UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Laboratory
Environmental Services Branch
10625 Fallstone Road, Houston, TX 77099
Phone: (281)983-2100 Fax: (281)983-2248

DRAFT Final Analytical Report

Site Name ----------	ITC Tank Fire
Sample Collection Date(s)--	03/21/19 - 03/25/19
Contact----------	Matt Loesel (SEDEC)
Report Date----------	03/27/19
Project #----------	19SF058
Work Order(s)----------	1903017

Analyses included in this report:

ABN 8270 Routine List
VOA 8260 Routine List

Report Narrative

Sample Management:

The Laboratory did not receive extra volume for performing matrix spike/matrix spike duplicate (MS/MSD).

Volatiles:

Batch B9C2616: Two analytes fail high in the BS. Four fail high in the MS/MSD. None were found in the associated samples.

Semivolatiles:

Batch B9C2615: Because extra volume was not received, only an MS could be performed. A BSD was added to assess precision. 18 analytes fail low in the MS. Of those failures, 7 were significant (<50%). The reporting limits were raised in source sample 1903017-04 due to low failures. The remaining failures should not affect the data.

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Standard procedures for quality assurance and quality control were followed in the analysis and reporting of the sample results. The results apply only to the samples tested. This final report should only be reproduced in full.

The reporting limit (sometimes referred to as a quantitation limit) is defined as the lowest concentration at which an analyte can be reliably measured and reported without qualification. Reporting limits are adjusted for sample size, dilution, and matrix interference. Concentrations below the reporting limit are reported as non-detects or <RL.

For a list of ISO 17025 accredited methods go to:
http://region6a.epa.gov/intranet/6md/lab/USEPARegion6CertScope-V005.pdf

Report Approvals:

Richard McMillin Region 6 Laboratory Technical Manager	David W. McQuiddy Region 6 Laboratory Branch Chief

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Region 6 Environmental Services Branch Laboratory

10625 Fallstone Road
Houston, Texas 77099

Sample Receipt and Disposal

Site Name: ITC Tank Fire

Project Number: 19SF058

Data Management Coordinator: Christy Warren

/ /

Data Management Coordinator Signature

Date

Date Transmitted: _____/_____/_____

Please have the U.S. EPA Project Manager/Officer call the Data Management Coordinator at 3-2137 for any comments or questions.

Please sign and date this form below and return it with any comments to:

Christy Warren
Data Management Coordinator
Region 6 Laboratory
6MD-HS

_____/_____/_____

Received by and Date

Comments:

The laboratory routinely disposes of samples 90 days after all analyses have been completed. If you have a need to hold these samples in custody longer than 90 days, please sign below.

_____ _____

Signature Date

Please provide a reason for holding:

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ANALYTICAL REPORT FOR SAMPLES

19SF058 ITC Tank Fire

Station ID	Laboratory ID	Sample Type	Date Collected	Date Received
ITC-BB-04E-20190325-11	1903017-01	Liquid	3/25/19 11:58	03/26/19 08:15
ITC-BB-05E-20190325-11	1903017-02	Liquid	3/25/19 11:07	03/26/19 08:15
ITC-BB-05E-20190325-15	1903017-03	Liquid	3/25/19 17:00	03/26/19 08:15
ITC-BB-09E-20190325-11	1903017-04	Liquid	3/25/19 10:44	03/26/19 08:15
TripBlank-06	1903017-05	Liquid	3/21/19 13:00	03/26/19 08:15

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QC SUMMARY REPORT

ABN 8270 Routine List
B9C2615
Liquid

Samples: 3 **ReExts: 0**

LAB NUMBER	SOURCE
B9C2615-BLK1	
B9C2615-BS1	
B9C2615-BSD1	
B9C2615-MS1	1903017-04

VOA 8260 Routine List
B9C2616
Liquid

Samples: 5 **ReExts: 0**

LAB NUMBER	SOURCE
B9C2616-BLK1	
B9C2616-BS1	
B9C2616-MS1	1903017-04
B9C2616-MSD1	1903017-04

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Semivolatiles by EPA Method 8270 - GC/MS

ABN 8270 Routine List

Lab ID: 1903017-01 **Station ID: ITC-BB-04E-20190325-11**

Batch: B9C2615 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 1063ml Sample Qualifiers: A
Analyst: DSH

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
2-Fluorophenol	36.1		51.1	42-109	03/26/19	03/26/19
Phenol-d5	34.2		48.5	46-110	"	"
2-Chlorophenol-d4	39.1		55.5	47-103	"	"
1,2-Dichlorobenzene-d4	24.9		52.9	33-100	"	"
Nitrobenzene-d5	28.4		60.5	42-126	"	"
2-Fluorobiphenyl	31.2		66.3	50-104	"	"
2,4,6-Tribromophenol	45.7		64.7	59-142	"	"
Terphenyl-d14	49.8		106	61-125	"	"

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Benzaldehyde (100-52-7)	U		4.7	1	03/26/19	03/26/19
Phenol (108-95-2)	U		4.7	"	"	"
Bis(2-chloroethyl)ether (111-44-4)	U		4.7	"	"	"
2-Chlorophenol (95-57-8)	U		4.7	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		4.7	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		4.7	"	"	"
Benzyl alcohol (100-51-6)	U		4.7	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		4.7	"	"	"
2-Methylphenol (95-48-7)	U		4.7	"	"	"
Bis(2-chloro-1-methylethyl)ether (108-60-1)	U		4.7	"	"	"
Acetophenone (98-86-2)	U		4.7	"	"	"
3 &/or 4-Methylphenol (108-39-4/106-44-5)	U		4.7	"	"	"
N-Nitrosodi-n-propylamine (621-64-7)	U		4.7	"	"	"
Hexachloroethane (67-72-1)	U		4.7	"	"	"
Nitrobenzene (98-95-3)	U		4.7	"	"	"
Isophorone (78-59-1)	U		4.7	"	"	"
2-Nitrophenol (88-75-5)	U		4.7	"	"	"
2,4-Dimethylphenol (105-67-9)	U		4.7	"	"	"
Bis(2-chloroethoxy)methane (111-91-1)	U		4.7	"	"	"
2,4-Dichlorophenol (120-83-2)	U		4.7	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		4.7	"	"	"
Naphthalene (91-20-3)	U		1.9	"	"	"

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Semivolatiles by EPA Method 8270 - GC/MS

ABN 8270 Routine List

Lab ID: 1903017-01 **Station ID: ITC-BB-04E-20190325-11**

Batch: B9C2615 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 1063ml Sample Qualifiers: A
Analyst: DSH

Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
4-Chloroaniline (106-47-8)	U		4.7	1	03/26/19	03/26/19
Hexachlorobutadiene (87-68-3)	U		4.7	"	"	"
Caprolactam (105-60-2)	U		4.7	"	"	"
4-Chloro-3-methylphenol (59-50-7)	U		4.7	"	"	"
2-Methylnaphthalene (91-57-6)	U		1.9	"	"	"
1-Methylnaphthalene (90-12-0)	U		1.9	"	"	"
Hexachlorocyclopentadiene (77-47-4)	U		4.7	"	"	"
2,4,6-Trichlorophenol (88-06-2)	U		4.7	"	"	"
2,4,5-Trichlorophenol (95-95-4)	U		4.7	"	"	"
2-Chloronaphthalene (91-58-7)	U		4.7	"	"	"
1,1'-Biphenyl (92-52-4)	U		4.7	"	"	"
2-Nitroaniline (88-74-4)	U		7.5	"	"	"
Dimethyl phthalate (131-11-3)	U		4.7	"	"	"
Acenaphthylene (208-96-8)	U		1.9	"	"	"
2,6-Dinitrotoluene (606-20-2)	U		4.7	"	"	"
3-Nitroaniline (99-09-2)	U		7.5	"	"	"
Acenaphthene (83-32-9)	U		1.9	"	"	"
2,4-Dinitrophenol (51-28-5)	U		18.8	"	"	"
4-Nitrophenol (100-02-7)	U		12.2	"	"	"
Dibenzofuran (132-64-9)	U		4.7	"	"	"
2,4-Dinitrotoluene (121-14-2)	U		4.7	"	"	"
Fluorene (86-73-7)	U		1.9	"	"	"
Diethyl phthalate (84-66-2)	U		4.7	"	"	"
4-Chlorophenyl phenyl ether (7005-72-3)	U		4.7	"	"	"
4-Nitroaniline (100-01-6)	U		7.5	"	"	"
4,6-Dinitro-2-methylphenol (534-52-1)	U		18.8	"	"	"
N-Nitrosodiphenylamine/Diphenylamine (86-30-6/122-39-4)	U		4.7	"	"	"
4-Bromophenyl phenyl ether (101-55-3)	U		4.7	"	"	"
Hexachlorobenzene (118-74-1)	U		4.7	"	"	"
Atrazine (1912-24-9)	U		4.7	"	"	"
Pentachlorophenol (87-86-5)	U		4.7	"	"	"
Phenanthrene (85-01-8)	U		1.9	"	"	"
Anthracene (120-12-7)	U		1.9	"	"	"
Carbazole (86-74-8)	U		4.7	"	"	"

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Semivolatiles by EPA Method 8270 - GC/MS

ABN 8270 Routine List

Lab ID: 1903017-01 **Station ID: ITC-BB-04E-20190325-11**

Batch: B9C2615 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 1063ml Sample Qualifiers: **A**
Analyst: DSH

Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Di-n-butyl phthalate (84-74-2)	U		4.7	1	03/26/19	03/26/19
Fluoranthene (206-44-0)	U		1.9	"	"	"
Pyrene (129-00-0)	U		1.9	"	"	"
Butyl benzyl phthalate (85-68-7)	U		4.7	"	"	"
Benzo (a) anthracene (56-55-3)	U		4.7	"	"	"
3,3´-Dichlorobenzidine (91-94-1)	U		4.7	"	"	"
Chrysene (218-01-9)	U		4.7	"	"	"
Bis(2-ethylhexyl)phthalate (117-81-7)	U		4.7	"	"	"
Di-n-octyl phthalate (117-84-0)	U		4.7	"	"	"
Benzo (b) fluoranthene (205-99-2)	U		4.7	"	"	"
Benzo (k) fluoranthene (207-08-9)	U		4.7	"	"	"
Benzo (a) pyrene (50-32-8)	U		4.7	"	"	"
Indeno (1,2,3-cd) pyrene (193-39-5)	U		4.7	"	"	"
Dibenz (a,h) anthracene (53-70-3)	U		4.7	"	"	"
Benzo (g,h,i) perylene (191-24-2)	U		4.7	"	"	"

