

# Voluntary Cleanup Program

## Progress Report

**August 2010**

Former Churchville Ford Site (#V00658-8)  
111 South Main Street  
Village of Churchville  
Monroe County, New York

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This progress report covers the month of August 2010.

### **Activities Relative to Site for Period**

Previous in-situ chemox injection activities and SVI sampling activities are summarized in previous monthly progress reports. No Site activities were conducted from April through July 2010.

On August 17, 2010, the first round of post-injection semi-annual groundwater samples were collected in accordance with the procedures outlined in the approved RAWP. Seven Site monitoring wells were sampled including: MW-JCL-01, MW-JCL-02, MW-JCL-03, MW-1, MW-3, MW-6 and MW-13. A minimum of 3 well volumes were purged from each well prior to sample collection by disposable bailer. QC samples (duplicate and MS/MSD) were also collected as per Table 1 of the QAPP, an attachment to the RAWP. Samples were relinquished to Paradigm Environmental Services laboratory for analysis of TCL VOCs by EPA Method 8260, and the metals iron and manganese.

The analytical data from the March 2010 SVI sampling event was sent out for third party validation/DUSR services at EDV Inc. in August.

### **Activities Anticipated for Next Period**

No on Site activities are planned for next month. A letter interpreting the results of the SVI sampling and findings of the validation/DUSR will be issued in the month of September.

### **Approved Site Activity Modifications**

There were no modifications made to Site activities during this period.

### **Sampling/Testing Results**

Groundwater sample analytical results are included as an attachment to this report. Sample results were compared to the NYSDEC Part 703 standards for class GA water. The constituents detected at concentrations exceeding Part 703 standards are summarized below:

<b><u>Well</u></b>	<b><u>Parameter(s) exceeding applicable regulatory limit</u></b>
MW-JCL-01(including Dup)	no VOCs/no TICs; exceeds for Fe&Mn
MW-JCL-02(in source area)	1,2-DCE @ 29 ppb; TCE @ 23.1 ppb/ no TICs; exceeds for Fe&Mn
MW-JCL-03	no VOCs/no TICs; exceeds for Fe&Mn
MW-1(in source area)	2-Butanone(MEK) @ 9.14 ppb/ no TICs; exceeds for Fe&Mn
MW-3(in source area)	2-Butanone(MEK) @ 7.53 ppb; dichlorodifluoromethane (Freon-R12) @ 98.2 ppb; PCE @ 16.2 ppb/ no TICs; exceeds for Fe&Mn
MW-6	2-Butanone(MEK) @ 5.35 ppb (estimated value); exceeds for Fe&Mn
MW-13	no VOCs/no TICs; exceeds for Fe&Mn

It is noted that the highest concentration of iron was detected in well MW-JCL-03, located up-gradient of the contaminant source and considered representative of background concentrations for the Site. The highest concentration of manganese was detected in well MW-1 in the source area, resulting from the permanganate injection process. It is also noted that the chemical dichlorodifluoromethane (Freon, R12) has not previously been detected by Lu Engineers in the source area.



**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

**LAB REPORT FOR METALS ANALYSIS IN WATER**

**Client:** Lu Engineers

**Lab Project No.:** 10-3367A

**Client Job Site:** Churchville Ford

**Sample Type:** Water  
**Method:** EPA 6010

**Client Job No.:** 5701-11

**Date Sampled:** 08/17/2010  
**Date Received:** 08/18/2010  
**Date Analyzed:** 08/26-30/2010

Lab Sample No.	Field ID No.	Field Location	Iron Results (mg/L)	Manganese Results (mg/L)
11063	N/A	CF-MW-JCL-02	0.145	0.622
11064	N/A	CF-MW-01	<0.500	117
11065	N/A	CF-MW-JCL-03	8.61	0.187
11066	N/A	CF-MW-6	3.76	78.0
11067	N/A	CF-MW-JCL-01	0.639	0.029
11068	N/A	CF-MW-JCL-01 DUP	0.683	0.027
11069	N/A	CF-MW-13	1.79	0.501
11070	N/A	CF-MW-3	0.468	24.6

ELAP ID No.:10958

Comments:

Approved By: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

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### Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11063

Client Job Number: 5701-11

Field Location: CF-MW-JCL-02

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Compound	Results in ug / L
Acetone	ND< 10.0
Benzene	ND< 0.700
Bromochloromethane	ND< 5.00
Bromodichloromethane	ND< 2.00
Bromoform	ND< 5.00
Bromomethane	ND< 2.00
2-Butanone	ND< 10.0
Carbon disulfide	ND< 5.00
Carbon Tetrachloride	ND< 2.00
Chlorobenzene	ND< 2.00
Chloroethane	ND< 2.00
Chloroform	ND< 2.00
Chloromethane	ND< 2.00
Cyclohexane	ND< 10.0
Dibromochloromethane	ND< 2.00
1,2-Dibromo-3-Chloropropane	ND< 10.0
1,2-Dibromoethane	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00
Dichlorodifluoromethane	ND< 5.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	29.0
trans-1,2-Dichloroethene	ND< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Ethylbenzene	ND< 2.00
2-Hexanone	ND< 5.00
Isopropylbenzene	ND< 5.00
Methyl acetate	ND< 2.00
Methyl tert-butyl Ether	ND< 2.00
Methylcyclohexane	ND< 2.00
Methylene chloride	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00
Styrene	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	2.68
Toluene	ND< 2.00
Freon 113	ND< 2.00
1,2,3-Trichlorobenzene	ND< 5.00
1,2,4-Trichlorobenzene	ND< 5.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	23.1
Trichlorofluoromethane	ND< 2.00
Vinyl chloride	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V77860.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

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103367V1.XLS



**Volatile Analysis Report for Non-potable Water**

**Client:** Lu Engineers

**Client Job Site:** Churchville Ford

**Lab Project Number:** 10-3367A

**Lab Sample Number:** 11063

**Client Job Number:** 5701-11

**Field Location:** CF-MW-JCL-02

**Date Sampled:** 08/17/2010

**Field ID Number:** N/A

**Date Received:** 08/18/2010

**Sample Type:** Water

**Date Analyzed:** 08/26/2010

Tentatively Identified Compounds	CAS Number	Retention Time	Results in ug / L	Percent Fit
None Found	N/A	N/A	ND< 5.00	N/A

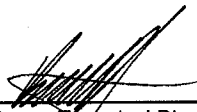
ELAP Number 10958

Method: EPA 8260B

Data File: V77860.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

  
Bruce Hoogesteger: Technical Director

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103367V1.XLS



### Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11064

Client Job Number: 5701-11

Field Location: CF-MW-01

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Compound	Results in ug / L
Acetone	104
Benzene	0.786
Bromochloromethane	ND< 5.00
Bromodichloromethane	ND< 2.00
Bromoform	ND< 5.00
Bromomethane	ND< 2.00
2-Butanone	J 9.14
Carbon disulfide	ND< 5.00
Carbon Tetrachloride	ND< 2.00
Chlorobenzene	ND< 2.00
Chloroethane	ND< 2.00
Chloroform	ND< 2.00
Chloromethane	ND< 2.00
Cyclohexane	ND< 10.0
Dibromochloromethane	ND< 2.00
1,2-Dibromo-3-Chloropropane	ND< 10.0
1,2-Dibromoethane	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00
Dichlorodifluoromethane	J 4.50
1,1-Dichloroethane	J 1.17
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00

ELAP Number 10958

Compound	Results in ug / L
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Ethylbenzene	ND< 2.00
2-Hexanone	ND< 5.00
Isopropylbenzene	ND< 5.00
Methyl acetate	ND< 2.00
Methyl tert-butyl Ether	J 1.71
Methylcyclohexane	ND< 2.00
Methylene chloride	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00
Styrene	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
Toluene	ND< 2.00
Freon 113	ND< 2.00
1,2,3-Trichlorobenzene	ND< 5.00
1,2,4-Trichlorobenzene	ND< 5.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl chloride	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

Method: EPA 8260B

Data File: V77861.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

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103367V2.XLS



## Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11064

Client Job Number: 5701-11

Field Location: CF-MW-01

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Tentatively Identified Compounds	CAS Number	Retention Time	Results in ug / L	Percent Fit
None Found	N/A	N/A	ND< 5.00	N/A

