Location and Results of Surface Water Samples Adjacent to UPRR

On November 8, 2019, after a rain event, two surface water samples were collected on the periphery of the Union Pacific Railroad (UPRR) site. Both samples were taken from the western part of the site. Each sample was given a numerical label for identification purposes. Figure 1 depicts the physical locations of each sampled location with its corresponding label. No chemicals of concern were detected in the samples.

Figure 1: Google map image showing the Union Pacific Railroad site. The red dots represent the locations where the City of Houston's Heath Department personnel took surface water samples for

analysis.

Laboratory Analysis Report

Total Number of Pages: 21

Job ID : 19110612

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
Union Pacific Railroad/ 5th Ward/ Pleasantville

Report To :	Client Name:	City of Houston Health and Human Services	P.O.#.:
	Attn:	Donald Richner	Sample Collected By: Jane Marzano
	Client Address:	7411 Park Place Blvd, Room 103	Date Collected: 11/08/19
	City, State, Zip:	Houston, Texas, 77087	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Sample_1	Water	19110612.01
Sample_2	Water	19110612.02

Released By: Alisha Hughes
Title: Project Manager
Date: 11/15/2019

This Laboratory is NELAP (T104704213-19-21) accredited. Effective: 08/26/2019; Expires: 3/31/2020
Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

Date Received : 11/08/2019 12:24

Report Number: RPT191115065

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 19110612

Date: 11/15/2019

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count
J	Estimation. Below calibration range but above MDL		

Qualifier Definition

L1	Associated LCS and/or LCSD recovery is above acceptance limits for flagged analyte. Bias may be high.

LABORATORY TEST RESULTS

Job ID : 19110612

Date 11/15/2019

Client Name: City of Houston Health and Human Services Attn: Donald Richner

Project Name: Union Pacific Railroad/ 5th Ward/ Pleasantville

Client Sample ID: Sample_1
Date Collected: 11/08/19
Time Collected: 10:50
Other Information:

Job Sample ID: 19110612.01
Sample Matrix Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,1,1-Trichloroethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,1,2,2-Tetrachloroethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,1,2-Trichloroethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,1-Dichloroethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,1-Dichloroethylene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,1-Dichloropropene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,2,3-trichlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,2,3-Trichloropropane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,2,4-Trichlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,2,4-Trimethylbenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,2-Dibromo-3-chloropropane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,2-Dibromoethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,2-Dichlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,2-Dichloroethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,2-Dichloropropane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,3,5-Trimethylbenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,3-Dichlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,3-Dichloropropane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	1,4-Dichlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	2,2-Dichloropropane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	2-Chlorotoluene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	4-Chlorotoluene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	4-Isopropyltoluene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Benzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Bromobenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Bromochloromethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Bromodichloromethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Bromoform	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Bromomethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Carbon tetrachloride	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Chlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Chloroethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Chloroform	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Chloromethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	cis-1,2-Dichloroethylene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	cis-1,3-Dichloropropene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Dibromochloromethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT

LABORATORY TEST RESULTS

Job ID : 19110612

Date 11/15/2019

Client Name: City of Houston Health and Human Services Attn: Donald Richner

Project Name: Union Pacific Railroad/ 5th Ward/ Pleasantville

Client Sample ID: Sample_1
Date Collected: 11/08/19
Time Collected: 10:50
Other Information:

Job Sample ID: 19110612.01
Sample Matrix Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	Dibromomethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Dichlorodifluoromethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Ethylbenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Isopropylbenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	m- & p-Xylenes	BRL	mg/L	1	0.01			11/08/19 18:05	RT
	MEK	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Methylene chloride	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Naphthalene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	n-Butylbenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	n-Propylbenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	o-Xylene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	sec-Butylbenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Styrene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	t-butylbenzene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Tetrachloroethylene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Toluene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	trans-1,2-Dichloroethylene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	trans-1,3-Dichloropropene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Trichloroethylene	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Trichlorofluoromethane	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	TTHMs[1]	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Vinyl Chloride	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Xylenes	BRL	mg/L	1	0.005			11/08/19 18:05	RT
	Dibromofluoromethane(surr)	102	%	1	70-130			11/08/19 18:05	RT
	1,2-Dichloroethane-d4(surr)	103	%	1	70-130			11/08/19 18:05	RT
	Toluene-d8(surr)	99.4	%	1	70-130			11/08/19 18:05	RT
	p-Bromofluorobenzene(surr)	102	%	1	70-130			11/08/19 18:05	RT
SW-846 8270D	Semivolatile Organic Compounds								
	1,2,4-Trichlorobenzene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	1,2-Dichlorobenzene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	1,3-Dichlorobenzene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	1,4-Dichlorobenzene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2,4,5-Trichlorophenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2,4,6-Trichlorophenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2,4-Dichlorophenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2,4-Dimethylphenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2,4-Dinitrophenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2,4-Dinitrotoluene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN

LABORATORY TEST RESULTS

Job ID : 19110612

Date 11/15/2019

Client Name: City of Houston Health and Human Services Attn: Donald Richner

Project Name: Union Pacific Railroad/ 5th Ward/ Pleasantville

Client Sample ID: Sample_1
Date Collected: 11/08/19
Time Collected: 10:50
Other Information:

Job Sample ID: 19110612.01
Sample Matrix Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8270D	Semivolatile Organic Compounds								
	2,6-Dinitrotoluene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2-Chloronaphthalene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2-Chlorophenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2-Methylnaphthalene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2-Methylphenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2-Nitroaniline	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2-Nitrophenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	3- & 4-Methylphenols	BRL	mg/L	1.14	0.0114			11/11/19 16:30	VMN
	3,3-Dichlorobenzidine	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	3-Nitroaniline	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	4,6-Dinitro-2-methylphenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	4-Bromophenyl phenyl ether	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	4-Chloro-3-methylphenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	4-Chloroaniline	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	4-Chlorophenyl phenyl ether	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	4-Nitroaniline	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	4-Nitrophenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Acenaphthene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Acenaphthylene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Aniline	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Anthracene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Azobenzene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Benzidine	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Benzo(a)anthracene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Benzo(a)pyrene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Benzo(b)fluoranthene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Benzo(g,h,i)perylene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Benzo(k)fluoranthene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Benzoic acid	BRL	mg/L	1.14	0.0285			11/11/19 16:30	VMN
	Benzyl alcohol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Bis(2-chloroethoxy) methane	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Bis(2-chloroethyl) ether	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Bis(2-chloroisopropyl) ether	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Bis(2-ethylhexyl)phthalate	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Butyl benzyl phthalate	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Carbazole	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Chrysene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Dibenzo(a,h)anthracene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN

LABORATORY TEST RESULTS

Job ID : 19110612

Date 11/15/2019

Client Name: City of Houston Health and Human Services Attn: Donald Richner

Project Name: Union Pacific Railroad/ 5th Ward/ Pleasantville

Client Sample ID: Sample_1
Date Collected: 11/08/19
Time Collected: 10:50
Other Information:

