Rugs and Cleaners- PDI Report

March 2025

NYSDEC – Site No. 360175

Earth Environment Engineering and Geology, P.C., Project No. US-EI-3616216144

ATTACHMENT 4

EVONIK REPORT

Klozur[®] Persulfate Demand Test and Base Buffering Capacity test**Client:**

WSP
2 Monument Square, Ste. 200
Portland ME, 04101
Charles Staples
(207) 910-1109
charles.staples@wsp.com

Performing Lab:

Evonik
Tonawanda, New York, 14150

Date

September 4, 2024

I. Background

Klozur[®] activated persulfate is a strong oxidant capable of mineralizing a wide range of contaminants, including chlorinated solvents, petroleum hydrocarbons, polyaromatic hydrocarbons, gasoline additives, pesticides, and many others. Activation of the persulfate anion generates the sulfate radical, the primary species that drives the rapid destruction of the contaminants of concern. Activation can be accomplished by several methods¹: heat, transition metals, addition of hydrogen peroxide, or utilizing high pH. Choice of the activation method will depend on the contaminant of concern and site characteristics.

A chemical oxidant is not specific as to what it will oxidize. As a result, activated persulfate will not only mineralize the contaminant of concern, but a portion of the oxidant will be used in oxidizing soil organics, reduced metals, and organic species that are not of concern. In addition, activated persulfate will undergo auto-decomposition, which will be a function of temperature, concentration and activation method. The demand upon the activated persulfate from all of these components is captured in a coarse screening test termed, "Klozur Demand Test". It is dependent upon the site characteristics, such as the organic content of the soil, the mineral loading, and soil type and collectively must be considered for estimating the magnitude of oxidant dosing during field application.

¹ Evonik is the owner of licensee under various patents relating to the use of activation chemistries

The Klozur® Persulfate KDT test measures the loss of persulfate in the presence of soil, groundwater and activator over a period of 48 and 168 hours. The resulting KDT values can then be used as a guide to develop appropriate persulfate dosing for subsequent treatability testing and field applications.

When high pH is chosen as a means of activation, a Base Buffering Capacity (BBC) test is recommended. The goal of a BBC test is to determine the amount of sodium hydroxide (NaOH) needed to raise the pH of a soil to pH 10.5, which is necessary for Klozur persulfate activation. This report contains the results and observations from both a KDT and BBC test.

II. Sample Handling

Client Sample Identification

Site Identification: Irvington Rug and Cleaners

Soil ID: 360175-DP018001

GW ID: 8-20-24/1080

Site Identification: Background Location

Soil ID: 360175-DP02A007

GW ID: 8-21-24/1040

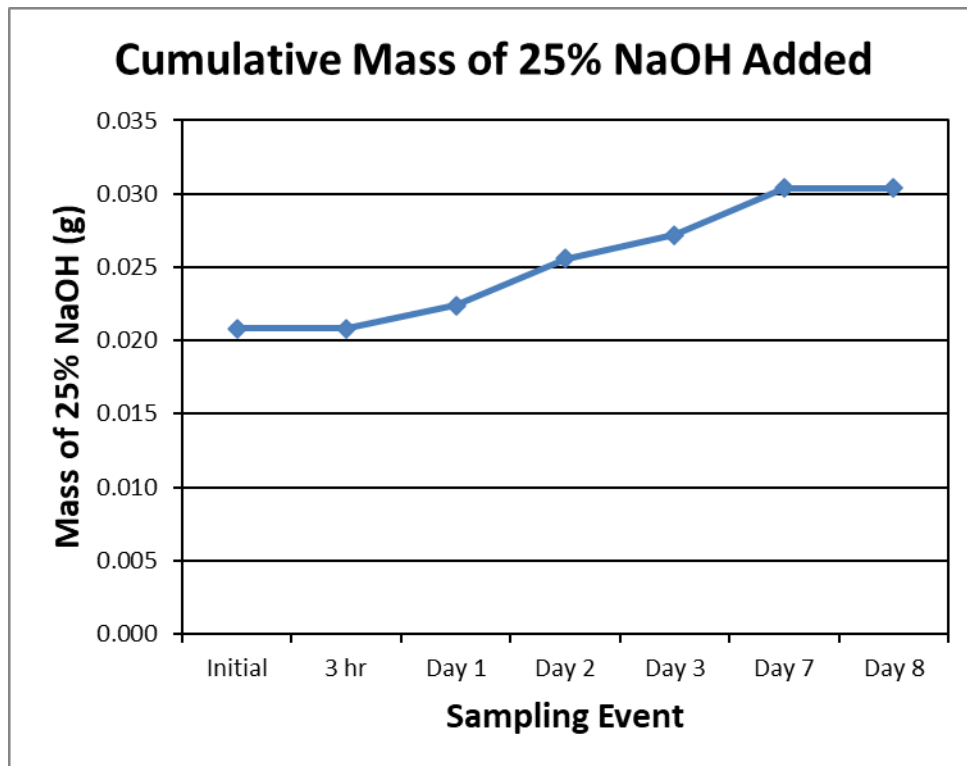
Handling Procedures

- The samples were received on August 26, 2024. Soils were transferred into stainless-steel bowls and mixed well. Soil 360175-DP018001 was a medium brown sandy soil with slight petroleum odor and lots of stones. The corresponding ground water (8-20-24/1080) was cloudy with small particulates. Soil 360175-DP02A007 was a light brown clay/silt soil with no odor. The corresponding ground water (8-21-24/1040) was cloudy with small particulates.
- The remaining soil was put into its original container and stored at ambient lab temperature.
- On August 27, 2024, the tubes were prepared according to the Evonik Tonawanda KDT protocol using the provided soil and groundwater. Additional tubes were prepared according to the Evonik Tonawanda BBC protocol using the provided soil and groundwater.
- The experimental samples were stored at room temperature and each sample was inverted daily.
- The unused soil will be disposed of responsibly after about one month.