ELAP Number 10958

Method: EPA 8260B

Data File: V77861.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

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103367V2.XLS





## Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11065

Client Job Number: 5701-11

Field Location: CF-MW-JCL-03

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Compound	Results in ug / L
Acetone	ND< 10.0
Benzene	ND< 0.700
Bromochloromethane	ND< 5.00
Bromodichloromethane	ND< 2.00
Bromoform	ND< 5.00
Bromomethane	ND< 2.00
2-Butanone	ND< 10.0
Carbon disulfide	ND< 5.00
Carbon Tetrachloride	ND< 2.00
Chlorobenzene	ND< 2.00
Chloroethane	ND< 2.00
Chloroform	ND< 2.00
Chloromethane	ND< 2.00
Cyclohexane	ND< 10.0
Dibromochloromethane	ND< 2.00
1,2-Dibromo-3-Chloropropane	ND< 10.0
1,2-Dibromoethane	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00
Dichlorodifluoromethane	ND< 5.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00

ELAP Number 10958

Compound	Results in ug / L
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Ethylbenzene	ND< 2.00
2-Hexanone	ND< 5.00
Isopropylbenzene	ND< 5.00
Methyl acetate	ND< 2.00
Methyl tert-butyl Ether	ND< 2.00
Methylcyclohexane	ND< 2.00
Methylene chloride	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00
Styrene	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
Toluene	ND< 2.00
Freon 113	ND< 2.00
1,2,3-Trichlorobenzene	ND< 5.00
1,2,4-Trichlorobenzene	ND< 5.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl chloride	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

Method: EPA 8260B

Data File: V77862.D

Comments: ND denotes Non Detect

ug / L = microgram per Liter

Matrix spike outliers indicate probable matrix interference

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

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103367V3.XLS

**Volatile Analysis Report for Non-potable Water**Client: **Lu Engineers**

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11065

Client Job Number: 5701-11

Field Location: CF-MW-JCL-03

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Tentatively Identified Compounds	CAS Number	Retention Time	Results in ug / L	Percent Fit
None Found	N/A	N/A	ND< 5.00	N/A

ELAP Number 10958

Method: EPA 8260B

Data File: V77862.D

Comments: ND denotes Non Detect

ug / L = microgram per Liter

Matrix spike outliers indicate probable matrix interference

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

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103367V3.XLS



## Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11066

Client Job Number: 5701-11

Field Location: CF-MW-6

Field ID Number: N/A

Sample Type: Water

Date Sampled: 08/17/2010

Date Received: 08/18/2010

Date Analyzed: 08/26/2010

Compound	Results in ug / L
Acetone	B 62.2
Benzene	J 0.383
Bromochloromethane	ND< 5.00
Bromodichloromethane	ND< 2.00
Bromoform	ND< 5.00
Bromomethane	ND< 2.00
2-Butanone	J 5.35
Carbon disulfide	ND< 5.00
Carbon Tetrachloride	ND< 2.00
Chlorobenzene	ND< 2.00
Chloroethane	ND< 2.00
Chloroform	J 1.46
Chloromethane	ND< 2.00
Cyclohexane	ND< 10.0
Dibromochloromethane	ND< 2.00
1,2-Dibromo-3-Chloropropane	ND< 10.0
1,2-Dibromoethane	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00
Dichlorodifluoromethane	J 3.80
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00

ELAP Number 10958

Compound	Results in ug / L
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Ethylbenzene	ND< 2.00
2-Hexanone	ND< 5.00
Isopropylbenzene	ND< 5.00
Methyl acetate	ND< 2.00
Methyl tert-butyl Ether	ND< 2.00
Methylcyclohexane	ND< 2.00
Methylene chloride	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00
Styrene	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
Toluene	ND< 2.00
Freon 113	ND< 2.00
1,2,3-Trichlorobenzene	ND< 5.00
1,2,4-Trichlorobenzene	ND< 5.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl chloride	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