Job Sample ID: 19110612.01
Sample Matrix Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8270D	Semivolatile Organic Compounds								
	Dibenzofuran	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Diethyl phthalate	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Dimethyl phthalate	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Di-n-butyl phthalate	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Di-n-octyl Phthalate	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Fluoranthene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Fluorene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Hexachlorobenzene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Hexachlorobutadiene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Hexachlorocyclopentadiene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Hexachloroethane	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Indeno(1,2,3-cd)pyrene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Isophorone	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Naphthalene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Nitrobenzene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	N-Nitrosodimethylamine	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	N-nitroso-di-n-propylamine	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	N-Nitrosodiphenylamine	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Pentachlorophenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Phenanthrene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Phenol	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Pyrene	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	Pyridine	BRL	mg/L	1.14	0.0057			11/11/19 16:30	VMN
	2-Fluorophenol(surr)	55	%	1.14	15-115			11/11/19 16:30	VMN
	Phenol-d6(surr)	38.6	%	1.14	10-130			11/11/19 16:30	VMN
	Nitrobenzene-d5(surr)	67.6	%	1.14	23-120			11/11/19 16:30	VMN
	2-Fluorobiphenyl(surr)	67	%	1.14	30-115			11/11/19 16:30	VMN
	2,4,6-Tribromophenol(surr)	65.5	%	1.14	19-122			11/11/19 16:30	VMN
	p-Terphenyl-d14(surr)	71.6	%	1.14	18-137			11/11/19 16:30	VMN

LABORATORY TEST RESULTS

Job ID : 19110612

Date 11/15/2019

Client Name: City of Houston Health and Human Services Attn: Donald Richner

Project Name: Union Pacific Railroad/ 5th Ward/ Pleasantville

Client Sample ID: Sample_2
Date Collected: 11/08/19
Time Collected: 11:15
Other Information:

Job Sample ID: 19110612.02
Sample Matrix Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,1,1-Trichloroethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,1,2,2-Tetrachloroethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,1,2-Trichloroethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,1-Dichloroethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,1-Dichloroethylene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,1-Dichloropropene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,2,3-trichlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,2,3-Trichloropropane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,2,4-Trichlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,2,4-Trimethylbenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,2-Dibromo-3-chloropropane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,2-Dibromoethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,2-Dichlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,2-Dichloroethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,2-Dichloropropane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,3,5-Trimethylbenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,3-Dichlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,3-Dichloropropane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	1,4-Dichlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	2,2-Dichloropropane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	2-Chlorotoluene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	4-Chlorotoluene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	4-Isopropyltoluene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Benzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Bromobenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Bromochloromethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Bromodichloromethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Bromoform	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Bromomethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Carbon tetrachloride	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Chlorobenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Chloroethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Chloroform	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Chloromethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	cis-1,2-Dichloroethylene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	cis-1,3-Dichloropropene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Dibromochloromethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT

LABORATORY TEST RESULTS

Job ID : 19110612

Date 11/15/2019

Client Name: City of Houston Health and Human Services Attn: Donald Richner

Project Name: Union Pacific Railroad/ 5th Ward/ Pleasantville

Client Sample ID: Sample_2
Date Collected: 11/08/19
Time Collected: 11:15
Other Information:

Job Sample ID: 19110612.02
Sample Matrix Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	Dibromomethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Dichlorodifluoromethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Ethylbenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Isopropylbenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	m- & p-Xylenes	BRL	mg/L	1	0.01			11/08/19 18:37	RT
	MEK	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Methylene chloride	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Naphthalene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	n-Butylbenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	n-Propylbenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	o-Xylene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	sec-Butylbenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Styrene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	t-butylbenzene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Tetrachloroethylene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Toluene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	trans-1,2-Dichloroethylene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	trans-1,3-Dichloropropene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Trichloroethylene	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Trichlorofluoromethane	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	TTHMs[1]	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Vinyl Chloride	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Xylenes	BRL	mg/L	1	0.005			11/08/19 18:37	RT
	Dibromofluoromethane(surr)	101	%	1	70-130			11/08/19 18:37	RT
	1,2-Dichloroethane-d4(surr)	104	%	1	70-130			11/08/19 18:37	RT
	Toluene-d8(surr)	98.6	%	1	70-130			11/08/19 18:37	RT
	p-Bromofluorobenzene(surr)	101	%	1	70-130			11/08/19 18:37	RT
SW-846 8270D	Semivolatile Organic Compounds								
	1,2,4-Trichlorobenzene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	1,2-Dichlorobenzene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	1,3-Dichlorobenzene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	1,4-Dichlorobenzene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2,4,5-Trichlorophenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2,4,6-Trichlorophenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2,4-Dichlorophenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2,4-Dimethylphenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2,4-Dinitrophenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2,4-Dinitrotoluene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN

LABORATORY TEST RESULTS

Job ID : 19110612

Date 11/15/2019

Client Name: City of Houston Health and Human Services Attn: Donald Richner

Project Name: Union Pacific Railroad/ 5th Ward/ Pleasantville

Client Sample ID: Sample_2
Date Collected: 11/08/19
Time Collected: 11:15
Other Information:

Job Sample ID: 19110612.02
Sample Matrix Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8270D	Semivolatile Organic Compounds								
	2,6-Dinitrotoluene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2-Chloronaphthalene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2-Chlorophenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2-Methylnaphthalene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2-Methylphenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2-Nitroaniline	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2-Nitrophenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	3- & 4-Methylphenols	BRL	mg/L	1.03	0.0103			11/11/19 17:02	VMN
	3,3-Dichlorobenzidine	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	3-Nitroaniline	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	4,6-Dinitro-2-methylphenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	4-Bromophenyl phenyl ether	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	4-Chloro-3-methylphenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	4-Chloroaniline	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	4-Chlorophenyl phenyl ether	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	4-Nitroaniline	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	4-Nitrophenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Acenaphthene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Acenaphthylene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Aniline	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Anthracene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Azobenzene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Benzidine	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Benzo(a)anthracene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Benzo(a)pyrene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Benzo(b)fluoranthene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Benzo(g,h,i)perylene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Benzo(k)fluoranthene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Benzoic acid	BRL	mg/L	1.03	0.02575			11/11/19 17:02	VMN
	Benzyl alcohol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Bis(2-chloroethoxy) methane	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Bis(2-chloroethyl) ether	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Bis(2-chloroisopropyl) ether	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Bis(2-ethylhexyl)phthalate	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Butyl benzyl phthalate	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Carbazole	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Chrysene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Dibenzo(a,h)anthracene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN

LABORATORY TEST RESULTS

Job ID : 19110612

Date 11/15/2019

Client Name: City of Houston Health and Human Services Attn: Donald Richner

Project Name: Union Pacific Railroad/ 5th Ward/ Pleasantville

Client Sample ID: Sample_2
Date Collected: 11/08/19
Time Collected: 11:15
Other Information:

Job Sample ID: 19110612.02
Sample Matrix Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8270D	Semivolatile Organic Compounds								
	Dibenzofuran	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Diethyl phthalate	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Dimethyl phthalate	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Di-n-butyl phthalate	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Di-n-octyl Phthalate	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Fluoranthene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Fluorene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Hexachlorobenzene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Hexachlorobutadiene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Hexachlorocyclopentadiene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Hexachloroethane	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Indeno(1,2,3-cd)pyrene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Isophorone	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Naphthalene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Nitrobenzene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	N-Nitrosodimethylamine	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	N-nitroso-di-n-propylamine	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	N-Nitrosodiphenylamine	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Pentachlorophenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Phenanthrene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Phenol	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Pyrene	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	Pyridine	BRL	mg/L	1.03	0.00515			11/11/19 17:02	VMN
	2-Fluorophenol(surr)	34.9	%	1.03	15-115			11/11/19 17:02	VMN
	Phenol-d6(surr)	27	%	1.03	10-130			11/11/19 17:02	VMN
	Nitrobenzene-d5(surr)	68.4	%	1.03	23-120			11/11/19 17:02	VMN
	2-Fluorobiphenyl(surr)	70.3	%	1.03	30-115			11/11/19 17:02	VMN
	2,4,6-Tribromophenol(surr)	49.6	%	1.03	19-122			11/11/19 17:02	VMN
	p-Terphenyl-d14(surr)	79.4	%	1.03	18-137			11/11/19 17:02	VMN

[1]-Parameter not covered by accreditation

QUALITY CONTROL CERTIFICATE

Job ID : 19110612 **Date :** 11/15/2019

Analysis : Volatile Organic Compounds **Method :** SW-846 8260C **Reporting Units :** mg/L

QC Batch ID : Qb19110901 **Created Date :** 11/08/19 **Created By :** Rajeev

Samples in This QC Batch : 19110612.01,02

Sample Preparation : PB19110901 **Prep Method :** SW-846 5030C **Prep Date :** 11/08/19 10:00 **Prep By :** Rajeev

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
1,1,1,2-Tetrachloroethane	630-20-6	BRL	mg/L	1	0.005	
1,1,1-Trichloroethane	71-55-6	BRL	mg/L	1	0.005	
1,1,2,2-Tetrachloroethane	79-34-5	BRL	mg/L	1	0.005	
1,1,2-Trichloroethane	79-00-5	BRL	mg/L	1	0.005	
1,1-Dichloroethane	75-34-3	BRL	mg/L	1	0.005	
1,1-Dichloroethylene	75-35-4	BRL	mg/L	1	0.005	
1,1-Dichloropropene	563-58-6	BRL	mg/L	1	0.005	
1,2,3-trichlorobenzene	87-61-6	BRL	mg/L	1	0.005	
1,2,3-Trichloropropane	96-18-4	BRL	mg/L	1	0.005	
1,2,4-Trichlorobenzene	120-82-1	BRL	mg/L	1	0.005	
1,2,4-Trimethylbenzene	95-63-6	BRL	mg/L	1	0.005	
1,2-Dibromo-3-chloropropa	96-12-8	BRL	mg/L	1	0.005	
1,2-Dibromoethane	106-93-4	BRL	mg/L	1	0.006	
1,2-Dichlorobenzene	95-50-1	BRL	mg/L	1	0.005	
1,2-Dichloroethane	107-06-2	BRL	mg/L	1	0.005	
1,2-Dichloropropane	78-87-5	BRL	mg/L	1	0.006	
1,3,5-Trimethylbenzene	108-67-8	BRL	mg/L	1	0.005	
1,3-Dichlorobenzene	541-73-1	BRL	mg/L	1	0.005	
1,3-Dichloropropane	142-28-9	BRL	mg/L	1	0.005	
1,4-Dichlorobenzene	106-46-7	BRL	mg/L	1	0.005	
2,2-Dichloropropane	594-20-7	BRL	mg/L	1	0.005	
2-Chlorotoluene	95-49-8	BRL	mg/L	1	0.005	
4-Chlorotoluene	106-43-4	BRL	mg/L	1	0.005	
4-Isopropyltoluene	99-87-6	BRL	mg/L	1	0.005	
Benzene	71-43-2	BRL	mg/L	1	0.005	
Bromobenzene	108-86-1	BRL	mg/L	1	0.005	
Bromochloromethane	74-97-5	BRL	mg/L	1	0.006	
Bromodichloromethane	75-27-4	BRL	mg/L	1	0.006	
Bromoform	75-25-2	BRL	mg/L	1	0.005	
Bromomethane	74-83-9	BRL	mg/L	1	0.005	
Carbon tetrachloride	56-23-5	BRL	mg/L	1	0.006	
Chlorobenzene	108-90-7	BRL	mg/L	1	0.005	
Chloroethane	75-00-3	BRL	mg/L	1	0.006	
Chloroform	67-66-3	BRL	mg/L	1	0.006	
Chloromethane	74-87-3	BRL	mg/L	1	0.005	
cis-1,2-Dichloroethylene	156-59-2	BRL	mg/L	1	0.005	
cis-1,3-Dichloropropene	10061-01-5	BRL	mg/L	1	0.006	
Dibromochloromethane	124-48-1	BRL	mg/L	1	0.005	
Dibromomethane	74-95-3	BRL	mg/L	1	0.005	
Dichlorodifluoromethane	75-71-8	BRL	mg/L	1	0.006	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19110612 **Date :** 11/15/2019

Analysis : Volatile Organic Compounds **Method :** SW-846 8260C **Reporting Units :** mg/L

QC Batch ID : Qb19110901 **Created Date :** 11/08/19 **Created By :** Rajeev

Samples in This QC Batch : 19110612.01,02

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Ethylbenzene	100-41-4	BRL	mg/L	1	0.005		
Isopropylbenzene	98-82-8	BRL	mg/L	1	0.005		
m- & p-Xylenes	108-38-3&106-42-3	BRL	mg/L	1	0.01		
MEK	78-93-3	BRL	mg/L	1	0.005		
Methylene chloride	75-09-2	BRL	mg/L	1	0.005		
Naphthalene	91-20-3	BRL	mg/L	1	0.005		
n-Butylbenzene	104-51-8	BRL	mg/L	1	0.005		
n-Propylbenzene	103-65-1	BRL	mg/L	1	0.005		
o-Xylene	95-47-6	BRL	mg/L	1	0.005		
sec-Butylbenzene	135-98-8	BRL	mg/L	1	0.005		
Styrene	100-42-5	BRL	mg/L	1	0.005		
t-butylbenzene	98-06-6	BRL	mg/L	1	0.005		
Tetrachloroethylene	127-18-4	BRL	mg/L	1	0.006		
Toluene	108-88-3	BRL	mg/L	1	0.005		
trans-1,2-Dichloroethylene	156-60-5	BRL	mg/L	1	0.005		
trans-1,3-Dichloropropene	10061-02-6	BRL	mg/L	1	0.005		
Trichloroethylene	79-01-6	BRL	mg/L	1	0.005		
Trichlorofluoromethane	75-69-4	BRL	mg/L	1	0.005		
TTHMs		BRL	mg/L	1	0.005		
Vinyl Chloride	75-01-4	BRL	mg/L	1	0.005		
Xylenes	1330-20-7	BRL	mg/L	1	0.005		
Dibromofluoromethane(surr	1868-53-7	98.9	%	1	70-130		
1,2-Dichloroethane-d4(surr	17060-07-0	99.7	%	1	70-130		
Toluene-d8(surr)	2037-26-5	99.8	%	1	70-130		
p-Bromofluorobenzene(surr	460-00-4	101	%	1	70-130		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	0.02	0.0193	96.4	0.02	0.0178	89.2	8	20	78-120	
1,1,1-Trichloroethane	0.02	0.0191	95.4	0.02	0.0173	86.4	9.8	20	74-126	
1,1,2,2-Tetrachloroethane	0.02	0.0201	100	0.02	0.0190	95.1	5.5	20	71-121	
1,1,2-Trichloroethane	0.02	0.0195	97.6	0.02	0.0189	94.5	3.3	20	80-120	
1,1-Dichloroethane	0.02	0.0195	97.7	0.02	0.0179	89.6	8.8	20	77-120	
1,1-Dichloroethylene	0.02	0.0187	93.7	0.02	0.0170	85	9.7	20	71-130	
1,1-Dichloropropene	0.02	0.0190	95.1	0.02	0.0172	85.9	10.1	20	79-125	
1,2,3-trichlorobenzene	0.02	0.0191	95.4	0.02	0.0174	86.8	9.2	20	69-121	
1,2,3-Trichloropropane	0.02	0.0199	99.3	0.02	0.0188	94.2	5.5	20	73-122	
1,2,4-Trichlorobenzene	0.02	0.0196	98.2	0.02	0.0177	88.3	10.4	20	69-130	
1,2,4-Trimethylbenzene	0.02	0.0193	96.6	0.02	0.0181	90.7	6.6	20	76-119	
1,2-Dibromo-3-chloropropa	0.02	0.0189	94.5	0.02	0.0187	93.7	1	20	62-135	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19110612 **Date :** 11/15/2019

Analysis : Volatile Organic Compounds **Method :** SW-846 8260C **Reporting Units :** mg/L

QC Batch ID : Qb19110901 **Created Date :** 11/08/19 **Created By :** Rajeev

Samples in This QC Batch : 19110612.01,02

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,2-Dibromoethane	0.02	0.0196	97.8	0.02	0.0188	93.9	3.9	20	77-121	
1,2-Dichlorobenzene	0.02	0.0195	97.6	0.02	0.0187	93.3	4.3	20	80-113	
1,2-Dichloroethane	0.02	0.0190	94.8	0.02	0.0181	90.3	4.7	20	70-125	
1,2-Dichloropropane	0.02	0.0195	97.6	0.02	0.0186	93	4.8	20	78-122	
1,3,5-Trimethylbenzene	0.02	0.0192	95.8	0.02	0.0180	90.2	6.3	20	75-117	
1,3-Dichlorobenzene	0.02	0.0194	96.8	0.02	0.0183	91.6	5.6	20	80-115	
1,3-Dichloropropane	0.02	0.0196	97.8	0.02	0.0183	91.6	6.7	20	80-119	
1,4-Dichlorobenzene	0.02	0.0193	96.6	0.02	0.0183	91.6	5.4	20	79-118	
2,2-Dichloropropane	0.02	0.0190	94.8	0.02	0.0168	83.8	12.1	20	65-135	
2-Chlorotoluene	0.02	0.0193	96.3	0.02	0.0183	91.5	5.1	20	79-118	
4-Chlorotoluene	0.02	0.0190	95.2	0.02	0.0181	90.3	5.1	20	78-118	
4-Isopropyltoluene	0.02	0.0193	96.5	0.02	0.0179	89.3	7.5	20	77-116	
Benzene	0.02	0.0195	97.6	0.02	0.0183	91.4	6.5	20	79-118	
Bromobenzene	0.02	0.0194	96.9	0.02	0.0185	92.6	4.6	20	80-116	
Bromochloromethane	0.02	0.0197	98.3	0.02	0.0184	91.8	6.6	20	78-123	
Bromodichloromethane	0.02	0.0193	96.6	0.02	0.0184	91.8	4.9	20	79-125	
Bromoform	0.02	0.0193	96.7	0.02	0.0184	92	5	20	71-130	
Bromomethane	0.02	0.0191	95.3	0.02	0.0174	87	9.1	20	62-141	
Carbon tetrachloride	0.02	0.0186	93.1	0.02	0.0173	86.4	7.4	20	72-132	
Chlorobenzene	0.02	0.0195	97.5	0.02	0.0183	91.7	6.3	20	82-116	
Chloroethane	0.02	0.0196	98	0.02	0.0176	88.1	10.8	20	60-138	
Chloroform	0.02	0.0193	96.7	0.02	0.0179	89.5	7.7	20	79-124	
Chloromethane	0.02	0.0189	94.4	0.02	0.0170	85	10.4	20	61-139	
cis-1,2-Dichloroethylene	0.02	0.0194	96.9	0.02	0.0180	90.2	7.4	20	78-121	
cis-1,3-Dichloropropene	0.02	0.0194	96.9	0.02	0.0182	91.2	6.3	20	81-122	
Dibromochloromethane	0.02	0.0197	98.3	0.02	0.0185	92.3	6.1	20	77-120	
Dibromomethane	0.02	0.0195	97.7	0.02	0.0186	93.1	5	20	79-124	
Dichlorodifluoromethane	0.02	0.0169	84.3	0.02	0.0158	78.9	6.5	20	51-135	
Ethylbenzene	0.02	0.0193	96.3	0.02	0.0179	89.3	7.3	20	84-117	
Isopropylbenzene	0.02	0.0195	97.3	0.02	0.0177	88.6	9.4	20	80-117	
m- & p-Xylenes	0.04	0.0389	97.4	0.04	0.0357	89.2	8.7	20	80-118	
MEK	0.02	0.0187	93.6	0.02	0.0172	85.9	8.4	20	60-136	
Methylene chloride	0.02	0.0198	99	0.02	0.0182	90.8	8.4	20	74-124	
Naphthalene	0.02	0.0191	95.7	0.02	0.0175	87.6	8.9	20	66-128	
n-Butylbenzene	0.02	0.0190	94.8	0.02	0.0175	87.4	8	20	75-120	
n-Propylbenzene	0.02	0.0190	95.1	0.02	0.0179	89.7	6.1	20	78-120	
o-Xylene	0.02	0.0194	97.1	0.02	0.0179	89.6	8.2	20	84-117	
sec-Butylbenzene	0.02	0.0193	96.4	0.02	0.0179	89.7	7.4	20	77-120	
Styrene	0.02	0.0192	96.2	0.02	0.0181	90.5	6.1	20	85-120	
t-butylbenzene	0.02	0.0190	94.9	0.02	0.0177	88.7	7	20	78-120	
Tetrachloroethylene	0.02	0.0189	94.6	0.02	0.0175	87.3	7.8	20	78-129	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19110612 **Date :** 11/15/2019

Analysis : Volatile Organic Compounds **Method : SW-846 8260C** **Reporting Units : mg/L**

QC Batch ID : Qb19110901 **Created Date :** 11/08/19 **Created By :** Rajeev

Samples in This QC Batch : 19110612.01,02

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Toluene	0.02	0.0194	97.1	0.02	0.0180	90	7.6	20	84-117	
trans-1,2-Dichloroethylene	0.02	0.0190	95	0.02	0.0175	87.5	8.2	20	75-124	
trans-1,3-Dichloropropene	0.02	0.0192	95.8	0.02	0.0180	89.8	6.2	20	80-121	
Trichloroethylene	0.02	0.0182	90.8	0.02	0.0172	86.2	5.4	20	80-122	
Trichlorofluoromethane	0.02	0.0171	85.4	0.02	0.0162	80.8	5.3	20	57-141	
Vinyl Chloride	0.02	0.0186	93.1	0.02	0.0167	83.3	10.9	20	59-130	
Xylenes	0.06	0.0583	97.2	0.06	0.0536	89.3	8.4	20	83-118	

QC Type: MS and MSD
QC Sample ID: 19110612.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	BRL	0.02	0.0199	99.5						72-139	
1,1,1-Trichloroethane	BRL	0.02	0.0194	97						70.6-135	
1,1,2,2-Tetrachloroethane	BRL	0.02	0.0233	117						55-149	
1,1,2-Trichloroethane	BRL	0.02	0.0216	108						68-139	
1,1-Dichloroethane	BRL	0.02	0.0199	99.5						78-134	
1,1-Dichloroethylene	BRL	0.02	0.0194	97						65-141	
1,1-Dichloropropene	BRL	0.02	0.0197	98.5						79-136	
1,2,3-trichlorobenzene	BRL	0.02	0.0212	106						54-144	
1,2,3-Trichloropropane	BRL	0.02	0.0231	116						58-156	
1,2,4-Trichlorobenzene	BRL	0.02	0.0206	103						69-127	
1,2,4-Trimethylbenzene	BRL	0.02	0.0198	99						80-131	
1,2-Dibromo-3-chloropropa	BRL	0.02	0.0230	115						61-145	
1,2-Dibromoethane	BRL	0.02	0.0222	111						68-140	
1,2-Dichlorobenzene	BRL	0.02	0.0206	103						70-138	
1,2-Dichloroethane	BRL	0.02	0.0207	104						67-152	
1,2-Dichloropropane	BRL	0.02	0.0206	103						79-135	
1,3,5-Trimethylbenzene	BRL	0.02	0.0196	98						79-133	
1,3-Dichlorobenzene	BRL	0.02	0.0200	100						79-128	
1,3-Dichloropropane	BRL	0.02	0.0213	107						70-147	
1,4-Dichlorobenzene	BRL	0.02	0.0203	102						76-127	
2,2-Dichloropropane	BRL	0.02	0.0193	96.5						60-129	
2-Chlorotoluene	BRL	0.02	0.0196	98						83-130	
4-Chlorotoluene	BRL	0.02	0.0196	98						82-129	
4-Isopropyltoluene	BRL	0.02	0.0198	99						78-129	
Benzene	BRL	0.02	0.0200	100						73-129	
Bromobenzene	BRL	0.02	0.0201	101						76-132	
Bromochloromethane	BRL	0.02	0.0211	106						76-135	
Bromodichloromethane	BRL	0.02	0.0204	102						80-136	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19110612 **Date :** 11/15/2019

Analysis : Volatile Organic Compounds **Method :** SW-846 8260C **Reporting Units :** mg/L

QC Batch ID : Qb19110901 **Created Date :** 11/08/19 **Created By :** Rajeev

Samples in This QC Batch : 19110612.01,02

QC Type: MS and MSD
QC Sample ID: 19110612.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Bromoform	BRL	0.02	0.0219	110						65-139	
Bromomethane	BRL	0.02	0.0193	96.5						65-150	
Carbon tetrachloride	BRL	0.02	0.0192	96						70-136	
Chlorobenzene	BRL	0.02	0.0199	99.5						69-123	
Chloroethane	BRL	0.02	0.0189	94.5						74-145	
Chloroform	BRL	0.02	0.0200	100						41.8-164	
Chloromethane	BRL	0.02	0.0192	96						42.2-160	
cis-1,2-Dichloroethylene	BRL	0.02	0.0200	100						71-134	
cis-1,3-Dichloropropene	BRL	0.02	0.0205	103						74-128	
Dibromochloromethane	BRL	0.02	0.0209	105						67-141	
Dibromomethane	BRL	0.02	0.0221	111						63.1-135	
Dichlorodifluoromethane	BRL	0.02	0.0186	93						62-146	
Ethylbenzene	BRL	0.02	0.0196	98						80-132	
Isopropylbenzene	BRL	0.02	0.0200	100						78-137	
m- & p-Xylenes	BRL	0.04	0.0397	99.3						74-127	
MEK	BRL	0.02	0.0294	147						52-148	
Methylene chloride	BRL	0.02	0.0215	108						68-131	
Naphthalene	BRL	0.02	0.0224	112						61-116	
n-Butylbenzene	BRL	0.02	0.0195	97.5						73-140	
n-Propylbenzene	BRL	0.02	0.0194	97						75-127	
o-Xylene	BRL	0.02	0.0198	99						74-126	
sec-Butylbenzene	BRL	0.02	0.0198	99						75-129	
Styrene	BRL	0.02	0.0202	101						77-123	
t-butylbenzene	BRL	0.02	0.0195	97.5						75-126	
Tetrachloroethylene	BRL	0.02	0.0218	109						27.6-194	
Toluene	BRL	0.02	0.0198	99						72-121	
trans-1,2-Dichloroethylene	BRL	0.02	0.0199	99.5						73-138	
trans-1,3-Dichloropropene	BRL	0.02	0.0204	102						66-131	
Trichloroethylene	BRL	0.02	0.0195	97.5						6-138	
Trichlorofluoromethane	BRL	0.02	0.0180	90						67-148	
Vinyl Chloride	BRL	0.02	0.0192	96						59.4-140	
Xylenes	BRL	0.06	0.0595	99.2						73-127	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19110612 **Date :** 11/15/2019

Analysis : Semivolatile Organic Compounds **Method :** SW-846 8270D **Reporting Units :** mg/L

QC Batch ID : Qb19111152 **Created Date :** 11/11/19 **Created By :** ZOTesfalidet

Samples in This QC Batch : 19110612.01,02

Extraction : PB19111134 **Prep Method :** SW-846 3510C **Prep Date :** 11/11/19 08:00 **Prep By :** MMuteen

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
1,2,4-Trichlorobenzene	120-82-1	BRL	mg/L	1.00	0.005	
1,2-Dichlorobenzene	95-50-1	BRL	mg/L	1.00	0.005	
1,3-Dichlorobenzene	541-73-1	BRL	mg/L	1.00	0.005	
1,4-Dichlorobenzene	106-46-7	BRL	mg/L	1.00	0.005	
2,4,5-Trichlorophenol	95-95-4	BRL	mg/L	1.00	0.005	
2,4,6-Trichlorophenol	88-06-2	BRL	mg/L	1.00	0.005	
2,4-Dichlorophenol	120-83-2	BRL	mg/L	1.00	0.005	
2,4-Dimethylphenol	105-67-9	BRL	mg/L	1.00	0.005	
2,4-Dinitrophenol	51-28-5	BRL	mg/L	1.00	0.005	
2,4-Dinitrotoluene	121-14-2	BRL	mg/L	1.00	0.005	
2,6-Dinitrotoluene	606-20-2	BRL	mg/L	1.00	0.005	
2-Chloronaphthalene	91-58-7	BRL	mg/L	1.00	0.005	
2-Chlorophenol	95-57-8	BRL	mg/L	1.00	0.005	
2-Methylnaphthalene	91-57-6	BRL	mg/L	1.00	0.005	
2-Methylphenol	95-48-7	BRL	mg/L	1.00	0.005	
2-Nitroaniline	88-74-4	BRL	mg/L	1.00	0.005	
2-Nitrophenol	88-75-5	BRL	mg/L	1.00	0.005	
3- & 4-Methylphenols	108-39-4 & 106-44-5	BRL	mg/L	1.00	0.005	
3,3-Dichlorobenzidine	91-94-1	BRL	mg/L	1.00	0.005	
3-Nitroaniline	99-09-2	BRL	mg/L	1.00	0.005	
4,6-Dinitro-2-methylphenol	534-52-1	BRL	mg/L	1.00	0.005	
4-Bromophenyl phenyl ethe	101-55-3	BRL	mg/L	1.00	0.005	
4-Chloro-3-methylphenol	59-50-7	BRL	mg/L	1.00	0.005	
4-Chloroaniline	106-47-8	BRL	mg/L	1.00	0.005	
4-Chlorophenyl phenyl ethe	7005-72-3	BRL	mg/L	1.00	0.005	
4-Nitroaniline	100-01-6	BRL	mg/L	1.00	0.005	
4-Nitrophenol	100-02-7	BRL	mg/L	1.00	0.005	
Acenaphthene	83-32-9	BRL	mg/L	1.00	0.005	
Acenaphthylene	208-96-8	BRL	mg/L	1.00	0.005	
Aniline	62-53-3	BRL	mg/L	1.00	0.005	
Anthracene	120-12-7	BRL	mg/L	1.00	0.005	
Azobenzene	103-33-3	BRL	mg/L	1.00	0.005	
Benzidine	92-87-5	BRL	mg/L	1.00	0.005	
Benzo(a)anthracene	56-55-3	BRL	mg/L	1.00	0.005	
Benzo(a)pyrene	50-32-8	BRL	mg/L	1.00	0.005	
Benzo(b)fluoranthene	205-99-2	BRL	mg/L	1.00	0.005	
Benzo(g,h,i)perylene	191-24-2	BRL	mg/L	1.00	0.005	
Benzo(k)fluoranthene	207-08-9	BRL	mg/L	1.00	0.005	
Benzoic acid	65-85-0	BRL	mg/L	1.00	0.025	
Benzyl alcohol	100-51-6	BRL	mg/L	1.00	0.005	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19110612 **Date :** 11/15/2019

Analysis : Semivolatile Organic Compounds **Method :** SW-846 8270D **Reporting Units :** mg/L

QC Batch ID : Qb19111152 **Created Date :** 11/11/19 **Created By :** ZOTesfalidet

Samples in This QC Batch : 19110612.01,02

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Bis(2-chloroethoxy) methan	111-91-1	BRL	mg/L	1.00	0.005		
Bis(2-chloroethyl) ether	111-44-4	BRL	mg/L	1.00	0.005		
Bis(2-chloroisopropyl) ether	108-60-1	BRL	mg/L	1.00	0.005		
Bis(2-ethylhexyl)phthalate	117-81-7	BRL	mg/L	1.00	0.005		
Butyl benzyl phthalate	85-68-7	BRL	mg/L	1.00	0.005		
Carbazole	86-74-8	BRL	mg/L	1.00	0.005		
Chrysene	218-01-9	BRL	mg/L	1.00	0.005		
Dibenzo(a,h)anthracene	53-70-3	BRL	mg/L	1.00	0.005		
Dibenzofuran	132-64-9	BRL	mg/L	1.00	0.005		
Diethyl phthalate	84-66-2	BRL	mg/L	1.00	0.005		
Dimethyl phthalate	131-11-3	BRL	mg/L	1.00	0.005		
Di-n-butyl phthalate	84-74-2	BRL	mg/L	1.00	0.005		
Di-n-octyl Phthalate	117-84-0	BRL	mg/L	1.00	0.005		
Fluoranthene	206-44-0	BRL	mg/L	1.00	0.005		
Fluorene	86-73-7	BRL	mg/L	1.00	0.005		
Hexachlorobenzene	118-74-1	BRL	mg/L	1.00	0.005		
Hexachlorobutadiene	87-68-3	BRL	mg/L	1.00	0.005		
Hexachlorocyclopentadiene	77-47-4	BRL	mg/L	1.00	0.005		
Hexachloroethane	67-72-1	BRL	mg/L	1.00	0.005		
Indeno(1,2,3-cd)pyrene	193-39-5	BRL	mg/L	1.00	0.005		
Isophorone	78-59-1	BRL	mg/L	1.00	0.005		
Naphthalene	91-20-3	BRL	mg/L	1.00	0.005		
Nitrobenzene	98-95-3	BRL	mg/L	1.00	0.005		
N-Nitrosodimethylamine	62-75-9	BRL	mg/L	1.00	0.005		
N-nitroso-di-n-propylamine	621-64-7	BRL	mg/L	1.00	0.005		
N-Nitrosodiphenylamine	86-30-6	BRL	mg/L	1.00	0.005		
Pentachlorophenol	87-86-5	BRL	mg/L	1.00	0.005		
Phenanthrene	85-01-8	BRL	mg/L	1.00	0.005		
Phenol	108-95-2	BRL	mg/L	1.00	0.005		
Pyrene	129-00-0	BRL	mg/L	1.00	0.005		
Pyridine	110-86-1	BRL	mg/L	1.00	0.005		
2-Fluorophenol(surr)	367-12-4	62.9	%	1.00	15-115		
Phenol-d6(surr)	13127-88-3	44.4	%	1.00	10-130		
Nitrobenzene-d5(surr)	4165-60-0	88.2	%	1.00	23-120		
2-Fluorobiphenyl(surr)	132-60-8	79.6	%	1.00	30-115		
2,4,6-Tribromophenol(surr)	118-79-6	67.9	%	1.00	19-122		
p-Terphenyl-d14(surr)	1718-51-0	97.4	%	1.00	18-137		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19110612 **Date :** 11/15/2019