III. Results

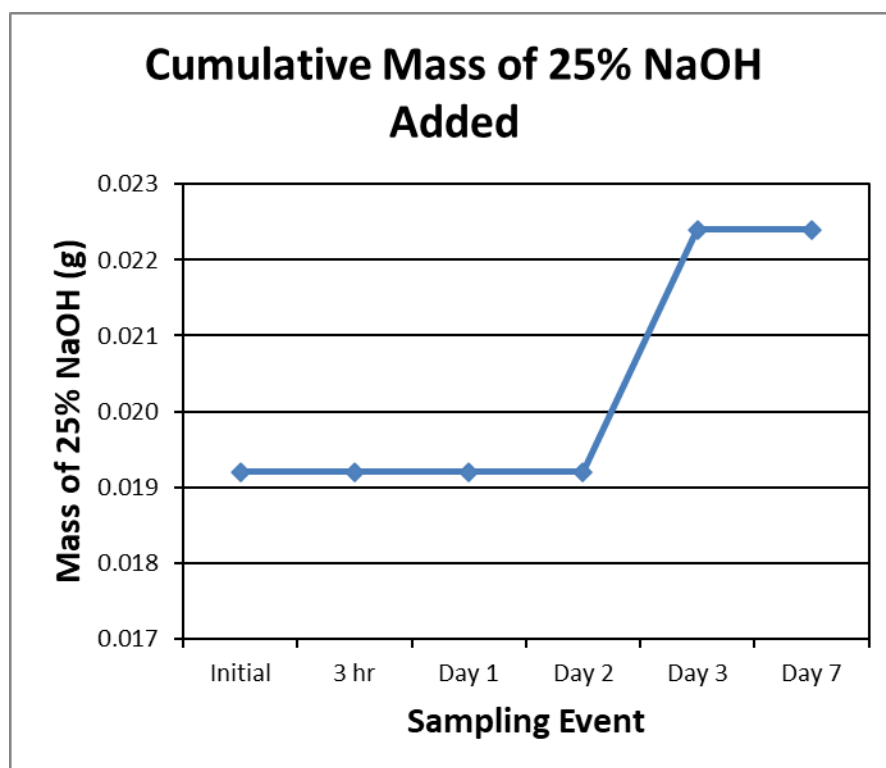
Sample ID	Trial Activator	Soil Wt. (g)	Water Vol. (mL)	Klozur Dosage (g/Kg Soil) t=0 hrs.	Slurry pH	Klozur Consumption (g persulfate / kg dry soil)	
						t=48hr	t=168 hr
Soil: 360175-DP018001 GW: 8-20-24/1080	High pH 25% NaOH	10	30	15	12.15	2.30	4.60

Sample ID	pH	Initial Dosing	8 days	Total mass of 25% NaOH added over 8 days (g)	BBC (g 25% NaOH / kg dry soil)
Soil: 360175-DP018001 GW: 8-20-24/1080	Initial pH	7.39	10.77	0.030	1.23
	Final pH	10.87	10.77		



Sample ID	Trial Activator	Soil Wt. (g)	Water Vol. (mL)	Klozur Dosage (g/Kg Soil) t=0 hrs.	Slurry pH	Klozur Consumption (g persulfate / kg dry soil)	
						t=48hr	t=168 hr
Soil: 360175-DP02A007 GW: 8-21-24/1040	High pH 25% NaOH	10	30	15	12.12	0.61	1.29

Sample ID	pH	Initial Dosing	7 days	Total mass of 25% NaOH added over 7 days (g)	BBC (g 25% NaOH / kg dry soil)
Soil: 360175-DP02A007 GW: 8-21-24/1040	Initial pH	7.33	10.53	0.022	0.93
	Final pH	11.16	10.53		



IV. Conclusions

The Klozur® Persulfate demand with high pH activation for the 360175-DP018001 sample was 2.30 g sodium persulfate / kg dry soil after 48 hours and 4.60 g sodium persulfate / kg dry soil after 168 hours.

The BBC for the provided soil and groundwater was 1.23 g 25% NaOH / kg dry soil.

The Klozur® Persulfate demand with high pH activation for the 360175-DP02A007 sample was 0.61 g sodium persulfate / kg dry soil after 48 hours and 1.29 g sodium persulfate / kg dry soil after 168 hours.

The BBC for the provided soil and groundwater was 0.93 g 25% NaOH / kg dry soil.

V. Photos from BBC test

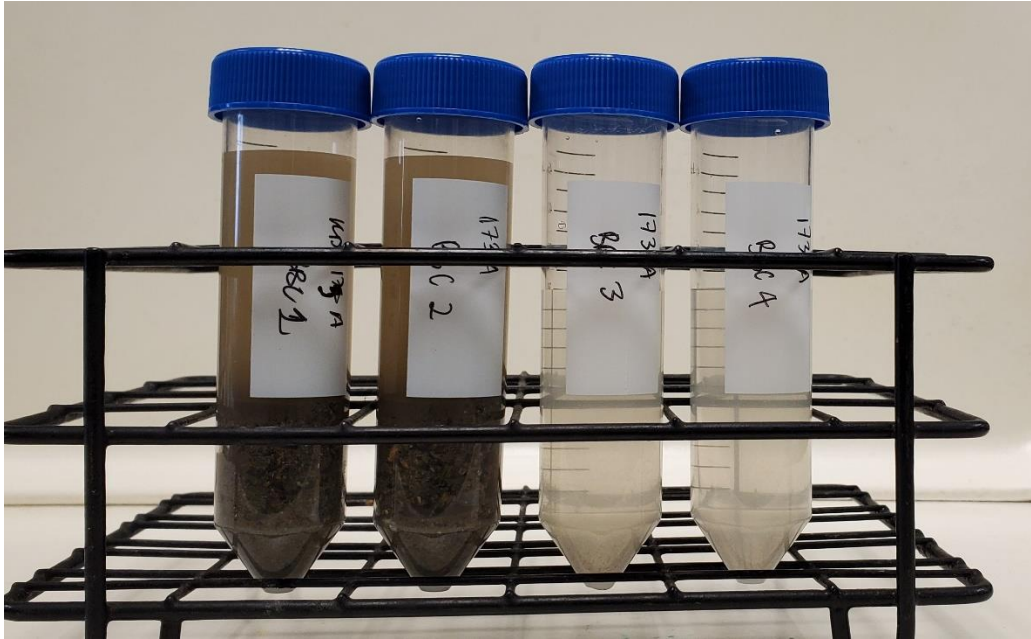


Photo 1: Day 0, before initial dosing for soil 360175-DP018001. From left to right: Tube #1 & #2 Sample soil with GW, #3 and #4 sample GW.

