

engineering and constructing a better tomorrow

March 17, 2008

Division of Environmental Remediation Remedial Bureau E, 12<sup>th</sup> Floor New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233-7017

Attention: Mr. Benjamin Rung, Project Manager

Subject:Addendum to Vapor Intrusion Evaluation Letter ReportBecker Electronics Manufacturing Site - Site No. 4-20-007MACTEC Engineering and Consulting, P.C. Project No. 3612072072

Dear Mr. Rung,

MACTEC Engineering and Consulting, P.C., (MACTEC), under contract to the New York State Department of Environmental Conservation (NYSDEC) is pleased to present this report documenting additional air sampling activities and results at the Becker Electronics Manufacturing Site # 4-20-007 (Site). In 2007, MACTEC conducted a Vapor Intrusion Evaluation (VIE) for the NYSDEC under Immediate Investigation Work Assignment (IIWA) #D004434-02, dated January 5, 2007. The findings of the VIE were presented in a Vapor Intrusion Evaluation Letter Report dated July 30, 2007.

This Addendum to the VIE Letter Report provides the results of additional air sampling activities that were completed at one residence in January 2008 at the request of the NYSDEC. The additional sampling event consisted of a second round of sub-slab soil vapor and basement air samples that were collected at the residence identified as location V-9 in the VIE Report. The activities completed and the analytical results are discussed below. Enclosures include: tables

presenting the final analytical results, an indoor air questionnaire and inventory record, and a Data Usability Summary Report (DUSR).

The air samples were obtained over a 24-hour period from noon on January 9, 2008 to noon on January 10, 2008. MACTEC completed an indoor air survey, and obtained sub-slab soil vapor and indoor air samples, as agreed upon with the homeowner and as deemed appropriate by the NYSDEC and the New York State Department of Health (NYSDOH).

The indoor air survey and product inventory were conducted using the modified NYSDOH "Indoor Air Quality Questionnaire and Building Inventory" (inventory form) form. A parts per billion (ppb) MiniRae PID was used to scan inventoried items that may have been off-gassing VOCs. VOCs that were listed on the household container and were also included on the air sample analytical target compound list were noted on the inventory form, along with any PID readings. The completed inventory form is attached.

The sub-slab soil vapor samples were collected at the same location that was sampled in 2006. A oneinch diameter hole was drilled two inches into the building's concrete floor using an electric hammer drill. The hole was continued with a 3/8-inch drill bit, through the building slab to a depth of approximately three-inches below the slab. Drill cuttings and dust from the area were removed. A <sup>1</sup>/4inch piece of Teflon tubing was inserted into the hole, so that the bottom of the tubing was below the slab floor and the annular space between the tubing and concrete was sealed with hydrated bentonite clay. One 60 cubic centimeter (cc) volume of air was purged from the tubing with a polyethylene syringe. The syringe was capped and the air released outside the building as to not interfere with the indoor air sample collection. A 6-liter SUMMA<sup>®</sup>-type canister with a 24-hour flow valve was then connected to the tubing with Swagelok<sup>®</sup> fittings. Two indoor air samples consisting of a prime field sample and a duplicate sample were collected in 6-liter SUMMA<sup>®</sup>-type canisters from the basement level in the vicinity of the sub-slab vapor sample collection point. An ambient air sample was positioned outside the residence to document outside air conditions during the indoor sampling event.

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The samples were analyzed by Con-Test Analytical Laboratory of East Longmeadow, Massachusetts for VOCs via USEPA Method TO-15. Laboratory analysis included Category B deliverables. Upon receipt of the analytical laboratory data, MACTEC determined that the laboratory data met the project specific criteria for data quality and data use. The completed Data Usability Summary Report (DUSR) and validated Form 1's are attached. Validated results are presented in Table 1.

Table 2 compares selected results from the 2006 and 2007 sampling events. Results for tetrachloroethene (PCE), trichloroethene (TCE) and 1,1,1-trichloroethane (1,1,1-TCA) are shown. The NYSDOH has promulgated guidance values for soil vapor for these compounds. Other organic compounds, if detected, were identified at low levels or are not compounds that are associated with the historic release at the Becker Site. The NYSDOH guidance values are only applicable when evaluating sub-slab soil vapor samples in relation to indoor air concentrations. The results indicate that levels of chlorinated solvent-type organic contaminants in the 2008 samples are below the NYSDOH guidance criteria.

If you have any questions or concerns, please contact either John Peterson or Eric Sandin at 207-775-5401.

Sincerely,

**MACTEC Engineering and Consulting, P.C.** 

John W. Peterson Principal

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Eric C. Sandin Project Manager

Enclosures (2)