Analysis : Semivolatile Organic Compounds **Method :** SW-846 8270D **Reporting Units :** mg/L

QC Batch ID : Qb19111152 **Created Date :** 11/11/19 **Created By :** ZOTesfalidet

Samples in This QC Batch : 19110612.01,02

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,2,4-Trichlorobenzene	0.05	0.0351	70.2	0.05	0.0345	69	1.7	35	29-116	
1,2-Dichlorobenzene	0.05	0.0365	73	0.05	0.0366	73.2	0.2	35	32-111	
1,3-Dichlorobenzene	0.05	0.0368	73.7	0.05	0.0369	73.7	0.2	35	28-110	
1,4-Dichlorobenzene	0.05	0.0359	71.8	0.05	0.0361	72.1	0.6	35	29-112	
2,4,5-Trichlorophenol	0.05	0.0475	95	0.05	0.0480	96.1	1	35	53-117	
2,4,6-Trichlorophenol	0.05	0.0478	95.7	0.05	0.0470	94	1.8	35	50-120	
2,4-Dichlorophenol	0.05	0.0462	92.5	0.05	0.0450	90.1	2.7	35	47-111	
2,4-Dimethylphenol	0.05	0.0438	87.6	0.05	0.0428	85.6	2.3	35	32-105	
2,4-Dinitrophenol	0.05	0.0252	50.3	0.05	0.0260	52	3.3	35	23-104	
2,4-Dinitrotoluene	0.05	0.0446	89.3	0.05	0.0450	90	0.8	35	57-120	
2,6-Dinitrotoluene	0.05	0.0432	86.4	0.05	0.0430	86	0.5	35	57-120	
2-Chloronaphthalene	0.05	0.0395	79.1	0.05	0.0398	79.5	0.7	35	40-116	
2-Chlorophenol	0.05	0.0442	88.5	0.05	0.0445	88.9	0.6	35	38-102	
2-Methylnaphthalene	0.05	0.0396	79.1	0.05	0.0386	77.3	2.5	35	40-121	
2-Methylphenol	0.05	0.0433	86.6	0.05	0.0436	87.1	0.7	35	30-100	
2-Nitroaniline	0.05	0.0495	98.9	0.05	0.0503	101	1.7	35	55-120	
2-Nitrophenol	0.05	0.0470	94	0.05	0.0471	94.1	0.2	35	47-109	
3- & 4-Methylphenols	0.1	0.0898	89.8	0.1	0.0902	90.2	0.5	35	29-100	
3,3-Dichlorobenzidine	0.08	0.0426	53.3	0.08	0.0428	53.5	0.4	35	27-120	
3-Nitroaniline	0.05	0.0516	103	0.05	0.0528	106	2.2	35	41-112	
4,6-Dinitro-2-methylphenol	0.05	0.0398	79.5	0.05	0.0410	82	3.1	35	32-132	
4-Bromophenyl phenyl ethe	0.05	0.0423	84.5	0.05	0.0418	83.6	1.1	35	55-110	
4-Chloro-3-methylphenol	0.05	0.0518	104	0.05	0.0508	102	2	35	52-119	
4-Chloroaniline	0.05	0.0410	82.1	0.05	0.0401	80.1	2.3	35	33-105	
4-Chlorophenyl phenyl ethe	0.05	0.0424	84.8	0.05	0.0418	83.6	1.4	35	53-110	
4-Nitroaniline	0.05	0.0494	98.9	0.05	0.0500	100	1.1	35	55-117	
4-Nitrophenol	0.05	0.0313	62.5	0.05	0.0318	63.6	1.7	35	15-105	
Acenaphthene	0.05	0.0428	85.7	0.05	0.0426	85.2	0.6	35	47-105	
Acenaphthylene	0.05	0.0456	91.3	0.05	0.0457	91.4	0.2	35	41-108	
Aniline	0.05	0.0357	71.4	0.05	0.0363	72.6	1.6	35	40-105	
Anthracene	0.05	0.0479	95.8	0.05	0.0476	95.1	0.7	35	57-112	
Azobenzene	0.05	0.0590	118	0.05	0.0584	117	1	35	47-116	L1
Benzidine	0.08	0.0244	30.5	0.08	0.0260	32.5	6.5	35	7-126	
Benzo(a)anthracene	0.05	0.0517	103	0.05	0.0514	103	0.6	35	58-115	
Benzo(a)pyrene	0.05	0.0442	88.3	0.05	0.0441	88.2	0.2	35	54-110	
Benzo(b)fluoranthene	0.05	0.0490	97.9	0.05	0.0482	96.4	1.6	35	53-117	
Benzo(g,h,i)perylene	0.05	0.0458	91.7	0.05	0.0448	89.6	2.3	35	50-110	
Benzo(k)fluoranthene	0.05	0.0460	92	0.05	0.0455	91	1	35	57-110	
Benzoic acid	0.04	0.0162	40.6	0.04	0.0175	43.7	7.4	35	D-124	
Benzyl alcohol	0.05	0.0411	82.3	0.05	0.0420	84	2.1	35	31-112	
Bis(2-chloroethoxy) methan	0.05	0.0462	92.3	0.05	0.0457	91.4	1	35	48-107	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19110612 **Date :** 11/15/2019

Analysis : Semivolatile Organic Compounds **Method :** SW-846 8270D **Reporting Units :** mg/L

QC Batch ID : Qb19111152 **Created Date :** 11/11/19 **Created By :** ZOTesfalidet