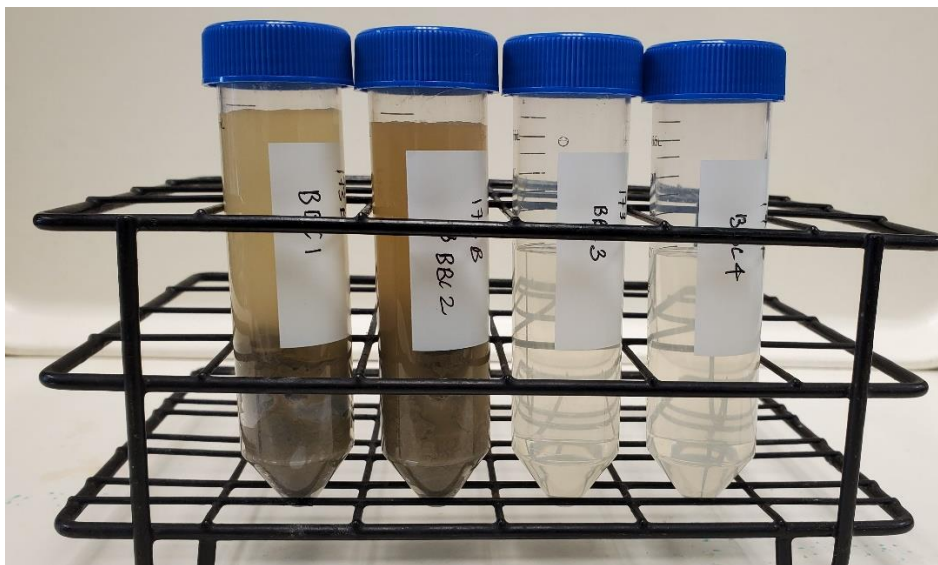


Photo 2: Day 0, before initial dosing for soil 360175-DP02A007. From left to right: left to right: Tube #1 & #2 Sample soil with GW, #3 and #4 sample GW.

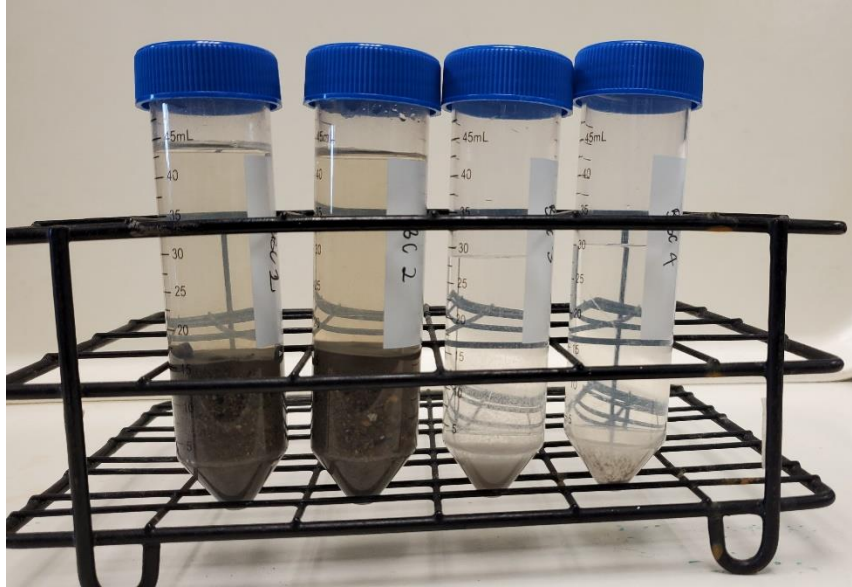


Photo 3: Day 7 for soil 360175-DP018001. From left to right: Tube #1& #2 sample soil and GW above 10.5 pH, #3 GW raised above pH 12 and #4 unaltered sample GW

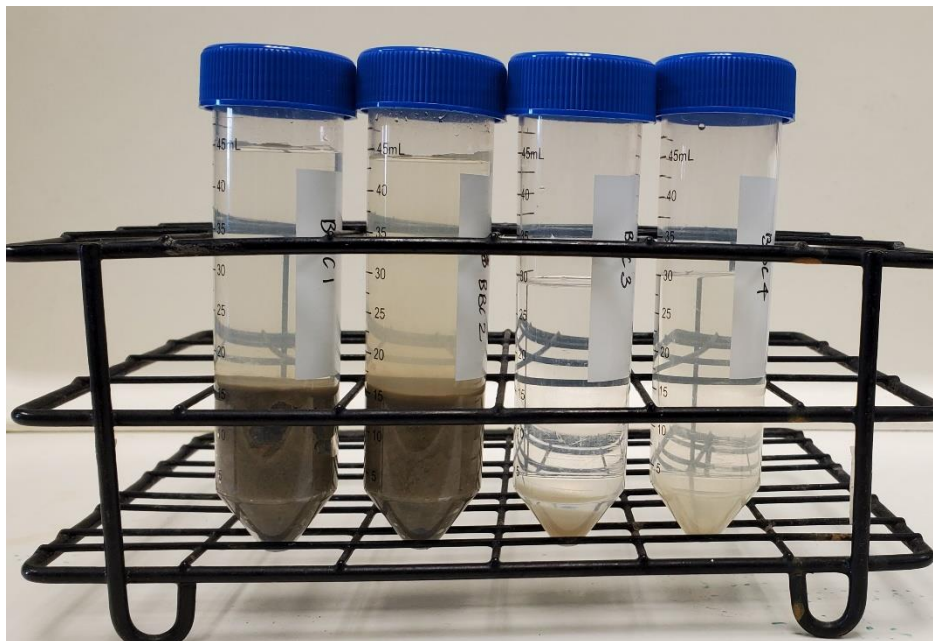


Photo 3: Day 7 for soil 360175-DP02A007. From left to right: Tube #1& #2 sample soil and GW above 10.5 pH, #3 GW raised above pH 12 and #4 unaltered sample GW

