



Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

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MEMORANDUM FOR THE RECORD

To: John Miano, Chief, Site Management Section, BWSC

From: Larry Immerman, Environmental Analyst, Site Management Section

Date: December 13, 2012

Subject: RE: **Framingham** - General Chemical Corporation, 133-135 Leland Street
RTN: 3-0019174
Tree Core Investigation in Wetlands South of GCC Facility

Introduction

The following information was taken from environmental reports on file with the Massachusetts Department of Environmental Protection (MassDEP). Since 1925, commercial property at 133-135 Leland Street has been used for oil and/or chemical solvent storage and retail. The current operators of the property, General Chemical Corporation (GCC) began operation at this location in 1960. An abbreviated breakdown of property use at 133-135 Leland Street is listed below:

1925-1936	Gulf Refining Company
1936-1960	Gulf Oil Company
1960-1979	Trinity Oil, Incorporation (*)
1960 to present	General Chemical Corporation

(*) In 1979, Trinity Oil, Inc. moved operations to 138 Leland Street.

GCC reported to MassDEP that from 1983 to 2000 at least fifty documented releases to the environment of either waste oil and/or chlorinated volatile organic compounds (chloroVOCs) occurred at the site. The reported releases ranged from 5 gallons to approximately 200 gallons. GCC has speculated that previous to 1983, an unknown number of undocumented releases of waste oil and chloroVOCs may have also occurred during

operations at the facility. GCC has been involved with environmental assessment and remediation work since approximately 1993, under MassDEP/Boston's Bureau of Waste Prevention (BWP) oversight. Although not confirmed, GCC has concluded from past shallow groundwater quality data that a dense non-aqueous phase liquid (DNAPL) consisting of chloroVOCs is likely present at the deeper portions of the aquifer at the facility. GCC's assessment work also determined that the chloroVOC groundwater contamination extends from 133-135 Leland Street, south and west, to New York Central Lines LLC property, MWRA's Sudbury Aqueduct easement, residential properties at 91 and 91A Leland Street, and undeveloped land owned by Exelon Framingham, LLC, and Century Estates Realty. From June through September 2012, GCC underwent closure operations at 133-135 Leland Street facility. MassDEP's Field Assessment Support Team and Boston/MassDEP/BWP program were involved with facility closure oversight. In May 2012, MassDEP decided to utilize tree core sampling technology to obtain additional information about chloroVOC contamination at the site. The remainder of this Memorandum describes tree core sampling conducted by MassDEP's Site Discovery (SD) group in July, September, and October of 2012.

2012 MassDEP Site Discovery Field Work

July 11, 2012: Tree core samples (TC-1 through TC-9) were extracted from nine hardwood trees using an increment borer. The trees selected for sampling were located at Exelon Framingham, LLC property, along their access road, and Century Estates Realty property. The cores were approximately 2.0-inches in length and 3/16-inches in diameter. Upon extraction, the core samples were immediately removed from the extractor tool, put into a 20 milliliter (ml) amber vial, and crimp sealed with an aluminum cap equipped with a silicon/Teflon septum. The vials were transported in a cooler at room temperature to MassDEP's Northeast Regional Office Laboratory (NERO Lab) for VOC screening.

September 27, 2012: Tree core samples (TC-10 through TC-12) were extracted from three hardwood trees using an increment borer as described above. The trees selected for sampling were located at GCC and Exelon Framingham, LLC property. The vials were transported in a cooler at room temperature to MassDEP's NERO Lab for VOC screening.

October 11, 2012: Tree core samples (TC-13 through TC-21) were extracted from hardwood trees using an increment borer as described above. The trees selected for sampling were located on GCC, Exelon Framingham LLC, and Century Estates property. The sample vials were transported in a cooler at room temperature to MasDEP's NERO Lab for VOC screening.

NERO Lab Results

The tree core samples were allowed to equilibrate at room temperature for at least 48 hours to allow for maximum headspace development. The tree core samples were screened for VOCs using a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and dry-electrolytic conductivity detector (ELCD), in series. A one ml sample was removed from the headspace of each sample vial using a gas tight syringe and directly injected on to the GC. The results of the GC screening identified chloroVOCs in TC-5, TC-6, and TC-11. VOCs were not identified in the remaining tree core samples. Please see "Table 1" and attached "NERO Lab Reports" for further information.