Method: EPA 8260B

Data File: V77865.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

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103367V4.XLS

**Volatile Analysis Report for Non-potable Water**Client: **Lu Engineers**

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11066

Client Job Number: 5701-11

Field Location: CF-MW-6

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Tentatively Identified Compounds	CAS Number	Retention Time	Results in ug / L	Percent Fit
None Found	N/A	N/A	ND< 5.00	N/A

ELAP Number 10958

Method: EPA 8260B

Data File: V77865.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

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103367V4.XLS



### Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11067

Client Job Number: 5701-11

Field Location: CF-MW-JCL-01

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Compound	Results in ug / L
Acetone	ND< 10.0
Benzene	ND< 0.700
Bromochloromethane	ND< 5.00
Bromodichloromethane	ND< 2.00
Bromoform	ND< 5.00
Bromomethane	ND< 2.00
2-Butanone	ND< 10.0
Carbon disulfide	ND< 5.00
Carbon Tetrachloride	ND< 2.00
Chlorobenzene	ND< 2.00
Chloroethane	ND< 2.00
Chloroform	ND< 2.00
Chloromethane	ND< 2.00
Cyclohexane	ND< 10.0
Dibromochloromethane	ND< 2.00
1,2-Dibromo-3-Chloropropane	ND< 10.0
1,2-Dibromoethane	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00
Dichlorodifluoromethane	ND< 5.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Ethylbenzene	ND< 2.00
2-Hexanone	ND< 5.00
Isopropylbenzene	ND< 5.00
Methyl acetate	ND< 2.00
Methyl tert-butyl Ether	ND< 2.00
Methylcyclohexane	ND< 2.00
Methylene chloride	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00
Styrene	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
Toluene	ND< 2.00
Freon 113	ND< 2.00
1,2,3-Trichlorobenzene	ND< 5.00
1,2,4-Trichlorobenzene	ND< 5.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl chloride	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V77866.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

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103367V5.XLS



### Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11067

Client Job Number: 5701-11

Field Location: CF-MW-JCL-01

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Tentatively Identified Compounds	CAS Number	Retention Time	Results in ug / L	Percent Fit
None Found	N/A	N/A	ND< 5.00	N/A

ELAP Number 10958

Method: EPA 8260B

Data File: V77866.D

Comments: ND denotes Non Detect

ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

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103367V5.XLS



### Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford  
Client Job Number: 5701-11  
Field Location: CF-MW-JCL-01 DUP  
Field ID Number: N/A  
Sample Type: Water

Lab Project Number: 10-3367A  
Lab Sample Number: 11068  
Date Sampled: 08/17/2010  
Date Received: 08/18/2010  
Date Analyzed: 08/26/2010

Compound	Results in ug / L
Acetone	ND< 10.0
Benzene	ND< 0.700
Bromochloromethane	ND< 5.00
Bromodichloromethane	ND< 2.00
Bromoform	ND< 5.00
Bromomethane	ND< 2.00
2-Butanone	ND< 10.0
Carbon disulfide	ND< 5.00
Carbon Tetrachloride	ND< 2.00
Chlorobenzene	ND< 2.00
Chloroethane	ND< 2.00
Chloroform	ND< 2.00
Chloromethane	ND< 2.00
Cyclohexane	ND< 10.0
Dibromochloromethane	ND< 2.00
1,2-Dibromo-3-Chloropropane	ND< 10.0
1,2-Dibromoethane	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00
Dichlorodifluoromethane	ND< 5.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Ethylbenzene	ND< 2.00
2-Hexanone	ND< 5.00
Isopropylbenzene	ND< 5.00
Methyl acetate	ND< 2.00
Methyl tert-butyl Ether	ND< 2.00
Methylcyclohexane	ND< 2.00
Methylene chloride	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00
Styrene	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
Toluene	ND< 2.00
Freon 113	ND< 2.00
1,2,3-Trichlorobenzene	ND< 5.00
1,2,4-Trichlorobenzene	ND< 5.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl chloride	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V77867.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

103367V6.XLS



### Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford  
Client Job Number: 5701-11  
Field Location: CF-MW-JCL-01 DUP  
Field ID Number: N/A  
Sample Type: Water

Lab Project Number: 10-3367A  
Lab Sample Number: 11068  
Date Sampled: 08/17/2010  
Date Received: 08/18/2010  
Date Analyzed: 08/26/2010

Tentatively Identified Compounds	CAS Number	Retention Time	Results in ug / L	Percent Fit
None Found	N/A	N/A	ND< 5.00	N/A

ELAP Number 10958

Method: EPA 8260B

Data File: V77867.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

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103367V6.XLS





### Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11069

Client Job Number: 5701-11

Field Location: CF-MW-13

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Compound	Results in ug / L
Acetone	J B 6.94
Benzene	ND< 0.700
Bromochloromethane	ND< 5.00
Bromodichloromethane	ND< 2.00
Bromoform	ND< 5.00
Bromomethane	ND< 2.00
2-Butanone	ND< 10.0
Carbon disulfide	ND< 5.00
Carbon Tetrachloride	ND< 2.00
Chlorobenzene	ND< 2.00
Chloroethane	ND< 2.00
Chloroform	ND< 2.00
Chloromethane	ND< 2.00
Cyclohexane	ND< 10.0
Dibromochloromethane	ND< 2.00
1,2-Dibromo-3-Chloropropane	ND< 10.0
1,2-Dibromoethane	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00
Dichlorodifluoromethane	ND< 5.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Ethylbenzene	ND< 2.00
2-Hexanone	ND< 5.00
Isopropylbenzene	ND< 5.00
Methyl acetate	ND< 2.00
Methyl tert-butyl Ether	ND< 2.00
Methylcyclohexane	ND< 2.00
Methylene chloride	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00
Styrene	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
Toluene	ND< 2.00
Freon 113	ND< 2.00
1,2,3-Trichlorobenzene	ND< 5.00
1,2,4-Trichlorobenzene	ND< 5.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl chloride	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V77868.D

Comments: ND denotes Non Detect

ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

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103367V7.XLS



### Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11069

Client Job Number: 5701-11

Field Location: CF-MW-13

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Tentatively Identified Compounds	CAS Number	Retention Time	Results in ug / L	Percent Fit
None Found	N/A	N/A	ND< 5.00	N/A

ELAP Number 10958

Method: EPA 8260B

Data File: V77868.D

Comments: ND denotes Non Detect

ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

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103367V7.XLS



## Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11070

Client Job Number: 5701-11

Field Location: CF-MW-3

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Compound	Results in ug / L
Acetone	B 52.9
Benzene	0.742
Bromochloromethane	ND< 5.00
Bromodichloromethane	ND< 2.00
Bromoform	ND< 5.00
Bromomethane	ND< 2.00
2-Butanone	J 7.53
Carbon disulfide	ND< 5.00
Carbon Tetrachloride	ND< 2.00
Chlorobenzene	ND< 2.00
Chloroethane	ND< 2.00
Chloroform	J 1.17
Chloromethane	ND< 2.00
Cyclohexane	ND< 10.0
Dibromochloromethane	ND< 2.00
1,2-Dibromo-3-Chloropropane	ND< 10.0
1,2-Dibromoethane	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00
Dichlorodifluoromethane	98.2
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Ethylbenzene	ND< 2.00
2-Hexanone	ND< 5.00
Isopropylbenzene	ND< 5.00
Methyl acetate	ND< 2.00
Methyl tert-butyl Ether	ND< 2.00
Methylcyclohexane	ND< 2.00
Methylene chloride	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00
Styrene	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	16.2
Toluene	ND< 2.00
Freon 113	ND< 2.00
1,2,3-Trichlorobenzene	ND< 5.00
1,2,4-Trichlorobenzene	ND< 5.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl chloride	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V77869.D

Comments: ND denotes Non Detect

ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

103367V8.XLS



### Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11070

Client Job Number: 5701-11

Field Location: CF-MW-3

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Tentatively Identified Compounds	CAS Number	Retention Time	Results in ug / L	Percent Fit
None Found	N/A	N/A	ND< 5.00	N/A

ELAP Number 10958

Method: EPA 8260B

Data File: V77869.D

Comments: ND denotes Non Detect

ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

103367V8.XLS



### Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11071

Client Job Number: 5701-11

Field Location: Trip Blank T212

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Compound	Results in ug / L
Acetone	B 23.7
Benzene	ND< 0.700
Bromochloromethane	ND< 5.00
Bromodichloromethane	ND< 2.00
Bromoform	ND< 5.00
Bromomethane	ND< 2.00
2-Butanone	ND< 10.0
Carbon disulfide	ND< 5.00
Carbon Tetrachloride	ND< 2.00
Chlorobenzene	ND< 2.00
Chloroethane	ND< 2.00
Chloroform	ND< 2.00
Chloromethane	ND< 2.00
Cyclohexane	ND< 10.0
Dibromochloromethane	ND< 2.00
1,2-Dibromo-3-Chloropropane	ND< 10.0
1,2-Dibromoethane	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00
Dichlorodifluoromethane	ND< 5.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Ethylbenzene	ND< 2.00
2-Hexanone	ND< 5.00
Isopropylbenzene	ND< 5.00
Methyl acetate	ND< 2.00
Methyl tert-butyl Ether	ND< 2.00
Methylcyclohexane	ND< 2.00
Methylene chloride	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00
Styrene	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
Toluene	ND< 2.00
Freon 113	ND< 2.00
1,2,3-Trichlorobenzene	ND< 5.00
1,2,4-Trichlorobenzene	ND< 5.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl chloride	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V77870.D

Comments: ND denotes Non Detect

ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

103367V9.XLS



### Volatile Analysis Report for Non-potable Water

Client: Lu Engineers

Client Job Site: Churchville Ford

Lab Project Number: 10-3367A

Lab Sample Number: 11071

Client Job Number: 5701-11

Field Location: Trip Blank T212

Date Sampled: 08/17/2010

Field ID Number: N/A

Date Received: 08/18/2010

Sample Type: Water

Date Analyzed: 08/26/2010

Tentatively Identified Compounds	CAS Number	Retention Time	Results in ug / L	Percent Fit
None Found	N/A	N/A	ND< 5.00	N/A

ELAP Number 10958

Method: EPA 8260B

Data File: V77870.D

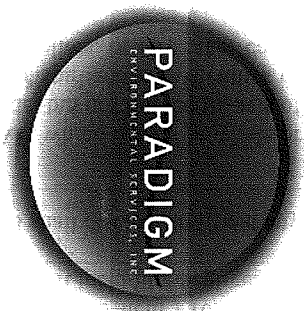
Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

103367V9.XLS

**CHAIN OF CUSTODY****REPORT TO:****INVOICE TO:**

<b>COMPANY:</b> Lu Engineers	<b>COMPANY:</b> Same	<b>LAB PROJECT #</b> 10-33874	<b>CLIENT PROJECT #</b> 5701-11
<b>ADDRESS:</b> 2222 175 Sally's Trail, Suite 202	<b>ADDRESS:</b> Same	<b>TURNAROUND TIME:</b> (WORKING DAYS) 10 day per quote. EAH 8/18	
<b>CITY:</b> P.H.S. Ford	<b>CITY:</b> NY	<b>STATE:</b> NY	<b>ZIP:</b> 14534
<b>PHONE:</b> 385-7417	<b>PHONE:</b> 385-7417	<b>FAX:</b>	<b>FAX:</b>
<b>ATTN:</b> Eric Detweiler	<b>ATTN:</b>	<b>STD</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 5	<b>OTHER</b> <input type="checkbox"/>

PROJECT NAME/SITE NAME:

Churchville Ford

COMMENTS:

\*Please provide Excel EDD

\*P.O. 424498

Quotation # MS0203104

**REQUESTED ANALYSIS**

DATE	TIME	C O M P O S I T E	G R A B	SAMPLE LOCATION/FIELD ID	M A T R I X	C O N T A I N E R S	8260 TCL	Fe	Mn	PER ASP Request Form and E. Detweiler in email 8/18, do 8260 TCL ASP 2008 plus TCS, EAH 8/18	PARADIGM LAB SAMPLE NUMBER
------	------	-------------------	---------	--------------------------	-------------	---------------------	----------	----	----	--	----------------------------