VI. Authorizing Signatures

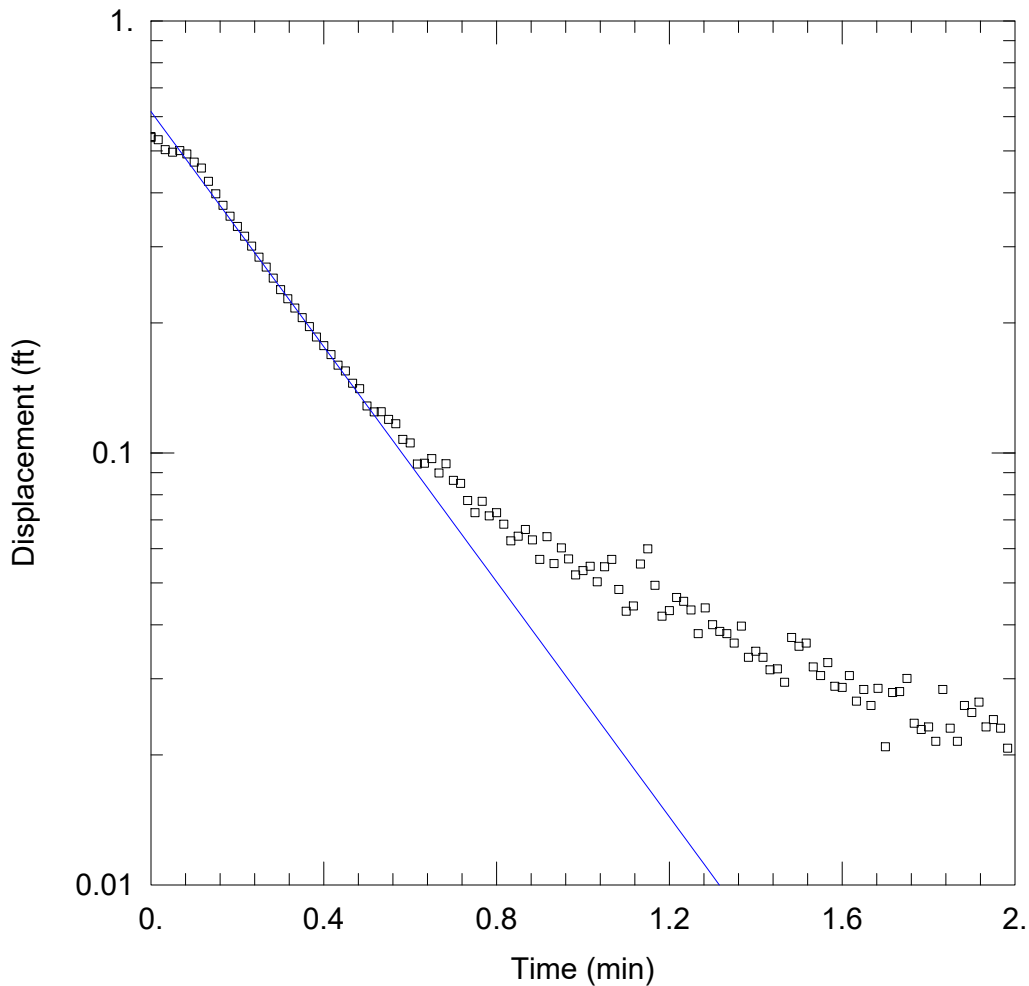
This report contains the results as determined by Evonik laboratory protocol and are accurately represented herein.

Note: 1. Evonik recommends performing suitable treatability testing and field pilot demonstration to determine the effectiveness of Klozur® activated persulfate on the contaminants of concern. KDT testing provides only an indication of the minimum amount of oxidant required to overcome the demands of soil, groundwater and other secondary species that contribute to the usage of the oxidant. The KDT results do not imply a guarantee of efficacy of the activated persulfate in actual field situations. 2. ANY SUCH QUANTITY OR WARRANTY IS EXPRESSLY DISCLAIMED.

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ATTACHMENT 5

AQUTESOLV OUTPUT AND CALCULATIONS



DP-02 RISING HEAD TEST 1

Data Set: C:\...\DP02RHT1.aqt

Date: 10/16/24

Time: 12:57:49

PROJECT INFORMATION

Company: WSP

Client: NYSDEC

Project: 616216144

Location: Irvington, NY

Test Well: DP-02

Test Date: 8/19/24

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (DP-02)

Initial Displacement: 0.54 ft

Static Water Column Height: 8.1 ft

Total Well Penetration Depth: 12.15 ft

Screen Length: 10. ft

Casing Radius: 0.042 ft

Well Radius: 0.042 ft

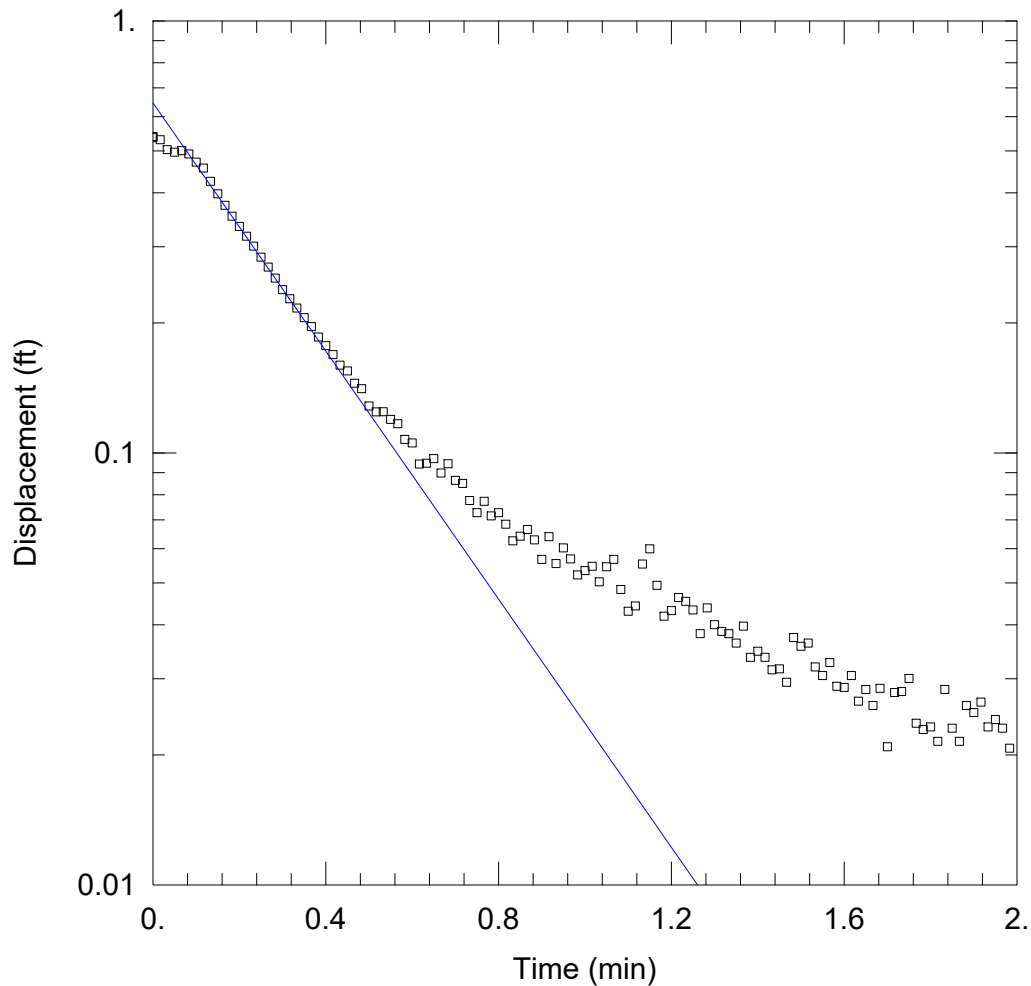
SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 1.192$ ft/day