Discussion

The tree core sample results were reported in units of micrograms per cubic meter (ug/m³). These units describe the concentration of the compounds detected in the vial into which the tree core samples were contained, and equilibrated. The concentration reported in ug/m³ does not represent the concentration of the compound within the tree that was sampled. As such, the results must be evaluated relative to each other. The results show that volatile organic compounds were detected in tree cores TC-5, TC-6 and TC-11, and that the total VOC amount measured in TC-5 is higher than the total levels measured in either TC-6 or TC-11. The relationship between the tree core results, and levels of compounds detected in soil or groundwater at the location of the tree core sample is not known.

Table 1 – Framingham Tree Core Results (ug/M³ Vial Concentration)

Sample ID	MTBE	1,1-DCA	cis1,2-DCE	1,1,1-TCA	1,2-DCA	TCE	PCE
TC-5	230	1600	6400	nd	1600	280	130
TC-6	nd	1200	770	nd	230	nd	12
TC-11	nd	1300	650	280	nd	21	40

Limitations

The scope of work performed by MassDEP at Exelon Framingham, LLC, GCC, and Century Estates property was a limited investigation and was not intended to be a comprehensive assessment of subsurface conditions at this location. Any findings by MassDEP were based on this limited assessment. Furthermore, these findings do not apply to aspects of the site that were not reviewed during this investigation and do not limit MassDEP’s authority to take or require additional actions if deemed necessary at some future time.

2012 MassDEP Tree Core Data Points

TREE CORE ID	LONGITUDE W	LATITUDE N	TREE CORE ID	LONGITUDE W	LATITUDE N
TC-1	-71 23.948	42 16.069	TC-12	-71 24.073	42 16.145
TC-2	-71 23.966	42 16.093	TC-13	-71 23.972	42 16.039
TC-3	-71 23.973	42 16.127	TC-14	-71 23.969	42 16.046
TC-4	-71 23.975	42 16.168	TC-15	-71 23.955	42 16.040
TC-5	-71 24.032	42 16.207	TC-16	-71 23.946	42 16.043
TC-6	-71 24.023	42 16.176	TC-17	-71 23.936	42 16.040
TC-7	-71 24.009	42 16.062	TC-18	-71 23.995	42 16.083
TC-8	-71 23.993	42 16.056	TC-19	-71 24.045	42 16.133
TC-9	-71 23.967	42 16.034	TC-20	-71 24.044	42 16.121
TC-10	-71 24.059	42 16.177	TC-21	-71 24.033	42 16.105
TC-11	-71 24.037	42 16.176			