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Volatiles by EPA Method 8260 - GC/MS

VOA 8260 Routine List

Lab ID: 1903017-01 **Station ID: ITC-BB-04E-20190325-11**

Batch: B9C2616 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 5ml Sample Qualifiers:
Analyst: ng

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	44.4		88.7	86-117	03/26/19	03/26/19
Toluene-d8	44.5		88.9	85-113	"	"
4-Bromofluorobenzene	44.7		89.3	73-115	"	"

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		5.0	1	03/26/19	03/26/19
Chloromethane (74-87-3)	U		5.0	"	"	"
Vinyl chloride (75-01-4)	U		2.0	"	"	"
Bromomethane (74-83-9)	U		5.0	"	"	"
Chloroethane (75-00-3)	U		2.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		2.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		2.0	"	"	"
Carbon disulfide (75-15-0)	U		2.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		2.0	"	"	"
Acetone (67-64-1)	U		10.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		2.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		2.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		2.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		2.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		2.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		2.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		2.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		2.0	"	"	"
Cyclohexane (110-82-7)	U		2.0	"	"	"
Carbon tetrachloride (56-23-5)	U		2.0	"	"	"
Benzene (71-43-2)	**6.0**		2.0	"	"	"
Trichloroethene (79-01-6)	U		2.0	"	"	"
Methylcyclohexane (108-87-2)	U		2.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		2.0	"	"	"
Bromodichloromethane (75-27-4)	U		2.0	"	"	"

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Volatiles by EPA Method 8260 - GC/MS

VOA 8260 Routine List

Lab ID: 1903017-01 **Station ID: ITC-BB-04E-20190325-11**

Batch: B9C2616 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 5ml Sample Qualifiers:
Analyst: ng

Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		2.0	1	03/26/19	03/26/19
trans-1,3-Dichloropropene (10061-02-6)	U		2.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		2.0	"	"	"
Dibromochloromethane (124-48-1)	U		2.0	"	"	"
Bromoform (75-25-2)	U		2.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		2.0	"	"	"
Tetrachloroethene (127-18-4)	U		2.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		2.0	"	"	"
Chlorobenzene (108-90-7)	U		2.0	"	"	"
Ethylbenzene (100-41-4)	U		2.0	"	"	"
meta-/para-Xylene (na)	U		4.0	"	"	"
ortho-Xylene (95-47-6)	U		2.0	"	"	"
Styrene (100-42-5)	U		2.0	"	"	"
Isopropylbenzene (98-82-8)	U		2.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		2.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		2.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		2.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		2.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		5.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		5.0	"	"	"

This sample was received at pH 2.
Vinyl Chloride and Styrene may be biased low.

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Semivolatiles by EPA Method 8270 - GC/MS

ABN 8270 Routine List

Lab ID: 1903017-02 **Station ID: ITC-BB-05E-20190325-11**

Batch: B9C2615 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 1059ml Sample Qualifiers: **A**
Analyst: DSH

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
2-Fluorophenol	41.2		58.2	42-109	03/26/19	03/26/19
Phenol-d5	39.1		55.2	46-110	"	"
2-Chlorophenol-d4	44.2		62.4	47-103	"	"
1,2-Dichlorobenzene-d4	32.9		69.6	33-100	"	"
Nitrobenzene-d5	31.8		67.3	42-126	"	"
2-Fluorobiphenyl	43.5		92.2	50-104	"	"
2,4,6-Tribromophenol	57.5		81.2	59-142	"	"
Terphenyl-d14	50.0		106	61-125	"	"

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Benzaldehyde (100-52-7)	U		4.7	1	03/26/19	03/26/19
Phenol (108-95-2)	U		4.7	"	"	"
Bis(2-chloroethyl)ether (111-44-4)	U		4.7	"	"	"
2-Chlorophenol (95-57-8)	U		4.7	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		4.7	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		4.7	"	"	"
Benzyl alcohol (100-51-6)	U		4.7	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		4.7	"	"	"
2-Methylphenol (95-48-7)	U		4.7	"	"	"
Bis(2-chloro-1-methylethyl)ether (108-60-1)	U		4.7	"	"	"
Acetophenone (98-86-2)	U		4.7	"	"	"
3 &/or 4-Methylphenol (108-39-4/106-44-5)	U		4.7	"	"	"
N-Nitrosodi-n-propylamine (621-64-7)	U		4.7	"	"	"
Hexachloroethane (67-72-1)	U		4.7	"	"	"
Nitrobenzene (98-95-3)	U		4.7	"	"	"
Isophorone (78-59-1)	U		4.7	"	"	"
2-Nitrophenol (88-75-5)	U		4.7	"	"	"
2,4-Dimethylphenol (105-67-9)	U		4.7	"	"	"
Bis(2-chloroethoxy)methane (111-91-1)	U		4.7	"	"	"
2,4-Dichlorophenol (120-83-2)	U		4.7	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		4.7	"	"	"
Naphthalene (91-20-3)	U		1.9	"	"	"

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Semivolatiles by EPA Method 8270 - GC/MS

ABN 8270 Routine List

Lab ID: 1903017-02 **Station ID: ITC-BB-05E-20190325-11**

Batch: B9C2615 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 1059ml Sample Qualifiers: **A**
Analyst: DSH

Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
4-Chloroaniline (106-47-8)	U		4.7	1	03/26/19	03/26/19
Hexachlorobutadiene (87-68-3)	U		4.7	"	"	"
Caprolactam (105-60-2)	U		4.7	"	"	"
4-Chloro-3-methylphenol (59-50-7)	U		4.7	"	"	"
2-Methylnaphthalene (91-57-6)	**2.0**		1.9	"	"	"
1-Methylnaphthalene (90-12-0)	U		1.9	"	"	"
Hexachlorocyclopentadiene (77-47-4)	U		4.7	"	"	"
2,4,6-Trichlorophenol (88-06-2)	U		4.7	"	"	"
2,4,5-Trichlorophenol (95-95-4)	U		4.7	"	"	"
2-Chloronaphthalene (91-58-7)	U		4.7	"	"	"
1,1'-Biphenyl (92-52-4)	U		4.7	"	"	"
2-Nitroaniline (88-74-4)	U		7.6	"	"	"
Dimethyl phthalate (131-11-3)	U		4.7	"	"	"
Acenaphthylene (208-96-8)	U		1.9	"	"	"
2,6-Dinitrotoluene (606-20-2)	U		4.7	"	"	"
3-Nitroaniline (99-09-2)	U		7.6	"	"	"
Acenaphthene (83-32-9)	U		1.9	"	"	"
2,4-Dinitrophenol (51-28-5)	U		18.9	"	"	"
4-Nitrophenol (100-02-7)	U		12.3	"	"	"
Dibenzofuran (132-64-9)	U		4.7	"	"	"
2,4-Dinitrotoluene (121-14-2)	U		4.7	"	"	"
Fluorene (86-73-7)	U		1.9	"	"	"
Diethyl phthalate (84-66-2)	U		4.7	"	"	"
4-Chlorophenyl phenyl ether (7005-72-3)	U		4.7	"	"	"
4-Nitroaniline (100-01-6)	U		7.6	"	"	"
4,6-Dinitro-2-methylphenol (534-52-1)	U		18.9	"	"	"
N-Nitrosodiphenylamine/Diphenylamine (86-30-6/122-39-4)	U		4.7	"	"	"
4-Bromophenyl phenyl ether (101-55-3)	U		4.7	"	"	"
Hexachlorobenzene (118-74-1)	U		4.7	"	"	"
Atrazine (1912-24-9)	U		4.7	"	"	"
Pentachlorophenol (87-86-5)	U		4.7	"	"	"
Phenanthrene (85-01-8)	U		1.9	"	"	"
Anthracene (120-12-7)	U		1.9	"	"	"
Carbazole (86-74-8)	U		4.7	"	"	"

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Environmental Protection Agency

Region 6 Laboratory

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Semivolatiles by EPA Method 8270 - GC/MS

ABN 8270 Routine List

Lab ID: 1903017-02 **Station ID: ITC-BB-05E-20190325-11**

Batch: B9C2615 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 1059ml Sample Qualifiers: **A**
Analyst: DSH

Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Di-n-butyl phthalate (84-74-2)	U		4.7	1	03/26/19	03/26/19
Fluoranthene (206-44-0)	U		1.9	"	"	"
Pyrene (129-00-0)	U		1.9	"	"	"
Butyl benzyl phthalate (85-68-7)	U		4.7	"	"	"
Benzo (a) anthracene (56-55-3)	U		4.7	"	"	"
3,3´-Dichlorobenzidine (91-94-1)	U		4.7	"	"	"
Chrysene (218-01-9)	U		4.7	"	"	"
Bis(2-ethylhexyl)phthalate (117-81-7)	U		4.7	"	"	"
Di-n-octyl phthalate (117-84-0)	U		4.7	"	"	"
Benzo (b) fluoranthene (205-99-2)	U		4.7	"	"	"
Benzo (k) fluoranthene (207-08-9)	U		4.7	"	"	"
Benzo (a) pyrene (50-32-8)	U		4.7	"	"	"
Indeno (1,2,3-cd) pyrene (193-39-5)	U		4.7	"	"	"
Dibenz (a,h) anthracene (53-70-3)	U		4.7	"	"	"
Benzo (g,h,i) perylene (191-24-2)	U		4.7	"	"	"

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Volatiles by EPA Method 8260 - GC/MS

VOA 8260 Routine List

Lab ID: 1903017-02 **Station ID: ITC-BB-05E-20190325-11**

Batch: B9C2616 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 5ml Sample Qualifiers:
Analyst: ng

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	43.9		87.8	86-117	03/26/19	03/26/19
Toluene-d8	44.6		89.2	85-113	"	"
4-Bromofluorobenzene	45.2		90.5	73-115	"	"

