

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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November 1, 2021

Jeremy Porter, Project Manager
Aspect Consulting, LLC
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Mr Porter:

Included are the results from the testing of material submitted on October 21, 2021 from the Spic'N Span 060172, F&BI 110422 project. There are 13 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Aspect Data
ASP1101R.DOC

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 21, 2020 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Spic'N Span 060172, F&BI 110422 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
110422 -01	VGAC-EFF-1-102121
110422 -02	VGAC-INF-1-102121

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

The concentration of several analytes exceeded the calibration range of the instrument. The data were flagged accordingly.

All other quality control requirements were acceptable.

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ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	VGAC-EFF-1-102121	Client:	Aspect Consulting, LLC
Date Received:	10/21/21	Project:	060172, F&BI 110422
Date Collected:	10/21/21	Lab ID:	110422-01 1/5.9
Date Analyzed:	10/23/21	Data File:	102235.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	900
APH EC9-12 aliphatics	720
APH EC9-10 aromatics	160

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	VGAC-INF-1-102121	Client:	Aspect Consulting, LLC
Date Received:	10/21/21	Project:	060172, F&BI 110422
Date Collected:	10/21/21	Lab ID:	110422-02 1/44
Date Analyzed:	10/23/21	Data File:	102236.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	109	70	130

	Concentration
Compounds:	ug/m3

APH EC5-8 aliphatics	34,000 ve
APH EC9-12 aliphatics	320,000 ve
APH EC9-10 aromatics	7,000

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ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	060172, F&BI 110422
Date Collected:	Not Applicable	Lab ID:	01-2391 MB
Date Analyzed:	10/22/21	Data File:	102210.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	83	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	<75
APH EC9-12 aliphatics	<25
APH EC9-10 aromatics	<25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	VGAC-EFF-1-102121	Client:	Aspect Consulting, LLC
Date Received:	10/21/21	Project:	060172, F&BI 110422
Date Collected:	10/21/21	Lab ID:	110422-01 1/5.9
Date Analyzed:	10/23/21	Data File:	102235.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	160 ve	93 ve	1,2-Dichloropropane	<1.4	<0.29
Dichlorodifluoromethane	4.7	0.94	1,4-Dioxane	<2.1	<0.59
Chloromethane	<22	<11	2,2,4-Trimethylpentane	<28	<5.9
F-114	<4.1	<0.59	Methyl methacrylate	<24	<5.9
Vinyl chloride	6.3	2.5	Heptane	<24	<5.9
1,3-Butadiene	<0.26	<0.12	Bromodichloromethane	<0.4	<0.059
Butane	<28	<12	Trichloroethene	<0.63	<0.12
Bromomethane	<14	<3.5	cis-1,3-Dichloropropene	<2.7	<0.59
Chloroethane	<16	<5.9	4-Methyl-2-pentanone	33	8.0
Vinyl bromide	<2.6	<0.59	trans-1,3-Dichloropropene	<2.7	<0.59
Ethanol	440 ve	240 ve	Toluene	120	31
Acrolein	0.85	0.37	1,1,2-Trichloroethane	<0.32	<0.059
Pentane	<17	<5.9	2-Hexanone	<24	<5.9
Trichlorofluoromethane	<13	<2.4	Tetrachloroethene	<40	<5.9
Acetone	66	28	Dibromochloromethane	<0.5	<0.059
2-Propanol	<51	<21	1,2-Dibromoethane (EDB)	<0.45	<0.059
1,1-Dichloroethene	<2.3	<0.59	Chlorobenzene	<2.7	<0.59
trans-1,2-Dichloroethene	<2.3	<0.59	Ethylbenzene	7.2	1.7
Methylene chloride	<200	<59	1,1,2,2-Tetrachloroethane	<0.81	<0.12
t-Butyl alcohol (TBA)	<72	<24	Nonane	<31	<5.9
3-Chloropropene	<9.2	<2.9	Isopropylbenzene	<15	<2.9
CFC-113	<4.5	<0.59	2-Chlorotoluene	<31	<5.9
Carbon disulfide	<37	<12	Propylbenzene	<15	<2.9
Methyl t-butyl ether (MTBE)	<11	<2.9	4-Ethyltoluene	<15	<2.9
Vinyl acetate	<42	<12	m,p-Xylene	31	7.2
1,1-Dichloroethane	<2.4	<0.59	o-Xylene	14	3.2
cis-1,2-Dichloroethene	<2.3	<0.59	Styrene	12	2.9
Hexane	45	13	Bromoform	<12	<1.2
Chloroform	<0.29	<0.059	Benzyl chloride	<0.31	<0.059
Ethyl acetate	<43	<12	1,3,5-Trimethylbenzene	<15	<2.9
Tetrahydrofuran	<3.5	<1.2	1,2,4-Trimethylbenzene	18	3.7
2-Butanone (MEK)	<17	<5.9	1,3-Dichlorobenzene	<3.5	<0.59
1,2-Dichloroethane (EDC)	0.64	0.16	1,4-Dichlorobenzene	<1.3	<0.22
1,1,1-Trichloroethane	<3.2	<0.59	1,2-Dichlorobenzene	<3.5	<0.59
Carbon tetrachloride	<1.9	<0.29	1,2,4-Trichlorobenzene	<4.4	<0.59
Benzene	<1.9	<0.59	Naphthalene	37	7.0
Cyclohexane	<41	<12	Hexachlorobutadiene	<1.3	<0.12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID: VGAC-INF-1-102121	Client: Aspect Consulting, LLC
Date Received: 10/21/21	Project: 060172, F&BI 110422
Date Collected: 10/21/21	Lab ID: 110422-02 1/44
Date Analyzed: 10/23/21	Data File: 102236.D
Matrix: Air	Instrument: GCMS7
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	127	70	130