October 11, 2012 MassDEP Tree Core Field Log

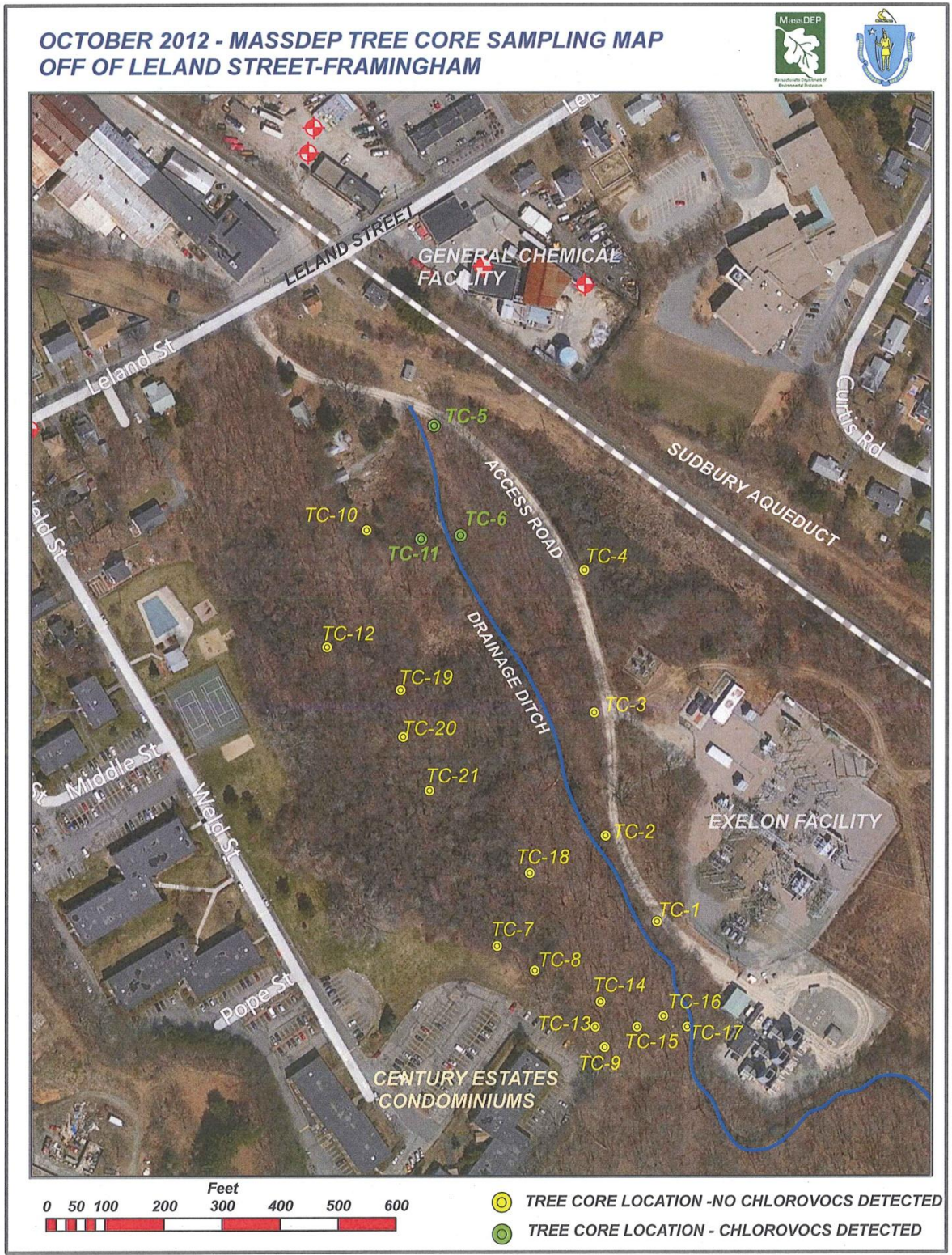
10/11/12
GPS Coordinates
91A Leland St.
Driveway
42° 16.197' N
71° 24.057' W
(Larry's)
Tree Core
between 91A driveway and wetland
42° 16.171' N
071° 24.053' W
Tree Core
behind the goat pen
42° 16.176' N
071° 24.037' W
Ditch Crossing Pt.
42° 16.067' N
071° 23.952' W

Tree Core
Condo Throat #1
42° 16.040' N
071° 23.971' W
Back Corner Condo Bldg.
Edge of Parking Lot
42° 16.038' N
071° 23.972' W
Tree Core
Condo Throat #2
42° 16.049' N
071° 23.969' W
Tree Core
Condo Throat #3
42° 16.040' N
071° 23.955' W
Tree Core
Condo Throat #4
42° 16.043' N
071° 23.945' W

Tree Core
Condo Throat #5
42° 16.040' N
071° 23.936' W
Tree Core
Center #6
N 42° 16.083'
W 071° 23.996'
Tree Core
Center #7
46° 16.134' N
071° 24.045' W
Tree Core #8
center
42° 16.121' N
071° 24.044' W
Tree Core #9
center
42° 16.106' N
071° 24.034' W

Blue Ribbon on Tree
in Swamp ~~at~~ ^{at} Fallen Tree
w/ Root Ball
42° 16.146' N
071° 24.073' W
Larry's Tree Core ~~at~~ ^{at} ~~WPP~~
Blue Ribbon labeled 10
Beginning of Path ~~at~~ driveway
42° 16.167' N
071° 24.050' W