Samples in This QC Batch : 19110612.01,02

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Bis(2-chloroethyl) ether	0.05	0.0458	91.5	0.05	0.0468	93.5	2.3	35	43-105	
Bis(2-chloroisopropyl) ether	0.05	0.0556	111	0.05	0.0560	112	0.6	35	37-130	
Bis(2-ethylhexyl)phthalate	0.05	0.0434	86.8	0.05	0.0435	87	0.3	35	29-135	
Butyl benzyl phthalate	0.05	0.0500	99.9	0.05	0.0497	99.3	0.5	35	53-128	
Carbazole	0.05	0.0486	97.2	0.05	0.0490	98	0.8	35	60-120	
Chrysene	0.05	0.0480	95.9	0.05	0.0464	92.7	3.3	35	59-110	
Dibenzo(a,h)anthracene	0.05	0.0435	86.9	0.05	0.0430	86	1.1	35	51-115	
Dibenzofuran	0.05	0.0432	86.4	0.05	0.0427	85.4	1.2	35	53-105	
Diethyl phthalate	0.05	0.0447	89.3	0.05	0.0440	88	1.5	35	56-117	
Dimethyl phthalate	0.05	0.0442	88.3	0.05	0.0437	87.4	1	35	45-112	
Di-n-butyl phthalate	0.05	0.0488	97.6	0.05	0.0476	95.1	2.5	35	59-127	
Di-n-octyl Phthalate	0.05	0.0432	86.5	0.05	0.0434	86.8	0.4	35	30-140	
Fluoranthene	0.05	0.0456	91.1	0.05	0.0460	92	1	35	57-128	
Fluorene	0.05	0.0455	90.9	0.05	0.0448	89.5	1.5	35	59-121	
Hexachlorobenzene	0.05	0.0398	79.6	0.05	0.0402	80.3	1	35	53-120	
Hexachlorobutadiene	0.05	0.0329	65.9	0.05	0.0316	63.1	4.1	35	24-105	
Hexachlorocyclopentadiene	0.05	0.0160	31.9	0.05	0.0159	31.7	0.3	35	14-105	
Hexachloroethane	0.05	0.0368	73.5	0.05	0.0369	73.7	0.4	35	40-105	
Indeno(1,2,3-cd)pyrene	0.05	0.0428	85.5	0.05	0.0404	80.7	5.7	35	52-122	
Isophorone	0.05	0.0424	84.8	0.05	0.0420	84.1	0.9	35	42-110	
Naphthalene	0.05	0.02869	57.4	0.05	0.02919	58.4	1.7	35	40-110	
Nitrobenzene	0.05	0.0516	103	0.05	0.0526	105	2	35	45-105	
N-Nitrosodimethylamine	0.05	0.0344	68.7	0.05	0.0358	71.5	4.1	35	29-100	
N-nitroso-di-n-propylamine	0.05	0.0523	105	0.05	0.0525	105	0.3	35	49-115	
N-Nitrosodiphenylamine	0.05	0.0474	94.7	0.05	0.0466	93.2	1.6	35	51-110	
Pentachlorophenol	0.05	0.0358	71.5	0.05	0.0365	72.9	2	35	35-128	
Phenanthrene	0.05	0.0459	91.9	0.05	0.0451	90.1	1.8	35	59-110	
Phenol	0.05	0.0271	54.2	0.05	0.0276	55.3	1.9	35	20-100	
Pyrene	0.05	0.0523	105	0.05	0.0514	103	1.8	35	57-115	
Pyridine	0.05	0.0295	58.9	0.05	0.0297	59.4	0.8	35	20-105	

Refer to the Definition page for terms.

A & B Labs — *Chain of Custody* — The Chain of Custody is a Legal Document — Page 1 of 1

10100 East Fwy (I-10)
Suite 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 19116012

5. Project #

1. REPORT TO:
Company: COH - BPCP
Address: 7411 Park Place Blvd
Contact: Don Richard
Phone: 832-393-5651
Fax: ☐
E-mail: ☐ don.richner@houstontx.gov

2. INVOICE TO:
Company: COH - BPCP
Address: Same
Contact:
Phone:
Fax: ☐
E-mail: ☐

3. PO #
3a. A&B Quote #
4. Turnaround Time (Business Days)
☐ 1 Day* ☐ Other:
☐ 2 Days*
☐ 3 Days* *Surcharge applies
☐ 7 Days - Standard

6. Project Name/Location: Union Pacific Railroad / 5th Ward / Pleasantville

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II ☐ PST ☐ MDL ☐ EDD

8. Sampler's Name & Company (PLEASE PRINT): Jane Marzano - COH-BPCP
Sampler's Signature & Date: 11/8/19

13. No. of Containers
14. Containers*: 2 | 1 | 1
15. Preservatives**: SEE REMARKS
16. PH-Lab Only

17. Analyses/Methods: SW-846 VOC | SW-846 SVOC | SW-846 PAH

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	10. Sampling Time 24hr	Comp.	Grab	Water	Soil	Sludge	Oil	Drinking Water	Air	Other	No. of Containers	SW-846 VOC	SW-846 SVOC	SW-846 PAH
OHAD	Sample_1	11/8/19	10:50		X	X							4	X	X	X
OHAD	Sample_2	11/8/19	11:15		X	X							4	X	X	X

~~Sample 1~~ 11-8-19 ⓓ

18. REMARKS: PLEASE PRESERVE SAMPLES ASAP

	19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1		11/8/19	12:24		11/8/19	1224
2						
3						

21. KNOWN HAZARDS/COMMENTS: IC | OI

Temperature: 2.6 - 0.5 = 2.1 °C
Thermometer ID: DOT029
Intact: Y or N
Initials:

*Containers: VOA - 40 ml vial; 4 oz/8 oz - glass wide mouth; A/G - Amber/Glass 1 Liter; P/O - Plastic/other

**Preservatives: C - Cool; OH - NaOH; H - HCl; T - $NA_2S_2O_3$; N - HNO_3; X - Other; S - H_2SO_4

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

LAB USE ONLY SAMPLING _____ RENTAL _____ P/U _____

Sample Condition Checklist

A&B JobID : **19110612**	Date Received : **11/08/2019**	Time Received : **12:24PM**
Client Name : **City of Houston Health and Human Services**		
Temperature : **12.6-0.5cf=12.1°C**	Sample pH : **n/a**	
Thermometer ID : **1707629**	pH Paper ID : **n/a**	

	Check Points	Yes	No	N/A
1.	**Cooler seal present and signed.**		X	
2.	**Sample(s) in a cooler.**	X		
3.	**If yes, ice in cooler.**	X		
4.	**Sample(s) received with chain-of-custody.**	X		
5.	**C-O-C signed and dated.**	X		
6.	**Sample(s) received with signed sample custody seal.**		X	
7.	**Sample containers arrived intact. (If no comment).**	X		
8.	**Matrix :** **Water** ☑ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☐ **Cassette** ☐ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐			
9.	**Sample(s) were received in appropriate container(s).**	X		
10.	**Sample(s) were received with proper preservative**			X
11.	**All samples were logged or labeled.**	X		
12.	**Sample ID labels match C-O-C ID's**	X		
13.	**Bottle count on C-O-C matches bottles found.**	X		
14.	**Sample volume is sufficient for analyses requested.**	X		
15.	**Samples were received within the hold time.**	X		
16.	**VOA vials completely filled.**	X		
17.	**Sample accepted.**	X		
18	**Has client been contacted about sub-out**			X

Comments : Include actions taken to resolve discrepancies/problem:

Received by : TThompson

Check in by/date : AArnett / 11/08/2019