Compounds:	Concentration		Compounds:	Concentration	
	ug/m3	ppbv		ug/m3	ppbv
Propene	130	76	1,2-Dichloropropane	12	2.6
Dichlorodifluoromethane	<22	<4.4	1,4-Dioxane	<16	<4.4
Chloromethane	<160	<79	2,2,4-Trimethylpentane	<210	<44
F-114	<31	<4.4	Methyl methacrylate	<180	<44
Vinyl chloride	<11	<4.4	Heptane	<180	<44
1,3-Butadiene	<1.9	<0.88	Bromodichloromethane	<2.9	<0.44
Butane	<210	<88	Trichloroethene	770	140
Bromomethane	<100	<26	cis-1,3-Dichloropropene	<20	<4.4
Chloroethane	<120	<44	4-Methyl-2-pentanone	<180	<44
Vinyl bromide	<19	<4.4	trans-1,3-Dichloropropene	<20	<4.4
Ethanol	480	260	Toluene	<830	<220
Acrolein	46	20	1,1,2-Trichloroethane	<2.4	<0.44
Pentane	<130	<44	2-Hexanone	<180	<44
Trichlorofluoromethane	<99	<18	Tetrachloroethene	8,200 ve	1,200 ve
Acetone	9,700 ve	4,100 ve	Dibromochloromethane	<3.7	<0.44
2-Propanol	<380	<150	1,2-Dibromoethane (EDB)	<3.4	<0.44
1,1-Dichloroethene	<17	<4.4	Chlorobenzene	<20	<4.4
trans-1,2-Dichloroethene	28	7.1	Ethylbenzene	120	28
Methylene chloride	<1,500	<440	1,1,2,2-Tetrachloroethane	<6	<0.88
t-Butyl alcohol (TBA)	<530	<180	Nonane	<230	<44
3-Chloropropene	<69	<22	Isopropylbenzene	<110	<22
CFC-113	<34	<4.4	2-Chlorotoluene	<230	<44
Carbon disulfide	<270	<88	Propylbenzene	210	43
Methyl t-butyl ether (MTBE)	<79	<22	4-Ethyltoluene	120	23
Vinyl acetate	<310	<88	m,p-Xylene	300	70
1,1-Dichloroethane	<18	<4.4	o-Xylene	120	27
cis-1,2-Dichloroethene	370	93	Styrene	<37	<8.8
Hexane	<160	<44	Bromoform	<91	<8.8
Chloroform	12	2.5	Benzyl chloride	<2.3	<0.44
Ethyl acetate	<320	<88	1,3,5-Trimethylbenzene	<110	<22
Tetrahydrofuran	<26	<8.8	1,2,4-Trimethylbenzene	560	110
2-Butanone (MEK)	1,500	520	1,3-Dichlorobenzene	<26	<4.4
1,2-Dichloroethane (EDC)	66	16	1,4-Dichlorobenzene	13	2.2
1,1,1-Trichloroethane	<24	<4.4	1,2-Dichlorobenzene	29	4.8
Carbon tetrachloride	<14	<2.2	1,2,4-Trichlorobenzene	<33	<4.4
Benzene	100	32	Naphthalene	1,200	220
Cyclohexane	<300	<88	Hexachlorobutadiene	<9.4	<0.88