MassDEP Tree Core Locations



NERO LAB REPORTS



Massachusetts Department of Environmental Protection
 Northeast Regional Office/Bureau of Waste Site Cleanup
Analytical Screening Data Report
AIR SAMPLES

Release Tracking Number:

3-0019174

Town:

FRAMINGHAM

Name of Site	Address	Sample Collected By
GENERAL CHEMICAL	133 LELAND STREET	L. IMMERMANN

Sample Location	Field ID	Lab ID	Date Sampled	Date Analyzed
EXCELON ACCESS RD-NEAR GZ-15S/R	TC-1	P7095 / E7095	7/11/12	7/16/12
OFF OF EXCELON ACCESS ROAD	TC-2	P7096 / E7096	7/11/12	7/16/12
OFF OF EXCELON ACCESS ROAD	TC-3	P7097 / E7097	7/11/12	7/16/12
EXCELON ACCESS RD-NEAR GZ-14S/M	TC-4	P7098 / E7098	7/11/12	7/16/12

SAMPLE RESULTS		Field Identification				
		Est RL	TC-1	TC-2	TC-3	TC-4
ANALYTE	Detector	ug/M ³	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)
methyl(t)butylether	PID	51	ND	ND	ND	ND
benzene	PID	49	ND	ND	ND	ND
toluene	PID	50	ND	ND	ND	ND
ethylbenzene	PID	101	ND	ND	ND	ND
total xylenes	PID	101	ND	ND	ND	ND
(1,2,4)-trimethylbenzene	PID	102	ND	ND	ND	ND
naphthalene	PID	524	ND	ND	ND	ND
T. unk. non-chloro (as xylene)	PID	101	ND	ND	ND	ND
methylene chloride	ELCD	49	ND	ND	ND	ND
(1,1)-dichloroethane	ELCD	49	ND	ND	ND	ND
cis(1,2)-dichloroethene	ELCD	48	ND	ND	ND	ND
(1,1,1)-trichloroethane	ELCD	50	ND	ND	ND	ND
(1,2)-dichloroethane	ELCD	49	ND	ND	ND	ND
trichloroethene	ELCD	50	ND	ND	ND	ND
tetrachloroethene	ELCD	50	ND	ND	ND	ND
chlorobenzene	ELCD	51	ND	ND	ND	ND
unk. chloro VOC	ELCD	50	ND	ND	ND	ND
unk chloro VOC	ELCD	50	ND	ND	ND	ND
unk. chloro VOC	ELCD	50	ND	ND	ND	ND

COMMENTS
 1. ND means target compound not detected. 2. (TR) means a target compound was found at a trace level - less than it's reportable level "RL", but above it's method detection limit (MDL).

Sampling Method: NERO Lab	Instrumentation: SRI	Analytical Method: NERO
Daily Quality Control Standards: -Air Blanks	-QC Calibration Check Standard (gaseous)	
Chromatograms Attached? Yes	Sample(s) Analyzed By: <i>[Signature]</i>	



Massachusetts Department of Environmental Protection
 Northeast Regional Office/Bureau of Waste Site Cleanup

**Analytical Screening Data Report
 AIR SAMPLES**

Release Tracking Number:

3-0019174

Town:

FRAMINGHAM

Name of Site	Address	Sample Collected By
GENERAL CHEMICAL	133 LELAND STREET	L. IMMERMANN

Sample Location	Field ID	Lab ID	Date Sampled	Date Analyzed
91 LELAND STREET-NEAR CDW-12	TC-5	P7099 / E7099	7/11/12	7/16/12
NEAR GZ-16DD	TC-6	P7100 / E7100	7/11/12	7/16/12
END OF WELD ST-OFF OF PARKING LOT	TC-7	P7101 / E7101	7/11/12	7/16/12
END OF WELD ST- OFF OF PARKING LOT	TC-8	P7102 / E7102	7/11/12	7/16/12