#### **Table 1: Air VOC Results**

Location Name	SS-009 420007-SS00902 1/10/2008		BA-009 420007-BA00902 1/10/2008		BA-009 420007-BA00902DUP 1/10/2008		AA-009 420007-AA00902		
Field Sample ID									
Field Sample Date							1/10/2008		
QC Code	FS	5	FS		FD		FS		
Parameter Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
1,1,1-Trichloroethane	90		1.4		1.3		0.19	U	
1,1,2,2-Tetrachloroethane	0.24	U	0.24		0.24	U	0.24	U	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.54	U	0.54	U	0.54	U	0.54	U	
1,1,2-Trichloroethane	0.19	U	0.19	U	0.19	U	0.19	U	
1,1-Dichloroethane	17		0.14	U	0.14	U	0.14	U	
1,1-Dichloroethene	1.7		0.28	U	0.28	U	0.28	U	
1,2,4-Trichlorobenzene	0.52	U	0.52	U	0.52	U	0.52	U	
1,2,4-Trimethylbenzene	8.1		1.6	J	0.21	J	0.18	U	
1,2-Dibromoethane	0.27	U	0.27	U	0.27	U	0.27	U	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.49	U	0.49	U	0.49	U	0.49	U	
1,2-Dichlorobenzene	0.21	U	0.21	U	0.21	U	0.21	U	
1,2-Dichloroethane	0.14	U	0.14	U	0.14	U	0.14	U	
1,2-Dichloropropane	0.17	U	0.17	U	0.17	U	0.17	U	
1,3,5-Trimethylbenzene	2.5		0.83	J	0.18	UJ	0.18	U	
1,3-Dichlorobenzene	0.21	U	0.21	U	0.21	U	0.21	U	
1,4-Dichlorobenzene	0.21	U	0.21	U	0.21	U	0.21	U	
2-Butanone	2.8		2.2	J	0.43	J	2.8		
2-Hexanone	1.2		0.8	J	0.14	UJ	0.46		
2-Propanol	1.3		0.69		0.43		0.58		
4-Ethyltoluene	1.5		0.41	J	0.18	UJ	0.18	U	
4-Methyl-2-pentanone	0.52		0.14	U	0.14	U	0.14	U	
Acetone	37	J	10	J	4.3	J	9.6	J	
Benzene	0.74		0.47		0.4		0.42		
Benzyl chloride	0.19	U	0.19	U	0.19	U	0.19	U	
Bromodichloromethane	0.24	U	0.23		0.24	U	0.24	U	
Bromoform	0.36	U	0.36	U	0.36	U	0.36	U	
Bromomethane	0.28	U	0.28	U	0.28	U	0.28	U	
Butadiene, 1,3-	0.16	U	0.16	U	0.16	U	0.16	U	
Carbon disulfide	12		0.22	U	0.22	U	0.22	U	
Carbon tetrachloride	0.22		0.31		0.31		0.31		
Chlorobenzene	0.55		0.17	U	0.17	U	0.17	U	
Chlorodibromomethane	0.31	U	0.31	U	0.31	U	0.31	U	
Chloroethane	0.1	U	0.1	U	0.1	U	0.1	U	
Chloroform	0.99		0.17	U	0.17	U	0.17	U	
Chloromethane	0.51		0.78		0.78		0.94		
Cis-1,2-Dichloroethene	0.44		0.14	U	0.14	U	0.14	U	
cis-1,3-Dichloropropene	0.16	U	0.16	U	0.16	U	0.16	U	
Cyclohexane	1.9		1	J	0.12	UJ	0.12	U	
Dichlorodifluoromethane	1.9		1.8		1.9		1.9		
Ethanol	9.4	J	10	J	10	J	4.3	J	
Ethyl acetate	0.55		0.26	U	0.26	U	0.26	U	
Ethyl benzene	17		0.27		0.24		0.16	U	
Heptane	4		1.6	J	0.14	UJ	0.14	U	

#### Table 1: Air VOC Results

Location Name	SS-009		BA-009		BA-009		AA-009		
Field Sample ID	420007-S	0007-SS00902 4		420007-BA00902		420007-BA00902DUP		420007-AA00902	
Field Sample Date	1/10/2	008	1/10/2008 FS		1/10/2008 FD		1/10/2008 FS		
QC Code	FS	5							
Parameter Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
Hexachlorobutadiene	0.75	U	0.75	U	0.75	U	0.75	U	
Hexane	2		4.2	J	0.52	J	0.3		
Methyl Tertbutyl Ether	0.13	U	0.13	U	0.13	U	0.13	U	
Methylene chloride	1.7	J	1.7	J	0.88	J	0.7	J	
o-Xylene	8.6		0.24		0.21		0.16	U	
Propylene	0.13	U	0.13	U	0.13	U	0.13	U	
Styrene	0.63		0.15	U	0.15	U	0.15	U	
Tetrachloroethene	1.7		0.57	J	0.24	UJ	0.24	U	
Tetrahydrofuran	0.11	U	0.11	U	0.11	U	0.11	U	
Toluene	67		1.1		1.1		0.4		
trans-1,2-Dichloroethene	0.28	U	0.28	U	0.28	U	0.28	U	
trans-1,3-Dichloropropene	0.16	U	0.16	U	0.16	U	0.16	U	
Trichloroethene	8.3		0.19	U	0.19	U	0.19	U	
Trichlorofluoromethane	0.98		0.94		0.94		0.94		
Vinyl acetate	1.7		1.6	J	0.25	J	1.5		
Vinyl chloride	0.1	U	0.1	U	0.1	U	0.1	U	
Xylene, m/p	39		1.2	J	0.67	J	0.31	U	

Notes:

Results in microgram per cubic meter (µg/m3) Samples analyzed for VOCs by EPA Method TO-15 **Bold** = Compound detected above the MDL

Location Code:

SS = Sub-Slab Vapor Sample

BA = Basement Indoor Air Sample

AA = Ambient Outdoor Air Sample

Qualifiers:

U = Not detected at a concentration greater than the RL

J = Estimated value

QC Code:

FS = Field Sample

FD = Field Duplicate

# Table 2Residence V-9 2007 and 2008 Data Comparison

Location ID	Addross	Sampla Type	1,1,1-TCA		PCE		TCE	
Location ID	Auuress	Sample Type	Feb-07	Jan-08	Feb-07	Jan-08	Feb-07	Jan-08
		AA	0.44 U	0.19 U	0.55 U	0.24 U	0.17 U	0.19 U
Pasidanaa V 0		SS	220	90	1.6	1.7	25	8.3
Residence V-9		BA	3.3	1.4	0.54 U	0.57 J	0.27	0.19 U
		FA	1.1	NS	0.68 U	NS	0.22 U	NS

#### Notes:

Results in microgram per cubic meter ( $\mu g/m^3$ ) Samples analyzed for VOCs by USEPA Method TO-15.

Qualifers:

U = not detected at concentration shown

J = estimated value

1,1,1-TCA = 1,1,1-Trichloroethane

PCE = Tetrachloroethene

TCE = Trichloroethene

NFA = No Further Action

Sample Type = Sample location name (First two Digits)

AA = Ambient Air

SV = Soil Vapor

BA = Basement Air

FA = First Floor Air

NS = Not Sampled

Only select VOCs for which the NYSDOH has promulgated guidance values for soil vapor are shown.

Results in **BOLD** exceed the sub-slab guidance criteria established in "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (New York State Department of Health, 2005).