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ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	060172, F&BI 110422
Date Collected:	Not Applicable	Lab ID:	01-2391 MB
Date Analyzed:	10/22/21	Data File:	102210.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	84	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1.2	<0.7	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.49	<0.1	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<0.7	<0.1	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<4.8	<2	Trichloroethene	<0.11	<0.02
Bromomethane	<2.3	<0.6	cis-1,3-Dichloropropene	<0.45	<0.1
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<4.1	<1
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5	<4	Toluene	<19	<5
Acrolein	<0.11	<0.05	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<3	<1	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35	<10	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<1.6	<0.5	Isopropylbenzene	<2.5	<0.5
CFC-113	<0.77	<0.1	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<2.5	<0.5
Methyl t-butyl ether (MTBE)	<1.8	<0.5	4-Ethyltoluene	<2.5	<0.5
Vinyl acetate	<7	<2	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052	<0.01
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<2.5	<0.5
Tetrahydrofuran	<0.59	<0.2	1,2,4-Trimethylbenzene	<2.5	<0.5
2-Butanone (MEK)	<2.9	<1	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.26	<0.05
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/21

Date Received: 10/21/21

Project: Spic'N Span 060172, F&BI 110422

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 110450-01 1/6.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	640	630	2
APH EC9-12 aliphatics	ug/m3	2,800	2,800	0
APH EC9-10 aromatics	ug/m3	<170	<170	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	110	70-130
APH EC9-12 aliphatics	ug/m3	67	111	70-130
APH EC9-10 aromatics	ug/m3	67	96	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/21

Date Received: 10/21/21

Project: Spic'N Span 060172, F&BI 110422

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 110450-01 1/6.7 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	<8.1	<8.1	nm
Dichlorodifluoromethane	ug/m3	100	100	0
Chloromethane	ug/m3	<25	<25	nm
F-114	ug/m3	<4.7	<4.7	nm
Vinyl chloride	ug/m3	<1.7	<1.7	nm
1,3-Butadiene	ug/m3	0.59	0.59	0
Butane	ug/m3	<32	<32	nm
Bromomethane	ug/m3	<16	<16	nm
Chloroethane	ug/m3	<18	<18	nm
Vinyl bromide	ug/m3	<2.9	<2.9	nm
Ethanol	ug/m3	82	90	9
Acrolein	ug/m3	1.4	1.3	7
Pentane	ug/m3	<20	<20	nm
Trichlorofluoromethane	ug/m3	<15	<15	nm
Acetone	ug/m3	280	280	0
2-Propanol	ug/m3	<58	<58	nm
1,1-Dichloroethene	ug/m3	<2.7	<2.7	nm
trans-1,2-Dichloroethene	ug/m3	<2.7	<2.7	nm
Methylene chloride	ug/m3	<230	<230	nm
t-Butyl alcohol (TBA)	ug/m3	<81	<81	nm
3-Chloropropene	ug/m3	<10	<10	nm
CFC-113	ug/m3	<5.1	<5.1	nm
Carbon disulfide	ug/m3	<42	<42	nm
Methyl t-butyl ether (MTBE)	ug/m3	<12	<12	nm
Vinyl acetate	ug/m3	<47	<47	nm
1,1-Dichloroethane	ug/m3	<2.7	<2.7	nm
cis-1,2-Dichloroethene	ug/m3	<2.7	<2.7	nm
Hexane	ug/m3	<24	<24	nm
Chloroform	ug/m3	0.85	0.85	0
Ethyl acetate	ug/m3	<48	<48	nm
Tetrahydrofuran	ug/m3	<4	<4	nm
2-Butanone (MEK)	ug/m3	<20	<20	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.27	<0.27	nm
1,1,1-Trichloroethane	ug/m3	<3.7	<3.7	nm
Carbon tetrachloride	ug/m3	<2.1	<2.1	nm
Benzene	ug/m3	2.6	2.6	0
Cyclohexane	ug/m3	<46	<46	nm
1,2-Dichloropropane	ug/m3	<1.5	<1.5	nm
1,4-Dioxane	ug/m3	<2.4	<2.4	nm
2,2,4-Trimethylpentane	ug/m3	<31	<31	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/21

Date Received: 10/21/21

Project: Spic'N Span 060172, F&BI 110422

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 110450-01 1/6.7 (Duplicate, continued)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<27	<27	nm
Heptane	ug/m3	<27	<27	nm
Bromodichloromethane	ug/m3	<0.45	<0.45	nm
Trichloroethene	ug/m3	1.9	1.9	0
cis-1,3-Dichloropropene	ug/m3	<3	<3	nm
4-Methyl-2-pentanone	ug/m3	<27	<27	nm
trans-1,3-Dichloropropene	ug/m3	<3	<3	nm
Toluene	ug/m3	<130	<130	nm
1,1,2-Trichloroethane	ug/m3	<0.37	<0.37	nm
2-Hexanone	ug/m3	<27	<27	nm
Tetrachloroethene	ug/m3	<45	<45	nm
Dibromochloromethane	ug/m3	<0.57	<0.57	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.51	<0.51	nm
Chlorobenzene	ug/m3	<3.1	<3.1	nm
Ethylbenzene	ug/m3	<2.9	<2.9	nm
1,1,2,2-Tetrachloroethane	ug/m3	<0.92	<0.92	nm
Nonane	ug/m3	56	58	4
Isopropylbenzene	ug/m3	<16	<16	nm
2-Chlorotoluene	ug/m3	<35	<35	nm
Propylbenzene	ug/m3	<16	<16	nm
4-Ethyltoluene	ug/m3	<16	<16	nm
m,p-Xylene	ug/m3	9.8	10	2
o-Xylene	ug/m3	4.1	4.0	2
Styrene	ug/m3	<5.7	<5.7	nm
Bromoform	ug/m3	<14	<14	nm
Benzyl chloride	ug/m3	<0.35	<0.35	nm
1,3,5-Trimethylbenzene	ug/m3	<16	<16	nm
1,2,4-Trimethylbenzene	ug/m3	<16	<16	nm
1,3-Dichlorobenzene	ug/m3	<4	<4	nm
1,4-Dichlorobenzene	ug/m3	<1.5	<1.5	nm
1,2-Dichlorobenzene	ug/m3	<4	<4	nm
1,2,4-Trichlorobenzene	ug/m3	<5	<5	nm
Naphthalene	ug/m3	<1.8	<1.8	nm
Hexachlorobutadiene	ug/m3	<1.4	<1.4	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/21

Date Received: 10/21/21

Project: Spic'N Span 060172, F&BI 110422

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ug/m3	23	120	70-130
Dichlorodifluoromethane	ug/m3	67	98	70-130
Chloromethane	ug/m3	28	97	70-130
F-114	ug/m3	94	102	70-130
Vinyl chloride	ug/m3	35	91	70-130
1,3-Butadiene	ug/m3	30	79	70-130
Butane	ug/m3	32	82	70-130
Bromomethane	ug/m3	52	115	70-130
Chloroethane	ug/m3	36	97	70-130
Vinyl bromide	ug/m3	59	92	70-130
Ethanol	ug/m3	25	80	70-130
Acrolein	ug/m3	31	81	70-130
Pentane	ug/m3	40	77	70-130
Trichlorofluoromethane	ug/m3	76	109	70-130
Acetone	ug/m3	32	97	70-130
2-Propanol	ug/m3	33	87	70-130
1,1-Dichloroethene	ug/m3	54	98	70-130
trans-1,2-Dichloroethene	ug/m3	54	92	70-130
Methylene chloride	ug/m3	94	99	70-130
t-Butyl alcohol (TBA)	ug/m3	41	88	70-130
3-Chloropropene	ug/m3	42	85	70-130
CFC-113	ug/m3	100	105	70-130
Carbon disulfide	ug/m3	42	104	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	80	70-130
Vinyl acetate	ug/m3	48	75	70-130
1,1-Dichloroethane	ug/m3	55	98	70-130
cis-1,2-Dichloroethene	ug/m3	54	89	70-130
Hexane	ug/m3	48	76	70-130
Chloroform	ug/m3	66	97	70-130
Ethyl acetate	ug/m3	49	89	70-130
Tetrahydrofuran	ug/m3	40	82	70-130
2-Butanone (MEK)	ug/m3	40	92	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	96	70-130
1,1,1-Trichloroethane	ug/m3	74	102	70-130
Carbon tetrachloride	ug/m3	85	103	70-130
Benzene	ug/m3	43	88	70-130
Cyclohexane	ug/m3	46	76	70-130
1,2-Dichloropropane	ug/m3	62	111	70-130
1,4-Dioxane	ug/m3	49	98	70-130
2,2,4-Trimethylpentane	ug/m3	63	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/01/21