SAMPLE RESULTS		Field Identification				
Ambient Air Concentration			TC-5	TC-6	TC-7	TC-8
ANALYTE	Detector	Est RL ug/M ³	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)
methyl(t)butylether	PID	51	230	ND	ND	ND
benzene	PID	49	ND	ND	ND	ND
toluene	PID	50	ND	306	ND	ND
ethylbenzene	PID	101	ND	ND	ND	ND
total xylenes	PID	101	ND	ND	ND	ND
(1,2,4)-trimethylbenzene	PID	102	ND	ND	ND	ND
naphthalene	PID	524	ND	ND	ND	ND
T. unk. non-chloro (as xylene)	PID	101	ND	ND	ND	ND
methylene chloride	ELCD	49	ND	ND	ND	ND
(1,1)-dichloroethane	ELCD	49	1600	1200	ND	ND
cis(1,2)-dichloroethene	ELCD	48	6400	770	ND	ND
(1,1,1)-trichloroethane	ELCD	50	ND	ND	ND	ND
(1,2)-dichloroethane	ELCD	49	1600	230	ND	ND
trichloroethene	ELCD	50	280	ND	ND	ND
tetrachloroethene	ELCD	50	130	12	ND	ND
chlorobenzene	ELCD	51	ND	ND	ND	ND
unk. chloro VOC	ELCD	50	ND	ND	ND	ND
unk chloro VOC	ELCD	50	ND	ND	ND	ND
unk. chloro VOC	ELCD	50	ND	ND	ND	ND

COMMENTS
 1. ND means target compound not detected. 2. (TR) means a target compound was found at a trace level - less than it's reportable level "RL", but above it's method detection limit (MDL).

Sampling Method: NERO Lab	Instrumentation: SRI	Analytical Method: NERO
Daily Quality Control Standards: -Air Blanks -QC Calibration Check Standard (gaseous)		
Chromatograms Attached? Yes	Sample(s) Analyzed By: <i>L. Immermann</i>	



Massachusetts Department of Environmental Protection
 Northeast Regional Office/Bureau of Waste Site Cleanup

Analytical Screening Data Report
AIR SAMPLES

Release Tracking Number:

3-0019174

Town:

FRAMINGHAM

Name of Site	Address	Sample Collected By		
GENERAL CHEMICAL	133 LELAND STREET	L. IMMERMANN		
Sample Location	Field ID	Lab ID	Date Sampled	Date Analyzed
END OF WELD ST-OFF OF PARKING LOT	TC-9	P7103 / E7103	7/11/12	7/16/12

SAMPLE RESULTS		Field Identification				
		Est RL	Estimated Air Conc.	Estimated Air Conc.	Estimated Air Conc.	Estimated Air Conc.
ANALYTE	Detector	ug/M ³	(ug/M ³)	(ug/M ³)	(ug/M ³)	(ug/M ³)
methyl(t)butylether	PID	51	ND			
benzene	PID	49	ND			
toluene	PID	50	ND			
ethylbenzene	PID	101	ND			
total xylenes	PID	101	ND			
(1,2,4)-trimethylbenzene	PID	102	ND			
naphthalene	PID	524	ND			
T. unk. non-chloro (as xylene)	PID	101	ND			
methylene chloride	ELCD	49	ND			
(1,1)-dichloroethane	ELCD	49	ND			
cis(1,2)-dichloroethene	ELCD	48	ND			
(1,1,1)-trichloroethane	ELCD	50	ND			
(1,2)-dichloroethane	ELCD	49	ND			
trichloroethene	ELCD	50	ND			
tetrachloroethene	ELCD	50	ND			
chlorobenzene	ELCD	51	ND			
unk. chloro VOC	ELCD	50	ND			
unk chloro VOC	ELCD	50	ND			
unk. chloro VOC	ELCD	50	ND			

COMMENTS
 1. ND means target compound not detected. 2. (TR) means a target compound was found at a trace level - less than it's reportable level "RL", but above it's method detection limit (MDL).