$y_0 = 0.6168$ ft



DP-02 RISING HEAD TEST 1

Data Set: C:\...\DP02RHT1.aqt

Date: 10/16/24

Time: 12:58:35

PROJECT INFORMATION

Company: WSP

Client: NYSDEC

Project: 616216144

Location: Irvington, NY

Test Well: DP-02

Test Date: 8/19/24

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (DP-02)

Initial Displacement: 0.54 ft

Static Water Column Height: 8.1 ft

Total Well Penetration Depth: 12.15 ft

Screen Length: 10. ft

Casing Radius: 0.042 ft

Well Radius: 0.042 ft

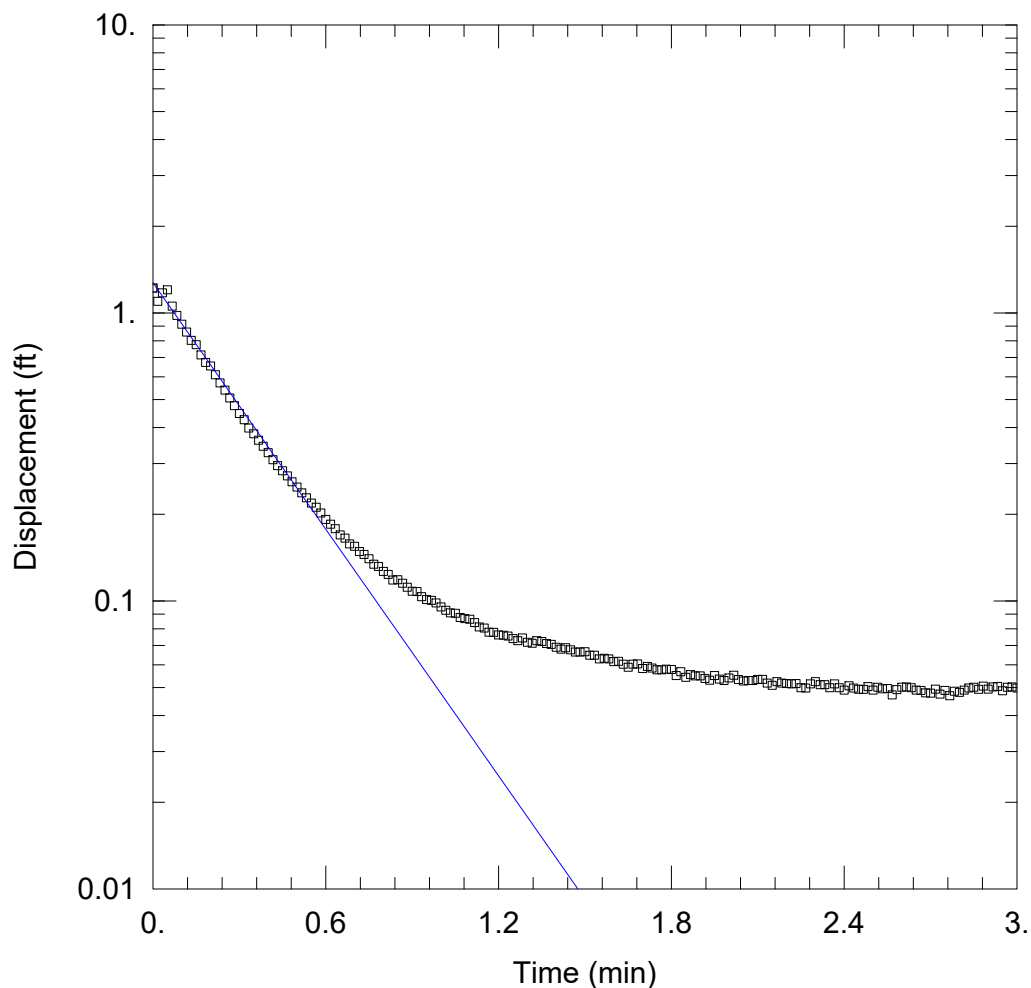
SOLUTION

Aquifer Model: Unconfined

Solution Method: Hvorslev

$K = 1.724$ ft/day

$y_0 = 0.6459$ ft



DP-02 RISING HEAD TEST 2

Data Set: C:\...\DP02-RHT2.aqt

Date: 10/16/24

Time: 13:15:31

PROJECT INFORMATION

Company: WSP

Client: NYSDEC

Project: 616216144

Location: Irvington, NY

Test Well: DP-02

Test Date: 8/19/24

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (DP-02)