Date Received: 10/21/21

Project: Spic'N Span 060172, F&BI 110422

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: Laboratory Control Sample (continued)

Analyte	Reporting Units	Spike Level	Percent	Acceptance Criteria
			Recovery LCS	
Methyl methacrylate	ug/m3	55	102	70-130
Heptane	ug/m3	55	90	70-130
Bromodichloromethane	ug/m3	90	111	70-130
Trichloroethene	ug/m3	73	116	70-130
cis-1,3-Dichloropropene	ug/m3	61	111	70-130
4-Methyl-2-pentanone	ug/m3	55	114	70-130
trans-1,3-Dichloropropene	ug/m3	61	106	70-130
Toluene	ug/m3	51	101	70-130
1,1,2-Trichloroethane	ug/m3	74	121	70-130
2-Hexanone	ug/m3	55	102	70-130
Tetrachloroethene	ug/m3	92	120	70-130
Dibromochloromethane	ug/m3	120	114	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	116	70-130
Chlorobenzene	ug/m3	62	113	70-130
Ethylbenzene	ug/m3	59	84	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	112	70-130
Nonane	ug/m3	71	86	70-130
Isopropylbenzene	ug/m3	66	100	70-130
2-Chlorotoluene	ug/m3	70	98	70-130
Propylbenzene	ug/m3	66	95	70-130
4-Ethyltoluene	ug/m3	66	90	70-130
m,p-Xylene	ug/m3	120	91	70-130
o-Xylene	ug/m3	59	95	70-130
Styrene	ug/m3	58	94	70-130
Bromoform	ug/m3	140	120	70-130
Benzyl chloride	ug/m3	70	109	70-130
1,3,5-Trimethylbenzene	ug/m3	66	89	70-130
1,2,4-Trimethylbenzene	ug/m3	66	88	70-130
1,3-Dichlorobenzene	ug/m3	81	113	70-130
1,4-Dichlorobenzene	ug/m3	81	101	70-130
1,2-Dichlorobenzene	ug/m3	81	107	70-130
1,2,4-Trichlorobenzene	ug/m3	100	99	70-130
Naphthalene	ug/m3	71	97	70-130
Hexachlorobutadiene	ug/m3	140	110	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

ME 10/21/21

ME 10/21/21

Page # 1 of 1

Phone: 202.740.2129 Email: port@aspirationmag

060172

INVOICE TO

☒ Standard
☐ RUSH
Rush charges authorized by _____
SAMPLE DISPOSAL

SAMPLE DISPOSAL
☐ Default: Clean after 3 days
☐ Archive (Fee may apply)

ANALYSIS REQUESTED

Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. (*Hg)	Field Initial Time	Final Vac. (*Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN	TO15 cVOCs	APH	Helium	Notes
Y6AC-EFF-2-102121	01	8529	242	IA / <u>SG</u>	10/21/21	29	1216	5	1221	X			X		
Y6AC-INF-1-102121	02	8207	301	IA / <u>SG</u>	↓	30	1223	5	1227	X			X		
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											

Samples received at 7:19 °C

FORMS\COG\COCTO-15.DOC

DATE	TIME
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10/21/21	1334
10/21/21	1335

100

[illegible]