Sampling Method: NERO Lab	Instrumentation: SRI	Analytical Method: NERO
Daily Quality Control Standards: -Air Blanks	-QC Calibration Check Standard (gaseous)	
Chromatograms Attached? Yes	Sample(s) Analyzed By:	<i>[Signature]</i>



Massachusetts Department of Environmental Protection
 Northeast Regional Office/Bureau of Waste Site Cleanup
Analytical Screening Data Report
AIR SAMPLES

Release Tracking Number:

3-0019174

Town:

FRAMINGHAM

Name of Site	Address	Sample Collected By
COMMERCIAL PROPERTY	133 LELAND STREET	L. IMMERMANN / M. BESTER

Sample Location	Field ID	Lab ID	Date Sampled	Date Analyzed
OFF OF POWER COMPANY ACCESS RD	TC-10	P7207 / E7207	9/27/12	10/1/12
OFF OF POWER COMPANY ACCESS RD	TC-11	P7208 / E7208	9/27/12	10/1/12
OFF OF POWER COMPANY ACCESS RD	TC-12	P7209 / E7209	9/27/12	10/1/12

SAMPLE RESULTS Ambient Air Concentration		Field Identification				
		Est RL ug/M ³	TC-10 Estimated Air Conc. (ug/M ³)	TC-11 Estimated Air Conc. (ug/M ³)	TC-12 Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)
ANALYTE	Detector					
methyl(t)butylether	PID	99	ND	ND	ND	ND
benzene	PID	101	ND	ND	ND	
toluene	PID	100	ND	ND	ND	
ethylbenzene	PID	198	ND	ND	ND	
total xylenes	PID	198	ND	ND	ND	
(1,2,4)-trimethylbenzene	PID	200	ND	ND	ND	
naphthalene	PID	202	ND	ND	ND	
T. unk. non-chloro (as xylene)	PID	198	ND	ND	ND	
methylene chloride	ELCD	201	ND	ND	ND	
(1,1)-dichloroethane	ELCD	202	ND	1300	ND	
cis(1,2)-dichloroethene	ELCD	202	ND	650	ND	
(1,1,1)-trichloroethane	ELCD	200	ND	280	ND	
(1,2)-dichloroethane	ELCD	201	ND	ND	ND	
trichloroethene	ELCD	202	ND	21 J (*)	ND	
tetrachloroethene	ELCD	200	ND	40 J (*)	ND	
chlorobenzene	ELCD	98	ND	ND	ND	
unk. chloro VOC	ELCD	202	ND	ND	ND	
unk chloro VOC	ELCD	202	ND	ND	ND	
unk. chloro VOC	ELCD	202	ND	ND	ND	

COMMENTS
 1. ND means target compound not detected. 2. (J) means a target compound was found at a trace level - less than it's reportable level "RL", but above it's method detection limit (MDL). The MDL had been set at 3.14 times less than the RL. The RL was determined using a modified CAM method. The acceptable %RSD was equal to or less than 30%, and the acceptable linearity (r2) was 0.99 or greater for each curve. (*) = value was below MDL but peak was above instrument noise threshold.

Sampling Method: NERO Lab	Instrumentation: SRI	Analytical Method: NERO
Daily Quality Control Standards: -Air Blanks	-QC Calibration Check Standard (gaseous)	
Chromatograms Attached? Yes	Sample(s) Analyzed By: <i>[Signature]</i>	



Massachusetts Department of Environmental Protection
 Northeast Regional Office/Bureau of Waste Site Cleanup
Analytical Screening Data Report
AIR SAMPLES

Release Tracking Number:

3-0019174

Town:

FRAMINGHAM

Name of Site	Address	Sample Collected By
GCC	133 LELAND STREET	R LAMKIN / J MIANO

Sample Location	Field ID	Lab ID	Date Sampled	Date Analyzed
WETLANDS - EXELON PROPERTY	TC-13 (*1)	P7216 / E7216	10/11/12	10/16/12
WETLANDS - EXELON PROPERTY	TC-14 (*2)	P7217 / E7217	10/11/12	10/16/12
WETLANDS - EXELON PROPERTY	TC-15 (*3)	P7218 / E7218	10/11/12	10/16/12
WETLANDS - EXELON PROPERTY	TC-16 (*4)	P7219 / E7219	10/11/12	10/16/12