Addendum to VIE Letter Report — Becker Electronics Manufacturing Site NYSDEC — Site No. 4-20-007 MACTEC Engineering and Consulting, P.C. Project No. 3612072072 March 2008 Draft

Indoor Air Quality Questionnaire Building Inventory Form

#### NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name MarkMags. und Date/Time Prepared 1/9 1000 @ 13:30
Preparer's Affiliation Macter - Portland, ME Phone No. 207 - 828 - 3317
Purpose of Investigation Soil Vapon Entrucion Envestigation Spit 42007
MBoellon Electronics
1. OCCUPANT:
Interviewed: Y/N
Last Name: Norbury First Name: Guy
Address: 2146 R+ MS -> Behind Hone; East Richan, NA
County: <u>Greene</u>
Home Phone: $Sir-G3V-772Y$ Office Phone: $2-2-yiz-Soc (3)$
Number of Occupants/persons at this location $4$ Age of Occupants $11, 52, 49$
2. OWNER OR LANDLORD: (Check if same as occupant)
Interviewed: Y / N
Last Name:First Name:
Address:
County:
Home Phone: Office Phone:

## 3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other:

10+0

15

Sample ID V-9

	(Ranch) 2-Family 3-Family
	Raised Ranch Split Level Colonial
	Cape Cod Contemporary Mobile Home
	Modular Log Home Other:
ľ	f multiple units, how many?
ľ	f the property is commercial, type?
	Business Type(s)
	Does it include residences (i.e., multi-use)? Y / N MA If yes, how many?
C	Other characteristics:
	Number of floors () Building age before 1960
	Is the building insulated? Y/N How air tight? Tight / Average / Not Tight
4	I. AIRFLOW
I	Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:
, r ,	
ŀ	Airflow between floors
_	
•	en en en la seconda de la construcción de la construcción de la construcción de la construcción de la construcc
1	Airflow near source
·	
-	
,	
	Outdoor air infiltration
•	
	Infiltration into air ducts

, \*: .

a. Above grade construction:	Cwood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other
c. Basement floor:	concrete	dirt	stone	other
d. Basement floor:	uncovered	covered	covered with	· · · · · · · · · · · · · · · · · · ·
e. Concrete floor:	unsealed	sealed	sealed with	
f. Foundation walls:	poured	block	stone	other
g. Foundation walls:	unsealed	sealed	sealed with	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially fini	shed
j. Sump present?	WN by	bulkher	C	
k. Water in sump? Y /	N/nøt applicable	3		
ement/Lowest level depth belo	w grade: day is	)) _(feet)		

mach

Sample ID: V-0

3

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply) Type of heating system(s) used in this building: (circle all that apply\_note primary) Hot air circulation Heat pump Hot water baseboard Space Heaters Stream radiation Radiant floor Electric baseboard Wood stove Outdoor wood boiler Other The primary type of fuel used is: Natural Gas FuelOil Kerosene Electric Propane Solar Wood Coal O. unnule Domestic hot water tank fueled by: Boiler/furnace located in: Basement Outdoors Main Floor Other Air conditioning: Central Air Window units Open Windows None

P53048

#### Are there air distribution ducts present?

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

1m

'N

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally	Seldom Almost Never
Level General Use of Each Floor (e.g., familyroom, bedroe	om, laundry, workshop, storage)
Basement laundry	
1st Floor family room, dinnin room office spa	<i>w</i>
2 <sup>nd</sup> Floor	
3 <sup>rd</sup> Floor	
4 <sup>th</sup> Floor	· · · · · · · · · · · · · · · · · · ·
8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY	
a. Is there an attached garage?	Y(N)
b. Does the garage have a separate heating unit?	Y/N/NA
c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)	Y / N /NA Please specify
d. Has the building ever had a fire?	Y / When?
e. Is a kerosene or unvented gas space heater present?	Y N Where?
f. Is there a workshop or hobby/craft area? $\sqrt{y}/N$	Where & Type?

Y /N How frequently?

Y / When & Type?

Y//N/When & Type?

g. Is there smoking in the building?

- h. Have cleaning products been used recently?
- i. Have cosmetic products been used recently?

Pilofo

	et, drapes or other textiles?	Y N Where & When?
l. Have air freshener	s been used recently?	(YIN When & Type? Cardl-5
m. Is there a kitchen	exhaust fan?	Y/N If yes, where vented? Outs, da
n. Is there a bathroo	om exhaust fan?	X/N If yes, where vented? O
o. Is there a clothes c	dryer?	(Y) If yes, is it vented outside $(Y)$ N
p. Has there been a p	pesticide application?	Y/N When & Type?
Are there odors in the If yes, please described	he building? be:	XIN NA
Do any of the building (e.g., chemical manufac boiler mechanic, pestici	occupants use solvents at we turing or laboratory, auto mec de application, cosmetologist	rork? Y4N chanic or auto body shop, painting, fuel oil delivery,
If yes, what types of s	solvents are used?	MA
If yes, are their clothe	es washed at work?	Y/N/NA
Yes, use dry-cle Yes, use dry-cle Yes, work at a c	eaning regularly (weekly) eaning infrequently (monthly dry-cleaning service	or less) Unknown
Is there a radon mitig Is the system active or	ation system for the building passive? Active/Passi	g/structure? Y /N Date of Installation:
9. WATER AND SEW	VAGE	$a = 100^{-105}$ 5
Water Supply:	Public Water Drilled Well	Driven Well Dug Well Other:
~	Public Sewer Septic Tank	Leach Field Dry Well Other:
Sewage Disposal:	and the second	
Sewage Disposal: 10. RELOCATION IN	NFORMATION (for oil spill	l residential emergency)
Sewage Disposal: 10. RELOCATION If a. Provide reasons	NFORMATION (for oil spill s why relocation is recomme	l residential emergency) ended:
Sewage Disposal: 10. RELOCATION II a. Provide reasons b. Residents choos	NFORMATION (for oil spill s why relocation is recomme se to: remain in homerelo	l residential emergency) ended: ocate to friends/family relocate to hotel/motel
Sewage Disposal: 10. RELOCATION II a. Provide reasons b. Residents choos c. Responsibility f	NFORMATION (for oil spill s why relocation is recomme se to: remain in home relo for costs associated with reim	l residential emergency) ended: ocate to friends/family relocate to hotel/motel nbursement explained? Y / N