Initial Displacement: 1.22 ft

Static Water Column Height: 8.09 ft

Total Well Penetration Depth: 12.15 ft

Screen Length: 10. ft

Casing Radius: 0.042 ft

Well Radius: 0.042 ft

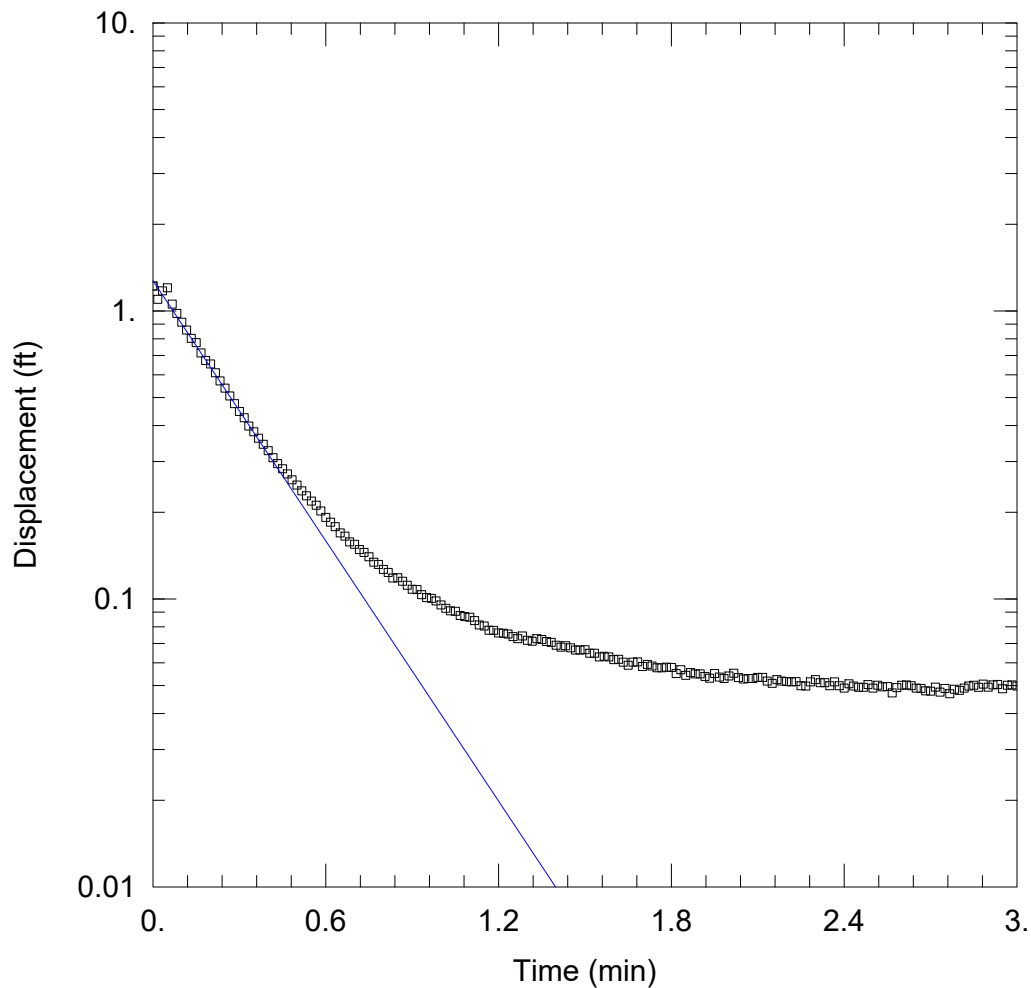
SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 1.25$ ft/day

$y_0 = 1.273$ ft



DP-02 RISING HEAD TEST 2

Data Set: C:\...\DP02-RHT2.aqt

Date: 10/16/24

Time: 13:16:05

PROJECT INFORMATION

Company: WSP

Client: NYSDEC

Project: 616216144

Location: Irvington, NY

Test Well: DP-02

Test Date: 8/19/24

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (DP-02)

Initial Displacement: 1.22 ft

Static Water Column Height: 8.09 ft

Total Well Penetration Depth: 12.15 ft

Screen Length: 10. ft

Casing Radius: 0.042 ft

Well Radius: 0.042 ft

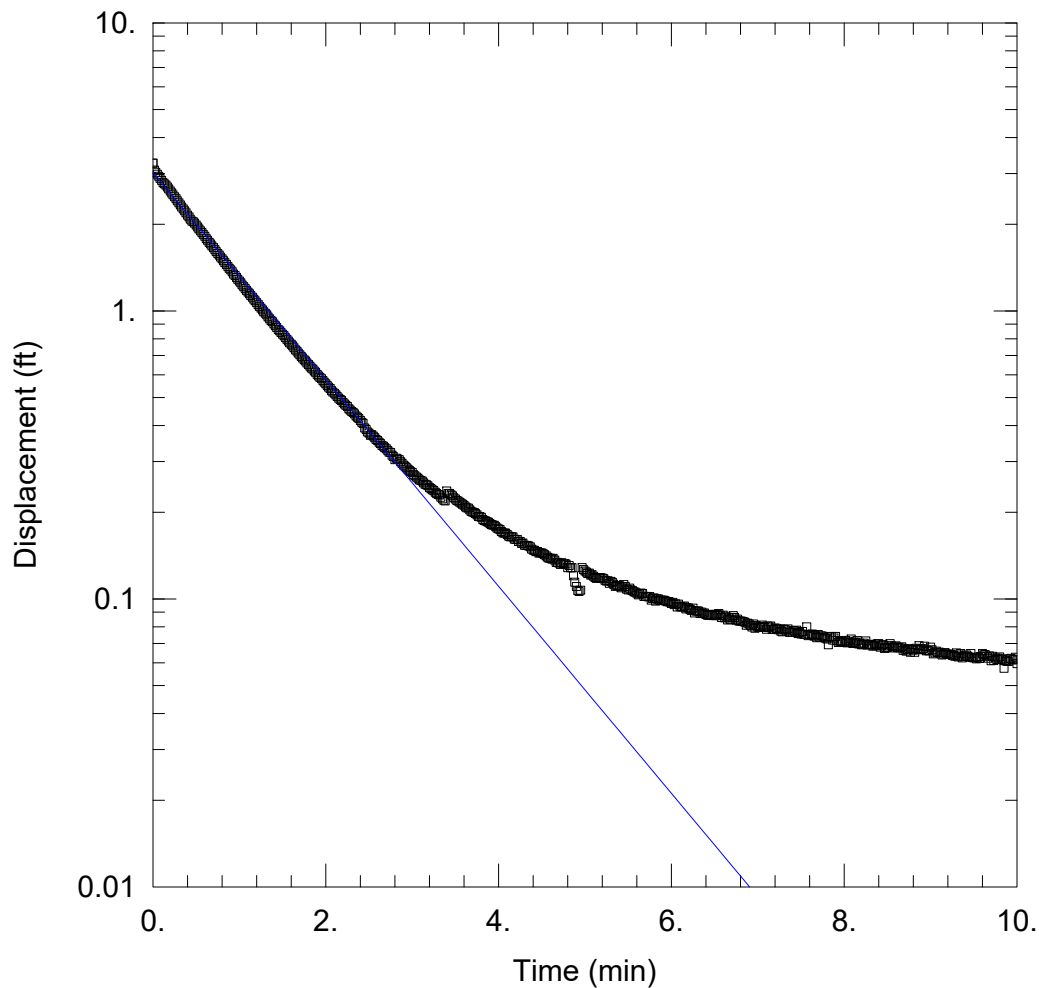
SOLUTION

Aquifer Model: Unconfined

Solution Method: Hvorslev

$K = 1.807$ ft/day

$y_0 = 1.273$ ft



DP-05 RISING HEAD TEST

Data Set: C:\...\DP05RHT.aqt

Date: 10/16/24

Time: 11:43:33

PROJECT INFORMATION

Company: WSP

Client: NYSDEC

Project: 616216144

Location: Irvington, NY

Test Well: DP-05

Test Date: 8/19/24

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (DP-05)

Initial Displacement: 3.26 ft

Static Water Column Height: 8.48 ft

Total Well Penetration Depth: 15.63 ft

Screen Length: 10. ft

Casing Radius: 0.042 ft

Well Radius: 0.042 ft

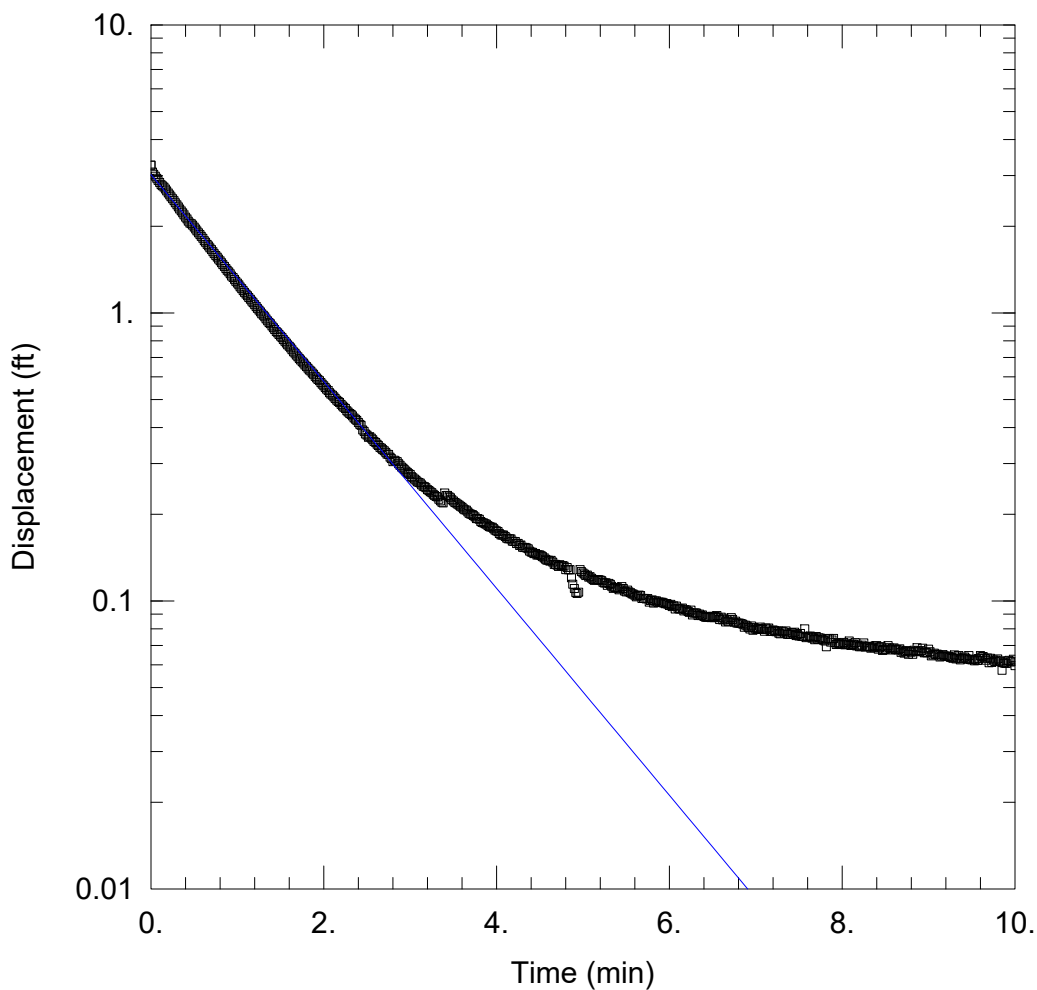
SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 0.3298$ ft/day

$y_0 = 3.021$ ft



DP-05 RISING HEAD TEST

Data Set: C:\...\DP05RHT.aqt

Date: 10/16/24

Time: 11:43:04

PROJECT INFORMATION

Company: WSP

Client: NYSDEC

Project: 616216144

Location: Irvington, NY

Test Well: DP-05

Test Date: 8/19/24

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (DP-05)

Initial Displacement: 3.26 ft

Static Water Column Height: 8.48 ft

Total Well Penetration Depth: 15.63 ft

Screen Length: 10. ft

Casing Radius: 0.042 ft

Well Radius: 0.042 ft

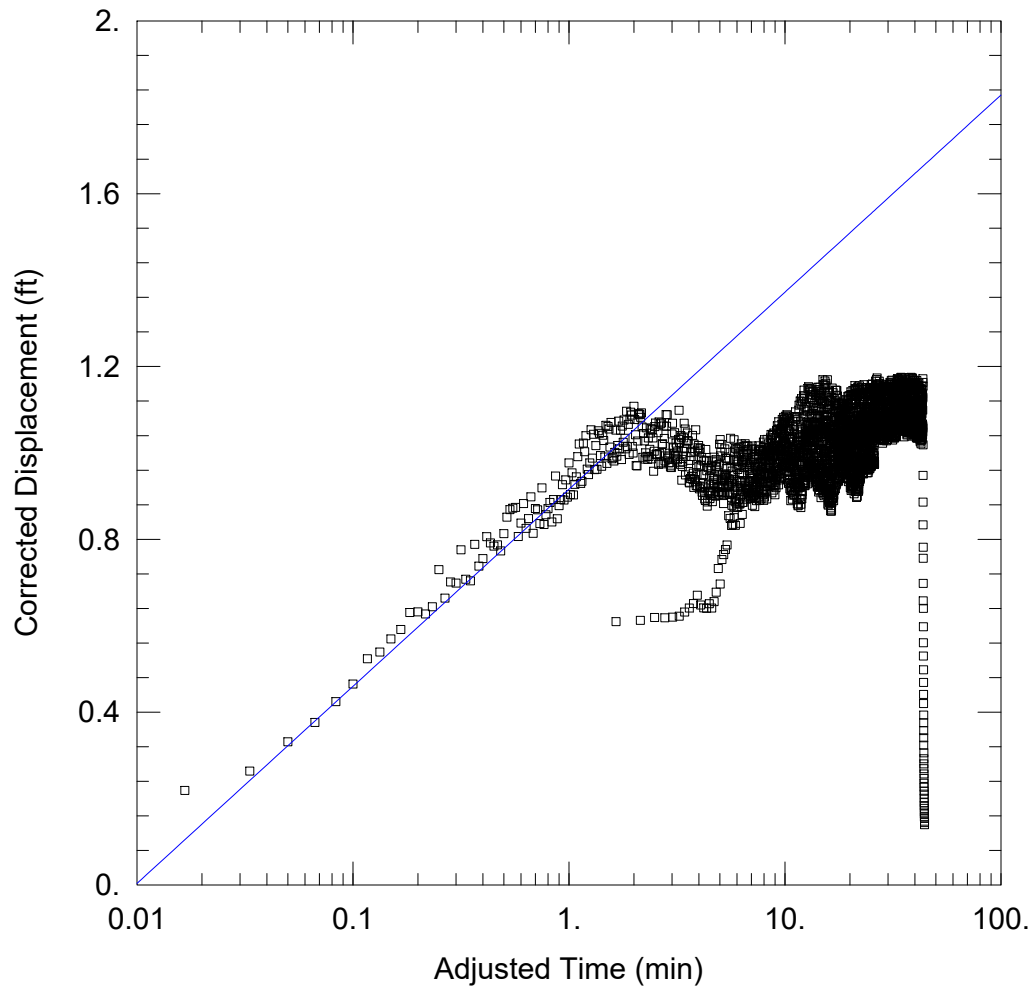
SOLUTION

Aquifer Model: Unconfined

Solution Method: Hvorslev

$K = 0.431$ ft/day

$y_0 = 3.021$ ft



DP-02 SINGLE WELL PUMP TEST

Data Set: X:\...\DP-02 VRT 10-23-24.aqt

Date: 10/23/24

Time: 11:57:59

PROJECT INFORMATION

Company: WSP

Client: NYSDEC

Project: 616216144

Location: Irvington, NY

Test Well: DP-02

Test Date: 8/19/24

AQUIFER DATA

Saturated Thickness: 15. ft

Anisotropy Ratio (K_z/K_r): 0.3

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
DP-02	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ DP-02	0	0

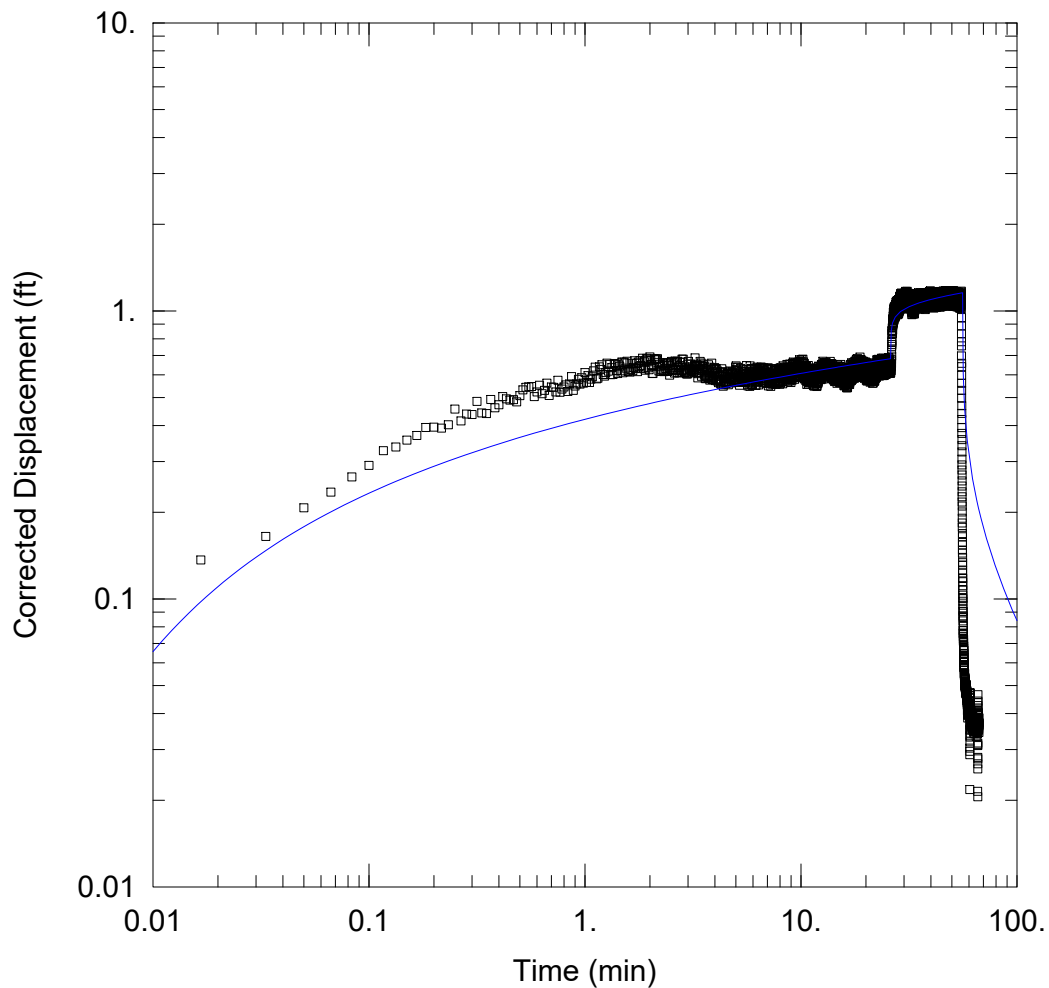
SOLUTION

Aquifer Model: Unconfined

Solution Method: Cooper-Jacob

$T = 16.34 \text{ ft}^2/\text{day}$

$S = 0.142$



DP-02 SINGLE WELL PUMP TEST

Data Set: X:\...\DP-02 VRT 10-23-24.aqt

Date: 10/23/24

Time: 11:51:59

PROJECT INFORMATION

Company: WSP

Client: NYSDEC

Project: 616216144

Location: Irvington, NY

Test Well: DP-02

Test Date: 8/19/24

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
DP-02	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ DP-02	0	0

SOLUTION

Aquifer Model: Unconfined

Solution Method: Theis

T = 45. ft²/day

S = 0.25

Kz/Kr = 0.3

b = 15. ft