

# Summit Scientific

---

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

November 06, 2017

Bryan Paraspolo  
LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada, CO 80003  
RE: HPD - Platteville

Enclosed are the results of analyses for samples received by Summit Scientific on 10/30/17 10:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury For Ben Shrewsbury  
Laboratory Manager



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

Project: HPD - Platteville

Project Number: 036217011

Project Manager: Bryan Paraspolo

**Reported:**  
11/06/17 10:19

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
HPD06	1710332-01	Soil	10/30/17 09:00	10/30/17 10:45
HPD07	1710332-02	Soil	10/30/17 09:10	10/30/17 10:45
HPD08	1710332-03	Soil	10/30/17 09:20	10/30/17 10:45
HPD09	1710332-04	Soil	10/30/17 09:30	10/30/17 10:45

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

# Summit Scientific

1710332

S<sub>2</sub>

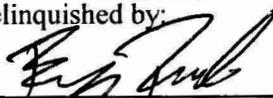
741 Corporate Circle, Suite J ♦ Golden, Colorado 80401

303-277-9310 ♦ 303-374-5933

Page 1 of 1

Client: LT ENVIRONMENTAL Project Manager: BRIAN PARASPOLO  
 Address: 4600 W 60<sup>th</sup> AVE E-Mail: BPARASPOLO@LTENV.COM  
 City/State/Zip: ARVADA CO 80003  
 Phone: 303 433 9788 Fax: Project Name: HPD- PLATVILLE SR  
 Sampler Name: B. PARASPOLO Project Number: 036217011

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested				Special Instructions		
					HCl	HNO3	None	Other (Specify)	Groundwater	Soil	Air-Canister #	Other (Specify)	BTEX	TPH				
1	HPD06	10/30/17	900	2			X			X			X	X				
2	HPD07	↓	910	2			X			X			X	X				
3	HPD08	↓	920	2			X			X			X	X				
4	HPD09	↓	930	2			X			X			X	X				
5																		
6																		
7																		
8																		
9																		
10																		

Relinquished by: 	Date/Time: 10/30/17 1045	Received by: 	Date/Time: 10/30/17 10:45	Turn Around Time (Check) Same Day _____ 72 hours _____ 24 hours _____ Standard <input checked="" type="checkbox"/> 48 hours _____ Sample Integrity: <u>3.6</u> Temperature Upon Receipt: <u>3.6</u> Intact: Yes No	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

1710332

Sample Receipt Checklist

S2 Work Order: \_\_\_\_\_

Client: LT Client Project ID: HPD - Plattville SA

Shipped Via: \_\_\_\_\_ Airbill #: \_\_\_\_\_  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Matrix (check all that apply):  Air  Soil/Solid  Water  Other: \_\_\_\_\_  
(Describe)

Cooler ID				
Temp (°C)	3.8			

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	<input checked="" type="checkbox"/>			
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
If custody seals are present, are they intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.			<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.

MC  
Custodian Printed Name

MC  
Signature or Initials of Custodian

10/30/17  
Date/Time



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

Project: HPD - Platteville  
Project Number: 036217011  
Project Manager: Bryan Paraspolo

Reported:  
11/06/17 10:19

**HPD06**  
**1710332-01 (Soil)**

**Summit Scientific**

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **10/30/17 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1710335	10/31/17	11/01/17	8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/30/17 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		94.6 %	70-130		"	"	"	"	

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

Date Sampled: **10/30/17 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1710336	10/31/17	11/01/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/30/17 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		86.1 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.6 %	21-167		"	"	"	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: HPD - Platteville  
Project Number: 036217011  
Project Manager: Bryan Paraspolo

Reported:  
11/06/17 10:19

**HPD07**  
**1710332-02 (Soil)**

**Summit Scientific**

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **10/30/17 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1710335	10/31/17	11/01/17	8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/30/17 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		91.5 %	70-130		"	"	"	"	

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

Date Sampled: **10/30/17 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1710336	10/31/17	11/01/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/30/17 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		89.1 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.4 %	21-167		"	"	"	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: HPD - Platteville  
Project Number: 036217011  
Project Manager: Bryan Paraspolo

Reported:  
11/06/17 10:19

**HPD08**  
**1710332-03 (Soil)**

**Summit Scientific**

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **10/30/17 09:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>C10-C28 (DRO)</b>	<b>450</b>	50	mg/kg	1	1710335	10/31/17	11/01/17	8015M	
<b>C28-C36 (ORO)</b>	<b>61</b>	50	"	"	"	"	"	"	

Date Sampled: **10/30/17 09:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		119 %	70-130		"	"	"	"	

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

Date Sampled: **10/30/17 09:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1710336	10/31/17	11/01/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>3.2</b>	0.50	"	"	"	"	"	"	

Date Sampled: **10/30/17 09:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		86.1 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		98.7 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99.5 %	21-167		"	"	"	"	

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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

Project: HPD - Platteville  
Project Number: 036217011  
Project Manager: Bryan Paraspolo

Reported:  
11/06/17 10:19

**HPD09**  
**1710332-04 (Soil)**

**Summit Scientific**

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **10/30/17 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1710335	10/31/17	11/01/17	8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/30/17 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		93.2 %	70-130		"	"	"	"	

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

Date Sampled: **10/30/17 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1710336	10/31/17	11/01/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/30/17 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		87.1 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.9 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.3 %	21-167		"	"	"	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: HPD - Platteville  
Project Number: 036217011  
Project Manager: Bryan Paraspolo