#### **11. FLOOR PLANS**

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

#### Basement:



P\$ 6 0+1

#### **12. OUTDOOR PLOT**

Sample I D: V-9

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



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#### 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: <u>PPb RHE</u> 1 S076 9

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Pho <u>Y</u>	to ** / <u>N</u>
Dasement	LI-cude o. 1	2011		Petrelum	C10	5). N	1
	ligadurench	47-	V	0,1 basy	CIU	·	
	Polygurethory	382	U.	Hyrocarbung	46	-	
	tuns oil	32-(1	$\sim \mathcal{O}_{\rm c}$	Hyrocarbons	CIL		
	Lockfluid	3.507	$\mathcal{O}$	Hyrocuburs	216		
	Bus Killer	3.78	$\mathcal{O}$	NA	210		
	5. licon & Soule -	1 pint	VO	NA	CIU	•	
	Sealant	16.2	UU	solvents, to lune	010		÷.
	wood stain	327	$\mathcal{O}$	NA	20ppb		1
	paint	32, 4/0	$\cup$	NA	610		
	houl Finish	32-16		Hydrocabon s	CIL		
	All pipese cleaning	ISA IL	$\overline{\mathcal{O}}$	Non Yoxa	Ciu		
	Carpel Firshi	10.500	$\mathcal{O}_{\mathcal{O}}$	NA	6-16		
	Wall paper st-ipp	1500		Diethyle alyach Enzy e Solium Benz	Clo		
	rust oleum	Stlui		O, 1 basa	CIU		
					2		
		•					
X							1

\* Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D) \*\* Photographs of the front and back of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

P:\Sections\SIS\Oil Spills\Guidance Docs\OSR-3.doc

PS-Botr

Addendum to VIE Letter Report — Becker Electronics Manufacturing Site NYSDEC — Site No. 4-20-007 MACTEC Engineering and Consulting, P.C. Project No. 3612072072 March 2008 Draft

Data Usability Summary Report

## DATA USABILITY SUMMARY REPORT 2008 SAMPLING EVENT BECKER ELECTRONICS EAST DURHAM, NEW YORK

#### **1.0 INTRODUCTION:**

Indoor air samples were collected at the Becker Electronics site in January of 2008 and submitted for off-site laboratory analyses. Indoor air samples were analyzed by Con-Test located in East Longmeadow, Massachusetts. A listing of samples included in this investigation is presented in Table 1. A summary of the analytical results is presented in Appendix E, Tables 1.1. Samples were analyzed for the following parameters:

• Air: VOCs by EPA Method TO-15

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2000).

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002). Laboratory QC limits were used during the data evaluation unless noted otherwise. The project chemist review included evaluations of sample collection, data package completeness, holding times, QC data (blanks, instrument calibrations, duplicates, surrogate recovery, and spike recovery), data transcription, electronic data reporting, calculations, and data qualification. With the exception of the items discussed below, results are interpreted to be usable as reported by the laboratory. The following laboratory or data validation qualifiers are used in the final data presentation.

- U = target analyte is not detected at the reported detection limit
- J = concentration is estimated
- UJ = target analyte is not detected at the reported detection limit and is estimated

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

#### 2.0 AIR - VOLATILE ORGANIC COMPOUNDS (TO-15)

#### Initial Calibration

The initial calibration associated with all samples in the SDG had a relative standard deviation that was greater than the control limit of 30 for acetone (46%) and ethanol (52.4%). The results for these compounds in samples 420007-SS00902, 420007-BA00902, 420007-BA00902DUP, and 420007-AA00902 were positive and qualified as estimated J.

#### QC Blanks

Methylene chloride was detected in the method blank  $(0.60 \ \mu g/m^3)$  for the associated samples 420007-SS00902, 420007-BA00902, 420007-BA00902DUP, 420007-AA00902. The results for this compound in the samples listed above were positive and qualified as estimated (J), and may be potentially biased high.

#### Field Duplicates

Sample 420007-BA00902 was chosen as the field duplicate. The relative percent differences between sample 420007-BA00902 and its field duplicate were greater than the control limit of 30 for acetone (60), 2-butanone (135), cyclohexane (157), 4-ethyl tolulene (>77), n-heptane (>100), hexane (56), 2-hexanone (>140), tetrachloroethene (>50), 1,2,4 trimethylbenzene (148), 1,3,5 trimethylbenzene (127), vinyl acetate (140), and m,p zylene (57). The results for these compounds were qualified as estimated (J) in these two samples.

The laboratory duplicate associated with sample 420007-AA00902 had results within criteria.

#### Miscellaneous

Sample IDs were reported on the chain of custody incorrectly, and were altered on the Form 1s and in the EDD to match previous sampling events.

# TABLE 1Sample Summary

		Lab Sample		Sample		QC
SDG	Field Sample ID	ID	Method	Date	Matrix	Code
LIMT-						
12798	420007-AA00902	08B01546	TO-15	1/10/2008	AIR	FS
LIMT-						
12798	420007-SS00902	08B01543	TO-15	1/10/2008	AIR	FS
LIMT-						
12798	420007-BA00902	08B01544	TO-15	1/10/2008	AIR	FS
LIMT-	420007-					
12798	BA00902DUP	08B01545	TO-15	1/10/2008	AIR	FD

#### **Reference:**

- New York State Department of Environmental Conservation (NYSDEC), 2000. "Analytical Services Protocols"; June 2000.
- New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

Data Validator: Brandon A. L. Shaw

Date February 12, 2008

Quality Assurance Officer:

Date:



REPORT DATE 1/22/2008

MACTEC, INC. - ME 511 CONGRESS STREET PORTLAND, ME 04101 ATTN: ERIC SANDIN

CONTRACT NUMBER: PURCHASE ORDER NUMBER: 200800897

PROJECT NUMBER: 3612072072.02

ANALYTICAL SUMMARY

LIMS BAT #: LIMT-12798

JOB NUMBER: 3612072072.02

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

#### PROJECT LOCATION: NORBURY RESIDENCE-2146 RT. 145

						•	
	FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST		
ſ	420007-195502	08B01543	AIR	SUB-SLAB BASEMENT	to-15 ppbv		
I	420007-005502	U08B01543	AIR	SUB-SLAB BASEMENT	to-15 ug/m3		
	420007-V9AA02	○ 08B01546	AIR	AMBIENT	to-15 ppbv	•	
	420007-V9AA02	O8B01546	AIR	AMBIENT	to-15 ug/m3		
	420007-V9BA02 (	08B01544	AIR	BASEMENT	to-15 ppbv		
	420007-V9BA02	<b>シ</b> 08B01544	AIR	BASEMENT	to-15 ug/m3		
l	420007-V9BA02DU	J 08B01545	AIR	BASEMENT	to-15 ppbv		
l	420007-V9BA02DL	08B01545	AIR	BASEMENT	to-15 ug/m3		
				• • • •			

A to 420007 - NG SS02

hanged Sample 1D5.

() 420007 - AA00902
() 420007 - SS00902
() 420007 - BA00902
() 420007 - BA00902 Dup.

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39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

ERIC SANDIN MACTEC, INC ME 511 CONGRESS STREET		· · ·		0.07		1/22 Pag	/2008 e 16 of 25
PORTLAND, ME 04101	Project Number:	3612072072.02					
Project Location: NORBURY RESI		Job Number: 3	-10/1-12/90 3612072072.02				
Date Received: 1/11/2006 Field Sample #: 420007-V9AA02		120007 - AA00	1902				
Sample ID : 08B01546	s A	Sampled : 1/10/2008 AMBIENT					
Sample Matrix: AIR	S	Sample Medium : SU	MMA				
	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/m3	9.6 J	01/18/08	WSD	0.09	·····	
Benzene	ug/m3	0.42	01/18/08	WSD	0.12		
Benzyl Chloride	ug/m3	ND	01/18/08	WSD	0.19		
Bromodichloromethane	ug/m3	ND	01/18/08	WSD	0.24		
Bromoform	ug/m3	ND	01/18/08	WSD	0.36		
Bromomethane	ug/m3	ND	01/18/08	WSD	0.28		
1,3-Butadiene	ug/m3	ND	01/18/08	WSD	0.16		
2-Butanone (MEK)	ug/m3	2.8	01/18/08	WSD	0.17		
Carbon Disulfide	ug/m3	ND	01/18/08	WSD	0.22		
Carbon Tetrachloride	ug/m3	0.31	01/18/08	WSD	0.22		
Chiorobenzene	ug/m3	ND	01/18/08	WSD	0.17		
Chlorodibromomethane	ug/m3	ND	. 01/18/08	WSD	0.31		
Chloroethane	ug/m3	ND	01/18/08	WSD	0.10		
Chloroform	ug/m3	ND	01/18/08	WSD	0.17		
Chloromethane	ug/m3	0.94	01/18/08	WSD	0.07		
Cyclohexane	ug/m3	ND	01/18/08	WSD	0.12	•	
1,2-Dibromoethane	ug/m3	ND	01/18/08	WSD	0.27		
1,2-Dichlorobenzene	ug/m3	ND	01/18/08	WSD	0.21		•
1,3-Dichlorobenzene	ug/m3	ND	01/18/08	WSD	0.21		
1,4-Dichlorobenzene	ug/m3	ND	01/18/08	WSD	0.21		. •
Dichlorodifluoromethane	ug/m3	1.9	01/18/08	WSD	0.18	•	
1,1-Dichloroethane	ug/m3	. ND	01/18/08	WSD	0.14		
1,2-Dichloroethane	ug/m3	ND	01/18/08	WSD	0.14	· .	
1,1-Dichloroethylene	ug/m3	ND	01/18/08	WSD	0.28		
cis-1,2-Dichloroethylene	ug/m3	ND	01/18/08	WSD	0.14		
t-1,2-Dichloroethylene	ug/m3	ND	01/18/08	WSD	0.28		
1,2-Dichloropropane	ug/m3	ND	01/18/08	WSD	0.17		
cis-1,3-Dichloropropene	ug/m3	ND	01/18/08	WSD	0.16		
trans-1,3-Dichloropropene	ug/m3	ND	01/18/08	WSD	0.16		
1.2-Dichlorotetrafiuoroethane (114)	ua/m3	ND	01/18/08	WSD	0.49		

RL = Reporting Limit

NM = Not Measured

ND = Not Detected at or above the Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample

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FRIC SANDIN									
MACTEC, INC N	1E -						1/:	22/2008	
511 CONGRESS	STREET						Pa	age 17 c	of 25
PORTLAND, ME	4101		Purchase Orde	er No.: 20080	00897		Project Numbe	r: 3612	072072.02
Project Location:	NORBURY RESI	DENCE	-2146 RT. 145	,			LIMS-BAT #:	LIMT-	12798
Date Received: Field Sample # :	1/11/2008 <b>420007-V9AA02</b>	4	420007-AA	00902		;	Job Number:	36120	72072.02
Sample ID :	08B01546		Sampled : 1/10/2008 AMBIENT	· .				• •	
Sample Matrix:	AIR		Sample Medium	SUMMA					
		Units	Results	Date	Analyst	RL.	SPEC Lim	it	P/F