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		5.0	1	03/26/19	03/26/19
Chloromethane (74-87-3)	U		5.0	"	"	"
Vinyl chloride (75-01-4)	U		2.0	"	"	"
Bromomethane (74-83-9)	U		5.0	"	"	"
Chloroethane (75-00-3)	U		2.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		2.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		2.0	"	"	"
Carbon disulfide (75-15-0)	U		2.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		2.0	"	"	"
Acetone (67-64-1)	U		10.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		2.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		2.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		2.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		2.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		2.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		2.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		2.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		2.0	"	"	"
Cyclohexane (110-82-7)	U		2.0	"	"	"
Carbon tetrachloride (56-23-5)	U		2.0	"	"	"
Benzene (71-43-2)	U		2.0	"	"	"
Trichloroethene (79-01-6)	U		2.0	"	"	"
Methylcyclohexane (108-87-2)	U		2.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		2.0	"	"	"
Bromodichloromethane (75-27-4)	U		2.0	"	"	"

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Volatiles by EPA Method 8260 - GC/MS

VOA 8260 Routine List

Lab ID: 1903017-02 **Station ID: ITC-BB-05E-20190325-11**

Batch: B9C2616 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 5ml Sample Qualifiers:
Analyst: ng

Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		2.0	1	03/26/19	03/26/19
trans-1,3-Dichloropropene (10061-02-6)	U		2.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		2.0	"	"	"
Dibromochloromethane (124-48-1)	U		2.0	"	"	"
Bromoform (75-25-2)	U		2.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		2.0	"	"	"
Tetrachloroethene (127-18-4)	U		2.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		2.0	"	"	"
Chlorobenzene (108-90-7)	U		2.0	"	"	"
Ethylbenzene (100-41-4)	U		2.0	"	"	"
meta-/para-Xylene (na)	U		4.0	"	"	"
ortho-Xylene (95-47-6)	U		2.0	"	"	"
Styrene (100-42-5)	U		2.0	"	"	"
Isopropylbenzene (98-82-8)	U		2.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		2.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		2.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		2.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		2.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		5.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		5.0	"	"	"

This sample was received at pH 2.
Vinyl Chloride and Styrene may be biased low.

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Volatiles by EPA Method 8260 - GC/MS

VOA 8260 Routine List

Lab ID: 1903017-03 **Station ID: ITC-BB-05E-20190325-15**

Batch: B9C2616 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 5ml Sample Qualifiers:
Analyst: ng

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	46.3		92.5	86-117	03/26/19	03/26/19
Toluene-d8	46.7		93.4	85-113	"	"
4-Bromofluorobenzene	47.0		93.9	73-115	"	"

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		5.0	1	03/26/19	03/26/19
Chloromethane (74-87-3)	U		5.0	"	"	"
Vinyl chloride (75-01-4)	U		2.0	"	"	"
Bromomethane (74-83-9)	U		5.0	"	"	"
Chloroethane (75-00-3)	U		2.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		2.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		2.0	"	"	"
Carbon disulfide (75-15-0)	U		2.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		2.0	"	"	"
Acetone (67-64-1)	U		10.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		2.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		2.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		2.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		2.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		2.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		2.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		2.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		2.0	"	"	"
Cyclohexane (110-82-7)	U		2.0	"	"	"
Carbon tetrachloride (56-23-5)	U		2.0	"	"	"
Benzene (71-43-2)	U		2.0	"	"	"
Trichloroethene (79-01-6)	U		2.0	"	"	"
Methylcyclohexane (108-87-2)	U		2.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		2.0	"	"	"
Bromodichloromethane (75-27-4)	U		2.0	"	"	"

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Volatiles by EPA Method 8260 - GC/MS

VOA 8260 Routine List

Lab ID: 1903017-03 **Station ID: ITC-BB-05E-20190325-15**

Batch: B9C2616 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 5ml Sample Qualifiers:
Analyst: ng

Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		2.0	1	03/26/19	03/26/19
trans-1,3-Dichloropropene (10061-02-6)	U		2.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		2.0	"	"	"
Dibromochloromethane (124-48-1)	U		2.0	"	"	"
Bromoform (75-25-2)	U		2.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		2.0	"	"	"
Tetrachloroethene (127-18-4)	U		2.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		2.0	"	"	"
Chlorobenzene (108-90-7)	U		2.0	"	"	"
Ethylbenzene (100-41-4)	U		2.0	"	"	"
meta-/para-Xylene (na)	U		4.0	"	"	"
ortho-Xylene (95-47-6)	U		2.0	"	"	"
Styrene (100-42-5)	U		2.0	"	"	"
Isopropylbenzene (98-82-8)	U		2.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		2.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		2.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		2.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		2.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		5.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		5.0	"	"	"

This sample was received at pH 2.
Vinyl Chloride and Styrene may be biased low.

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Semivolatiles by EPA Method 8270 - GC/MS

ABN 8270 Routine List

Lab ID: 1903017-04 **Station ID: ITC-BB-09E-20190325-11**

Batch: B9C2615 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 1052ml Sample Qualifiers: **A**
Analyst: DSH

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
2-Fluorophenol	40.8		57.2	42-109	03/26/19	03/26/19
Phenol-d5	38.7		54.2	46-110	"	"
2-Chlorophenol-d4	43.7		61.2	47-103	"	"
1,2-Dichlorobenzene-d4	26.1		55.0	33-100	"	"
Nitrobenzene-d5	31.6		66.5	42-126	"	"
2-Fluorobiphenyl	33.7		71.0	50-104	"	"
2,4,6-Tribromophenol	49.6		69.6	59-142	"	"
Terphenyl-d14	50.3		106	61-125	"	"

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Benzaldehyde (100-52-7)	U		4.8	1	03/26/19	03/26/19
Phenol (108-95-2)	U		4.8	"	"	"
Bis(2-chloroethyl)ether (111-44-4)	U		4.8	"	"	"
2-Chlorophenol (95-57-8)	U		4.8	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		4.8	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		4.8	"	"	"
Benzyl alcohol (100-51-6)	U		4.8	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		4.8	"	"	"
2-Methylphenol (95-48-7)	U		4.8	"	"	"
Bis(2-chloro-1-methylethyl)ether (108-60-1)	U		4.8	"	"	"
Acetophenone (98-86-2)	U		4.8	"	"	"
3 &/or 4-Methylphenol (108-39-4/106-44-5)	U		4.8	"	"	"
N-Nitrosodi-n-propylamine (621-64-7)	U		4.8	"	"	"
Hexachloroethane (67-72-1)	U		4.8	"	"	"
Nitrobenzene (98-95-3)	U		4.8	"	"	"
Isophorone (78-59-1)	U		4.8	"	"	"
2-Nitrophenol (88-75-5)	U		4.8	"	"	"
2,4-Dimethylphenol (105-67-9)	U	RL	9.5	"	"	"
Bis(2-chloroethoxy)methane (111-91-1)	U		4.8	"	"	"
2,4-Dichlorophenol (120-83-2)	U		4.8	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		4.8	"	"	"
Naphthalene (91-20-3)	U		1.9	"	"	"

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Semivolatiles by EPA Method 8270 - GC/MS

ABN 8270 Routine List

Lab ID: 1903017-04 **Station ID: ITC-BB-09E-20190325-11**

Batch: B9C2615 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 1052ml Sample Qualifiers: A
Analyst: DSH

Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
4-Chloroaniline (106-47-8)	U	RL	19.0	1	03/26/19	03/26/19
Hexachlorobutadiene (87-68-3)	U		4.8	"	"	"
Caprolactam (105-60-2)	U	RL	14.3	"	"	"
4-Chloro-3-methylphenol (59-50-7)	U		4.8	"	"	"
2-Methylnaphthalene (91-57-6)	U		1.9	"	"	"
1-Methylnaphthalene (90-12-0)	U		1.9	"	"	"
Hexachlorocyclopentadiene (77-47-4)	U		4.8	"	"	"
2,4,6-Trichlorophenol (88-06-2)	U		4.8	"	"	"
2,4,5-Trichlorophenol (95-95-4)	U		4.8	"	"	"
2-Chloronaphthalene (91-58-7)	U		4.8	"	"	"
1,1'-Biphenyl (92-52-4)	U		4.8	"	"	"
2-Nitroaniline (88-74-4)	U	RL	30.4	"	"	"
Dimethyl phthalate (131-11-3)	U		4.8	"	"	"
Acenaphthylene (208-96-8)	U		1.9	"	"	"
2,6-Dinitrotoluene (606-20-2)	U		4.8	"	"	"
3-Nitroaniline (99-09-2)	U	RL	53.2	"	"	"
Acenaphthene (83-32-9)	U		1.9	"	"	"
2,4-Dinitrophenol (51-28-5)	U		19.0	"	"	"
4-Nitrophenol (100-02-7)	U		12.4	"	"	"
Dibenzofuran (132-64-9)	U		4.8	"	"	"
2,4-Dinitrotoluene (121-14-2)	U		4.8	"	"	"
Fluorene (86-73-7)	U		1.9	"	"	"
Diethyl phthalate (84-66-2)	U		4.8	"	"	"
4-Chlorophenyl phenyl ether (7005-72-3)	U		4.8	"	"	"
4-Nitroaniline (100-01-6)	U	RL	38.0	"	"	"
4,6-Dinitro-2-methylphenol (534-52-1)	U		19.0	"	"	"
N-Nitrosodiphenylamine/Diphenylamine (86-30-6/122-39-4)	U		4.8	"	"	"
4-Bromophenyl phenyl ether (101-55-3)	U		4.8	"	"	"
Hexachlorobenzene (118-74-1)	U		4.8	"	"	"
Atrazine (1912-24-9)	U		4.8	"	"	"
Pentachlorophenol (87-86-5)	U		4.8	"	"	"
Phenanthrene (85-01-8)	U		1.9	"	"	"
Anthracene (120-12-7)	U		1.9	"	"	"
Carbazole (86-74-8)	U		4.8	"	"	"

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Semivolatiles by EPA Method 8270 - GC/MS

ABN 8270 Routine List

Lab ID: 1903017-04 **Station ID: ITC-BB-09E-20190325-11**

Batch: B9C2615 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 1052ml Sample Qualifiers: **A**
Analyst: DSH

Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Di-n-butyl phthalate (84-74-2)	U		4.8	1	03/26/19	03/26/19
Fluoranthene (206-44-0)	U		1.9	"	"	"
Pyrene (129-00-0)	U		1.9	"	"	"
Butyl benzyl phthalate (85-68-7)	U		4.8	"	"	"
Benzo (a) anthracene (56-55-3)	U		4.8	"	"	"
3,3´-Dichlorobenzidine (91-94-1)	U	RL	14.3	"	"	"
Chrysene (218-01-9)	U		4.8	"	"	"
Bis(2-ethylhexyl)phthalate (117-81-7)	U		4.8	"	"	"
Di-n-octyl phthalate (117-84-0)	U		4.8	"	"	"
Benzo (b) fluoranthene (205-99-2)	U		4.8	"	"	"
Benzo (k) fluoranthene (207-08-9)	U		4.8	"	"	"
Benzo (a) pyrene (50-32-8)	U		4.8	"	"	"
Indeno (1,2,3-cd) pyrene (193-39-5)	U		4.8	"	"	"
Dibenz (a,h) anthracene (53-70-3)	U		4.8	"	"	"
Benzo (g,h,i) perylene (191-24-2)	U		4.8	"	"	"

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Volatiles by EPA Method 8260 - GC/MS

VOA 8260 Routine List

Lab ID: 1903017-04 **Station ID: ITC-BB-09E-20190325-11**

Batch: B9C2616 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 5ml Sample Qualifiers:
Analyst: ng

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	47.0		94.0	86-117	03/26/19	03/26/19
Toluene-d8	47.8		95.5	85-113	"	"
4-Bromofluorobenzene	48.2		96.3	73-115	"	"

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		5.0	1	03/26/19	03/26/19
Chloromethane (74-87-3)	U		5.0	"	"	"
Vinyl chloride (75-01-4)	U		2.0	"	"	"
Bromomethane (74-83-9)	U		5.0	"	"	"
Chloroethane (75-00-3)	U		2.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		2.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		2.0	"	"	"
Carbon disulfide (75-15-0)	U		2.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		2.0	"	"	"
Acetone (67-64-1)	U		10.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		2.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		2.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		2.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		2.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		2.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		2.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		2.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		2.0	"	"	"
Cyclohexane (110-82-7)	U		2.0	"	"	"
Carbon tetrachloride (56-23-5)	U		2.0	"	"	"
Benzene (71-43-2)	U		2.0	"	"	"
Trichloroethene (79-01-6)	U		2.0	"	"	"
Methylcyclohexane (108-87-2)	U		2.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		2.0	"	"	"
Bromodichloromethane (75-27-4)	U		2.0	"	"	"

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Volatiles by EPA Method 8260 - GC/MS
VOA 8260 Routine List

Lab ID: 1903017-04 **Station ID: ITC-BB-09E-20190325-11**

Batch: B9C2616 Date Collected: 03/25/19
Sample Type: Liquid Sample Vol: 5ml Sample Qualifiers:
Analyst: ng

Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		2.0	1	03/26/19	03/26/19
trans-1,3-Dichloropropene (10061-02-6)	U		2.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		2.0	"	"	"
Dibromochloromethane (124-48-1)	U		2.0	"	"	"
Bromoform (75-25-2)	U		2.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		2.0	"	"	"
Tetrachloroethene (127-18-4)	U		2.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		2.0	"	"	"
Chlorobenzene (108-90-7)	U		2.0	"	"	"
Ethylbenzene (100-41-4)	U		2.0	"	"	"
meta-/para-Xylene (na)	U		4.0	"	"	"
ortho-Xylene (95-47-6)	U		2.0	"	"	"
Styrene (100-42-5)	U		2.0	"	"	"
Isopropylbenzene (98-82-8)	U		2.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		2.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		2.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		2.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		2.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		5.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		5.0	"	"	"

This sample was received at pH 2.
Vinyl Chloride and Styrene may be biased low.

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Volatiles by EPA Method 8260 - GC/MS

VOA 8260 Routine List

Lab ID: 1903017-05 **Station ID: TripBlank-06**

Batch: B9C2616 Date Collected: 03/21/19
Sample Type: Liquid Sample Vol: 5ml Sample Qualifiers:
Analyst: ng

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	45.6		91.1	86-117	03/26/19	03/26/19
Toluene-d8	46.6		93.2	85-113	"	"
4-Bromofluorobenzene	47.0		93.9	73-115	"	"

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		5.0	1	03/26/19	03/26/19
Chloromethane (74-87-3)	U		5.0	"	"	"
Vinyl chloride (75-01-4)	U		2.0	"	"	"
Bromomethane (74-83-9)	U		5.0	"	"	"
Chloroethane (75-00-3)	U		2.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		2.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		2.0	"	"	"
Carbon disulfide (75-15-0)	U		2.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		2.0	"	"	"
Acetone (67-64-1)	U		10.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		2.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		2.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		2.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		2.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		2.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		2.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		2.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		2.0	"	"	"
Cyclohexane (110-82-7)	U		2.0	"	"	"
Carbon tetrachloride (56-23-5)	U		2.0	"	"	"
Benzene (71-43-2)	U		2.0	"	"	"
Trichloroethene (79-01-6)	U		2.0	"	"	"
Methylcyclohexane (108-87-2)	U		2.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		2.0	"	"	"
Bromodichloromethane (75-27-4)	U		2.0	"	"	"

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Volatiles by EPA Method 8260 - GC/MS

VOA 8260 Routine List

Lab ID: 1903017-05 **Station ID: TripBlank-06**

Batch: B9C2616 Date Collected: 03/21/19
Sample Type: Liquid Sample Vol: 5ml Sample Qualifiers:
Analyst: ng

Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		2.0	1	03/26/19	03/26/19
trans-1,3-Dichloropropene (10061-02-6)	U		2.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		2.0	"	"	"
Dibromochloromethane (124-48-1)	U		2.0	"	"	"
Bromoform (75-25-2)	U		2.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		2.0	"	"	"
Tetrachloroethene (127-18-4)	U		2.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		2.0	"	"	"
Chlorobenzene (108-90-7)	U		2.0	"	"	"
Ethylbenzene (100-41-4)	U		2.0	"	"	"
meta-/para-Xylene (na)	U		4.0	"	"	"
ortho-Xylene (95-47-6)	U		2.0	"	"	"
Styrene (100-42-5)	U		2.0	"	"	"
Isopropylbenzene (98-82-8)	U		2.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		2.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		2.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		2.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		2.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		5.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		5.0	"	"	"

This sample was received at pH 2.
Vinyl Chloride and Styrene may be biased low.

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B9C2616 **Sample Type: Liquid**

Blank (B9C2616-BLK1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Surrogates

ANALYTE	Result µg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
1,2-Dichloroethane-d4	44.9		50.0	89.8	86-117
Toluene-d8	46.0		50.0	92.0	85-113
4-Bromofluorobenzene	46.0		50.0	92.0	73-115

Targets

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit
Dichlorodifluoromethane	U		5.0
Chloromethane	U		5.0
Vinyl chloride	U		2.0
Bromomethane	U		5.0
Chloroethane	U		2.0
Trichlorofluoromethane	U		2.0
1,1-Dichloroethene	U		2.0
Carbon disulfide	U		2.0
1,1,2-Trichloro-1,2,2-trifluoroethane	U		2.0
Acetone	U		10.0
Methylene chloride	U		2.0
Methyl acetate	U		2.0
trans-1,2-Dichloroethene	U		2.0
cis-1,2-Dichloroethene	U		2.0
Methyl tert-butyl ether	U		2.0
1,1-Dichloroethane	U		2.0
2-Butanone	U		5.0
Chloroform	U		2.0
1,2-Dichloroethane	U		2.0
1,1,1-Trichloroethane	U		2.0
Cyclohexane	U		2.0
Carbon tetrachloride	U		2.0
Benzene	U		2.0
Trichloroethene	U		2.0
Methylcyclohexane	U		2.0

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B9C2616 **Sample Type: Liquid**

Blank (B9C2616-BLK1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit
1,2-Dichloropropane	U		2.0
Bromodichloromethane	U		2.0
cis-1,3-Dichloropropene	U		2.0
trans-1,3-Dichloropropene	U		2.0
1,1,2-Trichloroethane	U		2.0
Dibromochloromethane	U		2.0
Bromoform	U		2.0
4-Methyl-2-pentanone	U		5.0
Toluene	U		2.0
Tetrachloroethene	U		2.0
2-Hexanone	U		5.0
1,2-Dibromoethane	U		2.0
Chlorobenzene	U		2.0
Ethylbenzene	U		2.0
meta-/para-Xylene	U		4.0
ortho-Xylene	U		2.0
Styrene	U		2.0
Isopropylbenzene	U		2.0
1,1,2,2-Tetrachloroethane	U		2.0
1,3-Dichlorobenzene	U		2.0
1,4-Dichlorobenzene	U		2.0
1,2-Dichlorobenzene	U		2.0
1,2-Dibromo-3-chloropropane	U		5.0
1,2,4-Trichlorobenzene	U		5.0

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B9C2616 **Sample Type: Liquid**

LCS (B9C2616-BS1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Surrogates

ANALYTE	Result µg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
1,2-Dichloroethane-d4	44.3		50.0	88.6	86-117
Toluene-d8	45.6		50.0	91.2	85-113
4-Bromofluorobenzene	46.1		50.0	92.2	73-115

Targets

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Dichlorodifluoromethane	63.8		5.0	50.0	128	69-132
Chloromethane	58.3		5.0	50.0	117	73-130
Vinyl chloride	55.5		2.0	50.0	111	76-130
Bromomethane	75.2		5.0	50.0	150 #	75-129
Chloroethane	62.0		2.0	50.0	124 #	75-121
Trichlorofluoromethane	54.5		2.0	50.0	109	79-130
1,1-Dichloroethene	54.5		2.0	50.0	109	76-127
Carbon disulfide	51.0		2.0	50.0	102	74-122
1,1,2-Trichloro-1,2,2-trifluoroethane	54.1		2.0	50.0	108	79-126
Acetone	31.0		10.0	50.0	62.0	44-140
Methylene chloride	51.1		2.0	50.0	102	79-122
Methyl acetate	46.4		2.0	50.0	92.7	78-118
trans-1,2-Dichloroethene	50.4		2.0	50.0	101	78-123
cis-1,2-Dichloroethene	48.9		2.0	50.0	97.7	80-120
Methyl tert-butyl ether	46.6		2.0	50.0	93.1	78-124
1,1-Dichloroethane	53.4		2.0	50.0	107	80-122
2-Butanone	40.0		5.0	50.0	79.9	71-127
Chloroform	48.6		2.0	50.0	97.1	81-121
1,2-Dichloroethane	47.9		2.0	50.0	95.9	80-121
1,1,1-Trichloroethane	49.5		2.0	50.0	99.0	80-120
Cyclohexane	50.4		2.0	50.0	101	77-120
Carbon tetrachloride	49.0		2.0	50.0	98.0	78-121
Benzene	47.8		2.0	50.0	95.7	81-119
Trichloroethene	50.3		2.0	50.0	101	80-120
Methylcyclohexane	49.2		2.0	50.0	98.3	79-122

