

# Summit Scientific

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741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

March 24, 2017

Colby Sterling  
Talon/LPE  
1811 E Mulberry  
Ft Collins, CO 80524  
RE: Ione 4

Enclosed are the results of analyses for samples received by Summit Scientific on 03/21/17 16:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury  
President



Talon/LPE  
1811 E Mulberry  
Ft Collins CO, 80524

Project: Ione 4

Project Number: 702201.001.01  
Project Manager: Colby Sterling

**Reported:**  
03/24/17 11:11

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	1703185-01	Water	03/21/17 15:00	03/21/17 16:05
MW-2	1703185-02	Water	03/21/17 15:05	03/21/17 16:05
MW-3	1703185-03	Water	03/21/17 15:10	03/21/17 16:05
MW-4	1703185-04	Water	03/21/17 15:15	03/21/17 16:05
MW-5	1703185-05	Water	03/21/17 15:20	03/21/17 16:05

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Ft Collins CO, 80524

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## Summit Scientific




1703185

741 Corporate Circle Suite I • Golden, Colorado 80401  
303-277-9310 • 303-374-5933 Fax

Page 1 of 1

Client: Talon / LPE  
Address: 1811 E. Milberry Rd  
City/State/Zip: Fort Collins, CO 90524  
Phone: 970 818 5320 Fax:  
Sampler Name: C. Sterling / J. Carverton

Project Manager: Colby Sterling  
E-Mail: csterling@talonape.com  
Project Name: Zone 4  
Project Number: 702201.001.01

				Preservative		Matrix		Analyze For:										Special Instructions		
Sample Description	Date Sampled	Time Sampled	Number of Containers	HCl	HNO <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)									
MW-1	3-21-17	1500	3	X				X				X								
MW-2		1505																		
MW-3		1510																		
MW-4		1515																		
MW-5		1520																		
Relinquished by: 	Date/Time: 3-21-17 1605	Received by:  3-21-17	Date/Time: 16:05	Turn Around Time (Check)				Notes:												
				Same Day <input type="checkbox"/> 72 Hours <input type="checkbox"/>																
				24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/>																
				48 Hours <input type="checkbox"/>																
Relinquished by: 	Date/Time: 3-21-17 18:20	Received by:	Date/Time:	Sample Integrity:																
				Temperature Upon Receipt: 7.0																
				Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																

[www.s2scientific.com](http://www.s2scientific.com)

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Ft Collins CO, 80524

Project: Ione 4  
Project Number: 702201.001.01  
Project Manager: Colby Sterling

Reported:  
03/24/17 11:11

#### Sample Receipt Checklist

S2 Work Order: 1703185  
Client: Talon Client Project ID: Ione 4  
Shipped Via: H.S. on ice Airbill #: \_\_\_\_\_  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)  
Matrix (check all that apply): ☐ Air ☐ Soil/Solid ☒ Water ☐ Other: \_\_\_\_\_  
(Describe)

Cooler ID					
Temp (°C)	<u>7.0</u>				

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature just above 0°C to ≤ 6°C <sup>(1)</sup> ?				
NOTE: If samples are delivered the same day of sampling, this requirement is waived provided that there is evidence that cooling has begun.	X			
Were all samples received intact <sup>(1)</sup> ?	✓			
Was adequate sample volume provided <sup>(1)</sup> ?	✓			
If custody seals are present, are they intact <sup>(1)</sup> ?			X	
Are short holding time analytes or samples with HTs due within 48 hours present?			✓	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	X			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	X			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	X			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	X			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.		✓		
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ?	X			HCL
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect				
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ?			X	
Record the pH in Comments.				
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				
(1) If NO, then contact the client before proceeding with analysis and note in case narrative.				

Mufip.  
Custodian Printed Name

AS 3-21-17  
Signature or Initials of Custodian

17:55  
Date/Time



Talon/LPE  
1811 E Mulberry  
Ft Collins CO, 80524

Project: Ione 4  
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**MW-1**  
**1703185-01 (Water)**

**Summit Scientific**

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

Date Sampled: **03/21/17 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1703243	03/23/17	03/23/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **03/21/17 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		122 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		99.0 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	45-146		"	"	"	"	

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Project: Ione 4  
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Reported:  
03/24/17 11:11

**MW-2**  
**1703185-02 (Water)**

**Summit Scientific**

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

Date Sampled: **03/21/17 15:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>130</b>	1.0	ug/l	1	1703243	03/23/17	03/23/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>56</b>	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>270</b>	1.0	"	"	"	"	"	"	

Date Sampled: **03/21/17 15:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		109 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		103 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.8 %	45-146		"	"	"	"	

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Ft Collins CO, 80524

Project: Ione 4  
Project Number: 702201.001.01  
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**Reported:**  
03/24/17 11:11

**MW-3**  
**1703185-03 (Water)**

**Summit Scientific**

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

Date Sampled: **03/21/17 15:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1703243	03/23/17	03/23/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>38</b>	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>520</b>	1.0	"	"	"	"	"	"	

Date Sampled: **03/21/17 15:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		100 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		101 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	45-146		"	"	"	"	

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Project: Ione 4  
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Project Manager: Colby Sterling

Reported:  
03/24/17 11:11

**MW-4**  
**1703185-04 (Water)**

**Summit Scientific**

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

Date Sampled: **03/21/17 15:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1703243	03/23/17	03/23/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **03/21/17 15:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		110 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		98.9 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	45-146		"	"	"	"	

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**MW-5**  
**1703185-05 (Water)**

**Summit Scientific**

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

Date Sampled: **03/21/17 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1703243	03/23/17	03/23/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **03/21/17 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		106 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		97.5 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	45-146		"	"	"	"	

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

### Summit Scientific

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

#### Batch 1703243 - EPA 5030 Water MS

##### Blank (1703243-BLK1)

Prepared & Analyzed: 03/23/17

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	14.5		"	13.3		109	37-154			
Surrogate: Toluene-d8	13.0		"	13.3		97.9	45-149			
Surrogate: 4-Bromofluorobenzene	12.9		"	13.3		97.1	45-146			

##### LCS (1703243-BS1)

Prepared & Analyzed: 03/23/17

Benzene	39.4	1.0	ug/l	33.3		118	51-132			
Toluene	37.6	1.0	"	33.3		113	51-138			
Ethylbenzene	40.5	1.0	"	33.1		123	58-146			
m,p-Xylene	77.6	2.0	"	66.5		117	57-144			
o-Xylene	38.4	1.0	"	32.7		118	53-146			
Surrogate: 1,2-Dichloroethane-d4	14.7		"	13.3		110	37-154			
Surrogate: Toluene-d8	13.5		"	13.3		101	45-149			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		100	45-146			

##### Matrix Spike (1703243-MS1)

Source: 1703185-01

Prepared & Analyzed: 03/23/17

Benzene	38.1	1.0	ug/l	33.3	ND	114	34-141			
Toluene	38.3	1.0	"	33.3	ND	115	27-151			
Ethylbenzene	41.8	1.0	"	33.1	ND	127	29-160			
m,p-Xylene	79.1	2.0	"	66.5	ND	119	20-166			
o-Xylene	39.1	1.0	"	32.7	ND	120	33-159			
Surrogate: 1,2-Dichloroethane-d4	14.6		"	13.3		110	37-154			
Surrogate: Toluene-d8	13.5		"	13.3		101	45-149			
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3		100	45-146			

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

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

**Batch 1703243 - EPA 5030 Water MS**

Matrix Spike Dup (1703243-MSD1)	Source: 1703185-01			Prepared & Analyzed: 03/23/17						
Benzene	40.2	1.0	ug/l	33.3	ND	121	34-141	5.57	32	
Toluene	38.4	1.0	"	33.3	ND	115	27-151	0.130	25	
Ethylbenzene	42.0	1.0	"	33.1	ND	127	29-160	0.334	50	
m,p-Xylene	80.8	2.0	"	66.5	ND	121	20-166	2.15	36	
o-Xylene	39.5	1.0	"	32.7	ND	121	33-159	1.12	26	
Surrogate: 1,2-Dichloroethane-d4	15.3		"	13.3		115	37-154			
Surrogate: Toluene-d8	13.7		"	13.3		103	45-149			
Surrogate: 4-Bromofluorobenzene	13.6		"	13.3		102	45-146			

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### 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