			Analyzed			Lo	Hi	
Ethanol	ug/m3	4.3 J	01/18/08	WSD	0.07			
Ethyl Acetate	ug/m3	ND	01/18/08	WSD	0.26			
Ethylbenzene	ug/m3	ND	01/18/08	WSD	0.16			
4-Ethyl Toluene	ug/m3	ND	01/18/08	WSD	0.18			
n-Heptane	ug/m3	ND	01/18/08	WSD	0.14			
Hexachlorobutadiene	ug/m3	ND	01/18/08	WSD	0.75			
Hexane	ug/m3	0.30	01/18/08	WSD	0.13			
2-Hexanone	ug/m3	0.46	01/18/08	WSD	0.14			
Isopropanol	ug/m3	0.58	01/18/08	WSD	0.09			
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	01/18/08	WSD	0.13			
Methylene Chloride	ug/m3	0.70 <b>J</b>	01/18/08	WSD	0.12		•	
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	01/18/08	WSD	0.14			
Propene	ug/m3	ND	01/18/08	WSD	0.13			
Styrene	ug/m3	ND .	01/18/08	WSD	0.15			
1,1,2,2-Tetrachloroethane	ug/m3	ND	01/18/08	WSD	0.24	-		
Tetrachloroethylene	ug/m3	ND	01/18/08	WSD	0.24			
Tetrahydrofuran	ug/m3	ND.	01/18/08	WSD	0.11			
Toluene	ug/m3	0.40	01/18/08	WSD	0.14			
1,2,4-Trichlorobenzene	ug/m3	NÐ	01/18/08	WSD	0.52			
1,1,1-Trichloroethane	ug/m3	ND	01/18/08	WSD	0.19			
1,1,2-Trichloroethane	ug/m3	ND	01/18/08	WSD	0.19	•		
Trichloroethylene	ug/m3	ND	01/18/08	WSD	0.19			
Trichlorofluoromethane	ug/m3	0.94	01/18/08	WSD	0.20 <sup>.</sup>			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	01/18/08	WSD	0.54			
1,2,4-Trimethylbenzene	ug/m3	ND	01/18/08	WSD	0.18			
1,3,5-Trimethylbenzene	ug/m3	ND	01/18/08	WSD	0.18			
Vinyl Acetate	ug/m3	1.5	01/18/08	WSD	0.13			
Vinyl Chloride	ug/m3	ND	01/18/08	WSD	0.10			
m/p-Xylene	ug/m3	ND	01/18/08	WSD	0.31			
o-Xvlene	ug/m3	ND	01/18/08	WSD	0.16			

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\* = See end of report for comments and notes applying to this sample

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420007 - AA 00902

Purchase Order No.: 200800897

ERIC SANDIN MACTEC, INC. - ME 511 CONGRESS STREET PORTLAND, ME 04101

1/22/2008 Page 18 of 25

 Project Number:
 3612072072.02

 LIMS-BAT #:
 LIMT-12798

 Job Number:
 3612072072.02

Project Location: NORBURY RESIDENCE-2146 RT. 145

Date Received: 1/11/2008

Field Sample #: 420007-V9AA02

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

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NM = Not Measured

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AIR

Sample Matrix:

#### 39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

Sample Medium

ERIC SANDIN MACTEC, INC ME 511 CONGRESS STREET		1/22/2008 Page 19 of 25
PORTLAND, ME 04101	Purchase Order No.: 200800897	Project Number: 3612072072.02
Project Location: NORBURY RESID Date Received: 1/11/2008	ENCE-2146 RT. 145	LIMS-BAT #: LIMT-12798 Job Number: 3612072072.02
Field Sample #: 420007-V9BA02	4 10001 - 5700 102	
Sample ID: 08B01544	Sampled : 1/10/2008 BASEMENT	· · · · ·

: SUMMA

Analyst RL SPEC Limit Results Date Units Lo Analyzed 0.09 WSD T 01/18/08 10 ug/m3 Acetone 01/18/08 WSD 0.12 0.47 Benzene ug/m3 ND 01/18/08 WSD 0.19 Benzyl Chloride ug/m3 01/18/08 WSD 0.24 0.23 Bromodichloromethane ug/m3 01/18/08 WSD 0.36 ND Bromoform ug/m3 01/18/08 WSD 0.28 ND Bromomethane ug/m3 01/18/08 WSD 0.16 ND ug/m3 1,3-Butadiene WSD 0.17 01/18/08 ug/m3 2.2 J 2-Butanone (MEK) WSD 0.22 ND 01/18/08 Carbon Disulfide ug/m3 0.22 0.31 01/18/08 WSD ug/m3 Carbon Tetrachloride 01/18/08 WSD 0.17 ND ug/m3 Chlorobenzene WSD 0.31 ND 01/18/08 ug/m3 Chlorodibromomethane ND 01/18/08 WSD 0.10 Chloroethane ug/m3 01/18/08 WSD ND 0.17 ug/m3 Chloroform 0.07 01/18/08 WSD 0.78 Chioromethane ug/m3 1.0 J 01/18/08 WSD 0.12 ug/m3 Cyclohexane 01/18/08 WSD 0.27 ND 1,2-Dibromoethane ug/m3 WSD 0.21 01/18/08 ND 1,2-Dichlorobenzene ug/m3 01/18/08 WSD 0.21 ND 1,3-Dichlorobenzene ug/m3 WSD 0.21 ND 01/18/08 ug/m3 1,4-Dichlorobenzene WSD 01/18/08 0.18 ug/m3 1.8 Dichlorodifluoromethane WSD 0.14 01/18/08 ND 1,1-Dichloroethane ug/m3 0.14 ND 01/18/08 WSD 1,2-Dichloroethane ug/m3 WSD 0.28 01/18/08 ug/m3 ND 1,1-Dichloroethylene ND 01/18/08 WSD 0.14 cis-1,2-Dichloroethylene ug/m3 01/18/08 WSD 0.28 ND t-1,2-Dichloroethylene ug/m3 WSD 0.17 01/18/08 ND ug/m3 1,2-Dichloropropane 01/18/08 WSD 0.16 ND cis-1,3-Dichloropropene ug/m3 ND 01/18/08 WSD 0.16 trans-1,3-Dichloropropene ug/m3 WSD 0.49 01/18/08 1,2-Dichlorotetrafluoroethane (114) ug/m3 ND