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B9C2616 **Sample Type: Liquid**

LCS (B9C2616-BS1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
1,2-Dichloropropane	51.7		2.0	50.0	103	81-121
Bromodichloromethane	49.3		2.0	50.0	98.7	80-121
cis-1,3-Dichloropropene	51.0		2.0	50.0	102	79-119
trans-1,3-Dichloropropene	52.4		2.0	50.0	105	78-119
1,1,2-Trichloroethane	49.6		2.0	50.0	99.3	80-120
Dibromochloromethane	50.3		2.0	50.0	101	80-118
Bromoform	48.0		2.0	50.0	96.0	79-119
4-Methyl-2-pentanone	49.9		5.0	50.0	99.8	77-121
Toluene	48.6		2.0	50.0	97.2	81-118
Tetrachloroethene	46.7		2.0	50.0	93.4	80-120
2-Hexanone	46.8		5.0	50.0	93.6	77-122
1,2-Dibromoethane	49.3		2.0	50.0	98.5	81-118
Chlorobenzene	47.3		2.0	50.0	94.7	81-118
Ethylbenzene	48.1		2.0	50.0	96.2	80-118
meta-/para-Xylene	97.6		4.0	100	97.6	81-117
ortho-Xylene	49.4		2.0	50.0	98.7	81-118
Styrene	49.6		2.0	50.0	99.3	79-118
Isopropylbenzene	50.1		2.0	50.0	100	74-124
1,1,2,2-Tetrachloroethane	47.8		2.0	50.0	95.6	79-119
1,3-Dichlorobenzene	47.6		2.0	50.0	95.1	81-118
1,4-Dichlorobenzene	47.2		2.0	50.0	94.5	80-117
1,2-Dichlorobenzene	46.9		2.0	50.0	93.9	79-119
1,2-Dibromo-3-chloropropane	41.9		5.0	50.0	83.9	77-123
1,2,4-Trichlorobenzene	45.1		5.0	50.0	90.2	78-128

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B9C2616 **Sample Type: Liquid**

Matrix Spike (B9C2616-MS1)

Source: 1903017-04 Prepared: 3/26/2019 Analyzed: 3/26/2019

Surrogates

ANALYTE	Result µg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
1,2-Dichloroethane-d4	46.2		50.0	92.4	86-117
Toluene-d8	48.0		50.0	95.9	85-113
4-Bromofluorobenzene	48.8		50.0	97.7	73-115

Targets

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
Dichlorodifluoromethane	70.7		5.0	50.0		141 #	64-127
Chloromethane	64.6		5.0	50.0		129 #	68-125
Vinyl chloride	60.8		2.0	50.0		122	75-123
Bromomethane	86.6		5.0	50.0	0.3	173 #	46-142
Chloroethane	77.8		2.0	50.0		156 #	60-145
Trichlorofluoromethane	59.3		2.0	50.0		119	73-132
1,1-Dichloroethene	58.5		2.0	50.0		117	72-134
Carbon disulfide	54.9		2.0	50.0		110	74-128
1,1,2-Trichloro-1,2,2-trifluoroethane	59.6		2.0	50.0		119	72-130
Acetone	32.8		10.0	50.0	1.2	63.2	35-142
Methylene chloride	56.3		2.0	50.0		113	74-127
Methyl acetate	49.7		2.0	50.0		99.4	64-134
trans-1,2-Dichloroethene	55.0		2.0	50.0		110	74-130
cis-1,2-Dichloroethene	54.0		2.0	50.0		108	75-127
Methyl tert-butyl ether	51.3		2.0	50.0	0.2	102	72-130
1,1-Dichloroethane	58.2		2.0	50.0		116	70-133
2-Butanone	43.0		5.0	50.0		86.0	51-139
Chloroform	53.6		2.0	50.0	0.9	105	75-125
1,2-Dichloroethane	52.6		2.0	50.0		105	73-126
1,1,1-Trichloroethane	53.4		2.0	50.0		107	79-117
Cyclohexane	55.1		2.0	50.0	0.4	109	72-129
Carbon tetrachloride	51.9		2.0	50.0		104	74-123
Benzene	52.4		2.0	50.0		105	79-122
Trichloroethene	53.8		2.0	50.0		108	79-126
Methylcyclohexane	53.3		2.0	50.0	0.3	106	76-123

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B9C2616 **Sample Type: Liquid**

Matrix Spike (B9C2616-MS1)

Source: 1903017-04 Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
1,2-Dichloropropane	59.9		2.0	50.0		120	77-125
Bromodichloromethane	53.6		2.0	50.0	0.2	107	80-115
cis-1,3-Dichloropropene	55.6		2.0	50.0		111	79-119
trans-1,3-Dichloropropene	56.2		2.0	50.0		112	77-118
1,1,2-Trichloroethane	55.1		2.0	50.0		110	79-122
Dibromochloromethane	53.8		2.0	50.0		108	78-123
Bromoform	51.6		2.0	50.0		103	76-127
4-Methyl-2-pentanone	55.8		5.0	50.0		112	84-126
Toluene	52.4		2.0	50.0		105	81-122
Tetrachloroethene	50.5		2.0	50.0		101	80-115
2-Hexanone	51.2		5.0	50.0		102	49-149
1,2-Dibromoethane	52.4		2.0	50.0		105	80-116
Chlorobenzene	51.4		2.0	50.0		103	82-121
Ethylbenzene	52.1		2.0	50.0		104	78-123
meta-/para-Xylene	107		4.0	100		107	79-123
ortho-Xylene	53.0		2.0	50.0		106	80-124
Styrene	53.7		2.0	50.0		107	82-121
Isopropylbenzene	54.1		2.0	50.0		108	80-117
1,1,2,2-Tetrachloroethane	51.2		2.0	50.0		102	77-127
1,3-Dichlorobenzene	50.8		2.0	50.0		102	80-114
1,4-Dichlorobenzene	50.8		2.0	50.0		102	79-116
1,2-Dichlorobenzene	50.7		2.0	50.0		101	77-118
1,2-Dibromo-3-chloropropane	41.2		5.0	50.0		82.3	76-116
1,2,4-Trichlorobenzene	45.9		5.0	50.0		91.7	70-118

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Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B9C2616 **Sample Type: Liquid**

Matrix Spike Dup (B9C2616-MSD1)

Source: 1903017-04 Prepared: 3/26/2019 Analyzed: 3/26/2019

Surrogates

ANALYTE	Result µg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
1,2-Dichloroethane-d4	45.2		50.0	90.3	86-117
Toluene-d8	47.4		50.0	94.8	85-113
4-Bromofluorobenzene	48.1		50.0	96.1	73-115

Targets

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dichlorodifluoromethane	68.8		5.0	50.0		138 #	64-127	2.77	21
Chloromethane	64.0		5.0	50.0		128 #	68-125	1.03	15
Vinyl chloride	60.0		2.0	50.0		120	75-123	1.33	16
Bromomethane	86.6		5.0	50.0	0.3	173 #	46-142	0.05	17
Chloroethane	76.6		2.0	50.0		153 #	60-145	1.54	18
Trichlorofluoromethane	58.2		2.0	50.0		116	73-132	1.89	12
1,1-Dichloroethene	58.8		2.0	50.0		118	72-134	0.41	21
Carbon disulfide	54.9		2.0	50.0		110	74-128	0.02	16
1,1,2-Trichloro-1,2,2-trifluoroethane	58.2		2.0	50.0		116	72-130	2.44	19
Acetone	34.1		10.0	50.0	1.2	65.8	35-142	3.85	17
Methylene chloride	56.2		2.0	50.0		112	74-127	0.09	13
Methyl acetate	48.6		2.0	50.0		97.3	64-134	2.09	13
trans-1,2-Dichloroethene	54.3		2.0	50.0		109	74-130	1.26	14
cis-1,2-Dichloroethene	52.9		2.0	50.0		106	75-127	2.08	15
Methyl tert-butyl ether	50.3		2.0	50.0	0.2	100	72-130	2.03	12
1,1-Dichloroethane	57.7		2.0	50.0		115	70-133	0.83	14
2-Butanone	42.7		5.0	50.0		85.4	51-139	0.68	21
Chloroform	53.2		2.0	50.0	0.9	105	75-125	0.73	13
1,2-Dichloroethane	50.7		2.0	50.0		101	73-126	3.72	13
1,1,1-Trichloroethane	53.4		2.0	50.0		107	79-117	0.13	13
Cyclohexane	54.8		2.0	50.0	0.4	109	72-129	0.60	13
Carbon tetrachloride	52.4		2.0	50.0		105	74-123	1.05	14
Benzene	52.3		2.0	50.0		105	79-122	0.23	16
Trichloroethene	53.9		2.0	50.0		108	79-126	0.15	14
Methylcyclohexane	53.1		2.0	50.0	0.3	106	76-123	0.32	20

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B9C2616 **Sample Type: Liquid**

Matrix Spike Dup (B9C2616-MSD1)

Source: 1903017-04 Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
1,2-Dichloropropane	55.9		2.0	50.0		112	77-125	7.03	14
Bromodichloromethane	53.1		2.0	50.0	0.2	106	80-115	0.98	14
cis-1,3-Dichloropropene	55.3		2.0	50.0		111	79-119	0.52	14
trans-1,3-Dichloropropene	56.2		2.0	50.0		112	77-118	0.02	15
1,1,2-Trichloroethane	53.9		2.0	50.0		108	79-122	2.17	14
Dibromochloromethane	53.0		2.0	50.0		106	78-123	1.53	14
Bromoform	50.9		2.0	50.0		102	76-127	1.31	14
4-Methyl-2-pentanone	54.2		5.0	50.0		108	84-126	2.76	15
Toluene	52.7		2.0	50.0		105	81-122	0.65	13
Tetrachloroethene	50.1		2.0	50.0		100	80-115	0.80	12
2-Hexanone	49.9		5.0	50.0		99.9	49-149	2.41	21
1,2-Dibromoethane	51.9		2.0	50.0		104	80-116	1.04	14
Chlorobenzene	51.4		2.0	50.0		103	82-121	0.04	10
Ethylbenzene	51.9		2.0	50.0		104	78-123	0.31	15
meta-/para-Xylene	106		4.0	100		106	79-123	0.63	19
ortho-Xylene	53.2		2.0	50.0		106	80-124	0.34	18
Styrene	53.7		2.0	50.0		107	82-121	0.02	12
Isopropylbenzene	54.2		2.0	50.0		108	80-117	0.07	11
1,1,2,2-Tetrachloroethane	50.9		2.0	50.0		102	77-127	0.63	14
1,3-Dichlorobenzene	51.1		2.0	50.0		102	80-114	0.65	13
1,4-Dichlorobenzene	50.7		2.0	50.0		101	79-116	0.26	11
1,2-Dichlorobenzene	50.5		2.0	50.0		101	77-118	0.34	12
1,2-Dibromo-3-chloropropane	44.2		5.0	50.0		88.5	76-116	7.24	16
1,2,4-Trichlorobenzene	47.3		5.0	50.0		94.7	70-118	3.15	21