SAMPLE RESULTS		Field Identification				
		Est RL	TC-13 (*1)	TC-14 (*2)	TC-15 (*3)	TC-16 (*4)
ANALYTE	Detector	ug/M ³	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)
methyl(t)butylether	PID	99	ND	ND	ND	ND
benzene	PID	101	ND	ND	ND	ND
toluene	PID	100	ND	ND	ND	ND
ethylbenzene	PID	198	ND	ND	ND	ND
total xylenes	PID	198	ND	ND	ND	ND
(1,2,4)-trimethylbenzene	PID	200	ND	ND	ND	ND
naphthalene	PID	202	ND	ND	ND	ND
T. unk. non-chloro (as xylene)	PID	198	ND	ND	ND	ND
methylene chloride	ELCD	201	ND	ND	ND	ND
(1,1)-dichloroethane	ELCD	202	ND	ND	ND	ND
cis(1,2)-dichloroethene	ELCD	202	ND	ND	ND	ND
(1,1,1)-trichloroethane	ELCD	200	ND	ND	ND	ND
(1,2)-dichloroethane	ELCD	201	ND	ND	ND	ND
trichloroethene	ELCD	202	ND	ND	ND	ND
tetrachloroethene	ELCD	200	ND	ND	ND	ND
chlorobenzene	ELCD	98	ND	ND	ND	ND
unk. chloro VOC	ELCD	202	ND	ND	ND	ND
unk chloro VOC	ELCD	202	ND	ND	ND	ND
unk. chloro VOC	ELCD	202	ND	ND	ND	ND

COMMENTS
 1. ND means target compound not detected. 2. (J) means a target compound was found at a trace level - less than it's reportable level "RL", but above it's method detection limit (MDL). The MDL had been set at 3.14 times less than the RL. The RL was determined using a modified CAM method. The acceptable %RSD was equal to or less than 30%, and the acceptable linearity (r2) was 0.99 or greater for each curve.

Sampling Method: NERO Lab	Instrumentation: SRI	Analytical Method: NERO
Daily Quality Control Standards: -Air Blanks	-QC Calibration Check Standard (gaseous)	
Chromatograms Attached? Yes	Sample(s) Analyzed By: <i>[Signature]</i>	



Massachusetts Department of Environmental Protection
 Northeast Regional Office/Bureau of Waste Site Cleanup
Analytical Screening Data Report
AIR SAMPLES

Release Tracking Number:

3-0019174

Town:

FRAMINGHAM

Name of Site	Address	Sample Collected By
GCC	133 LELAND STREET	R LAMKIN / J MIANO

Sample Location	Field ID	Lab ID	Date Sampled	Date Analyzed
WETLANDS-EXELON PROPERTY	TC-17 (*5)	P7220 / E7220	10/11/12	10/16/12
WETLANDS-EXELON PROPERTY	TC-18 (*6)	P7221 / E7221	10/11/12	10/16/12
WETLANDS-EXELON PROPERTY	TC-19 (*7)	P7222 / E7222	10/11/12	10/16/12
WETLANDS-EXELON PROPERTY	TC-20 (*8)	P7223 / E7223	10/11/12	10/16/12

