

### Technical Report for

### Partner Engineering & Science

Transportation, 165 Don Connor Boulevard, Jackson, NJ

SGS Accutest Job Number: JC39208

Sampling Date: 03/19/17

#### Report to:

Partner Engineering & Science, Inc  
611 Industrial Way West  
Eatontown, NJ 07724  
MGenna@PartnerESI.com

ATTN: Matthew Genna

Total number of pages in report: 75



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole  
Laboratory Director

Client Service contact: Kelly Patterson 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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### Sample Summary

Partner Engineering & Science

Job No: JC39208

Transportation, 165 Don Connor Boulevard, Jackson, NJ

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC39208-1	03/19/17	09:30	EM	03/20/17	DW Drinking Water FB	TG-FIELD BLANK
JC39208-2	03/19/17	09:30	EM	03/20/17	DW Drinking Water	TG-POE
JC39208-4	03/19/17	09:33	EM	03/20/17	DW Drinking Water	TG-S-01
JC39208-6	03/19/17	09:38	EM	03/20/17	DW Drinking Water	TG-S-02

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Partner Engineering & Science

**Job No** JC39208

**Site:** Transportation, 165 Don Connor Boulevard, Jackson, NJ

**Report Date** 3/27/2017 3:52:35 PM

On 03/20/2017, 3 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 4.1 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC39208 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

### Metals By Method EPA 200.8

**Matrix:** DW

**Batch ID:** MP99363

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC39207-140MS, JC39207-140MSD were used as the QC samples for metals.

**Matrix:** DW

**Batch ID:** MP99378

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC39208-6MS, JC39208-6MSD were used as the QC samples for metals.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

## Summary of Hits

Job Number: JC39208  
Account: Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ  
Collected: 03/19/17



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

JC39208-1      TG-FIELD BLANK

No hits reported in this sample.

JC39208-2      TG-POE

Lead		0.0618	0.00050		mg/l	EPA 200.8
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JC39208-4      TG-S-01

Lead		0.00448	0.00050		mg/l	EPA 200.8
------	--	---------	---------	--	------	-----------

JC39208-6      TG-S-02

No hits reported in this sample.

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

<b>Client Sample ID:</b> TG-FIELD BLANK		<b>Date Sampled:</b> 03/19/17
<b>Lab Sample ID:</b> JC39208-1		<b>Date Received:</b> 03/20/17
<b>Matrix:</b> DW - Drinking Water FB		<b>Percent Solids:</b> n/a
<b>Project:</b> Transportation, 165 Don Connor Boulevard, Jackson, NJ		

**Total Metals Analysis**

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 0.00050	0.015	0.00050	mg/l	1	03/21/17	03/21/17 MS	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>

(1) Instrument QC Batch: MA41620

(2) Prep QC Batch: MP99363

---

RL = Reporting Limit

MCL = Maximum Contamination Level (NJAC 7:10 11/04)

4.1  
4

## Report of Analysis

<b>Client Sample ID:</b> TG-POE		<b>Date Sampled:</b> 03/19/17
<b>Lab Sample ID:</b> JC39208-2		<b>Date Received:</b> 03/20/17
<b>Matrix:</b> DW - Drinking Water		<b>Percent Solids:</b> n/a
<b>Project:</b> Transportation, 165 Don Connor Boulevard, Jackson, NJ		

### Total Metals Analysis

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.0618	0.015	0.00050	mg/l	1	03/21/17	03/21/17 MS	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>

(1) Instrument QC Batch: MA41620

(2) Prep QC Batch: MP99363

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RL = Reporting Limit

MCL = Maximum Contamination Level (NJAC 7:10 11/04)

4.2  
**4**



## Report of Analysis

<b>Client Sample ID:</b> TG-S-01	<b>Date Sampled:</b> 03/19/17
<b>Lab Sample ID:</b> JC39208-4	<b>Date Received:</b> 03/20/17
<b>Matrix:</b> DW - Drinking Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Transportation, 165 Don Connor Boulevard, Jackson, NJ	

### Total Metals Analysis

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.00448	0.015	0.00050	mg/l	1	03/21/17	03/21/17 MS	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>

(1) Instrument QC Batch: MA41620

(2) Prep QC Batch: MP99363

---

RL = Reporting Limit

MCL = Maximum Contamination Level (NJAC 7:10 11/04)

## Report of Analysis

<b>Client Sample ID:</b> TG-S-02	<b>Date Sampled:</b> 03/19/17
<b>Lab Sample ID:</b> JC39208-6	<b>Date Received:</b> 03/20/17
<b>Matrix:</b> DW - Drinking Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Transportation, 165 Don Connor Boulevard, Jackson, NJ	

### Total Metals Analysis

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 0.00050	0.015	0.00050	mg/l	1	03/22/17	03/22/17 MA	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>

(1) Instrument QC Batch: MA41626

(2) Prep QC Batch: MP99378

RL = Reporting Limit

MCL = Maximum Contamination Level (NJAC 7:10 11/04)

4.4  
4

**Misc. Forms**

**Custody Documents and Other Forms**

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**Includes the following where applicable:**

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



## SGS Accutest Sample Receipt Summary

Job Number: JC39208

Client: \_\_\_\_\_

Project: \_\_\_\_\_

Date / Time Received: 3/20/2017 12:40:00 PM

Delivery Method: \_\_\_\_\_

Airbill #'s: \_\_\_\_\_

Cooler Temps (Raw Measured) °C: Cooler 1: (2.7);

Cooler Temps (Corrected) °C: Cooler 1: (4.1);

<u>Cooler Security</u>	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

SM089-02  
Rev. Date 12/1/16

JC39208: Chain of Custody

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### Internal Sample Tracking Chronicle

Partner Engineering & Science

Job No: JC39208

Transportation, 165 Don Connor Boulevard, Jackson, NJ

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Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC39208-1	Collected: 19-MAR-17 09:30	By: EM	Received: 20-MAR-17	By: AS		
	TG-FIELD BLANK					
JC39208-1	EPA 200.8	21-MAR-17 22:45	MS	21-MAR-17 MA		PBMS
JC39208-2	Collected: 19-MAR-17 09:30	By: EM	Received: 20-MAR-17	By: AS		
	TG-POE					
JC39208-2	EPA 200.8	21-MAR-17 22:49	MS	21-MAR-17 MA		PBMS
JC39208-4	Collected: 19-MAR-17 09:33	By: EM	Received: 20-MAR-17	By: AS		
	TG-S-01					
JC39208-4	EPA 200.8	21-MAR-17 22:52	MS	21-MAR-17 MA		PBMS
JC39208-6	Collected: 19-MAR-17 09:38	By: EM	Received: 20-MAR-17	By: AS		
	TG-S-02					
JC39208-6	EPA 200.8	22-MAR-17 13:21	MA	22-MAR-17 MA		PBMS