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ERIC SANDIN 1/22/2008 MACTEC, INC. - ME Page 20 of 25 **511 CONGRESS STREET** Purchase Order No.: 200800897 Project Number: 3612072072.02 PORTLAND, ME 04101 LIMS-BAT #: LIMT-12798 Project Location: NORBURY RESIDENCE-2146 RT. 145 Job Number: 3612072072.02 Date Received: 1/11/2008 Field Sample #: 420007-V9BA02 -7 420007 - BA 609 02 Sampled : 1/10/2008 08B01544 Sample ID :

RL

Analyst

SPEC Limit

P/F

AIR Sample Matrix:

Sample Medium : SUMMA

BASEMENT

	Units	Results	Date	Analyst	RL	SPEC	P/	
						Lo		Hi
Ethanol	ug/m3	10 J	01/18/08	WSD	0.07			
Ethyl Acetate	ug/m3	ND	01/18/08	WSD.	0.26			
Ethylbenzene	ug/m3	0.27	01/18/08	WSD	0.16			
4-Ethyl Toluene	ug/m3	0.41 <b>J</b>	01/18/08	WSD	0.18			
n-Heptane	ug/m3	1.6 J	01/18/08	WSD	0.14			
Hexachlorobutadiene	ug/m3	ND	01/18/08	WSD	0.75			
Hexane	ug/m3	4.2 <b>J</b>	01/18/08	WSD	0.13			
2-Hexanone	ug/m3	<b>C</b> 08.0	01/18/08	WSD	0.14			•
Isopropanol	ug/m3	0.69	01/18/08	WSD	0.09	•		
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	01/18/08	WSD	0.13			
Methylene Chloride	ug/m3	1.7 <b>J</b>	01/18/08	WSD	0.12			
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	01/18/08	WSD	0.14			
Propene	ug/m3	ND	01/18/08	WSD	0.13			
Styrene	ug/m3	ND	01/18/08	WSD	0.15			
1,1,2,2-Tetrachloroethane	ug/m3	0.24	01/18/08	WSD	0.24			
Tetrachloroethylene	ug/m3	0.57 <b>J</b>	01/18/08	WSD	0.24			
Tetrahydrofuran	ug/m3	ND	01/18/08	WSD	0.11			
Toluene	ug/m3	1.1	01/18/08	WSD	0.14	•		
1,2,4-Trichlorobenzene	ug/m3	ND	01/18/08	WSD	0.52			
1,1,1-Trichloroethane	ug/m3	1.4	01/18/08.	WSD	0.19			
1,1,2-Trichloroethane	ug/m3	ND	01/18/08	WSD	0.19			
Trichloroethylene	ug/m3	ND	01/18/08	WSD	0.19			
Trichlorofluoromethane	ug/m3	0.94	01/18/08	WSD	0.20			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	01/18/08	WSD	0.54			
1,2,4-Trimethylbenzene	ug/m3	1.6 <b>J</b>	01/18/08	WSD	0.18			
1,3,5-Trimethylbenzene	ug/m3	0.83 <b>J</b>	01/18/08	WSD	0.18			
Vinyl Acetate	ug/m3	1.6 <b>J</b>	01/18/08	WSD	0.13			
Vinyl Chloride	ug/m3	ND	01/18/08	WSD	0.10			
m/p-Xylene	ug/m3	1.2 J	01/18/08	WSD	0.31			
o-Xylene	ug/m3	0.24	01/18/08	WSD	0.16			
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\* = See end of report for comments and notes applying to this sample

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ERIC SANDIN MACTEC, INC. - ME 511 CONGRESS STREET PORTLAND, ME 04101

Purchase Order No.: 200800897

Project Location: NORBURY RESIDENCE-2146 RT. 145

Date Received: 1/11/2008

Field Sample #: 420007-V9BA02

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS · SPECTROMETRY DETECTION. (GC/MS)

- 420007 - BA00902

Page 21 of 25 Project Number: 3612072072.02 LIMS-BAT #: LIMT-12798 Job Number: 3612072072.02

1/22/2008

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B45 02-11-08



AIR -

Sample Matrix:

## 39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

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MACTEC, INC N	ΙE	and the second	1/22/2008
511 CONGRESS S	STREET		Page 22 of 25
PORTLAND, ME 0	4101	Purchase Order No.: 200800897	Project Number: 3612072072.02
Project Location:	NORBURY RESIDENCE-2	146 RT. 145	LIMS-BAT #: LIMT-12798
Date Received:	1/11/2008	12007-BA00902DUP	Job Number: 3612072072.02
Field Sample # :	420007-V9BA02DUP	460001 211 11= 1	
Sample ID :	08B01545	Sampled : 1/10/2008	
·		BASEMENT	
Sample Matrix:	AIR	Sample Medium : SUMMA	

· · ·	Units	Results	Date	Analyst	ŔL	SPEC Limit		
			Analyzed			Lo	Hi	
Acetone	ug/m3	4.3 J	01/18/08	WSD	0.09			
Benzene	ug/m3	0.40	01/18/08	WSD	0.12			
Benzyl Chloride	ug/m3	ND	01/18/08	WSD	0.19	1		
Bromodichloromethane	ug/m3	ND	01/18/08	WSD	0.24			
Bromoform	ug/m3	ND	01/18/08	WSD	0.36			
Bromomethane	ug/m3	ND	01/18/08	WSD	0.28			
1,3-Butadiene	ug/m3	ND	01/18/08	WSD	0.16			
2-Butanone (MEK)	ug/m3	0.43 J	01/18/08	WSD	0.17			
Carbon Disulfide	ug/m3	ND	01/18/08	WSD	0.22			
Carbon Tetrachloride	ug/m3	0.31	01/18/08	WSD	0.22			
Chlorobenzene	ug/m3	ND	01/18/08	WSD	0.17			
Chlorodibromomethane	ug/m3	ND	01/18/08	WSD	0.31			
Chloroethane	ug/m3	ND	01/18/08	WSD	0.10		· · · .	
Chloroform	ug/m3	ND	01/18/08	WSD	0.17	•		
Chloromethane	ug/m3	0.78	01/18/08	WSD	0.07			
Cyclohexane	ug/m3	NDUJ	01/18/08	WSD	0.12			
1,2-Dibromoethane	ug/m3	ND	01/18/08	WSD	0.27		• .	
1,2-Dichlorobenzene	ug/m3	ND	01/18/08	WSD	0.21			
1,3-Dichlorobenzene	ug/m3	ND	01/18/08	WSD	0.21			
1,4-Dichlorobenzene	ug/m3	ND	01/18/08	WSD	0.21			
Dichlorodifluoromethane	ug/m3	. 1.9	01/18/08	WSD	0.18			
1,1-Dichloroethane	ug/m3	ND	01/18/08	WSD	0.14			
1,2-Dichloroethane	ug/m3	ND	01/18/08	WSD	0.14			
1,1-Dichloroethylene	ug/m3	ND .	01/18/08	WSD	0.28			
cis-1,2-Dichloroethylene	ug/m3	ND	01/18/08	WSD	0.14			
t-1,2-Dichloroethylene	ug/m3	ND	01/18/08	WSD	0.28			
1,2-Dichloropropane	ug/m3	ND	01/18/08	WSD	0.17			
cis-1,3-Dichloropropene	ug/m3	ND	01/18/08	WSD	0.16			
trans-1,3-Dichloropropene	ug/m3	ND	01/18/08	WSD	0.16			
1 2-Dichlorotetrafluoroethane (114)	ua/m3	ND	01/18/08	WSD	0.49			