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Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

Blank (B9C2615-BLK1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Surrogates

ANALYTE	Result µg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
2-Fluorophenol	55.9		75.0	74.5	42-109
Phenol-d5	50.6		75.0	67.4	46-110
2-Chlorophenol-d4	59.2		75.0	78.9	47-103
1,2-Dichlorobenzene-d4	34.1		50.0	68.2	33-100
Nitrobenzene-d5	42.2		50.0	84.3	42-126
2-Fluorobiphenyl	42.8		50.0	85.7	50-104
2,4,6-Tribromophenol	67.3		75.0	89.7	59-142
Terphenyl-d14	57.8		50.0	116	61-125

Targets

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit
Benzaldehyde	U		5.0
Phenol	U		5.0
Bis(2-chloroethyl)ether	U		5.0
2-Chlorophenol	U		5.0
1,3-Dichlorobenzene	U		5.0
1,4-Dichlorobenzene	U		5.0
Benzyl alcohol	U		5.0
1,2-Dichlorobenzene	U		5.0
2-Methylphenol	U		5.0
Bis(2-chloro-1-methylethyl)ether	U		5.0
Acetophenone	U		5.0
3 &/or 4-Methylphenol	U		5.0
N-Nitrosodi-n-propylamine	U		5.0
Hexachloroethane	U		5.0
Nitrobenzene	U		5.0
Isophorone	U		5.0
2-Nitrophenol	U		5.0
2,4-Dimethylphenol	U		5.0
Bis(2-chloroethoxy)methane	U		5.0
2,4-Dichlorophenol	U		5.0
1,2,4-Trichlorobenzene	U		5.0

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Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

Blank (B9C2615-BLK1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit
Naphthalene	U		2.0
4-Chloroaniline	U		5.0
Hexachlorobutadiene	U		5.0
Caprolactam	U		5.0
4-Chloro-3-methylphenol	U		5.0
2-Methylnaphthalene	U		2.0
1-Methylnaphthalene	U		2.0
Hexachlorocyclopentadiene	U		5.0
2,4,6-Trichlorophenol	U		5.0
2,4,5-Trichlorophenol	U		5.0
2-Chloronaphthalene	U		5.0
1,1'-Biphenyl	U		5.0
2-Nitroaniline	U		8.0
Dimethyl phthalate	U		5.0
Acenaphthylene	U		2.0
2,6-Dinitrotoluene	U		5.0
3-Nitroaniline	U		8.0
Acenaphthene	U		2.0
2,4-Dinitrophenol	U		20.0
4-Nitrophenol	U		13.0
Dibenzofuran	U		5.0
2,4-Dinitrotoluene	U		5.0
Fluorene	U		2.0
Diethyl phthalate	U		5.0
4-Chlorophenyl phenyl ether	U		5.0
4-Nitroaniline	U		8.0
4,6-Dinitro-2-methylphenol	U		20.0
N-Nitrosodiphenylamine/Diphenylamine	U		5.0
4-Bromophenyl phenyl ether	U		5.0
Hexachlorobenzene	U		5.0
Atrazine	U		5.0
Pentachlorophenol	U		5.0

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10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

Blank (B9C2615-BLK1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit
Phenanthrene	U		2.0
Anthracene	U		2.0
Carbazole	U		5.0
Di-n-butyl phthalate	U		5.0
Fluoranthene	U		2.0
Pyrene	U		2.0
Butyl benzyl phthalate	U		5.0
Benzo (a) anthracene	U		5.0
3,3′-Dichlorobenzidine	U		5.0
Chrysene	U		5.0
Bis(2-ethylhexyl)phthalate	U		5.0
Di-n-octyl phthalate	U		5.0
Benzo (b) fluoranthene	U		5.0
Benzo (k) fluoranthene	U		5.0
Benzo (a) pyrene	U		5.0
Indeno (1,2,3-cd) pyrene	U		5.0
Dibenz (a,h) anthracene	U		5.0
Benzo (g,h,i) perylene	U		5.0

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10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

LCS (B9C2615-BS1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Surrogates

ANALYTE	Result µg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
2-Fluorophenol	61.0		75.0	81.3	42-109
Phenol-d5	56.1		75.0	74.8	46-110
2-Chlorophenol-d4	65.5		75.0	87.3	47-103
1,2-Dichlorobenzene-d4	35.3		50.0	70.6	33-100
Nitrobenzene-d5	46.9		50.0	93.7	42-126
2-Fluorobiphenyl	49.5		50.0	99.0	50-104
2,4,6-Tribromophenol	71.7		75.0	95.6	59-142
Terphenyl-d14	57.2		50.0	114	61-125

Targets

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Benzaldehyde	28.7		5.0	25.0	115	57-123
Phenol	20.6		5.0	25.0	82.3	60-116
Bis(2-chloroethyl)ether	23.1		5.0	25.0	92.5	74-112
2-Chlorophenol	22.8		5.0	25.0	91.1	64-116
1,3-Dichlorobenzene	16.0		5.0	25.0	63.9	32-100
1,4-Dichlorobenzene	16.6		5.0	25.0	66.3	35-100
Benzyl alcohol	21.3		5.0	25.0	85.4	63-125
1,2-Dichlorobenzene	17.7		5.0	25.0	70.8	46-100
2-Methylphenol	21.5		5.0	25.0	86.0	66-124
Bis(2-chloro-1-methylethyl)ether	22.5		5.0	25.0	90.1	63-122
Acetophenone	23.8		5.0	25.0	95.3	74-119
3 &/or 4-Methylphenol	21.7		5.0	25.0	87.0	66-125
N-Nitrosodi-n-propylamine	23.0		5.0	25.0	92.1	65-118
Hexachloroethane	13.1		5.0	25.0	52.5	16-103
Nitrobenzene	24.4		5.0	25.0	97.7	76-114
Isophorone	23.3		5.0	25.0	93.2	76-116
2-Nitrophenol	24.2		5.0	25.0	96.8	77-121
2,4-Dimethylphenol	21.1		5.0	25.0	84.3	57-115
Bis(2-chloroethoxy)methane	24.0		5.0	25.0	96.1	75-114
2,4-Dichlorophenol	24.1		5.0	25.0	96.4	80-113
1,2,4-Trichlorobenzene	19.8		5.0	25.0	79.3	42-103

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Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

LCS (B9C2615-BS1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Naphthalene	22.4		2.0	25.0	89.7	70-106
4-Chloroaniline	16.9		5.0	25.0	67.6	51-118
Hexachlorobutadiene	16.5		5.0	25.0	65.9	25-115
Caprolactam	17.5		5.0	25.0	70.2	53-130
4-Chloro-3-methylphenol	23.6		5.0	25.0	94.5	63-117
2-Methylnaphthalene	23.2		2.0	25.0	92.9	67-110
1-Methylnaphthalene	23.8		2.0	25.0	95.3	70-130
Hexachlorocyclopentadiene	23.8		5.0	25.0	95.1	37-127
2,4,6-Trichlorophenol	26.3		5.0	25.0	105	77-115
2,4,5-Trichlorophenol	27.6		5.0	25.0	111	78-116
2-Chloronaphthalene	26.9		5.0	25.0	108	70-110
1,1'-Biphenyl	27.2		5.0	25.0	109	63-118
2-Nitroaniline	28.3		8.0	25.0	113	74-125
Dimethyl phthalate	27.3		5.0	25.0	109	79-111
Acenaphthylene	26.8		2.0	25.0	107	73-115
2,6-Dinitrotoluene	27.9		5.0	25.0	111	77-122
3-Nitroaniline	29.2		8.0	25.0	117	61-139
Acenaphthene	27.0		2.0	25.0	108	63-112
2,4-Dinitrophenol	22.3		20.0	25.0	89.2	40-151
4-Nitrophenol	25.7		13.0	25.0	103	49-137
Dibenzofuran	27.6		5.0	25.0	110	74-112
2,4-Dinitrotoluene	28.8		5.0	25.0	115	59-120
Fluorene	28.0		2.0	25.0	112	74-114
Diethyl phthalate	28.0		5.0	25.0	112	79-115
4-Chlorophenyl phenyl ether	28.0		5.0	25.0	112	71-115
4-Nitroaniline	33.2		8.0	25.0	133	61-149
4,6-Dinitro-2-methylphenol	24.5		20.0	25.0	97.8	46-148
N-Nitrosodiphenylamine/Diphenylamine	25.7		5.0	25.0	103	76-117
4-Bromophenyl phenyl ether	25.3		5.0	25.0	101	77-114
Hexachlorobenzene	25.6		5.0	25.0	102	76-114
Atrazine	26.9		5.0	25.0	108	78-125
Pentachlorophenol	22.7		5.0	25.0	90.9	46-133

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Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

LCS (B9C2615-BS1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Phenanthrene	26.1		2.0	25.0	104	76-115
Anthracene	26.9		2.0	25.0	108	77-117
Carbazole	27.8		5.0	25.0	111	73-128
Di-n-butyl phthalate	27.2		5.0	25.0	109	82-126
Fluoranthene	28.2		2.0	25.0	113	75-122
Pyrene	27.2		2.0	25.0	109	59-131
Butyl benzyl phthalate	28.7		5.0	25.0	115	86-127
Benzo (a) anthracene	27.9		5.0	25.0	112	83-117
3,3′-Dichlorobenzidine	29.2		5.0	25.0	117	38-146
Chrysene	28.4		5.0	25.0	114	80-115
Bis(2-ethylhexyl)phthalate	29.0		5.0	25.0	116	83-135
Di-n-octyl phthalate	29.8		5.0	25.0	119	72-138
Benzo (b) fluoranthene	23.7		5.0	25.0	94.8	73-127
Benzo (k) fluoranthene	24.1		5.0	25.0	96.4	73-128
Benzo (a) pyrene	22.7		5.0	25.0	90.9	75-127
Indeno (1,2,3-cd) pyrene	24.1		5.0	25.0	96.4	66-147
Dibenz (a,h) anthracene	23.8		5.0	25.0	95.1	68-144
Benzo (g,h,i) perylene	24.6		5.0	25.0	98.5	63-148

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10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

LCS Dup (B9C2615-BSD1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Surrogates

ANALYTE	Result µg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
2-Fluorophenol	59.1		75.0	78.7	42-109
Phenol-d5	53.9		75.0	71.9	46-110
2-Chlorophenol-d4	64.4		75.0	85.9	47-103
1,2-Dichlorobenzene-d4	35.3		50.0	70.6	33-100
Nitrobenzene-d5	46.6		50.0	93.1	42-126
2-Fluorobiphenyl	49.4		50.0	98.8	50-104
2,4,6-Tribromophenol	71.1		75.0	94.8	59-142
Terphenyl-d14	56.5		50.0	113	61-125

Targets

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Benzaldehyde	28.1		5.0	25.0	112	57-123	2.30	30
Phenol	19.5		5.0	25.0	77.9	60-116	5.46	30
Bis(2-chloroethyl)ether	22.6		5.0	25.0	90.4	74-112	2.27	30
2-Chlorophenol	22.1		5.0	25.0	88.4	64-116	2.93	30
1,3-Dichlorobenzene	16.0		5.0	25.0	64.2	32-100	0.42	30
1,4-Dichlorobenzene	16.6		5.0	25.0	66.4	35-100	0.13	30
Benzyl alcohol	20.4		5.0	25.0	81.8	63-125	4.32	30
1,2-Dichlorobenzene	17.6		5.0	25.0	70.5	46-100	0.48	30
2-Methylphenol	21.0		5.0	25.0	84.0	66-124	2.40	30
Bis(2-chloro-1-methylethyl)ether	22.3		5.0	25.0	89.4	63-122	0.76	30
Acetophenone	23.2		5.0	25.0	93.0	74-119	2.53	30
3 &/or 4-Methylphenol	20.8		5.0	25.0	83.4	66-125	4.25	30
N-Nitrosodi-n-propylamine	22.7		5.0	25.0	90.9	65-118	1.28	30
Hexachloroethane	13.4		5.0	25.0	53.5	16-103	1.99	30
Nitrobenzene	24.0		5.0	25.0	95.9	76-114	1.85	30
Isophorone	22.9		5.0	25.0	91.6	76-116	1.80	30
2-Nitrophenol	23.8		5.0	25.0	95.3	77-121	1.57	30
2,4-Dimethylphenol	21.0		5.0	25.0	83.9	57-115	0.46	30
Bis(2-chloroethoxy)methane	23.5		5.0	25.0	93.9	75-114	2.28	30
2,4-Dichlorophenol	23.3		5.0	25.0	93.3	80-113	3.20	30
1,2,4-Trichlorobenzene	19.7		5.0	25.0	78.6	42-103	0.84	30

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Environmental Protection Agency

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

LCS Dup (B9C2615-BSD1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Naphthalene	22.0		2.0	25.0	87.9	70-106	2.04	30
4-Chloroaniline	15.7		5.0	25.0	62.6	51-118	7.53	30
Hexachlorobutadiene	16.8		5.0	25.0	67.1	25-115	1.76	30
Caprolactam	16.0		5.0	25.0	63.8	53-130	9.53	30
4-Chloro-3-methylphenol	23.3		5.0	25.0	93.1	63-117	1.47	30
2-Methylnaphthalene	22.9		2.0	25.0	91.4	67-110	1.56	30
1-Methylnaphthalene	23.5		2.0	25.0	94.0	70-130	1.41	30
Hexachlorocyclopentadiene	23.9		5.0	25.0	95.6	37-127	0.59	30
2,4,6-Trichlorophenol	25.9		5.0	25.0	104	77-115	1.35	30
2,4,5-Trichlorophenol	27.4		5.0	25.0	109	78-116	1.00	30
2-Chloronaphthalene	26.4		5.0	25.0	106	70-110	1.71	30
1,1'-Biphenyl	26.7		5.0	25.0	107	63-118	1.71	30
2-Nitroaniline	27.6		8.0	25.0	110	74-125	2.55	30
Dimethyl phthalate	26.4		5.0	25.0	106	79-111	3.38	30
Acenaphthylene	26.5		2.0	25.0	106	73-115	0.93	30
2,6-Dinitrotoluene	27.2		5.0	25.0	109	77-122	2.28	30
3-Nitroaniline	27.4		8.0	25.0	109	61-139	6.51	30
Acenaphthene	26.8		2.0	25.0	107	63-112	0.73	30
2,4-Dinitrophenol	21.4		20.0	25.0	85.8	40-151	3.97	30
4-Nitrophenol	24.5		13.0	25.0	98.0	49-137	4.68	30
Dibenzofuran	27.2		5.0	25.0	109	74-112	1.50	30
2,4-Dinitrotoluene	28.5		5.0	25.0	114	59-120	0.89	30
Fluorene	27.5		2.0	25.0	110	74-114	1.67	30
Diethyl phthalate	27.0		5.0	25.0	108	79-115	3.52	30
4-Chlorophenyl phenyl ether	27.3		5.0	25.0	109	71-115	2.67	30
4-Nitroaniline	31.8		8.0	25.0	127	61-149	4.18	30
4,6-Dinitro-2-methylphenol	24.1		20.0	25.0	96.3	46-148	1.55	30
N-Nitrosodiphenylamine/Diphenylamine	25.0		5.0	25.0	100	76-117	2.54	30
4-Bromophenyl phenyl ether	24.8		5.0	25.0	99.3	77-114	1.78	30
Hexachlorobenzene	25.0		5.0	25.0	100	76-114	2.06	30
Atrazine	26.0		5.0	25.0	104	78-125	3.44	30
Pentachlorophenol	22.3		5.0	25.0	89.0	46-133	2.11	30

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10625 Fallstone Road, Houston, TX 77099
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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

LCS Dup (B9C2615-BSD1)

Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Phenanthrene	25.7		2.0	25.0	103	76-115	1.59	30
Anthracene	26.1		2.0	25.0	104	77-117	2.94	30
Carbazole	27.4		5.0	25.0	110	73-128	1.20	30
Di-n-butyl phthalate	26.9		5.0	25.0	108	82-126	1.01	30
Fluoranthene	27.9		2.0	25.0	112	75-122	0.98	30
Pyrene	26.6		2.0	25.0	106	59-131	2.39	30
Butyl benzyl phthalate	27.6		5.0	25.0	110	86-127	4.01	30
Benzo (a) anthracene	27.1		5.0	25.0	108	83-117	2.84	30
3,3′-Dichlorobenzidine	27.4		5.0	25.0	110	38-146	6.20	30
Chrysene	27.5		5.0	25.0	110	80-115	3.15	30
Bis(2-ethylhexyl)phthalate	26.8		5.0	25.0	107	83-135	8.15	30
Di-n-octyl phthalate	28.4		5.0	25.0	114	72-138	4.74	30
Benzo (b) fluoranthene	23.6		5.0	25.0	94.5	73-127	0.33	30
Benzo (k) fluoranthene	24.4		5.0	25.0	97.7	73-128	1.27	30
Benzo (a) pyrene	23.0		5.0	25.0	91.9	75-127	1.07	30
Indeno (1,2,3-cd) pyrene	24.3		5.0	25.0	97.0	66-147	0.62	30
Dibenz (a,h) anthracene	23.9		5.0	25.0	95.5	68-144	0.46	30
Benzo (g,h,i) perylene	25.3		5.0	25.0	101	63-148	2.52	30

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10625 Fallstone Road, Houston, TX 77099
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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

Matrix Spike (B9C2615-MS1)

Source: 1903017-04 Prepared: 3/26/2019 Analyzed: 3/26/2019

Surrogates

ANALYTE	Result µg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
2-Fluorophenol	37.1		71.6	51.9	42-109
Phenol-d5	33.9		71.6	47.3	46-110
2-Chlorophenol-d4	39.8		71.6	55.6	47-103
1,2-Dichlorobenzene-d4	27.5		47.7	57.6	33-100
Nitrobenzene-d5	30.1		47.7	63.0	42-126
2-Fluorobiphenyl	43.9		47.7	92.0	50-104
2,4,6-Tribromophenol	51.7		71.6	72.2	59-142
Terphenyl-d14	48.5		47.7	102	61-125

Targets

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
Benzaldehyde	18.7		4.8	23.9		78.3	53-136
Phenol	12.1		4.8	23.9		50.9	41-114
Bis(2-chloroethyl)ether	13.6		4.8	23.9		57.1 #	62-125
2-Chlorophenol	13.5		4.8	23.9		56.7	46-114
1,3-Dichlorobenzene	13.0		4.8	23.9		54.3	36-100
1,4-Dichlorobenzene	13.2		4.8	23.9		55.2	34-100
Benzyl alcohol	12.5		4.8	23.9		52.6 #	67-119
1,2-Dichlorobenzene	13.9		4.8	23.9		58.1	48-100
2-Methylphenol	12.7		4.8	23.9		53.3 #	60-131
Bis(2-chloro-1-methylethyl)ether	13.1		4.8	23.9		55.0	51-138
Acetophenone	14.3		4.8	23.9		60.1 #	63-134
3 &/or 4-Methylphenol	12.7		4.8	23.9		53.3 #	57-136
N-Nitrosodi-n-propylamine	13.6		4.8	23.9		57.1	50-116
Hexachloroethane	12.9		4.8	23.9		53.9	24-100
Nitrobenzene	17.0		4.8	23.9		71.5	68-126
Isophorone	13.4		4.8	23.9		56.2 #	67-125
2-Nitrophenol	15.8		4.8	23.9		66.3	62-137
2,4-Dimethylphenol	11.2		4.8	23.9		47.1 #	48-136
Bis(2-chloroethoxy)methane	13.9		4.8	23.9		58.1 #	66-126
2,4-Dichlorophenol	14.1		4.8	23.9		58.9 #	69-125
1,2,4-Trichlorobenzene	18.6		4.8	23.9		78.0	38-106

