

# Summit Scientific

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August 27, 2012

Brian Dodek  
LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada, CO 80003  
RE: PDC - Dechant 1-31A

Enclosed are the results of analyses for samples received by Summit Scientific on 08/17/12 17:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe Egry IV".

Joe Egry For Ben Shrewsbury  
President / Laboratory Director





LT Environmental, Inc.  
 4600 West 60th Avenue  
 Arvada CO, 80003

Project: PDC - Dechant 1-31A

Project Number: PDC 09028.001  
 Project Manager: Brian Dodek

**Reported:**  
 08/27/12 12:03

**MW10R**  
**R208122-01 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/17/12 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>5.8</b>	1.0	ug/l	1	2081803	08/21/12	08/23/12	EPA 8260B	
<b>Toluene</b>	<b>2.3</b>	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>460</b>	100	"	100	"	"	"	"	
<b>Xylenes (total)</b>	<b>10000</b>	100	"	"	"	"	"	"	

Date Sampled: **08/17/12 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	49.7-150		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		146 %	51-150		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		103 %	50.1-150		"	"	"	"	

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**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**Summit Scientific**

Analyte	Reporting			Spike Level	Source		%REC		RPD		Notes
	Result	Limit	Units		Result	%REC	Limits	RPD	Limit		

**Batch 2081803 - EPA 5030 Water MS**

**Blank (2081803-BLK1)**

Prepared: 08/21/12 Analyzed: 08/22/12

Benzene	ND	1.0	ug/l								
Toluene	ND	1.0	"								
Ethylbenzene	ND	1.0	"								
Xylenes (total)	ND	1.0	"								
Surrogate: 1,2-Dichloroethane-d4	14.0		"	13.2	106	49.7-150					
Surrogate: Toluene-d8	13.6		"	13.3	102	51-150					
Surrogate: 4-Bromofluorobenzene	13.6		"	13.3	102	50.1-150					

**Blank (2081803-BLK2)**

Prepared: 08/21/12 Analyzed: 08/22/12

Benzene	ND	1.0	ug/l								
Toluene	ND	1.0	"								
Ethylbenzene	ND	1.0	"								
Xylenes (total)	ND	1.0	"								
Surrogate: 1,2-Dichloroethane-d4	14.0		"	13.2	106	49.7-150					
Surrogate: Toluene-d8	13.6		"	13.3	102	51-150					
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3	100	50.1-150					

**LCS (2081803-BS1)**

Prepared: 08/21/12 Analyzed: 08/22/12

Benzene	18.0	1.0	ug/l	16.7	108	50-150					
Toluene	18.3	1.0	"	16.7	110	50-150					
Ethylbenzene	19.4	1.0	"	16.7	116	50-150					
m,p-Xylene	35.6	2.0	"	33.3	107	50-150					
o-Xylene	17.5	1.0	"	16.7	105	50-150					
Surrogate: 1,2-Dichloroethane-d4	14.2		"	13.2	108	50-150					
Surrogate: Toluene-d8	13.9		"	13.3	104	50-150					
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3	99.6	50-150					

**LCS (2081803-BS2)**

Prepared: 08/21/12 Analyzed: 08/22/12

Benzene	17.3	1.0	ug/l	16.7	104	50-150					
Toluene	17.0	1.0	"	16.7	102	50-150					
Ethylbenzene	18.0	1.0	"	16.7	108	50-150					
m,p-Xylene	32.6	2.0	"	33.3	98.0	50-150					
o-Xylene	15.8	1.0	"	16.7	94.8	50-150					
Surrogate: 1,2-Dichloroethane-d4	14.1		"	13.2	106	50-150					
Surrogate: Toluene-d8	13.7		"	13.3	103	50-150					
Surrogate: 4-Bromofluorobenzene	13.8		"	13.3	103	50-150					

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**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
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Analyte	Reporting			Spike	Source	%REC			RPD	Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

**Batch 2081803 - EPA 5030 Water MS**

**LCS Dup (2081803-BSD1)**

Prepared: 08/21/12 Analyzed: 08/22/12

Benzene	16.8	1.0	ug/l	16.7	101	50-150	6.72	20	
Toluene	16.9	1.0	"	16.7	101	50-150	8.11	20	
Ethylbenzene	17.5	1.0	"	16.7	105	50-150	10.5	20	
m,p-Xylene	31.9	2.0	"	33.3	95.6	50-150	10.9	20	
o-Xylene	15.2	1.0	"	16.7	91.0	50-150	14.5	20	
Surrogate: 1,2-Dichloroethane-d4	13.8		"	13.2	104	50-150			
Surrogate: Toluene-d8	13.8		"	13.3	103	50-150			
Surrogate: 4-Bromofluorobenzene	12.8		"	13.3	95.6	50-150			