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

1,2-Dichlorotetrafluoroethane (114) ug/m3

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ERIC SANDIN MACTEC, INC ME 511 CONGRESS ST	REET						÷			1/2 Pa	:2/200 ge 23	)8 of 25
PORTLAND, ME 04101 Purchase Order No.: 200800897									Project I	lumber	: 361	2072072.02
Project Location: N		ENCE-2	146 RT. 145	•					LIMS-BA	\T #:	LIMT	-12798
Date Received: 1/11/2008								JOD INUN	ider:	3012	.072072.02	
Field Sample # : 4	20007-V9DA02D	01 /	Sampled : 1/	10/200	8		-	,				
Sample ID . 0	0001040		BASEMENT					·				
Sample Matrix: A	IR		Sample Med	ium	: SUMI	MA						
		Units	R	esults		Date Analyzed	Analyst	RL	SPE Lo	EC Limi H	t i	P/F
Ethanol		ug/m3	. 11	t o		01/18/08	WSD	0.07				
Ethyl Acetate		ug/m3	. <b>N</b>	D ·		01/18/08	WSD	0.26				
Ethylbenzene		ug/m3	0	.24		01/18/08	WSĎ	0.16			•	
4-Ethyi Toluene		ug/m3	N	DW	2	01/18/08	WSD	0.18	·			
n-Heptane	• •	ug/m3	N.	D U	5	01/18/08	WSD	0.14				
Hexachlorobutadien	e	ug/m3	Ň	ID	, î	01/18/08	WSD	0.75				
Hexane	· .	ug/m3	۰ 0	.52 🤳	t	01/18/08	WSD	0.13				
2-Hexanone		ug/m3	n n	ID <b>W</b>	1	01/18/08	WSD	0.14				
Isopropanol		ug/m3	0	.43		01/18/08	WSD	0.09				
Methyl tert-Butyl Eth	ner (MTBE)	ug/m3	N	1D		01/18/08	WSD	0.13				
Methylene Chloride		ug/m3	C	.88 <b>J</b>	•	01/18/08	WSD	0.12				
4-Methyl-2-Pentano	ne (MIBK)	ug/m3	Ν	ID .		01/18/08	WSD	0.14				
Propene		ug/m3	٢	١D		01/18/08	WSD	0.13				
Styrene		ug/m3	1	١D		01/18/08	WSD	0.15				
1,1,2,2-Tetrachloroe	ethane	ug/m3	ľ	١D		01/18/08	WSD	0.24				
Tetrachloroethyiene	)	ug/m3	1	ND: U	J	01/18/08	WSD	0.24				
Tetrahydrofuran		ug/m3	1	٧D		01/18/08	WSD	0.11				
Toluene		ug/m3		1.1		01/18/08	WSD	0.14				
1,2,4-Trichlorobenz	ene	ug/m3	ſ	ND .		01/18/08	WSD	0.52				
1,1,1-Trichloroethai	ne	ug/m3		1.3		01/18/08	WSD	0.19				
1,1,2-Trichloroethai	ne	ug/m3	· _1	ND		01/18/08	WSD	0.19		·		
Trichloroethylene		ug/m3	ł	ND		01/18/08	WSD	0.19				
Trichlorofluorometh	ane	ug/m3		0.94		01/18/08	WSD	0.20	1.			
1,1,2-Trichloro-1,2,	2-Trifluoroethane	ug/m3			Ś	01/18/08	WSD.	0.54				
1,2,4-Trimethylben	zene	ug/m3		0.21 <b>J</b>		01/18/08	WSD	0.18				
1,3,5-Trimethylben	zene	ug/m3		ND J		01/18/08	WSD	0.18				
Vinyl Acetate		ug/m3		0.25 J	Γ.	01/18/08	WSD	0.13				
Vinyl Chloride		ug/m3		ND		01/18/08	WSD	0.10				
m/p-Xylene		ug/m3		0.67	2	01/18/08	WSD	0.31				
o-Xvlene		ua/m3		0.21		01/18/08	WSD	0.16				

RL = Reporting Limit

o-Xylene

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

ug/m3

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

BAS 02-11-08-

	con-test°
MITT	ANALYTICAL LABORATORY

ERIC SANDIN MACTEC, INC. - ME 511 CONGRESS STREET PORTLAND, ME 04101

Purchase Order No.: 200800897

420007-13400902 Dyp

1/22/2008 Page 24 of 25 Project Number: 3612072072.02 LIMS-BAT #: LIMT-12798 Job Number: 3612072072.02

Project Location: NORBURY RESIDENCE-2146 RT. 145

Date Received: 1/11/2008

Field Sample # : 420007-V9BA02DUP

Analytical Method: EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

· ``, 12, 08'