SAMPLE RESULTS		Field Identification				
		Est RL ug/M ³	TC-17 (*5) Estimated Air Conc. (ug/M ³)	TC-18 (*6) Estimated Air Conc. (ug/M ³)	TC-19 (*7) Estimated Air Conc. (ug/M ³)	TC-20 (*8) Estimated Air Conc. (ug/M ³)
ANALYTE	Detector					
methyl(t)butylether	PID	99	ND	ND	ND	ND
benzene	PID	101	ND	ND	ND	ND
toluene	PID	100	ND	ND	ND	ND
ethylbenzene	PID	198	ND	ND	ND	ND
total xylenes	PID	198	ND	ND	ND	ND
(1,2,4)-trimethylbenzene	PID	200	ND	ND	ND	ND
naphthalene	PID	202	ND	ND	ND	ND
T. unk. non-chloro (as xylene)	PID	198	ND	ND	ND	ND
methylene chloride	ELCD	201	ND	ND	ND	ND
(1,1)-dichloroethane	ELCD	202	ND	ND	ND	ND
cis(1,2)-dichloroethane	ELCD	202	ND	ND	ND	ND
(1,1,1)-trichloroethane	ELCD	200	ND	ND	ND	ND
(1,2)-dichloroethane	ELCD	201	ND	ND	ND	ND
trichloroethene	ELCD	202	ND	ND	ND	ND
tetrachloroethene	ELCD	200	ND	ND	ND	ND
chlorobenzene	ELCD	98	ND	ND	ND	ND
unk. chloro VOC	ELCD	202	ND	ND	ND	ND
unk chloro VOC	ELCD	202	ND	ND	ND	ND
unk. chloro VOC	ELCD	202	ND	ND	ND	ND

COMMENTS
 1. ND means target compound not detected. 2. (J) means a target compound was found at a trace level - less than it's reportable level "RL", but above it's method detection limit (MDL). The MDL had been set at 3.14 times less than the RL. The RL was determined using a modified CAM method. The acceptable %RSD was equal to or less than 30%, and the acceptable linearity (r2) was 0.99 or greater for each curve.

Sampling Method: NERO Lab	Instrumentation: SRI	Analytical Method: NERO
Daily Quality Control Standards: -Air Blanks -QC Calibration Check Standard (gasbous)		
Chromatograms Attached? Yes	Sample(s) Analyzed By: <i>[Signature]</i>	



Massachusetts Department of Environmental Protection
 Northeast Regional Office/Bureau of Waste Site Cleanup
Analytical Screening Data Report
AIR SAMPLES

Release Tracking Number:

3-0019174

Town:

FRAMINGHAM

Name of Site	Address	Sample Collected By		
GCC	133 LELAND STREET	R LAMKIN / J MIANO		
Sample Location	Field ID	Lab ID	Date Sampled	Date Analyzed
WETLANDS-EXELON PROPERTY	TC-21 (*9)	P7224 / E7224	10/11/12	10/16/12

SAMPLE RESULTS		Field Identification				
		Est RL	TC-21 (*9)	Estimated Air Conc.	Estimated Air Conc.	Estimated Air Conc.
ANALYTE	Detector	ug/M ³	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)	Estimated Air Conc. (ug/M ³)
Ambient Air Concentration						
methyl(t)butylether	PID	99	ND			
benzene	PID	101	ND			
toluene	PID	100	ND			
ethylbenzene	PID	198	ND			
total xylenes	PID	198	ND			
(1,2,4)-trimethylbenzene	PID	200	ND			
naphthalene	PID	202	ND			
T. unk. non-chloro (as xylene)	PID	198	ND			
methylene chloride	ELCD	201	ND			
(1,1)-dichloroethane	ELCD	202	ND			
cis(1,2)-dichloroethene	ELCD	202	ND			
(1,1,1)-trichloroethane	ELCD	200	ND			
(1,2)-dichloroethane	ELCD	201	ND			
trichloroethene	ELCD	202	ND			
tetrachloroethene	ELCD	200	ND			
chlorobenzene	ELCD	98	ND			
unk. chloro VOC	ELCD	202	ND			
unk chloro VOC	ELCD	202	ND			
unk. chloro VOC	ELCD	202	ND			

COMMENTS
 1. ND means target compound not detected. 2. (J) means a target compound was found at a trace level - less than it's reportable level "RL", but above it's method detection limit (MDL). The MDL had been set at 3.14 times less than the RL. The RL was determined using a modified CAM method. The acceptable %RSD was equal to or less than 30%, and the acceptable linearity (r2) was 0.99 or greater for each curve.

Sampling Method: NERO Lab	Instrumentation: SRI	Analytical Method: NERO
Daily Quality Control Standards: -Air Blanks	-QC Calibration Check Standard (gaseous)	
Chromatograms Attached? Yes	Sample(s) Analyzed By: <i>[Signature]</i>	