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Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

Matrix Spike (B9C2615-MS1)

Source: 1903017-04 Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
Naphthalene	17.1		1.9	23.9		71.6	65-115
4-Chloroaniline	5.6		4.8	23.9		23.5 #	54-122
Hexachlorobutadiene	18.4		4.8	23.9		77.1	29-112
Caprolactam	9.0		4.8	23.9		37.7 #	56-124
4-Chloro-3-methylphenol	13.9		4.8	23.9		58.4	44-137
2-Methylnaphthalene	20.3		1.9	23.9		85.3	64-117
1-Methylnaphthalene	20.7		1.9	23.9		86.9	70-130
Hexachlorocyclopentadiene	23.2		4.8	23.9		97.1	32-122
2,4,6-Trichlorophenol	15.8		4.8	23.9		66.1	65-128
2,4,5-Trichlorophenol	16.4		4.8	23.9		68.8	68-127
2-Chloronaphthalene	23.8		4.8	23.9		99.7	62-122
1,1'-Biphenyl	24.2		4.8	23.9		101	60-129
2-Nitroaniline	6.4		7.6	23.9		26.9 #	65-126
Dimethyl phthalate	15.7		4.8	23.9		65.8 #	71-122
Acenaphthylene	23.1		1.9	23.9		96.8	70-121
2,6-Dinitrotoluene	17.9		4.8	23.9		74.9	68-128
3-Nitroaniline	3.3		7.6	23.9		13.8 #	57-136
Acenaphthene	24.0		1.9	23.9		101	41-131
2,4-Dinitrophenol	15.2		19.1	23.9		63.7	42-152
4-Nitrophenol	15.6		12.4	23.9		65.5	39-152
Dibenzofuran	24.5		4.8	23.9		103	67-123
2,4-Dinitrotoluene	19.4		4.8	23.9		81.5	57-123
Fluorene	25.0		1.9	23.9		105	65-129
Diethyl phthalate	16.6		4.8	23.9	0.6	66.9 #	72-124
4-Chlorophenyl phenyl ether	25.3		4.8	23.9		106	63-130
4-Nitroaniline	4.9		7.6	23.9		20.4 #	64-137
4,6-Dinitro-2-methylphenol	18.7		19.1	23.9		78.5	46-146
N-Nitrosodiphenylamine/Diphenylamine	20.8		4.8	23.9		87.2	66-125
4-Bromophenyl phenyl ether	22.9		4.8	23.9		96.0	64-123
Hexachlorobenzene	22.3		4.8	23.9		93.3	67-121
Atrazine	14.0		4.8	23.9	0.6	56.4 #	74-127
Pentachlorophenol	21.2		4.8	23.9		88.9	55-146

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10625 Fallstone Road, Houston, TX 77099
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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B9C2615 **Sample Type: Liquid**

Matrix Spike (B9C2615-MS1)

Source: 1903017-04 Prepared: 3/26/2019 Analyzed: 3/26/2019

Targets (Continued)

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
Phenanthrene	23.4		1.9	23.9		98.2	69-121
Anthracene	23.6		1.9	23.9		99.0	68-122
Carbazole	22.2		4.8	23.9		92.9	71-124
Di-n-butyl phthalate	24.1		4.8	23.9	0.3	99.6	75-136
Fluoranthene	24.7		1.9	23.9		104	74-123
Pyrene	23.9		1.9	23.9		100	54-133
Butyl benzyl phthalate	25.2		4.8	23.9		105	77-132
Benzo (a) anthracene	23.5		4.8	23.9	0.3	97.4	76-125
3,3′-Dichlorobenzidine	7.0		4.8	23.9		29.5 #	40-139
Chrysene	23.8		4.8	23.9		99.6	76-125
Bis(2-ethylhexyl)phthalate	23.6		4.8	23.9	0.5	96.9	79-138
Di-n-octyl phthalate	25.4		4.8	23.9		107	64-134
Benzo (b) fluoranthene	20.2		4.8	23.9	0.3	83.5	70-130
Benzo (k) fluoranthene	20.8		4.8	23.9	0.3	86.1	68-136
Benzo (a) pyrene	19.5		4.8	23.9	0.4	79.9	75-125
Indeno (1,2,3-cd) pyrene	19.8		4.8	23.9		83.2	65-143
Dibenz (a,h) anthracene	19.5		4.8	23.9	0.3	80.5	61-145
Benzo (g,h,i) perylene	20.9		4.8	23.9		87.5	67-142

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SURROGATE SUMMARY REPORT

VOA 8260 Routine List

Liquid

LAB NUMBER	1,2-DCE-d4	TOL-d8	4-BFB
1903017-01	88.7	88.9	89.3
1903017-02	87.8	89.2	90.5
1903017-03	92.5	93.4	93.9
1903017-04	94.0	95.5	96.3
1903017-05	91.1	93.2	93.9
B9C2616-BLK1	89.8	92.0	92.0
B9C2616-BS1	88.6	91.2	92.2
B9C2616-MS1	92.4	95.9	97.7
B9C2616-MSD1	90.3	94.8	96.1

			QC LIMITS
1,2-DCE-d4	=	1,2-Dichloroethane-d4	86 - 117
TOL-d8	=	Toluene-d8	85 - 113
4-BFB	=	4-Bromofluorobenzene	73 - 115

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Environmental Protection Agency

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

SURROGATE SUMMARY REPORT

ABN 8270 Routine List

Liquid

LAB NUMBER	2-FP	PH-d5	2-CP-d4	1,2-DCB-d4	NB-d5	2-FBP	2,4,6-TBP	TP-d14
1903017-01	51.1	48.5	55.5	52.9	60.5	66.3	64.7	106
1903017-02	58.2	55.2	62.4	69.6	67.3	92.2	81.2	106
1903017-04	57.2	54.2	61.2	55.0	66.5	71.0	69.6	106
B9C2615-BLK1	74.5	67.4	78.9	68.2	84.3	85.7	89.7	116
B9C2615-BS1	81.3	74.8	87.3	70.6	93.7	99.0	95.6	114
B9C2615-BSD1	78.7	71.9	85.9	70.6	93.1	98.8	94.8	113
B9C2615-MS1	51.9	47.3	55.6	57.6	63.0	92.0	72.2	102

			QC LIMITS
2-FP	=	2-Fluorophenol	42 - 109
PH-d5	=	Phenol-d5	46 - 110
2-CP-d4	=	2-Chlorophenol-d4	47 - 103
1,2-DCB-d4	=	1,2-Dichlorobenzene-d4	33 - 100
NB-d5	=	Nitrobenzene-d5	42 - 126
2-FBP	=	2-Fluorobiphenyl	50 - 104
2,4,6-TBP	=	2,4,6-Tribromophenol	59 - 142
TP-d14	=	Terphenyl-d14	61 - 125

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10625 Fallstone Road, Houston, TX 77099
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Qualifiers

RL	The reporting limit for this analyte was raised because absence or presence at the routine or lower value could not be verified.
A	This sample was extracted at a single acid pH.
HTS	Sample was prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.
U	The analyte was not detected at or above the reporting limit.

Abbreviations and Symbols

ABN	Acid Base Neutrals (Semivolatile Compounds)
AES	Atomic Emission Spectrometer
BS	Blank Spike
CVAA	Cold Vapor Atomic Absorption
DCB	Decachlorobiphenyl
ECD	Electron Capture Detector
GC	Gas Chromatograph
ICP	Inductively Coupled Plasma
ISTD	Internal Standard
LCS	Laboratory Control Sample
MS	Mass Spectrometer
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NA	Not Applicable
NPD	Nitrogen Phosphorous Detector
NR	Not Reported
PCB	Polychlorinatedbiphenyl
RL	Reporting Limit
RT	Retention Time

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RPD	Relative Percent Difference
TCLP	Toxicity Characteristic Leaching Procedure
TCMX	Tetrachloro-meta-xylene
VOA	Volatile Organic Analysis
#	Out of QC limits
>LR	The result was greater than the linear range.

Initial pressure in air analyses is the pressure at which the canister was received in psia (pounds *per* square inch absolute pressure).

The pH reported for Volatile liquid samples was tested using a 0-14 pH indicator strip for the purpose of verifying chemical preservation.

The statistical software used for the reporting of toxicity data is ToxCalc 5.0.32, Environmental Toxicity Data Analysis System 1994-2007 Tidepool Scientific Software.

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USEPA
DateShipped: 3/26/2019
CarrierName: START
AirbillNo: NA

CHAIN OF CUSTODY RECORD
ITC Tank Fire
Contact Name: Jeff Wright
Contact Phone: 225-278-8406

No: 6-032519-163956-0016
Cooler #: 16
Lab: EPA Region 6 Laboratory
Lab Phone: (281) 983-2100

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	Lab QC
	ITC-BB-04E-20190325-11	BB-04	EPA 8260 - VOCs	Surface Water	3/25/2019	11:58	3	40mL VOA	6C HCl	N
	ITC-BB-04E-20190325-11	BB-04	EPA 8270 - SVOCs	Surface Water	3/25/2019	11:58	2	1L Amber	6C	N
	ITC-BB-05E-20190325-11	BB-04	EPA 8260 - VOCs	Surface Water	3/25/2019	11:07	3	40mL VOA	6C HCl	N
	ITC-BB-05E-20190325-11	BB-04	EPA 8270 - SVOCs	Surface Water	3/25/2019	11:07	2	1L Amber	6C	N
	ITC-BB-05E-20190325-15	FieldQC	EPA 8260 - VOCs	Surface Water	3/25/2019	17:00	3	40mL VOA	6C HCl	N
	ITC-BB-09E-20190325-11	BB-09	EPA 8260 - VOCs	Surface Water	3/25/2019	10:44	3	40mL VOA	6C HCl	Y
	ITC-BB-09E-20190325-11	BB-09	EPA 8270 - SVOCs	Surface Water	3/25/2019	10:44	2	1L Amber	6C	Y
	TripBlank-06	FieldQC	EPA 8260 - VOCs	Surface Water	3/21/2019	13:00	2	40 mL VOA	6C HCl	N

Special Instructions: Fastest Available TAT

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/ Analysis	[illegible] - Weston	3/26/19 / 8:15	Michael J Ferlitt	3/26/19 8:15	Temp Blank = 2 °C.