1	8/17/10	15:20	X	CF-MW-JCL-02	W	3	✓	✓	✓	Cat. B	11063
2	✓	15:10	X	CF-MW-01	W	3	✓	✓	✓	deliverables	11064
3		13:40	X	CF-MW-JCL-03	W	3	✓	✓	✓		11065
4			X	CF-MW-JCL-03MS	W	3	✓	✓	✓		11066
5		↓	X	CF-MW-JCL-03MSD	W	3	✓	✓	✓		11067
6		13:25	X	CF-MW-6	W	3	✓	✓	✓		11068
7		11:08	X	CF-MW-JCL-01	W	3	✓	✓	✓		11069
8		11:08	X	CF-MW-JCL-01 Dup	W	3	✓	✓	✓		11070
9		11:10	X	CF-MW-13	W	3	✓	✓	✓		11071
10	✓	16:07	X	CF-MW-3	W	3	✓	✓	✓	Coolerhand	11072

\*\*LAB USE ONLY BELOW THIS LINE\*\*

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter

NELAC Compliance

Comments: Container Type: ☒ Y ☐ N

Comments: Preservation: ☒ Y ☐ N

Comments: Holding Time: ☒ Y ☐ N

Comments: Temperature: ☒ Y ☐ N

Comments: blank @ 1730 8/17/10 - pres. begun in field EAH

Sampled By: *Detweiler*

Date/Time: 8/17/10 4:55

Total Cost: N/A. EAH 8/18

Relinquished By: *Deanna MacLennan*

Date/Time: 8/17/10 4:55

Received By: *Deanna MacLennan*

Date/Time: 8/17/10 16:55

Received @ Lab By: *Elizabeth A. Honack*

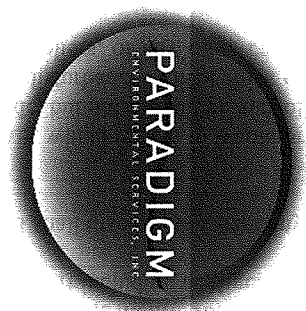
Date/Time: 8/17/10 1740

Elizabeth A. Honack 8/18/10 1145

P.L.F.



by client so custody seals delivered to lab EAH 8/18

**CHAIN OF CUSTODY****PARADIGM**  
ENVIRONMENTAL SCIENCES, INC.**REPORT TO:****INVOICE TO:**

COMPANY: Lu Engineers	COMPANY: Same	LAB PROJECT #: 10.3337A	CLIENT PROJECT #: 5701-11
ADDRESS:	ADDRESS:	TURNAROUND TIME: (WORKING DAYS)	
CITY:	CITY:		
STATE:	STATE:		
ZIP:	ZIP:		
PHONE:	PHONE:		
FAX:	FAX:		

ATTN: Eric Detweiler

ATTN:

1	2	3	5	10
STD				OTHER

PROJECT NAME/SITE NAME:

Churchville Ford

COMMENTS:

ASP Cat B, Excel EDD

PO # 4124498

Quotation # MS020310A

**REQUESTED ANALYSIS**

DATE	TIME	C O M P O S I T E	G R A B	SAMPLE LOCATION/FIELD ID	M A T R I X	C O N T A I N E R	REMARKS	PARADIGM LAB SAMPLE NUMBER
18/17/10				Trip Blank T212	W	1	Add trip blank to COC and analyze for VOCs ASP2008 plus TICS, per E. Detweiler 8/18 in email.	11071
2								
3								
4								
5								
6								
7								
8								
9								
10								

**\*\*LAB USE ONLY BELOW THIS LINE\*\***

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter NELAC Compliance

Container Type: Y ☒ N ☐Comments: Preservation: Y ☒ N ☐Comments: Holding Time: Y ☒ N ☐Comments: Temperature: Y ☒ N ☐

Comments: 10°C iced from temp - pres begun blank @ 1730 8/17/10 - pres begun in field

EAH

Client

Received By: Elizabeth A. Honck 8/17/10 1740

Relinquished By: Elizabeth A. Honck 8/18/10 1145

Date/Time

Date/Time

Total Cost:

P.I.F.

--