# SGS Accutest Internal Chain of Custody

Job Number: JC39208  
 Account: PARTENJE Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ  
 Received: 03/20/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC39208-1.1	Secured Storage	Edwin Gonzalez	03/20/17 15:30	Retrieve from Storage
JC39208-1.1	Edwin Gonzalez	Secured Staging Area	03/20/17 15:30	Return to Storage
JC39208-1.1	Secured Staging Area	Deval Patel	03/20/17 15:48	Retrieve from Storage
JC39208-1.1	Deval Patel	Secured Storage	03/20/17 22:37	Return to Storage
JC39208-1.1	Secured Storage	Mariyam Ali	03/21/17 06:15	Retrieve from Storage
JC39208-1.1	Mariyam Ali	Secured Storage	03/21/17 11:50	Return to Storage
JC39208-2.1	Secured Storage	Edwin Gonzalez	03/20/17 15:30	Retrieve from Storage
JC39208-2.1	Edwin Gonzalez	Secured Staging Area	03/20/17 15:30	Return to Storage
JC39208-2.1	Secured Staging Area	Deval Patel	03/20/17 15:48	Retrieve from Storage
JC39208-2.1	Deval Patel	Secured Storage	03/20/17 22:37	Return to Storage
JC39208-2.1	Secured Storage	Mariyam Ali	03/21/17 06:15	Retrieve from Storage
JC39208-2.1	Mariyam Ali	Secured Storage	03/21/17 11:50	Return to Storage
JC39208-2.1	Secured Storage	Dwayne Johnson	03/21/17 12:09	Retrieve from Storage
JC39208-2.1	Dwayne Johnson	Secured Staging Area	03/21/17 12:09	Return to Storage
JC39208-2.1	Secured Staging Area	Radhika Mistry	03/21/17 16:17	Retrieve from Storage
JC39208-2.1	Radhika Mistry	Deval Patel	03/21/17 16:17	Custody Transfer
JC39208-2.1	Wei Zhou	Secured Storage	03/22/17 07:40	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC39208-4.1	Secured Storage	Edwin Gonzalez	03/20/17 15:30	Retrieve from Storage
JC39208-4.1	Edwin Gonzalez	Secured Staging Area	03/20/17 15:30	Return to Storage
JC39208-4.1	Secured Staging Area	Deval Patel	03/20/17 15:48	Retrieve from Storage
JC39208-4.1	Deval Patel	Secured Storage	03/20/17 22:37	Return to Storage
JC39208-4.1	Secured Storage	Mariyam Ali	03/21/17 06:15	Retrieve from Storage
JC39208-4.1	Mariyam Ali	Secured Storage	03/21/17 11:50	Return to Storage
JC39208-6.1	Secured Storage	Edwin Gonzalez	03/20/17 15:30	Retrieve from Storage
JC39208-6.1	Edwin Gonzalez	Secured Staging Area	03/20/17 15:30	Return to Storage
JC39208-6.1	Secured Staging Area	Deval Patel	03/20/17 15:48	Retrieve from Storage
JC39208-6.1	Deval Patel	Secured Storage	03/20/17 22:37	Return to Storage
JC39208-6.1	Secured Storage	Mariyam Ali	03/21/17 06:15	Retrieve from Storage
JC39208-6.1	Mariyam Ali	Secured Storage	03/21/17 11:50	Return to Storage
JC39208-6.1	Secured Storage	Martin Serwatka	03/22/17 11:35	Retrieve from Storage
JC39208-6.1	Wei Zhou	Secured Storage	03/23/17 07:42	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				

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## Metals Analysis

### QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries



SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
Analyst: MS Run ID: MA41620  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
07:33	MA41620-STD1	1		STDA
07:37	MA41620-STD2	1		STDA
07:40	MA41620-STD3	1		STDB
07:43	MA41620-STD4	1		STDC
07:47	MA41620-STD5	1		STDD
07:50	MA41620-STD6	1		STDE
07:54	MA41620-STD7	1		STDF
07:57	ZZZZZZ	1		
08:00	ZZZZZZ	1		
08:04	MA41620-ICVA1	1		
08:07	MA41620-ICB1	1		
08:10	MA41620-CCVA1	1		
08:14	MA41620-CCB1	1		
08:17	MA41620-CRI1	1		
08:21	MA41620-CCVA2	1		
08:24	MA41620-CCB2	1		
08:28	ZZZZZZ	1		
08:31	ZZZZZZ	1		
08:36	ZZZZZZ	1		
08:40	MP99346-MB1	1		
08:43	MP99346-B1	1		
08:46	MP99346-B2	1		
08:50	MA41620-CCVA3	1		
08:53	MA41620-CCB3	1		
08:57	MP99346-S1	1		
09:00	MP99346-S2	1		
09:04	ZZZZZZ	1		
09:07	ZZZZZZ	1		
09:11	ZZZZZZ	1		
09:14	MA41620-CCVA4	1		
09:17	MA41620-CCB4	1		
09:21	ZZZZZZ	1		
09:24	ZZZZZZ	1		

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
Analyst: MS Run ID: MA41620  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:28	ZZZZZZ	1		
09:31	ZZZZZZ	1		
09:35	JC39206-4	1		(sample used for QC only; not part of login JC39208)
09:38	ZZZZZZ	1		
09:42	ZZZZZZ	1		
09:45	ZZZZZZ	1		
09:49	MA41620-CCVA5	1		
09:52	MA41620-CCB5	1		
09:56	MP99347-MB1	1		
09:59	MP99347-B1	1		
10:02	MP99347-B2	1		
10:06	MP99347-S1	1		
10:09	MP99347-S2	1		
10:13	ZZZZZZ	1		
10:16	JC39206-12	1		(sample used for QC only; not part of login JC39208)
10:19	ZZZZZZ	1		
10:23	MA41620-CCVA6	1		
10:26	MA41620-CCB6	1		
10:30	ZZZZZZ	1		
10:33	ZZZZZZ	1		
10:37	ZZZZZZ	1		
10:40	ZZZZZZ	1		
10:44	ZZZZZZ	1		
10:47	ZZZZZZ	1		
10:51	ZZZZZZ	1		
10:54	ZZZZZZ	1		
10:57	MA41620-CCVA7	1		
11:01	MA41620-CCB7	1		
11:04	MP99348-MB1	1		
11:08	ZZZZZZ	1		
11:11	MP99348-B2	1		
11:14	MP99348-S1	1		
11:18	MP99348-S2	1		

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV      Date Analyzed: 03/21/17      Methods: EPA 200.8  
Analyst: MS      Run ID: MA41620  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:21	MP99348-B1	1		
11:25	ZZZZZ	1		
11:28	JC39206-32	1		(sample used for QC only; not part of login JC39208)
11:32	ZZZZZ	1		
11:35	MA41620-CCVA8	1		
11:38	MA41620-CCB8	1		
11:42	ZZZZZ	1		
11:45	ZZZZZ	1		
11:49	ZZZZZ	1		
11:52	ZZZZZ	1		
11:56	ZZZZZ	1		
11:59	ZZZZZ	1		
12:02	ZZZZZ	1		
12:06	ZZZZZ	1		
12:09	MA41620-CCVA9	1		
12:13	MA41620-CCB9	1		
12:16	MP99349-MB1	1		
12:20	MP99349-B1	1		
12:23	MP99349-B2	1		
12:26	MP99349-S1	1		
12:30	MP99349-S2	1		
12:33	ZZZZZ	1		
12:37	JC39206-52	1		(sample used for QC only; not part of login JC39208)
12:40	ZZZZZ	1		
12:44	MA41620-CCVA10	1		
12:47	MA41620-CCB10	1		
12:50	ZZZZZ	1		
12:54	ZZZZZ	1		
12:58	ZZZZZ	1		
13:01	ZZZZZ	1		
13:05	ZZZZZ	1		
13:09	ZZZZZ	1		
13:12	ZZZZZ	1		

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
Analyst: MS Run ID: MA41620  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:16	ZZZZZZ	1		
13:19	MA41620-CCVA11	1		
13:22	MA41620-CCB11	1		
13:26	ZZZZZZ	1		
13:29	MP99356-B1	1		
13:33	MP99356-B2	1		
13:36	MP99356-S1	1		
13:39	MP99356-S2	1		
13:43	MP99356-MB1	1		
13:46	JC39207-4	1		(sample used for QC only; not part of login JC39208)
13:50	ZZZZZZ	1		
13:53	MA41620-CCVA12	1		
13:57	MA41620-CCB12	1		
14:00	ZZZZZZ	1		
14:03	ZZZZZZ	1		
14:07	ZZZZZZ	1		
14:10	ZZZZZZ	1		
14:14	ZZZZZZ	1		
14:17	ZZZZZZ	1		
14:21	ZZZZZZ	1		
14:24	ZZZZZZ	1		
14:28	MA41620-CCVA13	1		
14:31	MA41620-CCB13	1		
14:52	MP99357-MB1	1		
14:55	MP99357-B1	1		
14:59	MP99357-B2	1		
15:02	MP99357-S1	1		
15:05	MP99357-S2	1		
15:09	ZZZZZZ	1		
15:12	JC39207-20	1		(sample used for QC only; not part of login JC39208)
15:16	ZZZZZZ	1		
15:19	MA41620-CCVA14	1		
15:23	MA41620-CCB14	1		

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
Analyst: MS Run ID: MA41620  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:26	ZZZZZZ	1		
15:29	ZZZZZZ	1		
15:33	ZZZZZZ	1		
15:36	ZZZZZZ	1		
15:40	ZZZZZZ	1		
15:43	ZZZZZZ	1		
15:47	ZZZZZZ	1		
15:50	ZZZZZZ	1		
15:54	MA41620-CCVA15	1		
15:57	MA41620-CCB15	1		
16:01	MP99358-MB1	1		
16:04	MP99358-B1	1		
16:07	MP99358-B2	1		
16:11	MP99358-S1	1		
16:14	MP99358-S2	1		
16:19	ZZZZZZ	1		
16:22	JC39207-40	1		(sample used for QC only; not part of login JC39208)
16:26	ZZZZZZ	1		
16:29	MA41620-CCVA16	1		
16:32	MA41620-CCB16	1		
16:39	ZZZZZZ	1		
16:43	ZZZZZZ	1		
16:46	ZZZZZZ	1		
16:50	ZZZZZZ	1		
16:53	ZZZZZZ	1		
16:57	ZZZZZZ	1		
17:00	ZZZZZZ	1		
17:04	ZZZZZZ	1		
17:07	MA41620-CCVA17	1		
17:11	MA41620-CCB17	1		
17:14	MP99359-MB1	1		
17:19	MP99359-B1	1		
17:23	MP99359-B2	1		

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
Analyst: MS Run ID: MA41620  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:26	MP99359-S1	1		
17:30	MP99359-S2	1		
17:33	ZZZZZZ	1		
17:36	JC39207-60	1		(sample used for QC only; not part of login JC39208)
17:40	ZZZZZZ	1		
17:43	MA41620-CCVA18	1		
17:47	MA41620-CCB18	1		
17:50	ZZZZZZ	1		
17:54	ZZZZZZ	1		
17:57	ZZZZZZ	1		
18:01	ZZZZZZ	1		
18:04	ZZZZZZ	1		
18:08	ZZZZZZ	1		
18:11	ZZZZZZ	1		
18:14	ZZZZZZ	1		
18:18	ZZZZZZ	1		
18:21	MA41620-CCVA19	1		
18:25	MA41620-CCB19	1		
18:28	MP99360-MB1	1		
18:31	MP99360-B1	1		
18:35	MP99360-B2	1		
18:38	MP99360-S1	1		
18:42	MP99360-S2	1		
18:45	ZZZZZZ	1		
18:49	JC39207-80	1		(sample used for QC only; not part of login JC39208)
18:52	ZZZZZZ	1		
18:55	MA41620-CCVA20	1		
18:59	MA41620-CCB20	1		
19:02	ZZZZZZ	1		
19:06	ZZZZZZ	1		
19:09	ZZZZZZ	1		
19:13	ZZZZZZ	1		
19:16	ZZZZZZ	1		

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
Analyst: MS Run ID: MA41620  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:20	ZZZZZZ	1		
19:23	ZZZZZZ	1		
19:27	ZZZZZZ	1		
19:30	MA41620-CCVA21	1		
19:33	MA41620-CCB21	1		
19:37	MP99361-MB1	1		
19:40	MP99361-B1	1		
19:43	MP99361-B2	1		
19:47	MP99361-S1	1		
19:50	MP99361-S2	1		
19:54	ZZZZZZ	1		
19:57	JC39207-100	1		(sample used for QC only; not part of login JC39208)
20:01	ZZZZZZ	1		
20:04	MA41620-CCVA22	1		
20:08	MA41620-CCB22	1		
20:11	ZZZZZZ	1		
20:14	ZZZZZZ	1		
20:18	ZZZZZZ	1		
20:21	ZZZZZZ	1		
20:25	ZZZZZZ	1		
20:28	ZZZZZZ	1		
20:32	ZZZZZZ	1		
20:35	ZZZZZZ	1		
20:39	MA41620-CCVA23	1		
20:42	MA41620-CCB23	1		
20:45	MP99362-MB1	1		
20:49	MP99362-B1	1		
20:52	MP99362-B2	1		
20:56	MP99362-S1	1		
20:59	MP99362-S2	1		
21:02	ZZZZZZ	1		
21:06	JC39207-120	1		(sample used for QC only; not part of login JC39208)
21:09	ZZZZZZ	1		

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
Analyst: MS Run ID: MA41620  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
21:13	MA41620-CCVA24	1		
21:16	MA41620-CCB24	1		
21:20	ZZZZZZ	1		
21:23	ZZZZZZ	1		
21:26	ZZZZZZ	1		
21:30	ZZZZZZ	1		
21:33	ZZZZZZ	1		
21:37	ZZZZZZ	1		
21:40	ZZZZZZ	1		
21:44	ZZZZZZ	1		
21:47	MA41620-CCVA25	1		
21:51	MA41620-CCB25	1		
21:54	MP99363-MB1	1		
21:57	MP99363-B1	1		
22:01	MP99363-B2	1		
22:04	MP99363-S1	1		
22:08	MP99363-S2	1		
22:11	ZZZZZZ	1		
22:14	JC39207-140	1		(sample used for QC only; not part of login JC39208)
22:18	ZZZZZZ	1		
22:21	MA41620-CCVA26	1		
22:25	MA41620-CCB26	1		
22:28	ZZZZZZ	1		
22:32	ZZZZZZ	1		
22:35	ZZZZZZ	1		
22:39	ZZZZZZ	1		
22:42	ZZZZZZ	1		
22:45	JC39208-1	1		
22:49	JC39208-2	1		>
22:52	JC39208-4	1		
----->	Last reportable sample/prep for job JC39208			
22:56	MA41620-CCVA27	1		
22:59	MA41620-CCB27	1		
----->	Last reportable CCB for job JC39208			
	Refer to raw data for calibration curve and standards.			



INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 Analyst: MS Run ID: MA41620  
 Parameters: Pb

Time	Sample Description	Istd#1
07:33	MA41620-STD1	100
07:37	MA41620-STD2	100
07:40	MA41620-STD3	100.71
07:43	MA41620-STD4	101.438
07:47	MA41620-STD5	102.098
07:50	MA41620-STD6	101.196
07:54	MA41620-STD7	101.236
07:57	ZZZZZ	No results reported for the elements associated with this internal standard.
08:00	ZZZZZ	No results reported for the elements associated with this internal standard.
08:04	MA41620-ICVA1	101.424
08:07	MA41620-ICB1	103.624
08:10	MA41620-CCVA1	101.348
08:14	MA41620-CCB1	104.295
08:17	MA41620-CRI1	104.487
08:21	MA41620-CCVA2	101.535
08:24	MA41620-CCB2	105.918
08:28	ZZZZZ	No results reported for the elements associated with this internal standard.
08:31	ZZZZZ	No results reported for the elements associated with this internal standard.
08:36	ZZZZZ	No results reported for the elements associated with this internal standard.
08:40	MP99346-MB1	105.112
08:43	MP99346-B1	105.303
08:46	MP99346-B2	104.17
08:50	MA41620-CCVA3	102.331
08:53	MA41620-CCB3	105.698
08:57	MP99346-S1	102.53
09:00	MP99346-S2	103.001
09:04	ZZZZZ	No results reported for the elements associated with this internal standard.
09:07	ZZZZZ	108.177
09:11	ZZZZZ	104.854
09:14	MA41620-CCVA4	105.211
09:17	MA41620-CCB4	107.409
09:21	ZZZZZ	105.561
09:24	ZZZZZ	105.723

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 Analyst: MS Run ID: MA41620  
 Parameters: Pb

Time	Sample Description	Istd#1
09:28	ZZZZZZ	106.074
09:31	ZZZZZZ	109.165
09:35	JC39206-4	105.048
09:38	ZZZZZZ	104.29
09:42	ZZZZZZ	105.055
09:45	ZZZZZZ	104.852
09:49	MA41620-CCVA5	101.732
09:52	MA41620-CCB5	104.36
09:56	MP99347-MB1	104.327
09:59	MP99347-B1	104.238
10:02	MP99347-B2	104.643
10:06	MP99347-S1	103.926
10:09	MP99347-S2	104.858
10:13	ZZZZZZ	No results reported for the elements associated with this internal standard.
10:16	JC39206-12	106.665
10:19	ZZZZZZ	106.429
10:23	MA41620-CCVA6	106.137
10:26	MA41620-CCB6	107.814
10:30	ZZZZZZ	106.757
10:33	ZZZZZZ	106.305
10:37	ZZZZZZ	106.484
10:40	ZZZZZZ	105.39
10:44	ZZZZZZ	107.052
10:47	ZZZZZZ	105.64
10:51	ZZZZZZ	106.173
10:54	ZZZZZZ	105.705
10:57	MA41620-CCVA7	102.533
11:01	MA41620-CCB7	104.98
11:04	MP99348-MB1	104.961
11:08	ZZZZZZ	No results reported for the elements associated with this internal standard.
11:11	MP99348-B2	104.471
11:14	MP99348-S1	104.024
11:18	MP99348-S2	107.091

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 Analyst: MS Run ID: MA41620  
 Parameters: Pb

Time	Sample Description	Istd#1
11:21	MP99348-B1	104.727
11:25	ZZZZZZ	No results reported for the elements associated with this internal standard.
11:28	JC39206-32	105.964
11:32	ZZZZZZ	105.504
11:35	MA41620-CCVA8	103.167
11:38	MA41620-CCB8	103.359
11:42	ZZZZZZ	104.138
11:45	ZZZZZZ	105.323
11:49	ZZZZZZ	105.906
11:52	ZZZZZZ	103.421
11:56	ZZZZZZ	104.247
11:59	ZZZZZZ	105.727
12:02	ZZZZZZ	105.958
12:06	ZZZZZZ	105.467
12:09	MA41620-CCVA9	102.197
12:13	MA41620-CCB9	106.222
12:16	MP99349-MB1	103.902
12:20	MP99349-B1	104.454
12:23	MP99349-B2	104.003
12:26	MP99349-S1	103.596
12:30	MP99349-S2	104.955
12:33	ZZZZZZ	No results reported for the elements associated with this internal standard.
12:37	JC39206-52	105.13
12:40	ZZZZZZ	105.928
12:44	MA41620-CCVA10	103.215
12:47	MA41620-CCB10	106.157
12:50	ZZZZZZ	105.862
12:54	ZZZZZZ	106.469
12:58	ZZZZZZ	106.026
13:01	ZZZZZZ	103.469
13:05	ZZZZZZ	106.697
13:09	ZZZZZZ	106.908
13:12	ZZZZZZ	107.357

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 Analyst: MS Run ID: MA41620  
 Parameters: Pb

Time	Sample Description	Istd#1
13:16	ZZZZZZ	108.277
13:19	MA41620-CCVA11	103.328
13:22	MA41620-CCB11	107.099
13:26	ZZZZZZ	No results reported for the elements associated with this internal standard.
13:29	MP99356-B1	105.869
13:33	MP99356-B2	106.353
13:36	MP99356-S1	105.668
13:39	MP99356-S2	106.019
13:43	MP99356-MB1	105.734
13:46	JC39207-4	106.032
13:50	ZZZZZZ	No results reported for the elements associated with this internal standard.
13:53	MA41620-CCVA12	104.988
13:57	MA41620-CCB12	106.996
14:00	ZZZZZZ	106.836
14:03	ZZZZZZ	106.487
14:07	ZZZZZZ	108.643
14:10	ZZZZZZ	107.916
14:14	ZZZZZZ	107.082
14:17	ZZZZZZ	110.157
14:21	ZZZZZZ	106.534
14:24	ZZZZZZ	104.011
14:28	MA41620-CCVA13	103.582
14:31	MA41620-CCB13	105.954
14:52	MP99357-MB1	102.911
14:55	MP99357-B1	107.439
14:59	MP99357-B2	106.356
15:02	MP99357-S1	106.09
15:05	MP99357-S2	107.152
15:09	ZZZZZZ	No results reported for the elements associated with this internal standard.
15:12	JC39207-20	106.771
15:16	ZZZZZZ	107.231
15:19	MA41620-CCVA14	105.017
15:23	MA41620-CCB14	107.643

6.1.1  
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INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 Analyst: MS Run ID: MA41620  
 Parameters: Pb

Time	Sample Description	Istd#1
15:26	ZZZZZZ	106.831
15:29	ZZZZZZ	106.807
15:33	ZZZZZZ	107.181
15:36	ZZZZZZ	107.36
15:40	ZZZZZZ	106.949
15:43	ZZZZZZ	105.514
15:47	ZZZZZZ	102.502
15:50	ZZZZZZ	107.45
15:54	MA41620-CCVA15	103.649
15:57	MA41620-CCB15	107.326
16:01	MP99358-MB1	105.95
16:04	MP99358-B1	107.287
16:07	MP99358-B2	106.608
16:11	MP99358-S1	104.964
16:14	MP99358-S2	106.271
16:19	ZZZZZZ	No results reported for the elements associated with this internal standard.
16:22	JC39207-40	105.73
16:26	ZZZZZZ	107.66
16:29	MA41620-CCVA16	104.479
16:32	MA41620-CCB16	107.51
16:39	ZZZZZZ	105.832
16:43	ZZZZZZ	107.26
16:46	ZZZZZZ	107.011
16:50	ZZZZZZ	106.064
16:53	ZZZZZZ	106.606
16:57	ZZZZZZ	106.798
17:00	ZZZZZZ	106.852
17:04	ZZZZZZ	107.882
17:07	MA41620-CCVA17	103.639
17:11	MA41620-CCB17	103.212
17:14	MP99359-MB1	106.416
17:19	MP99359-B1	106.033
17:23	MP99359-B2	105.54

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 Analyst: MS Run ID: MA41620  
 Parameters: Pb

Time	Sample Description	Istd#1
17:26	MP99359-S1	103.945
17:30	MP99359-S2	106.008
17:33	ZZZZZ	No results reported for the elements associated with this internal standard.
17:36	JC39207-60	106.662
17:40	ZZZZZ	106.715
17:43	MA41620-CCVA18	104.08
17:47	MA41620-CCB18	106.284
17:50	ZZZZZ	105.409
17:54	ZZZZZ	105.605
17:57	ZZZZZ	105.84
18:01	ZZZZZ	105.881
18:04	ZZZZZ	106.491
18:08	ZZZZZ	105.399
18:11	ZZZZZ	105.927
18:14	ZZZZZ	103.797
18:18	ZZZZZ	109.567
18:21	MA41620-CCVA19	101.858
18:25	MA41620-CCB19	103.247
18:28	MP99360-MB1	104.105
18:31	MP99360-B1	103.274
18:35	MP99360-B2	103.195
18:38	MP99360-S1	103.67
18:42	MP99360-S2	104.318
18:45	ZZZZZ	No results reported for the elements associated with this internal standard.
18:49	JC39207-80	104.784
18:52	ZZZZZ	105.708
18:55	MA41620-CCVA20	103.053
18:59	MA41620-CCB20	105.088
19:02	ZZZZZ	105.458
19:06	ZZZZZ	105.32
19:09	ZZZZZ	105.96
19:13	ZZZZZ	106.115
19:16	ZZZZZ	103.522

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 Analyst: MS Run ID: MA41620  
 Parameters: Pb

Time	Sample Description	Istd#1
19:20	ZZZZZZ	105.089
19:23	ZZZZZZ	104.773
19:27	ZZZZZZ	104.953
19:30	MA41620-CCVA21	101.334
19:33	MA41620-CCB21	105.207
19:37	MP99361-MB1	103.468
19:40	MP99361-B1	104.332
19:43	MP99361-B2	103.715
19:47	MP99361-S1	103.215
19:50	MP99361-S2	105.298
19:54	ZZZZZZ	No results reported for the elements associated with this internal standard.
19:57	JC39207-100	104.516
20:01	ZZZZZZ	104.855
20:04	MA41620-CCVA22	102.239
20:08	MA41620-CCB22	104.037
20:11	ZZZZZZ	103.554
20:14	ZZZZZZ	104.068
20:18	ZZZZZZ	102.721
20:21	ZZZZZZ	103.317
20:25	ZZZZZZ	103.725
20:28	ZZZZZZ	103.879
20:32	ZZZZZZ	103.12
20:35	ZZZZZZ	103.71
20:39	MA41620-CCVA23	101.079
20:42	MA41620-CCB23	103.302
20:45	MP99362-MB1	101.036
20:49	MP99362-B1	102.594
20:52	MP99362-B2	102.387
20:56	MP99362-S1	102.447
20:59	MP99362-S2	103.553
21:02	ZZZZZZ	No results reported for the elements associated with this internal standard.
21:06	JC39207-120	102.473
21:09	ZZZZZZ	103.964

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 Analyst: MS Run ID: MA41620  
 Parameters: Pb

Time	Sample Description	Istd#1
21:13	MA41620-CCVA24	98.036
21:16	MA41620-CCB24	103.616
21:20	ZZZZZZ	100.555
21:23	ZZZZZZ	103.963
21:26	ZZZZZZ	102.353
21:30	ZZZZZZ	102.662
21:33	ZZZZZZ	102.598
21:37	ZZZZZZ	102.348
21:40	ZZZZZZ	101.708
21:44	ZZZZZZ	101.624
21:47	MA41620-CCVA25	98.496
21:51	MA41620-CCB25	100.342
21:54	MP99363-MB1	102.072
21:57	MP99363-B1	99.889
22:01	MP99363-B2	99.786
22:04	MP99363-S1	101.245
22:08	MP99363-S2	102.052
22:11	ZZZZZZ	No results reported for the elements associated with this internal standard.
22:14	JC39207-140	101.57
22:18	ZZZZZZ	101.886
22:21	MA41620-CCVA26	98.932
22:25	MA41620-CCB26	100.859
22:28	ZZZZZZ	101.488
22:32	ZZZZZZ	101.216
22:35	ZZZZZZ	100.774
22:39	ZZZZZZ	101.188
22:42	ZZZZZZ	104.645
22:45	JC39208-1	105.786
22:49	JC39208-2	101.501
22:52	JC39208-4	100.499
22:56	MA41620-CCVA27	98.429
22:59	MA41620-CCB27	101.543

! = Outside limits.



INTERNAL STANDARD SUMMARY

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV      Date Analyzed: 03/21/17      Methods: EPA 200.8  
Analyst: MS      Run ID: MA41620  
Parameters: Pb

Time	Sample Description	Istd#1
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LEGEND:

<u>Istd#</u>	<u>Parameter</u>	<u>Limits</u>
Istd#1	Bismuth	60-125 %

6.1.1  
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BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 QC Limits: result < RL Run ID: MA41620 Units: ug/l

Time:			08:07			08:14			08:24			08:53
Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3	final	CCB3	final
Metal			raw	final	raw	final	raw	final	raw	final	raw	final
Lead	0.50	.0043	0.00611	<0.50	0.00587	<0.50	0.00689	<0.50	0.0119	<0.50		

(\*) Outside of QC limits  
 (anr) Analyte not requested

6.1.2

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BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 QC Limits: result < RL Run ID: MA41620 Units: ug/l

	Time:		09:17		09:52		10:26		11:01	
	Sample ID:		CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Lead	0.50	.0043	0.0105	<0.50	0.0101	<0.50	0.0149	<0.50	0.0108	<0.50

(\*) Outside of QC limits  
 (anr) Analyte not requested

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 QC Limits: result < RL Run ID: MA41620 Units: ug/l

	Time:		11:38		12:13		12:47		13:22	
	Sample ID:		CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Lead	0.50	.0043	0.0159	<0.50	0.0128	<0.50	0.0171	<0.50	0.0122	<0.50

(\*) Outside of QC limits  
 (anr) Analyte not requested

6.1.2  
 6

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 QC Limits: result < RL Run ID: MA41620 Units: ug/l

Time:			13:57		14:31		15:23		15:57	
Sample ID:			CCB12		CCB13		CCB14		CCB15	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Lead	0.50	.0043	0.0183	<0.50	0.0166	<0.50	0.0267	<0.50	0.0202	<0.50

(\*) Outside of QC limits  
 (anr) Analyte not requested

6.1.2

6

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 QC Limits: result < RL Run ID: MA41620 Units: ug/l

Time:			16:32		17:11		17:47		18:25	
Sample ID:			CCB16		CCB17		CCB18		CCB19	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Lead	0.50	.0043	0.0320	<0.50	0.0327	<0.50	0.0328	<0.50	0.0223	<0.50

(\*) Outside of QC limits  
 (anr) Analyte not requested

6.1.2

6

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 QC Limits: result < RL Run ID: MA41620 Units: ug/l

Time:	18:59	19:33	20:08	20:42						
Sample ID:	CCB20	CCB21	CCB22	CCB23						
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Lead	0.50	.0043	0.0285	<0.50	0.0253	<0.50	0.0294	<0.50	0.0232	<0.50

(\*) Outside of QC limits  
 (anr) Analyte not requested

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 QC Limits: result < RL Run ID: MA41620 Units: ug/l

	Time:		21:16		21:51		22:25		22:59	
	Sample ID:		CCB24		CCB25		CCB26		CCB27	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Lead	0.50	.0043	0.0324	<0.50	0.0145	<0.50	0.0214	<0.50	0.0158	<0.50

(\*) Outside of QC limits  
 (anr) Analyte not requested

6.1.2

6



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV      Date Analyzed: 03/21/17      Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery      Run ID: MA41620      Units: ug/l

	Time:		08:04		08:10		08:21		
Sample ID:	ICVA	ICVA1		CCVA	CCVA1		CCVA	CCVA2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Lead	60	61.4	102.3	50	51.3	102.6	50	51.5	103.0

(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.3

6

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV      Date Analyzed: 03/21/17      Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery      Run ID: MA41620      Units: ug/l

	Time:	08:50		09:14		09:49			
Sample ID:	CCVA	CCVA3		CCVA4		CCVA5			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Lead	50	51.5	103.0	50	50.9	101.8	50	50.7	101.4

(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.3

6

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV      Date Analyzed: 03/21/17      Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery      Run ID: MA41620      Units: ug/l

	Time:	10:23		10:57		11:35			
Sample ID:	CCVA	CCVA6		CCVA7		CCVA8			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Lead	50	50.7	101.4	50	50.9	101.8	50	50.9	101.8

(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.3

6

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV      Date Analyzed: 03/21/17      Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery      Run ID: MA41620      Units: ug/l

	Time:	12:09		12:44		13:19			
Sample ID:	CCVA	CCVA9		CCVA10		CCVA11			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Lead	50	50.9	101.8	50	50.7	101.4	50	50.8	101.6

(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.3

6

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV      Date Analyzed: 03/21/17      Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery      Run ID: MA41620      Units: ug/l

	Time:	13:53		14:28		15:19			
Sample ID:	CCVA	CCVA12		CCVA13		CCVA14			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Lead	50	50.8	101.6	50	50.8	101.6	50	50.4	100.8

(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.3

6

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV      Date Analyzed: 03/21/17      Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery      Run ID: MA41620      Units: ug/l

	Time:	15:54		16:29		17:07			
Sample ID:	CCVA	CCVA15		CCVA16		CCVA17			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Lead	50	50.5	101.0	50	50.7	101.4	50	50.2	100.4

(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.3

6

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV      Date Analyzed: 03/21/17      Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery      Run ID: MA41620      Units: ug/l

	Time:	17:43		18:21		18:55			
Sample ID:	CCVA	CCVA18		CCVA19		CCVA20			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Lead	50	50.4	100.8	50	50.4	100.8	50	50.3	100.6

(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.3

6

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV      Date Analyzed: 03/21/17      Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery      Run ID: MA41620      Units: ug/l

	Time:	19:30		20:04		20:39			
Sample ID:	CCVA	CCVA21		CCVA22		CCVA23			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Lead	50	50.1	100.2	50	49.7	99.4	50	49.7	99.4

(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.3

6



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV      Date Analyzed: 03/21/17      Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery      Run ID: MA41620      Units: ug/l

	Time:	21:13		21:47		22:21			
Sample ID:	CCVA	CCVA24		CCVA	CCVA25		CCVA	CCVA26	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Lead	50	51.2	102.4	50	49.5	99.0	50	49.2	98.4

(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.3

6

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery Run ID: MA41620 Units: ug/l

Time:	22:56
Sample ID: CCVA	CCVA27
Metal True	Results % Rec

Lead 50 48.9 97.8

(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.3

6

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032117W1.CSV Date Analyzed: 03/21/17 Methods: EPA 200.8  
 QC Limits: 70 to 130 % Recovery Run ID: MA41620 Units: ug/l

Time:			08:17	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec

Lead 0.5 0.25 0.479 95.8

(\*) Outside of QC limits  
 (anr) Analyte not requested

6.1.4

6

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
Analyst: MA Run ID: MA41626  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:07	MA41626-STD1	1		STDA
12:10	MA41626-STD2	1		STDA
12:13	MA41626-STD3	1		STDB
12:17	MA41626-STD4	1		STDC
12:20	MA41626-STD5	1		STDD
12:24	MA41626-STD6	1		STDE
12:27	MA41626-STD7	1		STDF
12:30	ZZZZZZ	1		
12:34	MA41626-ICVA1	1		
12:37	MA41626-ICB1	1		
12:41	MA41626-CCVA1	1		
12:44	MA41626-CCB1	1		
12:47	MA41626-CRI1	1		
12:51	MA41626-CCVA2	1		
12:54	MA41626-CCB2	1		
13:00	MP99378-MB1	1		
13:04	MP99378-B1	1		
13:07	MP99378-B2	1		
13:10	MP99378-S1	1		
13:14	MP99378-S2	1		
13:17	ZZZZZZ	1		
13:21	JC39208-6	1		
----->	Last reportable sample/prep for job JC39208			
13:24	ZZZZZZ	1		
13:28	MA41626-CCVA3	1		
13:31	MA41626-CCB3	1		
----->	Last reportable CCB for job JC39208			
13:41	ZZZZZZ	1		
13:45	ZZZZZZ	1		
13:48	ZZZZZZ	1		
13:52	ZZZZZZ	1		
13:55	ZZZZZZ	1		
13:59	ZZZZZZ	1		
14:02	ZZZZZZ	1		
14:06	ZZZZZZ	1		

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
Analyst: MA Run ID: MA41626  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:10	MA41626-CCVA4	1		
14:14	MA41626-CCB4	1		
14:17	MP99379-MB1	1		
14:21	MP99379-B1	1		
14:24	MP99379-B2	1		
14:27	MP99379-S1	1		
14:31	MP99379-S2	1		
14:34	ZZZZZ	1		
14:38	JC39209-18	1		(sample used for QC only; not part of login JC39208)
14:41	ZZZZZ	1		
14:45	MA41626-CCVA5	1		
14:48	MA41626-CCB5	1		
14:51	ZZZZZ	1		
14:55	ZZZZZ	1		
14:58	ZZZZZ	1		
15:02	ZZZZZ	1		
15:05	ZZZZZ	1		
15:09	ZZZZZ	1		
15:12	ZZZZZ	1		
15:16	ZZZZZ	1		
15:19	MA41626-CCVA6	1		
15:23	MA41626-CCB6	1		
15:26	MP99380-MB1	1		
15:29	MP99380-B1	1		
15:33	MP99380-B2	1		
15:36	MP99380-S1	1		
15:40	MP99380-S2	1		
15:43	ZZZZZ	1		
15:46	JC39209-38	1		(sample used for QC only; not part of login JC39208)
15:50	ZZZZZ	1		
15:53	MA41626-CCVA7	1		
15:57	MA41626-CCB7	1		
16:00	ZZZZZ	1		

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
Analyst: MA Run ID: MA41626  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:04	ZZZZZZ	1		
16:07	ZZZZZZ	1		
16:11	ZZZZZZ	1		
16:14	ZZZZZZ	1		
16:17	ZZZZZZ	1		
16:21	ZZZZZZ	1		
16:24	ZZZZZZ	1		
16:28	MA41626-CCVA8	1		
16:31	MA41626-CCB8	1		
16:35	MP99381-MB1	1		
16:38	MP99381-B1	1		
16:41	MP99381-B2	1		
16:45	MP99381-S1	1		
16:48	MP99381-S2	1		
16:52	ZZZZZZ	1		
16:55	JC39209-58	1		(sample used for QC only; not part of login JC39208)
16:59	ZZZZZZ	1		
17:02	MA41626-CCVA9	1		
17:05	MA41626-CCB9	1		
17:09	ZZZZZZ	1		
17:12	ZZZZZZ	1		
17:16	ZZZZZZ	1		
17:19	ZZZZZZ	1		
17:23	ZZZZZZ	1		
17:26	ZZZZZZ	1		
17:30	ZZZZZZ	1		
17:33	ZZZZZZ	1		
17:37	MA41626-CCVA10	1		
17:40	MA41626-CCB10	1		
17:43	MP99410-MB1	1		
17:47	ZZZZZZ	1		
17:50	MP99410-B2	1		
17:54	MP99410-S1	1		

6.2  
6

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
Analyst: MA Run ID: MA41626  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:57	MP99410-S2	1		
18:00	MP99410-B1	1		
18:04	ZZZZZZ	1		
18:07	JC39209-78	1		(sample used for QC only; not part of login JC39208)
18:11	ZZZZZZ	1		
18:14	MA41626-CCVA11	1		
18:18	MA41626-CCB11	1		
18:21	ZZZZZZ	1		
18:24	ZZZZZZ	1		
18:28	ZZZZZZ	1		
18:31	ZZZZZZ	1		
18:35	ZZZZZZ	1		
18:38	ZZZZZZ	1		
18:42	ZZZZZZ	1		
18:45	ZZZZZZ	1		
18:49	MA41626-CCVA12	1		
18:52	MA41626-CCB12	1		
18:55	MP99411-MB1	1		
18:59	MP99411-B1	1		
19:02	MP99411-B2	1		
19:06	MP99411-S1	1		
19:09	MP99411-S2	1		
19:13	ZZZZZZ	1		
19:16	JC39210-10	1		(sample used for QC only; not part of login JC39208)
19:19	ZZZZZZ	1		
19:23	MA41626-CCVA13	1		
19:26	MA41626-CCB13	1		
19:30	ZZZZZZ	1		
19:33	ZZZZZZ	1		
19:37	ZZZZZZ	1		
19:40	ZZZZZZ	1		
19:44	ZZZZZZ	1		
19:47	ZZZZZZ	1		

SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
Analyst: MA Run ID: MA41626  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:50	ZZZZZZ	1		
19:54	ZZZZZZ	1		
19:57	MA41626-CCVA14	1		
20:01	MA41626-CCB14	1		
20:04	MP99412-MB1	1		
20:08	MP99412-B1	1		
20:11	MP99412-B2	1		
20:14	MP99412-S1	1		
20:18	MP99412-S2	1		
20:21	ZZZZZZ	1		
20:25	JC39210-30	1		(sample used for QC only; not part of login JC39208)
20:28	ZZZZZZ	1		
20:32	MA41626-CCVA15	1		
20:35	MA41626-CCB15	1		
20:38	ZZZZZZ	1		
20:42	ZZZZZZ	1		
20:45	ZZZZZZ	1		
20:49	ZZZZZZ	1		
20:52	ZZZZZZ	1		
20:56	ZZZZZZ	1		
20:59	ZZZZZZ	1		
21:03	ZZZZZZ	1		
21:06	MA41626-CCVA16	1		
21:10	MA41626-CCB16	1		
21:13	MP99413-MB1	1		
21:16	MP99413-B1	1		
21:20	MP99413-B2	1		
21:23	MP99413-S1	1		
21:27	MP99413-S2	1		
21:30	ZZZZZZ	1		
21:34	JC39210-50	1		(sample used for QC only; not part of login JC39208)
21:37	ZZZZZZ	1		
21:41	MA41626-CCVA17	1		



SGS Accutest Instrument Runlog  
Inorganics Analyses

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV      Date Analyzed: 03/22/17      Methods: EPA 200.8  
Analyst: MA      Run ID: MA41626  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
21:44	MA41626-CCB17	1		
21:47	ZZZZZZ	1		
21:51	ZZZZZZ	1		
21:54	ZZZZZZ	1		
21:58	ZZZZZZ	1		
22:01	ZZZZZZ	1		
22:05	ZZZZZZ	1		
22:08	ZZZZZZ	1		
22:12	ZZZZZZ	1		
22:15	MA41626-CCVA18	1		
22:19	MA41626-CCB18	1		

Refer to raw data for calibration curve and standards.

6.2  
6

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
 Analyst: MA Run ID: MA41626  
 Parameters: Pb

Time	Sample Description	Istd#1
12:07	MA41626-STD1	100
12:10	MA41626-STD2	100
12:13	MA41626-STD3	98.828
12:17	MA41626-STD4	99.047
12:20	MA41626-STD5	97.613
12:24	MA41626-STD6	97.002
12:27	MA41626-STD7	95.506
12:30	ZZZZZ	No results reported for the elements associated with this internal standard.
12:34	MA41626-ICVA1	94.102
12:37	MA41626-ICB1	98.027
12:41	MA41626-CCVA1	95.647
12:44	MA41626-CCB1	98.724
12:47	MA41626-CRI1	99.714
12:51	MA41626-CCVA2	95.538
12:54	MA41626-CCB2	98.251
13:00	MP99378-MB1	97.807
13:04	MP99378-B1	97.138
13:07	MP99378-B2	92.583
13:10	MP99378-S1	94.039
13:14	MP99378-S2	94.402
13:17	ZZZZZ	No results reported for the elements associated with this internal standard.
13:21	JC39208-6	94.014
13:24	ZZZZZ	97.384
13:28	MA41626-CCVA3	94.758
13:31	MA41626-CCB3	96.565
13:41	ZZZZZ	94.637
13:45	ZZZZZ	95.54
13:48	ZZZZZ	96.168
13:52	ZZZZZ	No results reported for the elements associated with this internal standard.
13:55	ZZZZZ	96.091
13:59	ZZZZZ	97.214
14:02	ZZZZZ	96.793
14:06	ZZZZZ	97.267

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
 Analyst: MA Run ID: MA41626  
 Parameters: Pb

Time	Sample Description	Istd#1
14:10	MA41626-CCVA4	95.09
14:14	MA41626-CCB4	97.608
14:17	MP99379-MB1	96.947
14:21	MP99379-B1	96.452
14:24	MP99379-B2	94.595
14:27	MP99379-S1	94.708
14:31	MP99379-S2	94.126
14:34	ZZZZZ	No results reported for the elements associated with this internal standard.
14:38	JC39209-18	93.744
14:41	ZZZZZ	91.333
14:45	MA41626-CCVA5	93.747
14:48	MA41626-CCB5	96.04
14:51	ZZZZZ	93.928
14:55	ZZZZZ	94.84
14:58	ZZZZZ	95.09
15:02	ZZZZZ	96.132
15:05	ZZZZZ	94.871
15:09	ZZZZZ	96.924
15:12	ZZZZZ	96.718
15:16	ZZZZZ	95.997
15:19	MA41626-CCVA6	95.574
15:23	MA41626-CCB6	98.143
15:26	MP99380-MB1	96.668
15:29	MP99380-B1	94.988
15:33	MP99380-B2	94.822
15:36	MP99380-S1	93.753
15:40	MP99380-S2	94.135
15:43	ZZZZZ	No results reported for the elements associated with this internal standard.
15:46	JC39209-38	93.507
15:50	ZZZZZ	94.589
15:53	MA41626-CCVA7	92.462
15:57	MA41626-CCB7	95.402
16:00	ZZZZZ	93.08

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
 Analyst: MA Run ID: MA41626  
 Parameters: Pb

Time	Sample Description	Istd#1
16:04	ZZZZZZ	94.57
16:07	ZZZZZZ	94.461
16:11	ZZZZZZ	94.362
16:14	ZZZZZZ	94.362
16:17	ZZZZZZ	94.789
16:21	ZZZZZZ	94.535
16:24	ZZZZZZ	94.263
16:28	MA41626-CCVA8	92.195
16:31	MA41626-CCB8	94.398
16:35	MP99381-MB1	94.136
16:38	MP99381-B1	95.599
16:41	MP99381-B2	92.713
16:45	MP99381-S1	92.503
16:48	MP99381-S2	92.76
16:52	ZZZZZZ	No results reported for the elements associated with this internal standard.
16:55	JC39209-58	92.402
16:59	ZZZZZZ	92.579
17:02	MA41626-CCVA9	91.793
17:05	MA41626-CCB9	92.967
17:09	ZZZZZZ	92.188
17:12	ZZZZZZ	92.874
17:16	ZZZZZZ	92.571
17:19	ZZZZZZ	92.373
17:23	ZZZZZZ	92.592
17:26	ZZZZZZ	92.204
17:30	ZZZZZZ	91.603
17:33	ZZZZZZ	93.375
17:37	MA41626-CCVA10	90.682
17:40	MA41626-CCB10	93.451
17:43	MP99410-MB1	93.189
17:47	ZZZZZZ	No results reported for the elements associated with this internal standard.
17:50	MP99410-B2	92.564
17:54	MP99410-S1	92.28

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
 Analyst: MA Run ID: MA41626  
 Parameters: Pb

Time	Sample Description	Istd#1
17:57	MP99410-S2	92.2
18:00	MP99410-B1	89.882
18:04	ZZZZZZ	No results reported for the elements associated with this internal standard.
18:07	JC39209-78	91.029
18:11	ZZZZZZ	90.779
18:14	MA41626-CCVA11	89.797
18:18	MA41626-CCB11	92.121
18:21	ZZZZZZ	90.709
18:24	ZZZZZZ	90.901
18:28	ZZZZZZ	91.016
18:31	ZZZZZZ	93.378
18:35	ZZZZZZ	90.124
18:38	ZZZZZZ	91.17
18:42	ZZZZZZ	90.409
18:45	ZZZZZZ	90.787
18:49	MA41626-CCVA12	89.988
18:52	MA41626-CCB12	91.29
18:55	MP99411-MB1	91.619
18:59	MP99411-B1	90.425
19:02	MP99411-B2	89.192
19:06	MP99411-S1	89.24
19:09	MP99411-S2	89.552
19:13	ZZZZZZ	No results reported for the elements associated with this internal standard.
19:16	JC39210-10	89.413
19:19	ZZZZZZ	89.514
19:23	MA41626-CCVA13	89.619
19:26	MA41626-CCB13	90.327
19:30	ZZZZZZ	89.019
19:33	ZZZZZZ	86.763
19:37	ZZZZZZ	89.517
19:40	ZZZZZZ	89.747
19:44	ZZZZZZ	89.069
19:47	ZZZZZZ	89.471

6.2.1  
6

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
 Analyst: MA Run ID: MA41626  
 Parameters: Pb

Time	Sample Description	Istd#1
19:50	ZZZZZZ	90.04
19:54	ZZZZZZ	89.504
19:57	MA41626-CCVA14	87.745
20:01	MA41626-CCB14	89.87
20:04	MP99412-MB1	90.184
20:08	MP99412-B1	89.258
20:11	MP99412-B2	87.844
20:14	MP99412-S1	87.833
20:18	MP99412-S2	87.816
20:21	ZZZZZZ	No results reported for the elements associated with this internal standard.
20:25	JC39210-30	88.08
20:28	ZZZZZZ	88.252
20:32	MA41626-CCVA15	87.392
20:35	MA41626-CCB15	85.696
20:38	ZZZZZZ	87.42
20:42	ZZZZZZ	87.696
20:45	ZZZZZZ	87.916
20:49	ZZZZZZ	87.491
20:52	ZZZZZZ	86.722
20:56	ZZZZZZ	87.05
20:59	ZZZZZZ	87.673
21:03	ZZZZZZ	86.51
21:06	MA41626-CCVA16	86.06
21:10	MA41626-CCB16	88.473
21:13	MP99413-MB1	87.43
21:16	MP99413-B1	86.774
21:20	MP99413-B2	85.887
21:23	MP99413-S1	85.706
21:27	MP99413-S2	86.43
21:30	ZZZZZZ	No results reported for the elements associated with this internal standard.
21:34	JC39210-50	86.054
21:37	ZZZZZZ	86.633
21:41	MA41626-CCVA17	85.583

6.2.1  
6

INTERNAL STANDARD SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV      Date Analyzed: 03/22/17      Methods: EPA 200.8  
 Analyst: MA      Run ID: MA41626  
 Parameters: Pb

Time	Sample Description	Istd#1
21:44	MA41626-CCB17	87.345
21:47	ZZZZZZ	86.557
21:51	ZZZZZZ	86.045
21:54	ZZZZZZ	85.698
21:58	ZZZZZZ	86.217
22:01	ZZZZZZ	85.882
22:05	ZZZZZZ	85.553
22:08	ZZZZZZ	86.093
22:12	ZZZZZZ	85.872
22:15	MA41626-CCVA18	84.659
22:19	MA41626-CCB18	86.563

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Bismuth	60-125 %

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
 QC Limits: result < RL Run ID: MA41626 Units: ug/l

Time:			12:37			12:44			12:54			13:31
Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3	final	final	
Metal			raw		raw		raw		raw		raw	
Lead	0.50	.0043	0.0105	<0.50	0.0110	<0.50	0.0114	<0.50	0.0141	<0.50		

(\*) Outside of QC limits  
 (anr) Analyte not requested

6.2.2

6



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV      Date Analyzed: 03/22/17      Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery      Run ID: MA41626      Units: ug/l

	Time:		12:34		12:41		12:51					
Sample ID:	ICVA	ICVA1	Results	% Rec	CCVA	CCVA1	Results	% Rec	CCVA			
Metal	True				True				True			
Lead	60		62.0	103.3	50		49.6	99.2	50		49.5	99.0

(\*) Outside of QC limits  
(anr) Analyte not requested

6.2.3

6

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV      Date Analyzed: 03/22/17      Methods: EPA 200.8  
QC Limits: 90 to 110 % Recovery      Run ID: MA41626      Units: ug/l

Time:	13:28		
Sample ID: CCVA	CCVA3		
Metal	True	Results	% Rec

Lead                    50                    48.9                    97.8

(\*) Outside of QC limits  
(anr) Analyte not requested

6.2.3

6

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

File ID: XA032217W1.CSV Date Analyzed: 03/22/17 Methods: EPA 200.8  
 QC Limits: 70 to 130 % Recovery Run ID: MA41626 Units: ug/l

Time:	12:47		
Sample ID:	CRI	CRIA	CRI1
Metal	True	True	Results % Rec
Lead	0.5	0.25	0.476 95.2

(\*) Outside of QC limits  
 (anr) Analyte not requested

6.2.4

6

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

QC Batch ID: MP99363  
Matrix Type: DRINKING WATER

Methods: EPA 200.8  
Units: mg/l

Prep Date: 03/21/17

Metal	RL	IDL	MDL	MB raw	final
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Lead 0.00050 .0000043 .000018 0.0000115<0.00050

Associated samples MP99363: JC39208-1, JC39208-2, JC39208-4

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

6.3.1

6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

QC Batch ID: MP99363  
 Matrix Type: DRINKING WATER

Methods: EPA 200.8  
 Units: mg/l

Prep Date: 03/21/17

Metal	JC39207-140 Original MS	Spike lot	QC MPX200.8 % Rec	QC Limits
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Lead 0.0206 0.119 0.100 98.4 70-130

Associated samples MP99363: JC39208-1, JC39208-2, JC39208-4

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

6.3.2

6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

QC Batch ID: MP99363

Methods: EPA 200.8

Matrix Type: DRINKING WATER

Units: mg/l

Prep Date:

03/21/17

Metal	JC39207-140 Original MSD	SpikeLot MPX200.8 % Rec	MSD RPD	QC Limit
Lead	0.0206 0.119	0.100 98.4	0.0	20

Associated samples MP99363: JC39208-1, JC39208-2, JC39208-4

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

6.3.2

6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

QC Batch ID: MP99363  
 Matrix Type: DRINKING WATER

Methods: EPA 200.8  
 Units: mg/l

Prep Date: 03/21/17 03/21/17

Metal	BSP Result	Spikelot MPX200.8 % Rec	QC Limits	BSD Result	Spikelot MPX200.8 % Rec	BSD RPD	QC Limit
Lead	0.0995	0.100	99.5	85-115	0.100	0.100 100.0	0.5

Associated samples MP99363: JC39208-1, JC39208-2, JC39208-4

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

6.3.3

6

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

QC Batch ID: MP99378  
Matrix Type: DRINKING WATER

Methods: EPA 200.8  
Units: mg/l

Prep Date: 03/22/17

Metal	RL	IDL	MDL	MB raw	final
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Lead 0.00050 .0000043 .000018 0.00000667<0.00050

Associated samples MP99378: JC39208-6

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

6.4.1

6



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC39208  
Account: PARTENJE - Partner Engineering & Science  
Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

QC Batch ID: MP99378

Methods: EPA 200.8

Matrix Type: DRINKING WATER

Units: mg/l

Prep Date: 03/22/17

Metal	JC39208-6 Original MS	SpikeLot MPX200.8 % Rec	QC Limits
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Lead 0.000463 0.0979 0.100 97.4 70-130

Associated samples MP99378: JC39208-6

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

6.4.2

6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

QC Batch ID: MP99378

Methods: EPA 200.8

Matrix Type: DRINKING WATER

Units: mg/l

Prep Date:

03/22/17

Metal	JC39208-6 Original MSD	SpikeLot MPX200.8	% Rec	MSD RPD	QC Limit
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Lead	0.000463	0.0978	0.100	97.3	0.1	20
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Associated samples MP99378: JC39208-6

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

6.4.2

6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC39208  
 Account: PARTENJE - Partner Engineering & Science  
 Project: Transportation, 165 Don Connor Boulevard, Jackson, NJ

QC Batch ID: MP99378

Methods: EPA 200.8

Matrix Type: DRINKING WATER

Units: mg/l

Prep Date:

03/22/17

03/22/17

Metal	BSP Result	Spikelot MPX200.8 % Rec	QC Limits	BSD Result	Spikelot MPX200.8 % Rec	BSD RPD	QC Limit
Lead	0.0976	0.100	97.6	85-115	0.103	0.100 103.0	5.4

Associated samples MP99378: JC39208-6

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

6.4.3

6