**Reported:**  
11/06/17 10:19

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch 1710335 - EPA 3550A**

**Blank (1710335-BLK1)** Prepared & Analyzed: 10/31/17

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
<i>Surrogate: o-Terphenyl</i>	<i>13.1</i>		<i>"</i>	<i>12.5</i>		<i>105</i>	<i>70-130</i>			

**LCS (1710335-BS1)** Prepared & Analyzed: 10/31/17

C10-C28 (DRO)	549	50	mg/kg	499		110	50-150			
C28-C36 (ORO)	11.0	50	"				50-150			
<i>Surrogate: o-Terphenyl</i>	<i>13.8</i>		<i>"</i>	<i>12.5</i>		<i>110</i>	<i>70-130</i>			

**Matrix Spike (1710335-MS1)** Source: 1710312-01 Prepared: 10/31/17 Analyzed: 11/01/17

C10-C28 (DRO)	570	50	mg/kg	499	186	76.9	50-150			
C28-C36 (ORO)	23.1	50	"		27.0		50-150			
<i>Surrogate: o-Terphenyl</i>	<i>14.8</i>		<i>"</i>	<i>12.5</i>		<i>119</i>	<i>70-130</i>			

**Matrix Spike Dup (1710335-MSD1)** Source: 1710312-01 Prepared: 10/31/17 Analyzed: 11/01/17

C10-C28 (DRO)	508	50	mg/kg	499	186	64.5	50-150	11.5	20	
C28-C36 (ORO)	13.9	50	"		27.0		50-150	49.6	20	
<i>Surrogate: o-Terphenyl</i>	<i>12.9</i>		<i>"</i>	<i>12.5</i>		<i>103</i>	<i>70-130</i>			

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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

Project: HPD - Platteville  
Project Number: 036217011  
Project Manager: Bryan Paraspolo

Reported:  
11/06/17 10:19

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

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

**Batch 1710336 - EPA 5030 Soil MS**

**Blank (1710336-BLK1)**

Prepared: 10/31/17 Analyzed: 11/01/17

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0380</i>		<i>"</i>	<i>0.0400</i>		<i>95.0</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0403</i>		<i>"</i>	<i>0.0400</i>		<i>101</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0404</i>		<i>"</i>	<i>0.0400</i>		<i>101</i>	<i>21-167</i>			

**LCS (1710336-BS1)**

Prepared: 10/31/17 Analyzed: 11/01/17

Benzene	0.0638	0.0020	mg/kg	0.100		63.8	58-130			
Toluene	0.0788	0.0050	"	0.100		78.8	61-134			
Ethylbenzene	0.0933	0.0050	"	0.0992		94.1	74-139			
m,p-Xylene	0.187	0.010	"	0.200		93.6	73-137			
o-Xylene	0.0906	0.0050	"	0.0980		92.4	73-141			
Xylenes (total)	0.277	0.0050	"				30-150			
Gasoline Range Hydrocarbons	1.85	0.50	"				30-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0344</i>		<i>"</i>	<i>0.0400</i>		<i>86.1</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0384</i>		<i>"</i>	<i>0.0400</i>		<i>95.9</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0376</i>		<i>"</i>	<i>0.0400</i>		<i>94.1</i>	<i>21-167</i>			

**Matrix Spike (1710336-MS1)**

Source: 1710322-02

Prepared: 10/31/17 Analyzed: 11/01/17

Benzene	0.0653	0.0020	mg/kg	0.100	ND	65.3	30-131			
Toluene	0.0778	0.0050	"	0.100	ND	77.8	30-134			
Ethylbenzene	0.0913	0.0050	"	0.0992	ND	92.0	22-153			
m,p-Xylene	0.186	0.010	"	0.200	ND	93.3	10-159			
o-Xylene	0.0931	0.0050	"	0.0980	ND	95.0	31-151			
Xylenes (total)	0.279	0.0050	"		ND		30-150			
Gasoline Range Hydrocarbons	1.80	0.50	"		ND		30-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0362</i>		<i>"</i>	<i>0.0400</i>		<i>90.6</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0392</i>		<i>"</i>	<i>0.0400</i>		<i>98.0</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0387</i>		<i>"</i>	<i>0.0400</i>		<i>96.8</i>	<i>21-167</i>			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: HPD - Platteville  
Project Number: 036217011  
Project Manager: Bryan Paraspolo

Reported:  
11/06/17 10:19

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

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

**Batch 1710336 - EPA 5030 Soil MS**

<b>Matrix Spike Dup (1710336-MSD1)</b>	<b>Source: 1710322-02</b>			Prepared: 10/31/17		Analyzed: 11/01/17				
Benzene	0.0632	0.0020	mg/kg	0.100	ND	63.2	30-131	3.27	34	
Toluene	0.0783	0.0050	"	0.100	ND	78.3	30-134	0.615	30	
Ethylbenzene	0.0912	0.0050	"	0.0992	ND	91.9	22-153	0.0658	24	
m,p-Xylene	0.183	0.010	"	0.200	ND	91.8	10-159	1.67	68	
o-Xylene	0.0913	0.0050	"	0.0980	ND	93.2	31-151	1.95	38	
Xylenes (total)	0.274	0.0050	"		ND		30-150	1.77	20	
Gasoline Range Hydrocarbons	1.81	0.50	"		ND		30-150	0.731	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0356</i>		<i>"</i>	<i>0.0400</i>		<i>89.1</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0382</i>		<i>"</i>	<i>0.0400</i>		<i>95.5</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0382</i>		<i>"</i>	<i>0.0400</i>		<i>95.6</i>	<i>21-167</i>			

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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

Project: HPD - Platteville

Project Number: 036217011  
Project Manager: Bryan Paraspolo

**Reported:**  
11/06/17 10:19

### Notes and Definitions

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