**LCS Dup (2081803-BSD2)**

Prepared: 08/21/12 Analyzed: 08/22/12

Benzene	17.3	1.0	ug/l	16.7	104	50-150	0.0579	20	
Toluene	16.9	1.0	"	16.7	102	50-150	0.295	20	
Ethylbenzene	17.7	1.0	"	16.7	106	50-150	2.02	20	
m,p-Xylene	32.8	2.0	"	33.3	98.3	50-150	0.397	20	
o-Xylene	16.0	1.0	"	16.7	96.1	50-150	1.32	20	
Surrogate: 1,2-Dichloroethane-d4	14.3		"	13.2	108	50-150			
Surrogate: Toluene-d8	13.8		"	13.3	103	50-150			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3	100	50-150			

**Matrix Spike (2081803-MS1)**

Source: R208124-04

Prepared: 08/21/12 Analyzed: 08/22/12

Benzene	11.8	1.0	ug/l	16.7	ND	70.7	50-150		
Toluene	11.2	1.0	"	16.7	ND	67.1	50-150		
Ethylbenzene	10.5	1.0	"	16.7	ND	63.2	50-150		
m,p-Xylene	19.1	2.0	"	33.3	ND	57.2	50-150		
o-Xylene	9.61	1.0	"	16.7	ND	57.7	50-150		
Surrogate: 1,2-Dichloroethane-d4	14.7		"	13.2	111	50-150			
Surrogate: Toluene-d8	13.7		"	13.3	103	50-150			
Surrogate: 4-Bromofluorobenzene	12.7		"	13.3	95.6	50-150			

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Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

**Batch 2081803 - EPA 5030 Water MS**

<b>Matrix Spike (2081803-MS2)</b>	<b>Source: R208124-05</b>			Prepared: 08/21/12		Analyzed: 08/22/12				
Benzene	218	1.0	ug/l	16.7	169	292	50-150			QM-07
Toluene	12.9	1.0	"	16.7	ND	77.3	50-150			
Ethylbenzene	13.1	1.0	"	16.7	ND	78.8	50-150			
m,p-Xylene	24.2	2.0	"	33.3	ND	72.8	50-150			
o-Xylene	12.1	1.0	"	16.7	ND	72.4	50-150			
Surrogate: 1,2-Dichloroethane-d4	14.2		"	13.2		107	50-150			
Surrogate: Toluene-d8	13.7		"	13.3		103	50-150			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.4	50-150			

<b>Matrix Spike Dup (2081803-MSD1)</b>	<b>Source: R208124-04</b>			Prepared: 08/21/12		Analyzed: 08/22/12				
Benzene	13.2	1.0	ug/l	16.7	ND	79.0	50-150	11.1	25	
Toluene	12.7	1.0	"	16.7	ND	76.0	50-150	12.5	25	
Ethylbenzene	12.6	1.0	"	16.7	ND	75.8	50-150	18.2	25	
m,p-Xylene	22.9	2.0	"	33.3	ND	68.6	50-150	18.2	25	
o-Xylene	11.3	1.0	"	16.7	ND	68.0	50-150	16.5	25	
Surrogate: 1,2-Dichloroethane-d4	14.5		"	13.2		110	50-150			
Surrogate: Toluene-d8	13.8		"	13.3		103	50-150			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		99.3	50-150			

<b>Matrix Spike Dup (2081803-MSD2)</b>	<b>Source: R208124-05</b>			Prepared: 08/21/12		Analyzed: 08/22/12		<b>QM-07</b>		
Benzene	189	1.0	ug/l	16.7	169	121	50-150	14.0	25	
Toluene	16.3	1.0	"	16.7	ND	97.6	50-150	23.1	25	
Ethylbenzene	17.3	1.0	"	16.7	ND	104	50-150	27.2	25	
m,p-Xylene	31.9	2.0	"	33.3	ND	95.8	50-150	27.3	25	
o-Xylene	15.8	1.0	"	16.7	ND	94.7	50-150	26.7	25	
Surrogate: 1,2-Dichloroethane-d4	13.4		"	13.2		101	50-150			
Surrogate: Toluene-d8	13.7		"	13.3		102	50-150			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		99.1	50-150			

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### Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference