

## **APPENDIX B**

### **Laboratory Analytical Reports**



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**TO:** Kevin Pasternak  
**FROM:** Carol Lovett, Austin QA/QC Group  
**PROJECT:** Colorado River Corridor (CRC)  
**DATE:** September 9, 2014  
**SUBJECT:** Data Validation Summary for the August 2014 Sampling Event

I have completed the data review and validation of the August 2014 sampling event. This was a general review of the results that were reported from one laboratory: DHL Analytical, Round Rock, Texas. The quality control (QC) results that were submitted by the laboratory were reviewed to confirm that the analyses were performed according to method protocols and to assess the quality of the reported laboratory data.

The QC results indicate that the data are usable for the intended purposes. There were no anomalies and no results were qualified.



September 02, 2014

Kevin Pasternack  
URS Corporation  
9400 Amberglen Bldg E  
Austin, Texas 78729  
TEL: (512) 454-4797  
FAX (512) 454-8807  
RE: CRCP

Order No.: 1408222

Dear Kevin Pasternack:

DHL Analytical, Inc. received 7 sample(s) on 8/26/2014 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in red ink, appearing to read "John DuPont".

John DuPont  
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-14-12



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 Web: [www.dhlanalytical.com](http://www.dhlanalytical.com)  
 E-Mail: [login@dhlanalytical.com](mailto:login@dhlanalytical.com)



No 63340

CHAIN-OF-CUSTODY

CLIENT: URS Corp  
 ADDRESS: 9400 Amberglen Blvd  
 PHONE: 512-454-4797 FAX/E-MAIL: 512-454-8807  
 DATA REPORTED TO: Kevin.Pasternak@urs.com  
 ADDITIONAL REPORT COPIES TO: \_\_\_\_\_

DATE: 8/26/2014 PAGE 1 OF 1  
 PO #: \_\_\_\_\_ DHL WORK ORDER #: 1408222  
 PROJECT LOCATION OR NAME: CRCP  
 CLIENT PROJECT #: 4101013.102 COLLECTOR: K. Pasternak + L. Reinhardt

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	PRESERVATION				ANALYSES	FIELD NOTES
							HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub> / NaOH	ICE		
CRCP-58522-120	01	8/26/14	1355	W	VOAs	3	X		X			
CRCP-221049-120	02		1301			3						
CRCP-Holweges-123	03		1215			3						MS/MSD
CRCP-5852314-120	04		1049			3						
CRCP-5852314-121	05		1049			3						
CRCP-ATF1-120	04		0945			3						
CRCP-NTNW2-120	07		1008			3						

- ANALYSES**
- BTEX  MTBE  TPH 1006  HOLD 1006
  - GRO (METHOD 8015)  PRO (METHOD 8105)
  - VOC 8260  VOC 624  VOC 624  HOLD (PAH) (SVOC) 624
  - SVOC 8270  PAH 8270  HOLD (PAH) (SVOC) 624
  - 8081 PEST  6088 PEST / PCB  8270 PEST
  - 8270 O-P PEST  8082 PCB  8270 PCB
  - 8321 HERB  8330 EXPL  PERCHLORATED
  - METALS 6020  METALS 200.8  LOSS METALS
  - PH  HEX CHROM  ALKALINITY
  - CHLORIDE  ANIONS
  - TCLP-SVOC  VOC  PEST  HERB
  - TCLP-METALS  RCRA 800 TX-1  Pb
  - RC  TOX  FLASHPOINT
  - TDS  TSS  \* MOISTURE  CYANIDE

TOTAL

RELINQUISHED BY: (Signature) <i>[Signature]</i>	DATE/TIME <u>8-26-14</u>	RECEIVED BY: (Signature) <i>[Signature]</i>	<b>TURN AROUND TIME</b> RUSH <input type="checkbox"/> CALL FIRST 1 DAY <input type="checkbox"/> CALL FIRST 2 DAY <input type="checkbox"/> NORMAL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	<b>LABORATORY USE ONLY:</b> RECEIVING TEMP: <u>5.9</u> THERM #: <u>57</u> CUSTODY SEALS: <input type="checkbox"/> BROKEN <input type="checkbox"/> INTACT <input checked="" type="checkbox"/> NOT USED <input type="checkbox"/> CARRIER BILL #: <input type="checkbox"/> APC DELIVERY <input checked="" type="checkbox"/> HAND DELIVERED
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)		
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)		

3

DHL DISPOSAL @ \$5.00 each     Return

Sample Receipt Checklist

Client Name URS Corporation

Date Received: 8/26/2014

Work Order Number 1408222

Received by JB

Checklist completed by: [Signature] 8/26/2014
Signature Date

Reviewed by: [Initials] 8/26/2014
Initials Date

Carrier name Hand Delivered

- Shipping container/cooler in good condition? Yes [checked] No [ ] Not Present [ ]
Custody seals intact on shipping container/cooler? Yes [ ] No [ ] Not Present [checked]
Custody seals intact on sample bottles? Yes [ ] No [ ] Not Present [checked]
Chain of custody present? Yes [checked] No [ ]
Chain of custody signed when relinquished and received? Yes [checked] No [ ]
Chain of custody agrees with sample labels? Yes [checked] No [ ]
Samples in proper container/bottle? Yes [checked] No [ ]
Sample containers intact? Yes [checked] No [ ]
Sufficient sample volume for indicated test? Yes [checked] No [ ]
All samples received within holding time? Yes [checked] No [ ]
Container/Temp Blank temperature in compliance? Yes [checked] No [ ] 5.9 °C
Water - VOA vials have zero headspace? Yes [checked] No [ ] No VOA vials submitted [ ]
Water - pH<2 acceptable upon receipt? Yes [ ] No [ ] NA [checked] LOT #
Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_
Water - ph>9 (S) or ph>12 (CN) acceptable upon receipt? Yes [ ] No [ ] NA [checked] LOT #
Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Any No response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

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**CLIENT:** URS Corporation  
**Project:** CRCP  
**Lab Order:** 1408222

**CASE NARRATIVE**

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Sample was analyzed using the methods outlined in the following references:

Method Tx1005 - Total Petroleum Hydrocarbons

LOG IN

The samples were received and log-in performed on 8/26/14. A total of 7 samples were received. The samples arrived in good condition and were properly packaged. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

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**CLIENT:** URS Corporation  
**Project:** CRCP  
**Lab Order:** 1408222

**Work Order Sample Summary**

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<b>Lab Smp ID</b>	<b>Client Sample ID</b>	<b>Tag Number</b>	<b>Date Collected</b>	<b>Date Recved</b>
1408222-01	CRCP-58522-120		08/26/14 01:55 PM	8/26/2014
1408222-02	CRCP-221049-120		08/26/14 01:01 PM	8/26/2014
1408222-03	CRCP-Holweger-123		08/26/14 12:15 PM	8/26/2014
1408222-04	CRCP-5852314-120		08/26/14 10:49 AM	8/26/2014
1408222-05	CRCP-5852314-121		08/26/14 10:49 AM	8/26/2014
1408222-06	CRCP-ATF1-120		08/26/14 09:45 AM	8/26/2014
1408222-07	CRCP-NTNW2-120		08/26/14 10:08 AM	8/26/2014

**Lab Order:** 1408222  
**Client:** URS Corporation  
**Project:** CRCP

**PREP DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1408222-01A	CRCP-58522-120	08/26/14 01:55 PM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402
1408222-02A	CRCP-221049-120	08/26/14 01:01 PM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402
1408222-03A	CRCP-Holweger-123	08/26/14 12:15 PM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402
1408222-04A	CRCP-5852314-120	08/26/14 10:49 AM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402
1408222-05A	CRCP-5852314-121	08/26/14 10:49 AM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402
1408222-06A	CRCP-ATF1-120	08/26/14 09:45 AM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402
1408222-07A	CRCP-NTNW2-120	08/26/14 10:08 AM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402

**Lab Order:** 1408222  
**Client:** URS Corporation  
**Project:** CRCP

**ANALYTICAL DATES REPORT**

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1408222-01A	CRCP-58522-120	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 10:41 AM	GC12_140902A
1408222-02A	CRCP-221049-120	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 10:49 AM	GC12_140902A
1408222-03A	CRCP-Holweger-123	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 10:58 AM	GC12_140902A
1408222-04A	CRCP-5852314-120	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 11:23 AM	GC12_140902A
1408222-05A	CRCP-5852314-121	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 11:31 AM	GC12_140902A
1408222-06A	CRCP-ATF1-120	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 11:40 AM	GC12_140902A
1408222-07A	CRCP-NTNW2-120	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 11:48 AM	GC12_140902A

**DHL Analytical, Inc.**

Date: 02-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408222

**Client Sample ID:** CRCP-58522-120  
**Lab ID:** 1408222-01  
**Collection Date:** 08/26/14 01:55 PM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							
		<b>TX1005</b>					Analyst: <b>LM</b>
T/R Hydrocarbons: C6-C12	<0.633	0.633	1.81		mg/L	1	09/02/14 10:41 AM
T/R Hydrocarbons: >C12-C28	<0.633	0.633	1.81		mg/L	1	09/02/14 10:41 AM
T/R Hydrocarbons: >C28-C35	<0.633	0.633	1.81		mg/L	1	09/02/14 10:41 AM
T/R Hydrocarbons: C6-C35	<0.633	0.633	1.81		mg/L	1	09/02/14 10:41 AM
Surr: Isopropylbenzene	82.0	0	70-130		%REC	1	09/02/14 10:41 AM
Surr: Octacosane	75.6	0	70-130		%REC	1	09/02/14 10:41 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 02-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408222

**Client Sample ID:** CRCP-221049-120  
**Lab ID:** 1408222-02  
**Collection Date:** 08/26/14 01:01 PM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							
		<b>TX1005</b>					Analyst: LM
T/R Hydrocarbons: C6-C12	<0.705	0.705	2.01		mg/L	1	09/02/14 10:49 AM
T/R Hydrocarbons: >C12-C28	<0.705	0.705	2.01		mg/L	1	09/02/14 10:49 AM
T/R Hydrocarbons: >C28-C35	<0.705	0.705	2.01		mg/L	1	09/02/14 10:49 AM
T/R Hydrocarbons: C6-C35	<0.705	0.705	2.01		mg/L	1	09/02/14 10:49 AM
Surr: Isopropylbenzene	82.8	0	70-130		%REC	1	09/02/14 10:49 AM
Surr: Octacosane	76.2	0	70-130		%REC	1	09/02/14 10:49 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 02-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408222

**Client Sample ID:** CRCP-Holweger-123  
**Lab ID:** 1408222-03  
**Collection Date:** 08/26/14 12:15 PM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							<b>Analyst: LM</b>
T/R Hydrocarbons: C6-C12	<0.710	0.710	2.03		mg/L	1	09/02/14 10:58 AM
T/R Hydrocarbons: >C12-C28	<0.710	0.710	2.03		mg/L	1	09/02/14 10:58 AM
T/R Hydrocarbons: >C28-C35	<0.710	0.710	2.03		mg/L	1	09/02/14 10:58 AM
T/R Hydrocarbons: C6-C35	<0.710	0.710	2.03		mg/L	1	09/02/14 10:58 AM
Surr: Isopropylbenzene	84.8	0	70-130		%REC	1	09/02/14 10:58 AM
Surr: Octacosane	79.3	0	70-130		%REC	1	09/02/14 10:58 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 02-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408222

**Client Sample ID:** CRCP-5852314-120  
**Lab ID:** 1408222-04  
**Collection Date:** 08/26/14 10:49 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							
		<b>TX1005</b>					Analyst: <b>LM</b>
T/R Hydrocarbons: C6-C12	<0.715	0.715	2.04		mg/L	1	09/02/14 11:23 AM
T/R Hydrocarbons: >C12-C28	<0.715	0.715	2.04		mg/L	1	09/02/14 11:23 AM
T/R Hydrocarbons: >C28-C35	<0.715	0.715	2.04		mg/L	1	09/02/14 11:23 AM
T/R Hydrocarbons: C6-C35	<0.715	0.715	2.04		mg/L	1	09/02/14 11:23 AM
Surr: Isopropylbenzene	87.0	0	70-130		%REC	1	09/02/14 11:23 AM
Surr: Octacosane	83.6	0	70-130		%REC	1	09/02/14 11:23 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 02-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408222

**Client Sample ID:** CRCP-5852314-121  
**Lab ID:** 1408222-05  
**Collection Date:** 08/26/14 10:49 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							
		<b>TX1005</b>					Analyst: <b>LM</b>
T/R Hydrocarbons: C6-C12	<0.702	0.702	2.01		mg/L	1	09/02/14 11:31 AM
T/R Hydrocarbons: >C12-C28	<0.702	0.702	2.01		mg/L	1	09/02/14 11:31 AM
T/R Hydrocarbons: >C28-C35	<0.702	0.702	2.01		mg/L	1	09/02/14 11:31 AM
T/R Hydrocarbons: C6-C35	<0.702	0.702	2.01		mg/L	1	09/02/14 11:31 AM
Surr: Isopropylbenzene	86.1	0	70-130		%REC	1	09/02/14 11:31 AM
Surr: Octacosane	82.2	0	70-130		%REC	1	09/02/14 11:31 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 02-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408222

**Client Sample ID:** CRCP-ATF1-120  
**Lab ID:** 1408222-06  
**Collection Date:** 08/26/14 09:45 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							<b>Analyst: LM</b>
T/R Hydrocarbons: C6-C12	<0.705	0.705	2.01		mg/L	1	09/02/14 11:40 AM
T/R Hydrocarbons: >C12-C28	<0.705	0.705	2.01		mg/L	1	09/02/14 11:40 AM
T/R Hydrocarbons: >C28-C35	<0.705	0.705	2.01		mg/L	1	09/02/14 11:40 AM
T/R Hydrocarbons: C6-C35	<0.705	0.705	2.01		mg/L	1	09/02/14 11:40 AM
Surr: Isopropylbenzene	86.3	0	70-130		%REC	1	09/02/14 11:40 AM
Surr: Octacosane	82.8	0	70-130		%REC	1	09/02/14 11:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 02-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408222

**Client Sample ID:** CRCP-NTNW2-120  
**Lab ID:** 1408222-07  
**Collection Date:** 08/26/14 10:08 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							<b>Analyst: LM</b>
T/R Hydrocarbons: C6-C12	<0.694	0.694	1.98		mg/L	1	09/02/14 11:48 AM
T/R Hydrocarbons: >C12-C28	<0.694	0.694	1.98		mg/L	1	09/02/14 11:48 AM
T/R Hydrocarbons: >C28-C35	<0.694	0.694	1.98		mg/L	1	09/02/14 11:48 AM
T/R Hydrocarbons: C6-C35	<0.694	0.694	1.98		mg/L	1	09/02/14 11:48 AM
Surr: Isopropylbenzene	86.9	0	70-130		%REC	1	09/02/14 11:48 AM
Surr: Octacosane	83.4	0	70-130		%REC	1	09/02/14 11:48 AM

<b>Qualifiers:</b>	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

CLIENT: URS Corporation

Work Order: 1408222

Project: CRCP

**ANALYTICAL QC SUMMARY REPORT**

RunID: GC12\_140902A

The QC data in batch 65402 applies to the following samples: 1408222-01A, 1408222-02A, 1408222-03A, 1408222-04A, 1408222-05A, 1408222-06A, 1408222-07A

Sample ID	<b>LCS-65402</b>	Batch ID:	<b>65402</b>	TestNo:	<b>TX1005</b>	Units:	<b>mg/L</b>
SampType:	<b>LCS</b>	Run ID:	<b>GC12_140902A</b>	Analysis Date:	<b>9/2/2014 9:44:54 AM</b>	Prep Date:	<b>8/28/2014</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	21.6	2.00	25.00	0	86.2	75	125			
Surr: Isopropylbenzene	2.16		2.500		86.2	70	130			
Surr: Octacosane	2.01		2.500		80.3	70	130			

Sample ID	<b>LCSD-65402</b>	Batch ID:	<b>65402</b>	TestNo:	<b>TX1005</b>	Units:	<b>mg/L</b>
SampType:	<b>LCSD</b>	Run ID:	<b>GC12_140902A</b>	Analysis Date:	<b>9/2/2014 9:53:21 AM</b>	Prep Date:	<b>8/28/2014</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	21.3	2.00	25.00	0	85.1	75	125	1.26	20	
Surr: Isopropylbenzene	2.11		2.500		84.3	70	130	0	0	
Surr: Octacosane	2.00		2.500		79.8	70	130	0	0	

Sample ID	<b>MB-65402</b>	Batch ID:	<b>65402</b>	TestNo:	<b>TX1005</b>	Units:	<b>mg/L</b>
SampType:	<b>MBLK</b>	Run ID:	<b>GC12_140902A</b>	Analysis Date:	<b>9/2/2014 10:32:44 AM</b>	Prep Date:	<b>8/28/2014</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C12	<0.700	2.00								
T/R Hydrocarbons: >C12-C28	<0.700	2.00								
T/R Hydrocarbons: >C28-C35	<0.700	2.00								
T/R Hydrocarbons: C6-C35	<0.700	2.00								
Surr: Isopropylbenzene	2.22		2.500		88.6	70	130			
Surr: Octacosane	2.21		2.500		88.2	70	130			

Sample ID	<b>1408222-03AMS</b>	Batch ID:	<b>65402</b>	TestNo:	<b>TX1005</b>	Units:	<b>mg/L</b>
SampType:	<b>MS</b>	Run ID:	<b>GC12_140902A</b>	Analysis Date:	<b>9/2/2014 11:06:31 AM</b>	Prep Date:	<b>8/28/2014</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	22.2	2.01	25.11	0	88.3	75	125			
Surr: Isopropylbenzene	2.16		2.511		86.1	70	130			
Surr: Octacosane	2.00		2.511		79.6	70	130			

Sample ID	<b>1408222-03AMSD</b>	Batch ID:	<b>65402</b>	TestNo:	<b>TX1005</b>	Units:	<b>mg/L</b>
SampType:	<b>MSD</b>	Run ID:	<b>GC12_140902A</b>	Analysis Date:	<b>9/2/2014 11:14:57 AM</b>	Prep Date:	<b>8/28/2014</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	22.4	2.01	25.16	0	88.9	75	125	0.824	20	
Surr: Isopropylbenzene	2.20		2.516		87.5	70	130	0	0	
Surr: Octacosane	2.05		2.516		81.5	70	130	0	0	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - J Analyte detected between MDL and RL
  - ND Not Detected at the Method Detection Limit
  - RL Reporting Limit
  - J Analyte detected between SDL and RL
  - DF Dilution Factor
  - MDL Method Detection Limit
  - R RPD outside accepted control limits
  - S Spike Recovery outside control limits
  - N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1408222  
**Project:** CRCP

## ANALYTICAL QC SUMMARY REPORT

**RunID: GC12\_140902A**

Sample ID <b>ICV-140902</b>	Batch ID: <b>R75147</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>ICV</b>	Run ID: <b>GC12_140902A</b>	Analysis Date: <b>9/2/2014 9:15:49 AM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	1140	2.00	1000	0	114	75	125			
Surr: Isopropylbenzene	56.2		50.00		112	70	130			
Surr: Octacosane	53.0		50.00		106	70	130			

Sample ID <b>CCV1-140902</b>	Batch ID: <b>R75147</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>GC12_140902A</b>	Analysis Date: <b>9/2/2014 2:29:44 PM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	598	2.00	500.0	0	120	75	125			
Surr: Isopropylbenzene	30.1		25.00		120	70	130			
Surr: Octacosane	27.7		25.00		111	70	130			

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	DF Dilution Factor
	J Analyte detected between MDL and RL	MDL Method Detection Limit
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
	RL Reporting Limit	S Spike Recovery outside control limits
	J Analyte detected between SDL and RL	N Parameter not NELAC certified



September 03, 2014

Kevin Pasternick  
URS Corporation  
9400 Amberglen Bldg E  
Austin, Texas 78729  
TEL: (512) 454-4797  
FAX (512) 454-8807  
RE: CRCP

Order No.: 1408242

Dear Kevin Pasternick:

DHL Analytical, Inc. received 5 sample(s) on 8/27/2014 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in red ink, appearing to read "John DuPont", is written over a white background.

John DuPont  
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-14-12



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Sample Receipt Checklist

Client Name URS Corporation  
Work Order Number 1408242

Date Received: 8/27/2014  
Received by BB

Checklist completed by: [Signature] 8/28/2014  
Signature Date

Reviewed by: [Initials] 8/28/2014  
Initials Date

Carrier name Hand Delivered

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No  8.5 °C
- Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted
- Water - pH<2 acceptable upon receipt? Yes  No  NA  LOT #  
Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_
- Water - pH>9 (S) or pH>12 (CN) acceptable upon receipt? Yes  No  NA  LOT #  
Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Any No response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

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**CLIENT:** URS Corporation  
**Project:** CRCP  
**Lab Order:** 1408242

**CASE NARRATIVE**

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Sample was analyzed using the methods outlined in the following references:

Method TX1005 - Total Petroleum Hydrocarbons

LOG IN

The samples were received and log-in performed on 8/27/2014. A total of 5 samples were received and analyzed. The samples arrived in good condition and were properly packaged. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

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**CLIENT:** URS Corporation  
**Project:** CRCP  
**Lab Order:** 1408242

**Work Order Sample Summary**

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<b>Lab Smp ID</b>	<b>Client Sample ID</b>	<b>Tag Number</b>	<b>Date Collected</b>	<b>Date Recved</b>
1408242-01	CRCP-Buccheit-120		08/27/14 01:30 PM	8/27/2014
1408242-02	CRCP-5852213-120		08/27/14 10:20 AM	8/27/2014
1408242-03	CRCP-WisianW2-120		08/27/14 12:43 PM	8/27/2014
1408242-04	CRCP-WisianW1-120		08/27/14 11:55 AM	8/27/2014
1408242-05	CRCP-WisianW1-125		08/27/14 12:05 PM	8/27/2014

Lab Order: 1408242  
Client: URS Corporation  
Project: CRCP

**PREP DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1408242-01A	CRCP-Buccheit-120	08/27/14 01:30 PM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402
1408242-02A	CRCP-5852213-120	08/27/14 10:20 AM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402
1408242-03A	CRCP-WisianW2-120	08/27/14 12:43 PM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402
1408242-04A	CRCP-WisianW1-120	08/27/14 11:55 AM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402
1408242-05A	CRCP-WisianW1-125	08/27/14 12:05 PM	Aqueous	TX1005	TX1005 Water Prep	08/28/14 08:45 AM	65402

**Lab Order:** 1408242  
**Client:** URS Corporation  
**Project:** CRCP

**ANALYTICAL DATES REPORT**

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1408242-01A	CRCP-Buccheit-120	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 12:39 PM	GC12_140902A
1408242-02A	CRCP-5852213-120	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 12:47 PM	GC12_140902A
1408242-03A	CRCP-WisianW2-120	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 12:56 PM	GC12_140902A
1408242-04A	CRCP-WisianW1-120	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 01:04 PM	GC12_140902A
1408242-05A	CRCP-WisianW1-125	Aqueous	TX1005	Tx1005 TPH Water	65402	1	09/02/14 01:13 PM	GC12_140902A

**DHL Analytical, Inc.**

**Date:** 03-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408242

**Client Sample ID:** CRCP-Buccheit-120  
**Lab ID:** 1408242-01  
**Collection Date:** 08/27/14 01:30 PM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							
		<b>TX1005</b>					Analyst: <b>LM</b>
T/R Hydrocarbons: C6-C12	<0.703	0.703	2.01		mg/L	1	09/02/14 12:39 PM
T/R Hydrocarbons: >C12-C28	<0.703	0.703	2.01		mg/L	1	09/02/14 12:39 PM
T/R Hydrocarbons: >C28-C35	<0.703	0.703	2.01		mg/L	1	09/02/14 12:39 PM
T/R Hydrocarbons: C6-C35	<0.703	0.703	2.01		mg/L	1	09/02/14 12:39 PM
Surr: Isopropylbenzene	85.5	0	70-130		%REC	1	09/02/14 12:39 PM
Surr: Octacosane	83.8	0	70-130		%REC	1	09/02/14 12:39 PM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 03-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408242

**Client Sample ID:** CRCP-5852213-120  
**Lab ID:** 1408242-02  
**Collection Date:** 08/27/14 10:20 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							
		<b>TX1005</b>					Analyst: LM
T/R Hydrocarbons: C6-C12	<0.693	0.693	1.98		mg/L	1	09/02/14 12:47 PM
T/R Hydrocarbons: >C12-C28	<0.693	0.693	1.98		mg/L	1	09/02/14 12:47 PM
T/R Hydrocarbons: >C28-C35	<0.693	0.693	1.98		mg/L	1	09/02/14 12:47 PM
T/R Hydrocarbons: C6-C35	<0.693	0.693	1.98		mg/L	1	09/02/14 12:47 PM
Surr: Isopropylbenzene	82.5	0	70-130		%REC	1	09/02/14 12:47 PM
Surr: Octacosane	81.5	0	70-130		%REC	1	09/02/14 12:47 PM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 03-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408242

**Client Sample ID:** CRCP-WisianW2-120  
**Lab ID:** 1408242-03  
**Collection Date:** 08/27/14 12:43 PM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							
		<b>TX1005</b>					Analyst: LM
T/R Hydrocarbons: C6-C12	<0.690	0.690	1.97		mg/L	1	09/02/14 12:56 PM
T/R Hydrocarbons: >C12-C28	<0.690	0.690	1.97		mg/L	1	09/02/14 12:56 PM
T/R Hydrocarbons: >C28-C35	<0.690	0.690	1.97		mg/L	1	09/02/14 12:56 PM
T/R Hydrocarbons: C6-C35	<0.690	0.690	1.97		mg/L	1	09/02/14 12:56 PM
Surr: Isopropylbenzene	84.8	0	70-130		%REC	1	09/02/14 12:56 PM
Surr: Octacosane	82.8	0	70-130		%REC	1	09/02/14 12:56 PM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 03-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408242

**Client Sample ID:** CRCP-WisianW1-120  
**Lab ID:** 1408242-04  
**Collection Date:** 08/27/14 11:55 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							
		<b>TX1005</b>					Analyst: <b>LM</b>
T/R Hydrocarbons: C6-C12	<0.692	0.692	1.98		mg/L	1	09/02/14 01:04 PM
T/R Hydrocarbons: >C12-C28	<0.692	0.692	1.98		mg/L	1	09/02/14 01:04 PM
T/R Hydrocarbons: >C28-C35	<0.692	0.692	1.98		mg/L	1	09/02/14 01:04 PM
T/R Hydrocarbons: C6-C35	<0.692	0.692	1.98		mg/L	1	09/02/14 01:04 PM
Surr: Isopropylbenzene	84.3	0	70-130		%REC	1	09/02/14 01:04 PM
Surr: Octacosane	81.0	0	70-130		%REC	1	09/02/14 01:04 PM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 03-Sep-14

**CLIENT:** URS Corporation  
**Project:** CRCP  
**Project No:** 41010113.102  
**Lab Order:** 1408242

**Client Sample ID:** CRCP-WisianW1-125  
**Lab ID:** 1408242-05  
**Collection Date:** 08/27/14 12:05 PM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>							
		<b>TX1005</b>					Analyst: <b>LM</b>
T/R Hydrocarbons: C6-C12	<0.696	0.696	1.99		mg/L	1	09/02/14 01:13 PM
T/R Hydrocarbons: >C12-C28	<0.696	0.696	1.99		mg/L	1	09/02/14 01:13 PM
T/R Hydrocarbons: >C28-C35	<0.696	0.696	1.99		mg/L	1	09/02/14 01:13 PM
T/R Hydrocarbons: C6-C35	<0.696	0.696	1.99		mg/L	1	09/02/14 01:13 PM
Surr: Isopropylbenzene	85.9	0	70-130		%REC	1	09/02/14 01:13 PM
Surr: Octacosane	86.1	0	70-130		%REC	1	09/02/14 01:13 PM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**CLIENT:** URS Corporation  
**Work Order:** 1408242  
**Project:** CRCP

**ANALYTICAL QC SUMMARY REPORT**

**RunID: GC12\_140902A**

The QC data in batch 65402 applies to the following samples: 1408242-01A, 1408242-02A, 1408242-03A, 1408242-04A, 1408242-05A

Sample ID <b>LCS-65402</b>	Batch ID: <b>65402</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>GC12_140902A</b>	Analysis Date: <b>9/2/2014 9:44:54 AM</b>	Prep Date: <b>8/28/2014</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	21.6	2.00	25.00	0	86.2	75	125			
Surr: Isopropylbenzene	2.16		2.500		86.2	70	130			
Surr: Octacosane	2.01		2.500		80.3	70	130			

Sample ID <b>LCSD-65402</b>	Batch ID: <b>65402</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>LCSD</b>	Run ID: <b>GC12_140902A</b>	Analysis Date: <b>9/2/2014 9:53:21 AM</b>	Prep Date: <b>8/28/2014</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	21.3	2.00	25.00	0	85.1	75	125	1.26	20	
Surr: Isopropylbenzene	2.11		2.500		84.3	70	130	0	0	
Surr: Octacosane	2.00		2.500		79.8	70	130	0	0	

Sample ID <b>MB-65402</b>	Batch ID: <b>65402</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>GC12_140902A</b>	Analysis Date: <b>9/2/2014 10:32:44 AM</b>	Prep Date: <b>8/28/2014</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C12	<0.700	2.00								
T/R Hydrocarbons: >C12-C28	<0.700	2.00								
T/R Hydrocarbons: >C28-C35	<0.700	2.00								
T/R Hydrocarbons: C6-C35	<0.700	2.00								
Surr: Isopropylbenzene	2.22		2.500		88.6	70	130			
Surr: Octacosane	2.21		2.500		88.2	70	130			

Sample ID <b>1408222-03AMS</b>	Batch ID: <b>65402</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>GC12_140902A</b>	Analysis Date: <b>9/2/2014 11:06:31 AM</b>	Prep Date: <b>8/28/2014</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	22.2	2.01	25.11	0	88.3	75	125			
Surr: Isopropylbenzene	2.16		2.511		86.1	70	130			
Surr: Octacosane	2.00		2.511		79.6	70	130			

Sample ID <b>1408222-03AMSD</b>	Batch ID: <b>65402</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>GC12_140902A</b>	Analysis Date: <b>9/2/2014 11:14:57 AM</b>	Prep Date: <b>8/28/2014</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	22.4	2.01	25.16	0	88.9	75	125	0.824	20	
Surr: Isopropylbenzene	2.20		2.516		87.5	70	130	0	0	
Surr: Octacosane	2.05		2.516		81.5	70	130	0	0	

**Qualifiers:** B Analyte detected in the associated Method Blank DF Dilution Factor  
 J Analyte detected between MDL and RL MDL Method Detection Limit  
 ND Not Detected at the Method Detection Limit R RPD outside accepted control limits  
 RL Reporting Limit S Spike Recovery outside control limits  
 J Analyte detected between SDL and RL N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1408242  
**Project:** CRCP

## ANALYTICAL QC SUMMARY REPORT

**RunID: GC12\_140902A**

Sample ID: <b>ICV-140902</b>	Batch ID: <b>R75147</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>ICV</b>	Run ID: <b>GC12_140902A</b>	Analysis Date: <b>9/2/2014 9:15:49 AM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	1140	2.00	1000	0	114	75	125			
Surr: Isopropylbenzene	56.2		50.00		112	70	130			
Surr: Octacosane	53.0		50.00		106	70	130			

Sample ID: <b>CCV1-140902</b>	Batch ID: <b>R75147</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>GC12_140902A</b>	Analysis Date: <b>9/2/2014 2:29:44 PM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	598	2.00	500.0	0	120	75	125			
Surr: Isopropylbenzene	30.1		25.00		120	70	130			
Surr: Octacosane	27.7		25.00		111	70	130			

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**TO:** Kevin Pasternak  
**FROM:** Carol Lovett, Austin QA/QC Group  
**PROJECT:** Colorado River Corridor (CRC)  
**DATE:** January 14, 2016  
**SUBJECT:** Data Validation Summary for the October 2015 Sampling Event

I have completed the data review and validation of the October 2015 sampling event. This was a general review of the results that were reported from one laboratory: DHL Analytical, Round Rock, Texas. The quality control (QC) results that were submitted by the laboratory were reviewed to confirm that the analyses were performed according to method protocols and to assess the quality of the reported laboratory data.

The QC results indicate that the data are usable for the intended purposes. The QC results indicate that the data are usable for the intended purposes. Additional observations are:

- Sample results that were detected between the method detection limits and reporting limits were qualified with “J” as estimated.
- The recoveries for sodium in two low-level calibration verification standards were above the acceptance criteria. However, the recoveries in the associated medium level continuing calibration verification (CCV) standards were within acceptance criteria. Per professional judgment, since the sodium results in the associated samples were similar to the concentrations in the CCVs, no results were qualified due to this possible high bias.

- Sodium and ammonia were detected in equipment blank CRCP-WisianW1-135 at concentrations of 0.168 milligrams per liter (mg/L) and 0.145 mg/L, respectively. The concentrations for sodium in the associated samples were greater than five times the concentration in the equipment blank; therefore, no sodium results were qualified due to similarity to the blank. Results for ammonia from samples collected on the same day and with the same equipment as the equipment blank were qualified with “B” as similar to the blank concentration and are presented in Table 1.

**Table 1**  
**Qualified Results**

<b>Client Identification</b>	<b>Method</b>	<b>Analyte</b>	<b>Result (mg/L)</b>	<b>Qualifier</b>	<b>Reason</b>
CRCP-5852314-130	SM4500-NH <sub>3</sub> -D	Ammonia	0.120	B	Result within five times of the equipment blank concentration
CRCP-NTNW2-130			0.173		
CRCP-WisianW1-130			0.124		
CRCP-WisianW2-130			0.133		

B – Similar to the blank concentration  
 mg/L – Milligrams per liter  
 SM- Standard Method



October 14, 2015

Kevin Pasternick  
URS Corporation  
9400 Amberglen Bldg E  
Austin, Texas 78729  
TEL: (512) 454-4797  
FAX (512) 454-8807  
RE: CRCP - Travis Co

Order No.: 1510065

Dear Kevin Pasternick:

DHL Analytical, Inc. received 6 sample(s) on 10/8/2015 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in red ink, appearing to read "John DuPont", is written in a cursive style.

John DuPont  
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-15-15



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Sample Receipt Checklist

Client Name URS Corporation

Date Received: 10/8/2015

Work Order Number 1510065

Received by MB

Checklist completed by: [Signature] 10/8/2015

Reviewed by: [Signature] 10/8/2015

Carrier name Hand Delivered

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No  3.1 °C
- Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted
- Water - pH<2 acceptable upon receipt? Yes  No  NA  LOT # 8086  
Adjusted? N Checked by MB
- Water - pH>9 (S) or pH>12 (CN) acceptable upon receipt? Yes  No  NA  LOT #  
Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Any No response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

**CLIENT:** URS Corporation  
**Project:** CRCP - Travis Co  
**Lab Order:** 1510065

**CASE NARRATIVE**

Samples were analyzed using the methods outlined in the following references:

- Method Tx1005 - Total Petroleum Hydrocarbons Analysis
- Method SW6020A - Metals Analysis
- Method E300 - Anions Analysis
- Method M2320 B - Alkalinity Analysis
- Method M4500-NH3-D - Ammonia Analysis
- Method M2540D - TSS Analysis

**LOG IN**

The samples were received and log-in performed on 10/7/15. A total of 6 samples were received. The samples arrived in good condition and were properly packaged.

**METALS ANALYSIS**

For Metals analysis performed on 10/12/15 and 10/13/15 the matrix spike and matrix spike duplicate recoveries were out of control limits for three analytes. These are flagged accordingly in the QC summary report. The sample selected for the matrix spike and matrix spike duplicate was from this work order. The LCS was within control limits for these analytes. No further corrective actions were taken.

For Metals analysis performed on 10/13/15 LCVL2-151013 and LCVL3-151013 were above control limits for Sodium. These are flagged accordingly. The associated CCVs were within control limits for these analytes. No further corrective actions were taken.

**TSS ANALYSIS**

For TSS analysis, as per the TCEQ-NELAP accreditation requirement the following must be noted: The Standard Methods for TSS analysis specifies a volume of 1 Liter of sample and this will result in a minimum detection limit of 2.5 mg/L. For this project, the detection limit of 2.5 mg/L was not required and a smaller volume was used for samples CRCP-NTNW2-130, CRCP-5852314-130, CRCP-Wisian W1-130, CRCP-WisianW1-135 and CRCP-WisianW2-130. NELAP requires a note that if the full 1-liter volume was not utilized, the results must be discussed in the narrative. The client has been notified and has requested DHL Analytical to proceed with the analysis.

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**CLIENT:** URS Corporation  
**Project:** CRCP - Travis Co  
**Lab Order:** 1510065

**Work Order Sample Summary**

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<b>Lab Smp ID</b>	<b>Client Sample ID</b>	<b>Tag Number</b>	<b>Date Collected</b>	<b>Date Recved</b>
1510065-01	CRCP-NTNW2-130		10/07/15 09:30 AM	10/8/2015
1510065-02	CRCP-5852314-130		10/07/15 10:45 AM	10/8/2015
1510065-03	CRCP-5852213-133		10/07/15 12:20 PM	10/8/2015
1510065-04	CRCP-WisianW1-130		10/07/15 02:25 PM	10/8/2015
1510065-05	CRCP-WisianW1-135		10/07/15 02:40 PM	10/8/2015
1510065-06	CRCP-WisianW2-130		10/07/15 03:20 PM	10/8/2015

**Lab Order:** 1510065  
**Client:** URS Corporation  
**Project:** CRCP - Travis Co

**PREP DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1510065-01A	CRCP-NTNW2-130	10/07/15 09:30 AM	Aqueous	TX1005	TX1005 Water Prep	10/08/15 10:28 AM	71800
1510065-01B	CRCP-NTNW2-130	10/07/15 09:30 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-NTNW2-130	10/07/15 09:30 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-NTNW2-130	10/07/15 09:30 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
1510065-01C	CRCP-NTNW2-130	10/07/15 09:30 AM	Aqueous	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510065-01D	CRCP-NTNW2-130	10/07/15 09:30 AM	Aqueous	M2320 B	Alkalinity Preparation	10/08/15 10:50 AM	71801
	CRCP-NTNW2-130	10/07/15 09:30 AM	Aqueous	E300	Anion Preparation	10/08/15 09:48 AM	71795
	CRCP-NTNW2-130	10/07/15 09:30 AM	Aqueous	E300	Anion Preparation	10/08/15 09:48 AM	71795
1510065-01E	CRCP-NTNW2-130	10/07/15 09:30 AM	Aqueous	M2540D	TSS Preparation	10/09/15 08:12 AM	71806
1510065-02A	CRCP-5852314-130	10/07/15 10:45 AM	Aqueous	TX1005	TX1005 Water Prep	10/08/15 10:28 AM	71800
1510065-02B	CRCP-5852314-130	10/07/15 10:45 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-5852314-130	10/07/15 10:45 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
1510065-02C	CRCP-5852314-130	10/07/15 10:45 AM	Aqueous	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510065-02D	CRCP-5852314-130	10/07/15 10:45 AM	Aqueous	M2320 B	Alkalinity Preparation	10/08/15 10:50 AM	71801
	CRCP-5852314-130	10/07/15 10:45 AM	Aqueous	E300	Anion Preparation	10/08/15 09:48 AM	71795
	CRCP-5852314-130	10/07/15 10:45 AM	Aqueous	E300	Anion Preparation	10/08/15 09:48 AM	71795
1510065-02E	CRCP-5852314-130	10/07/15 10:45 AM	Aqueous	M2540D	TSS Preparation	10/09/15 08:12 AM	71806
1510065-03A	CRCP-5852213-133	10/07/15 12:20 PM	Aqueous	TX1005	TX1005 Water Prep	10/08/15 10:28 AM	71800
1510065-03B	CRCP-5852213-133	10/07/15 12:20 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-5852213-133	10/07/15 12:20 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-5852213-133	10/07/15 12:20 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
1510065-03C	CRCP-5852213-133	10/07/15 12:20 PM	Aqueous	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510065-03D	CRCP-5852213-133	10/07/15 12:20 PM	Aqueous	M2320 B	Alkalinity Preparation	10/08/15 10:50 AM	71801
	CRCP-5852213-133	10/07/15 12:20 PM	Aqueous	E300	Anion Preparation	10/08/15 09:48 AM	71795
	CRCP-5852213-133	10/07/15 12:20 PM	Aqueous	E300	Anion Preparation	10/08/15 09:48 AM	71795
1510065-03E	CRCP-5852213-133	10/07/15 12:20 PM	Aqueous	M2540D	TSS Preparation	10/09/15 08:12 AM	71806
1510065-04A	CRCP-WisianW1-130	10/07/15 02:25 PM	Aqueous	TX1005	TX1005 Water Prep	10/08/15 10:28 AM	71800
1510065-04B	CRCP-WisianW1-130	10/07/15 02:25 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810

**Lab Order:** 1510065  
**Client:** URS Corporation  
**Project:** CRCP - Travis Co

**PREP DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1510065-04B	CRCP-WisianW1-130	10/07/15 02:25 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-WisianW1-130	10/07/15 02:25 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
1510065-04C	CRCP-WisianW1-130	10/07/15 02:25 PM	Aqueous	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510065-04D	CRCP-WisianW1-130	10/07/15 02:25 PM	Aqueous	M2320 B	Alkalinity Preparation	10/08/15 10:50 AM	71801
	CRCP-WisianW1-130	10/07/15 02:25 PM	Aqueous	E300	Anion Preparation	10/08/15 09:48 AM	71795
1510065-04E	CRCP-WisianW1-130	10/07/15 02:25 PM	Aqueous	M2540D	TSS Preparation	10/09/15 08:12 AM	71806
1510065-05A	CRCP-WisianW1-135	10/07/15 02:40 PM	Equip Blank	TX1005	TX1005 Water Prep	10/08/15 10:28 AM	71800
1510065-05B	CRCP-WisianW1-135	10/07/15 02:40 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-WisianW1-135	10/07/15 02:40 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
1510065-05C	CRCP-WisianW1-135	10/07/15 02:40 PM	Equip Blank	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510065-05D	CRCP-WisianW1-135	10/07/15 02:40 PM	Equip Blank	M2320 B	Alkalinity Preparation	10/08/15 10:50 AM	71801
	CRCP-WisianW1-135	10/07/15 02:40 PM	Equip Blank	E300	Anion Preparation	10/08/15 09:48 AM	71795
1510065-05E	CRCP-WisianW1-135	10/07/15 02:40 PM	Equip Blank	M2540D	TSS Preparation	10/09/15 08:12 AM	71806
1510065-06A	CRCP-WisianW2-130	10/07/15 03:20 PM	Aqueous	TX1005	TX1005 Water Prep	10/08/15 10:28 AM	71800
1510065-06B	CRCP-WisianW2-130	10/07/15 03:20 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-WisianW2-130	10/07/15 03:20 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-WisianW2-130	10/07/15 03:20 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
1510065-06C	CRCP-WisianW2-130	10/07/15 03:20 PM	Aqueous	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510065-06D	CRCP-WisianW2-130	10/07/15 03:20 PM	Aqueous	M2320 B	Alkalinity Preparation	10/08/15 10:50 AM	71801
	CRCP-WisianW2-130	10/07/15 03:20 PM	Aqueous	E300	Anion Preparation	10/08/15 09:48 AM	71795
1510065-06E	CRCP-WisianW2-130	10/07/15 03:20 PM	Aqueous	M2540D	TSS Preparation	10/09/15 08:12 AM	71806

Lab Order: 1510065  
 Client: URS Corporation  
 Project: CRCP - Travis Co

**ANALYTICAL DATES REPORT**

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1510065-01A	CRCP-NTNW2-130	Aqueous	TX1005	Tx1005 TPH Water	71800	1	10/09/15 10:28 AM	GC12_151009A
1510065-01B	CRCP-NTNW2-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/12/15 12:11 PM	ICP-MS4_151012B
	CRCP-NTNW2-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	10	10/13/15 02:33 PM	ICP-MS4_151013B
	CRCP-NTNW2-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	100	10/13/15 03:07 PM	ICP-MS4_151013B
1510065-01C	CRCP-NTNW2-130	Aqueous	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510065-01D	CRCP-NTNW2-130	Aqueous	M2320 B	Alkalinity	71801	1	10/08/15 11:41 AM	TITRATOR_151008B
	CRCP-NTNW2-130	Aqueous	E300	Anions by IC method - Water	71795	1	10/08/15 11:47 AM	IC3_151008A
	CRCP-NTNW2-130	Aqueous	E300	Anions by IC method - Water	71795	10	10/08/15 06:47 PM	IC3_151008A
1510065-01E	CRCP-NTNW2-130	Aqueous	M2540D	Total Suspended Solids	71806	1	10/09/15 10:40 AM	WC_151009A
1510065-02A	CRCP-5852314-130	Aqueous	TX1005	Tx1005 TPH Water	71800	1	10/09/15 10:37 AM	GC12_151009A
1510065-02B	CRCP-5852314-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	10	10/13/15 02:35 PM	ICP-MS4_151013B
	CRCP-5852314-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/12/15 12:13 PM	ICP-MS4_151012B
1510065-02C	CRCP-5852314-130	Aqueous	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510065-02D	CRCP-5852314-130	Aqueous	M2320 B	Alkalinity	71801	1	10/08/15 11:50 AM	TITRATOR_151008B
	CRCP-5852314-130	Aqueous	E300	Anions by IC method - Water	71795	1	10/08/15 12:07 PM	IC3_151008A
	CRCP-5852314-130	Aqueous	E300	Anions by IC method - Water	71795	10	10/08/15 07:29 PM	IC3_151008A
1510065-02E	CRCP-5852314-130	Aqueous	M2540D	Total Suspended Solids	71806	1	10/09/15 10:40 AM	WC_151009A
1510065-03A	CRCP-5852213-133	Aqueous	TX1005	Tx1005 TPH Water	71800	1	10/09/15 10:46 AM	GC12_151009A
1510065-03B	CRCP-5852213-133	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/12/15 12:07 PM	ICP-MS4_151012B
	CRCP-5852213-133	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	10	10/13/15 02:02 PM	ICP-MS4_151013B
	CRCP-5852213-133	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	100	10/13/15 03:01 PM	ICP-MS4_151013B
1510065-03C	CRCP-5852213-133	Aqueous	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510065-03D	CRCP-5852213-133	Aqueous	M2320 B	Alkalinity	71801	1	10/08/15 12:32 PM	TITRATOR_151008B
	CRCP-5852213-133	Aqueous	E300	Anions by IC method - Water	71795	10	10/08/15 03:41 PM	IC3_151008A
	CRCP-5852213-133	Aqueous	E300	Anions by IC method - Water	71795	1	10/08/15 12:28 PM	IC3_151008A
1510065-03E	CRCP-5852213-133	Aqueous	M2540D	Total Suspended Solids	71806	1	10/09/15 10:40 AM	WC_151009A
1510065-04A	CRCP-WisianW1-130	Aqueous	TX1005	Tx1005 TPH Water	71800	1	10/09/15 11:13 AM	GC12_151009A
1510065-04B	CRCP-WisianW1-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/12/15 12:15 PM	ICP-MS4_151012B

Lab Order: 1510065  
 Client: URS Corporation  
 Project: CRCP - Travis Co

**ANALYTICAL DATES REPORT**

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1510065-04B	CRCP-WisianW1-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/13/15 02:06 PM	ICP-MS4_151013B
	CRCP-WisianW1-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	10	10/13/15 02:37 PM	ICP-MS4_151013B
1510065-04C	CRCP-WisianW1-130	Aqueous	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510065-04D	CRCP-WisianW1-130	Aqueous	M2320 B	Alkalinity	71801	1	10/08/15 01:24 PM	TITRATOR_151008B
	CRCP-WisianW1-130	Aqueous	E300	Anions by IC method - Water	71795	1	10/08/15 12:49 PM	IC3_151008A
1510065-04E	CRCP-WisianW1-130	Aqueous	M2540D	Total Suspended Solids	71806	1	10/09/15 10:40 AM	WC_151009A
1510065-05A	CRCP-WisianW1-135	Equip Blank	TX1005	Tx1005 TPH Water	71800	1	10/09/15 11:22 AM	GC12_151009A
1510065-05B	CRCP-WisianW1-135	Equip Blank	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/12/15 12:17 PM	ICP-MS4_151012B
	CRCP-WisianW1-135	Equip Blank	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/14/15 11:42 AM	ICP-MS4_151014A
1510065-05C	CRCP-WisianW1-135	Equip Blank	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510065-05D	CRCP-WisianW1-135	Equip Blank	M2320 B	Alkalinity	71801	1	10/08/15 01:27 PM	TITRATOR_151008B
	CRCP-WisianW1-135	Equip Blank	E300	Anions by IC method - Water	71795	1	10/08/15 01:09 PM	IC3_151008A
1510065-05E	CRCP-WisianW1-135	Equip Blank	M2540D	Total Suspended Solids	71806	1	10/09/15 10:40 AM	WC_151009A
1510065-06A	CRCP-WisianW2-130	Aqueous	TX1005	Tx1005 TPH Water	71800	1	10/09/15 11:31 AM	GC12_151009A
1510065-06B	CRCP-WisianW2-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/12/15 12:19 PM	ICP-MS4_151012B
	CRCP-WisianW2-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/13/15 02:08 PM	ICP-MS4_151013B
	CRCP-WisianW2-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	10	10/13/15 02:39 PM	ICP-MS4_151013B
1510065-06C	CRCP-WisianW2-130	Aqueous	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510065-06D	CRCP-WisianW2-130	Aqueous	M2320 B	Alkalinity	71801	1	10/08/15 01:40 PM	TITRATOR_151008B
	CRCP-WisianW2-130	Aqueous	E300	Anions by IC method - Water	71795	1	10/08/15 01:30 PM	IC3_151008A
1510065-06E	CRCP-WisianW2-130	Aqueous	M2540D	Total Suspended Solids	71806	1	10/09/15 10:40 AM	WC_151009A

**DHL Analytical, Inc.**

Date: 14-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP - Travis Co  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510065

**Client Sample ID:** CRCP-NTNW2-130  
**Lab ID:** 1510065-01  
**Collection Date:** 10/07/15 09:30 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.678	0.678	1.94		mg/L	1	10/09/15 10:28 AM
T/R Hydrocarbons: >C12-C28	<0.678	0.678	1.94		mg/L	1	10/09/15 10:28 AM
T/R Hydrocarbons: >C28-C35	<0.678	0.678	1.94		mg/L	1	10/09/15 10:28 AM
T/R Hydrocarbons: C6-C35	<0.678	0.678	1.94		mg/L	1	10/09/15 10:28 AM
Surr: Isopropylbenzene	83.1	0	70-130		%REC	1	10/09/15 10:28 AM
Surr: Octacosane	84.9	0	70-130		%REC	1	10/09/15 10:28 AM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	219	10.0	30.0		mg/L	100	10/13/15 03:07 PM
Magnesium	74.4	1.00	3.00		mg/L	10	10/13/15 02:33 PM
Potassium	2.45	0.100	0.300		mg/L	1	10/12/15 12:11 PM
Sodium	54.2	1.00	3.00		mg/L	10	10/13/15 02:33 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	49.9	0.300	1.00		mg/L	1	10/08/15 11:47 AM
Fluoride	0.245	0.100	0.400	J	mg/L	1	10/08/15 11:47 AM
Nitrate-N	28.1	1.00	5.00		mg/L	10	10/08/15 06:47 PM
Sulfate	518	10.0	30.0		mg/L	10	10/08/15 06:47 PM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	365	10.0	20.0		mg/L @ pH 4.53	1	10/08/15 11:41 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/08/15 11:41 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/08/15 11:41 AM
Alkalinity, Total (As CaCO3)	365	20.0	20.0		mg/L @ pH 4.53	1	10/08/15 11:41 AM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	0.173	0.100	0.250	J	mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	<2.62	2.62	2.62		mg/L	1	10/09/15 10:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 14-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP - Travis Co  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510065

**Client Sample ID:** CRCP-5852314-130  
**Lab ID:** 1510065-02  
**Collection Date:** 10/07/15 10:45 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.682	0.682	1.95		mg/L	1	10/09/15 10:37 AM
T/R Hydrocarbons: >C12-C28	<0.682	0.682	1.95		mg/L	1	10/09/15 10:37 AM
T/R Hydrocarbons: >C28-C35	<0.682	0.682	1.95		mg/L	1	10/09/15 10:37 AM
T/R Hydrocarbons: C6-C35	<0.682	0.682	1.95		mg/L	1	10/09/15 10:37 AM
Surr: Isopropylbenzene	85.9	0	70-130		%REC	1	10/09/15 10:37 AM
Surr: Octacosane	86.9	0	70-130		%REC	1	10/09/15 10:37 AM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	78.2	1.00	3.00		mg/L	10	10/13/15 02:35 PM
Magnesium	24.6	1.00	3.00		mg/L	10	10/13/15 02:35 PM
Potassium	1.77	0.100	0.300		mg/L	1	10/12/15 12:13 PM
Sodium	55.5	1.00	3.00		mg/L	10	10/13/15 02:35 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	51.1	3.00	10.0		mg/L	10	10/08/15 07:29 PM
Fluoride	0.350	0.100	0.400	J	mg/L	1	10/08/15 12:07 PM
Nitrate-N	0.508	0.100	0.500		mg/L	1	10/08/15 12:07 PM
Sulfate	119	1.00	3.00		mg/L	1	10/08/15 12:07 PM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	252	10.0	20.0		mg/L @ pH 4.51	1	10/08/15 11:50 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.51	1	10/08/15 11:50 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.51	1	10/08/15 11:50 AM
Alkalinity, Total (As CaCO3)	252	20.0	20.0		mg/L @ pH 4.51	1	10/08/15 11:50 AM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	0.120	0.100	0.250	J	mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	<2.53	2.53	2.53		mg/L	1	10/09/15 10:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 14-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP - Travis Co  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510065

**Client Sample ID:** CRCP-5852213-133  
**Lab ID:** 1510065-03  
**Collection Date:** 10/07/15 12:20 PM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.678	0.678	1.94		mg/L	1	10/09/15 10:46 AM
T/R Hydrocarbons: >C12-C28	<0.678	0.678	1.94		mg/L	1	10/09/15 10:46 AM
T/R Hydrocarbons: >C28-C35	<0.678	0.678	1.94		mg/L	1	10/09/15 10:46 AM
T/R Hydrocarbons: C6-C35	<0.678	0.678	1.94		mg/L	1	10/09/15 10:46 AM
Surr: Isopropylbenzene	85.4	0	70-130		%REC	1	10/09/15 10:46 AM
Surr: Octacosane	88.1	0	70-130		%REC	1	10/09/15 10:46 AM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	291	10.0	30.0		mg/L	100	10/13/15 03:01 PM
Magnesium	65.8	1.00	3.00		mg/L	10	10/13/15 02:02 PM
Potassium	9.63	0.100	0.300		mg/L	1	10/12/15 12:07 PM
Sodium	77.0	1.00	3.00		mg/L	10	10/13/15 02:02 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	62.0	3.00	10.0		mg/L	10	10/08/15 03:41 PM
Fluoride	0.281	0.100	0.400	J	mg/L	1	10/08/15 12:28 PM
Nitrate-N	<0.100	0.100	0.500		mg/L	1	10/08/15 12:28 PM
Sulfate	<1.00	1.00	3.00		mg/L	1	10/08/15 12:28 PM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	1210	10.0	20.0		mg/L @ pH 4.54	1	10/08/15 12:32 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.54	1	10/08/15 12:32 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.54	1	10/08/15 12:32 PM
Alkalinity, Total (As CaCO3)	1210	20.0	20.0		mg/L @ pH 4.54	1	10/08/15 12:32 PM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	1.15	0.100	0.250		mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	20.7	8.33	8.33		mg/L	1	10/09/15 10:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 14-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP - Travis Co  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510065

**Client Sample ID:** CRCP-WisianW1-130  
**Lab ID:** 1510065-04  
**Collection Date:** 10/07/15 02:25 PM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.700	0.700	2.00		mg/L	1	10/09/15 11:13 AM
T/R Hydrocarbons: >C12-C28	<0.700	0.700	2.00		mg/L	1	10/09/15 11:13 AM
T/R Hydrocarbons: >C28-C35	<0.700	0.700	2.00		mg/L	1	10/09/15 11:13 AM
T/R Hydrocarbons: C6-C35	<0.700	0.700	2.00		mg/L	1	10/09/15 11:13 AM
Surr: Isopropylbenzene	85.8	0	70-130		%REC	1	10/09/15 11:13 AM
Surr: Octacosane	89.7	0	70-130		%REC	1	10/09/15 11:13 AM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	75.5	1.00	3.00		mg/L	10	10/13/15 02:37 PM
Magnesium	10.2	0.100	0.300		mg/L	1	10/13/15 02:06 PM
Potassium	2.80	0.100	0.300		mg/L	1	10/12/15 12:15 PM
Sodium	69.2	1.00	3.00		mg/L	10	10/13/15 02:37 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	15.2	0.300	1.00		mg/L	1	10/08/15 12:49 PM
Fluoride	0.246	0.100	0.400	J	mg/L	1	10/08/15 12:49 PM
Nitrate-N	10.4	0.100	0.500		mg/L	1	10/08/15 12:49 PM
Sulfate	32.2	1.00	3.00		mg/L	1	10/08/15 12:49 PM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	334	10.0	20.0		mg/L @ pH 4.52	1	10/08/15 01:24 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.52	1	10/08/15 01:24 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.52	1	10/08/15 01:24 PM
Alkalinity, Total (As CaCO3)	334	20.0	20.0		mg/L @ pH 4.52	1	10/08/15 01:24 PM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	0.124	0.100	0.250	J	mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	<2.78	2.78	2.78		mg/L	1	10/09/15 10:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 14-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP - Travis Co  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510065

**Client Sample ID:** CRCP-WisianW1-135  
**Lab ID:** 1510065-05  
**Collection Date:** 10/07/15 02:40 PM  
**Matrix:** EQUIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.694	0.694	1.98		mg/L	1	10/09/15 11:22 AM
T/R Hydrocarbons: >C12-C28	<0.694	0.694	1.98		mg/L	1	10/09/15 11:22 AM
T/R Hydrocarbons: >C28-C35	<0.694	0.694	1.98		mg/L	1	10/09/15 11:22 AM
T/R Hydrocarbons: C6-C35	<0.694	0.694	1.98		mg/L	1	10/09/15 11:22 AM
Surr: Isopropylbenzene	85.3	0	70-130		%REC	1	10/09/15 11:22 AM
Surr: Octacosane	88.5	0	70-130		%REC	1	10/09/15 11:22 AM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	<0.100	0.100	0.300		mg/L	1	10/12/15 12:17 PM
Magnesium	<0.100	0.100	0.300		mg/L	1	10/14/15 11:42 AM
Potassium	<0.100	0.100	0.300		mg/L	1	10/12/15 12:17 PM
Sodium	0.168	0.100	0.300	J	mg/L	1	10/12/15 12:17 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	<0.300	0.300	1.00		mg/L	1	10/08/15 01:09 PM
Fluoride	<0.100	0.100	0.400		mg/L	1	10/08/15 01:09 PM
Nitrate-N	<0.100	0.100	0.500		mg/L	1	10/08/15 01:09 PM
Sulfate	<1.00	1.00	3.00		mg/L	1	10/08/15 01:09 PM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.5	1	10/08/15 01:27 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.5	1	10/08/15 01:27 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.5	1	10/08/15 01:27 PM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 4.5	1	10/08/15 01:27 PM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	0.145	0.100	0.250	J	mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	<2.75	2.75	2.75		mg/L	1	10/09/15 10:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 14-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP - Travis Co  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510065

**Client Sample ID:** CRCP-WisianW2-130  
**Lab ID:** 1510065-06  
**Collection Date:** 10/07/15 03:20 PM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.660	0.660	1.89		mg/L	1	10/09/15 11:31 AM
T/R Hydrocarbons: >C12-C28	<0.660	0.660	1.89		mg/L	1	10/09/15 11:31 AM
T/R Hydrocarbons: >C28-C35	<0.660	0.660	1.89		mg/L	1	10/09/15 11:31 AM
T/R Hydrocarbons: C6-C35	<0.660	0.660	1.89		mg/L	1	10/09/15 11:31 AM
Surr: Isopropylbenzene	85.8	0	70-130		%REC	1	10/09/15 11:31 AM
Surr: Octacosane	86.6	0	70-130		%REC	1	10/09/15 11:31 AM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	94.3	1.00	3.00		mg/L	10	10/13/15 02:39 PM
Magnesium	13.2	0.100	0.300		mg/L	1	10/13/15 02:08 PM
Potassium	2.17	0.100	0.300		mg/L	1	10/12/15 12:19 PM
Sodium	65.3	1.00	3.00		mg/L	10	10/13/15 02:39 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	26.9	0.300	1.00		mg/L	1	10/08/15 01:30 PM
Fluoride	0.152	0.100	0.400	J	mg/L	1	10/08/15 01:30 PM
Nitrate-N	7.88	0.100	0.500		mg/L	1	10/08/15 01:30 PM
Sulfate	34.8	1.00	3.00		mg/L	1	10/08/15 01:30 PM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	377	10.0	20.0		mg/L @ pH 4.53	1	10/08/15 01:40 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/08/15 01:40 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/08/15 01:40 PM
Alkalinity, Total (As CaCO3)	377	20.0	20.0		mg/L @ pH 4.53	1	10/08/15 01:40 PM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	0.133	0.100	0.250	J	mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	<2.65	2.65	2.65		mg/L	1	10/09/15 10:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

**ANALYTICAL QC SUMMARY REPORT**

**RunID: GC12\_151009A**

The QC data in batch 71800 applies to the following samples: 1510065-01A, 1510065-02A, 1510065-03A, 1510065-04A, 1510065-05A, 1510065-06A

Sample ID <b>LCS-71800</b>	Batch ID: <b>71800</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>GC12_151009A</b>	Analysis Date: <b>10/9/2015 9:50:18 AM</b>	Prep Date: <b>10/8/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	24.3	2.00	25.00	0	97.0	75	125			
Surr: Isopropylbenzene	2.17		2.500		86.9	70	130			
Surr: Octacosane	2.23		2.500		89.0	70	130			

Sample ID <b>LCS-D-71800</b>	Batch ID: <b>71800</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>LCS-D</b>	Run ID: <b>GC12_151009A</b>	Analysis Date: <b>10/9/2015 9:59:21 AM</b>	Prep Date: <b>10/8/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	24.8	2.00	25.00	0	99.2	75	125	2.20	20	
Surr: Isopropylbenzene	2.20		2.500		88.0	70	130	0	0	
Surr: Octacosane	2.17		2.500		86.9	70	130	0	0	

Sample ID <b>MB-71800</b>	Batch ID: <b>71800</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>GC12_151009A</b>	Analysis Date: <b>10/9/2015 10:08:23 AM</b>	Prep Date: <b>10/8/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C12	<0.700	2.00								
T/R Hydrocarbons: >C12-C28	<0.700	2.00								
T/R Hydrocarbons: >C28-C35	<0.700	2.00								
T/R Hydrocarbons: C6-C35	<0.700	2.00								
Surr: Isopropylbenzene	2.10		2.500		83.8	70	130			
Surr: Octacosane	2.20		2.500		88.2	70	130			

Sample ID <b>1510065-03AMS</b>	Batch ID: <b>71800</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>GC12_151009A</b>	Analysis Date: <b>10/9/2015 10:55:22 AM</b>	Prep Date: <b>10/8/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	24.1	1.98	24.70	0	97.6	75	125			
Surr: Isopropylbenzene	2.37		2.470		95.8	70	130			
Surr: Octacosane	2.11		2.470		85.3	70	130			

Sample ID <b>1510065-03AMSD</b>	Batch ID: <b>71800</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>GC12_151009A</b>	Analysis Date: <b>10/9/2015 11:04:24 AM</b>	Prep Date: <b>10/8/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	23.2	1.91	23.86	0	97.0	75	125	3.98	20	
Surr: Isopropylbenzene	2.39		2.386		100	70	130	0	0	
Surr: Octacosane	2.08		2.386		87.2	70	130	0	0	

**Qualifiers:** B Analyte detected in the associated Method Blank DF Dilution Factor  
 J Analyte detected between MDL and RL MDL Method Detection Limit  
 ND Not Detected at the Method Detection Limit R RPD outside accepted control limits  
 RL Reporting Limit S Spike Recovery outside control limits  
 J Analyte detected between SDL and RL N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: GC12\_151009A**

Sample ID: <b>ICV-151009</b>	Batch ID: <b>R82112</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>ICV</b>	Run ID: <b>GC12_151009A</b>	Analysis Date: <b>10/9/2015 9:33:10 AM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	1090	2.00	1000	0	109	75	125			
Surr: Isopropylbenzene	45.4		50.00		90.9	70	130			
Surr: Octacosane	43.7		50.00		87.3	70	130			

Sample ID: <b>CCV1-151009</b>	Batch ID: <b>R82112</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>GC12_151009A</b>	Analysis Date: <b>10/9/2015 12:57:56 PM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	564	2.00	500.0	0	113	75	125			
Surr: Isopropylbenzene	23.9		25.00		95.6	70	130			
Surr: Octacosane	25.8		25.00		103	70	130			

**Qualifiers:**

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151012B**

The QC data in batch 71810 applies to the following samples: 1510065-01B, 1510065-02B, 1510065-03B, 1510065-04B, 1510065-05B, 1510065-06B

Sample ID <b>MB-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>MBLK</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 11:57:00 A</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	<0.100	0.300								
Potassium	<0.100	0.300								
Sodium	<0.100	0.300								

Sample ID <b>LCS-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCS</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:01:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.89	0.300	5.00	0	97.8	80	120			
Potassium	5.15	0.300	5.00	0	103	80	120			
Sodium	5.32	0.300	5.00	0	106	80	120			

Sample ID <b>LCSD-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCSD</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:03:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.67	0.300	5.00	0	93.5	80	120	4.56	15	
Potassium	4.97	0.300	5.00	0	99.4	80	120	3.65	15	
Sodium	5.05	0.300	5.00	0	101	80	120	5.19	15	

Sample ID <b>1510065-03B SD</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>SD</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:09:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	9.86	1.50	0	9.63				2.37	10	

Sample ID <b>1510065-03B PDS</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>PDS</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:29:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	14.1	0.300	5.00	9.63	89.8	80	120			

Sample ID <b>1510065-03B MS</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>MS</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:30:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	287	0.300	5.00	293	-117	80	120			S
Potassium	14.5	0.300	5.00	9.63	98.0	80	120			
Sodium	85.7	0.300	5.00	82.3	68.0	80	120			S

**Qualifiers:** B Analyte detected in the associated Method Blank      DF Dilution Factor  
J Analyte detected between MDL and RL      MDL Method Detection Limit  
ND Not Detected at the Method Detection Limit      R RPD outside accepted control limits  
RL Reporting Limit      S Spike Recovery outside control limits  
J Analyte detected between SDL and RL      N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151012B**

Sample ID: <b>1510065-03B MSD</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>MSD</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:32:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	280	0.300	5.00	293	-259	80	120	2.52	15	S
Potassium	13.9	0.300	5.00	9.63	85.6	80	120	4.36	15	
Sodium	82.6	0.300	5.00	82.3	4.71	80	120	3.76	15	S

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	DF Dilution Factor	
	J Analyte detected between MDL and RL	MDL Method Detection Limit	
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits	
	RL Reporting Limit	S Spike Recovery outside control limits	
	J Analyte detected between SDL and RL	N Parameter not NELAC certified	

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151012B**

Sample ID <b>ICV-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>ICV</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 11:16:00 A</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	2.51	0.300	2.50	0	100	90	110			
Potassium	2.70	0.300	2.50	0	108	90	110			
Sodium	2.74	0.300	2.50	0	110	90	110			

Sample ID <b>LCVL-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 11:21:00 A</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.0998	0.300	0.100	0	99.8	70	130			
Potassium	0.110	0.300	0.100	0	110	70	130			
Sodium	0.116	0.300	0.100	0	116	70	130			

Sample ID <b>CCV1-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 11:47:00 A</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.81	0.300	5.00	0	96.2	90	110			
Potassium	5.12	0.300	5.00	0	102	90	110			
Sodium	5.20	0.300	5.00	0	104	90	110			

Sample ID <b>LCVL1-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 11:52:00 A</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.0949	0.300	0.100	0	94.9	70	130			
Potassium	0.114	0.300	0.100	0	114	70	130			
Sodium	0.114	0.300	0.100	0	114	70	130			

Sample ID <b>CCV2-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:34:00 P</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.90	0.300	5.00	0	97.9	90	110			
Potassium	5.08	0.300	5.00	0	102	90	110			
Sodium	5.26	0.300	5.00	0	105	90	110			

Sample ID <b>LCVL2-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:39:00 P</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.110	0.300	0.100	0	110	70	130			

**Qualifiers:**

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151012B**

Sample ID	LCVL2-151012	Batch ID:	R82128	TestNo:	SW6020A	Units:	mg/L			
SampType:	LCVL	Run ID:	ICP-MS4_151012B	Analysis Date:	10/12/2015 12:39:00 P	Prep Date:				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	0.102	0.300	0.100	0	102	70	130			
Sodium	0.114	0.300	0.100	0	114	70	130			

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	DF Dilution Factor	
	J Analyte detected between MDL and RL	MDL Method Detection Limit	
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits	
	RL Reporting Limit	S Spike Recovery outside control limits	
	J Analyte detected between SDL and RL	N Parameter not NELAC certified	

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151013B**

The QC data in batch 71810 applies to the following samples: 1510065-01B, 1510065-02B, 1510065-03B, 1510065-04B, 1510065-05B, 1510065-06B

Sample ID <b>MB-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 1:54:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	<0.100	0.300								

Sample ID <b>LCS-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 1:56:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	4.75	0.300	5.00	0	95.0	80	120			

Sample ID <b>LCSD-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCSD</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 1:58:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	4.64	0.300	5.00	0	92.7	80	120	2.44	15	

Sample ID <b>1510065-03B SD</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>SD</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:04:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	66.7	15.0	0	65.8				1.38	10	
Sodium	82.0	15.0	0	77.0				6.37	10	

Sample ID <b>1510065-03B PDS</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>PDS</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:17:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	115	3.00	50.0	65.8	98.0	80	120			
Sodium	127	3.00	50.0	77.0	101	80	120			

Sample ID <b>1510065-03B MS</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:19:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	69.5	3.00	5.00	65.8	73.8	80	120			S

Sample ID <b>1510065-03B MSD</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:21:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	67.7	3.00	5.00	65.8	37.8	80	120	2.62	15	S

**Qualifiers:** B Analyte detected in the associated Method Blank      DF Dilution Factor  
J Analyte detected between MDL and RL      MDL Method Detection Limit  
ND Not Detected at the Method Detection Limit      R RPD outside accepted control limits  
RL Reporting Limit      S Spike Recovery outside control limits  
J Analyte detected between SDL and RL      N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151013B**

Sample ID <b>1510065-03B SD</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>SD</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 3:03:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	293	150	0	291				0.817	10	

Sample ID <b>1510065-03B PDS</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>PDS</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 3:05:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	752	30.0	500	291	92.1	80	120			

**Qualifiers:**

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151013B**

Sample ID <b>ICV-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>ICV</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 12:03:00 P</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Calcium	2.28	0.300	2.50	0	91.3	90	110			
Magnesium	2.43	0.300	2.50	0	97.1	90	110			
Sodium	2.40	0.300	2.50	0	95.9	90	110			

Sample ID <b>LCVL-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 12:08:00 P</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Calcium	0.0998	0.300	0.100	0	99.8	70	130			
Magnesium	0.0993	0.300	0.100	0	99.3	70	130			
Sodium	0.104	0.300	0.100	0	104	70	130			

Sample ID <b>CCV2-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 1:43:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Magnesium	4.83	0.300	5.00	0	96.6	90	110			
Sodium	5.00	0.300	5.00	0	100	90	110			

Sample ID <b>LCVL2-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 1:49:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Magnesium	0.0982	0.300	0.100	0	98.2	70	130			
Sodium	0.180	0.300	0.100	0	180	70	130			S

Sample ID <b>CCV3-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:23:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Calcium	4.74	0.300	5.00	0	94.7	90	110			
Magnesium	4.82	0.300	5.00	0	96.4	90	110			
Sodium	4.90	0.300	5.00	0	98.1	90	110			

Sample ID <b>LCVL3-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:28:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Calcium	0.100	0.300	0.100	0	100	70	130			
Magnesium	0.0997	0.300	0.100	0	99.7	70	130			
Sodium	0.148	0.300	0.100	0	148	70	130			S

**Qualifiers:**

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151013B**

Sample ID: <b>CCV4-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:53:00 PM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.74	0.300	5.00	0	94.7	90	110			
Magnesium	4.81	0.300	5.00	0	96.1	90	110			
Sodium	4.87	0.300	5.00	0	97.4	90	110			

Sample ID: <b>LCVL4-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:57:00 PM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.0938	0.300	0.100	0	93.8	70	130			
Magnesium	0.0980	0.300	0.100	0	98.0	70	130			
Sodium	0.127	0.300	0.100	0	127	70	130			

Sample ID: <b>CCV5-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 3:15:00 PM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.72	0.300	5.00	0	94.4	90	110			

Sample ID: <b>LCVL5-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 3:20:00 PM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.101	0.300	0.100	0	101	70	130			

**Qualifiers:**

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151014A**

Sample ID <b>ICV-151014</b>	Batch ID: <b>R82177</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>ICV</b>	Run ID: <b>ICP-MS4_151014A</b>	Analysis Date: <b>10/14/2015 11:22:00 A</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Magnesium	2.56	0.300	2.50	0	102	90	110			
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Sample ID <b>LCVL-151014</b>	Batch ID: <b>R82177</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151014A</b>	Analysis Date: <b>10/14/2015 11:26:00 A</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Magnesium	0.111	0.300	0.100	0	111	70	130			
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Sample ID <b>CCV1-140417</b>	Batch ID: <b>R82177</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151014A</b>	Analysis Date: <b>10/14/2015 12:14:00 P</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Magnesium	4.88	0.300	5.00	0	97.6	90	110			
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Sample ID <b>LCVL1-140417</b>	Batch ID: <b>R82177</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151014A</b>	Analysis Date: <b>10/14/2015 12:30:00 P</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Magnesium	0.108	0.300	0.100	0	108	70	130			
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<b>Qualifiers:</b>	<p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: IC3\_151008A**

The QC data in batch 71795 applies to the following samples: 1510065-01D, 1510065-02D, 1510065-03D, 1510065-04D, 1510065-05D, 1510065-06D

Sample ID: <b>MB-71795</b>	Batch ID: <b>71795</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>
SampType: <b>MBLK</b>	Run ID: <b>IC3_151008A</b>	Analysis Date: <b>10/8/2015 10:42:27 AM</b>	Prep Date: <b>10/8/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								
Fluoride	<0.100	0.400								
Nitrate-N	<0.100	0.500								
Sulfate	<1.00	3.00								

Sample ID: <b>LCS-71795</b>	Batch ID: <b>71795</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>
SampType: <b>LCS</b>	Run ID: <b>IC3_151008A</b>	Analysis Date: <b>10/8/2015 11:05:56 AM</b>	Prep Date: <b>10/8/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.90	1.00	10.00	0	99.0	90	110			
Fluoride	4.06	0.400	4.000	0	101	90	110			
Nitrate-N	4.93	0.500	5.000	0	98.6	90	110			
Sulfate	30.6	3.00	30.00	0	102	90	110			

Sample ID: <b>LCSD-71795</b>	Batch ID: <b>71795</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>
SampType: <b>LCSD</b>	Run ID: <b>IC3_151008A</b>	Analysis Date: <b>10/8/2015 11:26:34 AM</b>	Prep Date: <b>10/8/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.89	1.00	10.00	0	98.9	90	110	0.070	20	
Fluoride	4.04	0.400	4.000	0	101	90	110	0.494	20	
Nitrate-N	4.93	0.500	5.000	0	98.6	90	110	0.020	20	
Sulfate	30.6	3.00	30.00	0	102	90	110	0.163	20	

Sample ID: <b>1510065-03DMS</b>	Batch ID: <b>71795</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>
SampType: <b>MS</b>	Run ID: <b>IC3_151008A</b>	Analysis Date: <b>10/8/2015 6:06:42 PM</b>	Prep Date: <b>10/8/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	264	10.0	200.0	61.99	101	90	110			
Fluoride	198	4.00	200.0	0	98.8	90	110			
Nitrate-N	44.9	5.00	45.16	0	99.4	90	110			
Sulfate	204	30.0	200.0	0	102	90	110			

Sample ID: <b>1510065-03DMSD</b>	Batch ID: <b>71795</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>
SampType: <b>MSD</b>	Run ID: <b>IC3_151008A</b>	Analysis Date: <b>10/8/2015 6:27:20 PM</b>	Prep Date: <b>10/8/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	262	10.0	200.0	61.99	100	90	110	0.422	20	
Fluoride	197	4.00	200.0	0	98.4	90	110	0.406	20	
Nitrate-N	44.6	5.00	45.16	0	98.7	90	110	0.715	20	
Sulfate	203	30.0	200.0	0	102	90	110	0.152	20	

**Qualifiers:**

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: IC3\_151008A**

Sample ID <b>ICV-151008</b>	Batch ID: <b>R82102</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>ICV</b>	Run ID: <b>IC3_151008A</b>	Analysis Date: <b>10/8/2015 9:34:18 AM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	24.8	1.00	25.00	0	99.3	90	110			
Fluoride	9.94	0.400	10.00	0	99.4	90	110			
Nitrate-N	12.5	0.500	12.50	0	99.8	90	110			
Sulfate	75.8	3.00	75.00	0	101	90	110			

Sample ID <b>CCV1-151008</b>	Batch ID: <b>R82102</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>IC3_151008A</b>	Analysis Date: <b>10/8/2015 4:25:34 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.1	1.00	10.00	0	101	90	110			
Fluoride	4.05	0.400	4.000	0	101	90	110			
Nitrate-N	4.94	0.500	5.000	0	98.9	90	110			
Sulfate	30.6	3.00	30.00	0	102	90	110			

Sample ID <b>CCV2-151008</b>	Batch ID: <b>R82102</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>IC3_151008A</b>	Analysis Date: <b>10/8/2015 9:12:18 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.91	1.00	10.00	0	99.1	90	110			
Fluoride	4.02	0.400	4.000	0	101	90	110			
Nitrate-N	4.89	0.500	5.000	0	97.9	90	110			
Sulfate	30.5	3.00	30.00	0	102	90	110			

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: TITRATOR\_151008B**

The QC data in batch 71801 applies to the following samples: 1510065-01D, 1510065-02D, 1510065-03D, 1510065-04D, 1510065-05D, 1510065-06D

Sample ID <b>MB-71801</b>	Batch ID: <b>71801</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.51</b>
SampType: <b>MBLK</b>	Run ID: <b>TITRATOR_151008B</b>	Analysis Date: <b>10/8/2015 11:13:00 AM</b>	Prep Date: <b>10/8/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0								
Alkalinity, Total (As CaCO3)	<20.0	20.0								

Sample ID <b>LCS-71801</b>	Batch ID: <b>71801</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.51</b>
SampType: <b>LCS</b>	Run ID: <b>TITRATOR_151008B</b>	Analysis Date: <b>10/8/2015 11:18:00 AM</b>	Prep Date: <b>10/8/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	54.0	20.0	50.00	0	108	74	129			

Sample ID <b>1510065-03D DUP</b>	Batch ID: <b>71801</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.55</b>
SampType: <b>DUP</b>	Run ID: <b>TITRATOR_151008B</b>	Analysis Date: <b>10/8/2015 1:13:00 PM</b>	Prep Date: <b>10/8/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	1200	20.0	0	1206				0.824	20	
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Total (As CaCO3)	1200	20.0	0	1206				0.824	20	

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: TITRATOR\_151008B**

Sample ID: <b>ICV-151008</b>	Batch ID: <b>R82096</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.53</b>
SampType: <b>ICV</b>	Run ID: <b>TITRATOR_151008B</b>	Analysis Date: <b>10/8/2015 11:11:00 AM</b>	Prep Date: <b>10/8/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	7.12	20.0	0							
Alkalinity, Carbonate (As CaCO3)	93.4	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	101	20.0	100.0	0	101	98	102			

Sample ID: <b>CCV1-151008</b>	Batch ID: <b>R82096</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.48</b>
SampType: <b>CCV</b>	Run ID: <b>TITRATOR_151008B</b>	Analysis Date: <b>10/8/2015 2:50:00 PM</b>	Prep Date: <b>10/8/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	6.56	20.0	0							
Alkalinity, Carbonate (As CaCO3)	93.4	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	100	20.0	100.0	0	100	90	110			

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: WC\_151009A**

The QC data in batch 71806 applies to the following samples: 1510065-01E, 1510065-02E, 1510065-03E, 1510065-04E, 1510065-05E, 1510065-06E

Sample ID <b>MB-71806</b>	Batch ID: <b>71806</b>	TestNo: <b>M2540D</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>WC_151009A</b>	Analysis Date: <b>10/9/2015 10:40:00 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	<2.50	2.50								

Sample ID <b>LCS-71806</b>	Batch ID: <b>71806</b>	TestNo: <b>M2540D</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>WC_151009A</b>	Analysis Date: <b>10/9/2015 10:40:00 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	108	25.0	100.0	0	108	85	115			

Sample ID <b>1510065-03E-DUP</b>	Batch ID: <b>71806</b>	TestNo: <b>M2540D</b>	Units: <b>mg/L</b>							
SampType: <b>DUP</b>	Run ID: <b>WC_151009A</b>	Analysis Date: <b>10/9/2015 10:40:00 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	21.7	8.33	0	20.67				4.72	5	

Sample ID <b>1510071-02E-DUP</b>	Batch ID: <b>71806</b>	TestNo: <b>M2540D</b>	Units: <b>mg/L</b>							
SampType: <b>DUP</b>	Run ID: <b>WC_151009A</b>	Analysis Date: <b>10/9/2015 10:40:00 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	81.0	25.0	0	82.00				1.23	5	

**Qualifiers:**

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: WC\_151009B**

The QC data in batch 71813 applies to the following samples: 1510065-01C, 1510065-02C, 1510065-03C, 1510065-04C, 1510065-05C, 1510065-06C

Sample ID <b>MB-71813</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N) <0.100 0.250

Sample ID <b>LCS-71813</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N) 4.88 0.250 5.000 0 97.6 80 120

Sample ID <b>1510065-03CMS</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N) 5.56 0.250 5.000 1.150 88.2 80 120

Sample ID <b>1510065-03CMSD</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N) 6.19 0.250 5.000 1.150 101 80 120 10.7 25

<b>Qualifiers:</b>	<p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510065  
**Project:** CRCP - Travis Co

## ANALYTICAL QC SUMMARY REPORT

**RunID: WC\_151009B**

Sample ID <b>ICV-151009</b>	Batch ID: <b>R82120</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>ICV</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ammonia-N (As N)	2.48	0.250	2.500	0	99.2	80	120			

Sample ID <b>CCV-151009</b>	Batch ID: <b>R82120</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ammonia-N (As N)	5.08	0.250	5.000	0	102	80	120			

**Qualifiers:**

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified



October 15, 2015

Kevin Pasternick  
URS Corporation  
9400 Amberglen Bldg E  
Austin, Texas 78729

TEL: (512) 454-4797

FAX (512) 454-8807

RE: CRCP Travis County

Order No.: 1510076

Dear Kevin Pasternick:

DHL Analytical, Inc. received 5 sample(s) on 10/8/2015 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in red ink, appearing to read "John DuPont".

John DuPont  
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-15-15



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Sample Receipt Checklist

Client Name URS Corporation

Date Received: 10/8/2015

Work Order Number 1510076

Received by MB

Checklist completed by: [Signature] 10/8/2015

Reviewed by [Initials] 10/8/2015

Signature

Date

Initials

Date

Carrier name Hand Delivered

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No  4.4 °C
- Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted
- Water - pH<2 acceptable upon receipt? Yes  No  NA  LOT # 8086
- Adjusted? N Checked by MB
- Water - pH>9 (S) or pH>12 (CN) acceptable upon receipt? Yes  No  NA  LOT #
- Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Any No response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Lab Order:** 1510076

**CASE NARRATIVE**

Sample was analyzed using the methods outlined in the following references:

- Method E300 - Anions Analysis
- Method SW6020A - Metals Analysis
- Method TX1005 - Total Petroleum Hydrocarbons
- Method M2320 B - Alkalinity Analysis
- Method M4500-NH3 F - Nitrogen Ammonia Analysis
- Method M2540D - Total Suspended Solids

**LOG IN**

The samples were received and log-in performed on 10/8/2015. A total of 5 samples were received and analyzed. The samples arrived in good condition and were properly packaged.

**ANIONS ANALYSIS**

For Anions Analysis, the recoveries of two anions for the Matrix Spike and Matrix Spike Duplicate (1510091-01 MS/MSD) were slightly above the method control limits. These are flagged accordingly in the QC Summary Report. These anions were within method control limits the associated LCS. No further corrective action was taken.

**METALS ANALYSIS**

For Metals Analysis, the recovery of Sodium for the Low Level Calibration Verification(s) (LCVL2/LCVL3-151013) was above the method control limits. The concentration of this analyte detected in the associated samples is similar to the CCV spike levels. This analyte meets method control limits in the associated bracketing QC. No further corrective action was taken.

For Metals Analysis, the recoveries of three analytes for the Matrix Spike and Matrix Spike Duplicate (1510065-03 MS/MSD) were outside of the method control limits. These are flagged accordingly in the QC Summary Report. These analytes were within method control limits the associated LCS. No further corrective action was taken.

**TSS ANALYSIS**

As per the TCEQ-NELAP accreditation requirement the following must be noted: The Standard Methods for TSS analysis specifies a volume of 1 Liter of sample, and this will result in a minimum detection limit of 2.5 mg/L. For this project, the detection limit of 2.5 mg/L is not required and a smaller volume is being used. NELAP requires a note that if the full 1-liter volume is not utilized, the

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**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Lab Order:** 1510076

**CASE NARRATIVE**

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results must be discussed in the narrative. The client has been notified and has requested the Laboratory to proceed with analysis.

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**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Lab Order:** 1510076

**Work Order Sample Summary**

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<b>Lab Smp ID</b>	<b>Client Sample ID</b>	<b>Tag Number</b>	<b>Date Collected</b>	<b>Date Recved</b>
1510076-01	CRCP-221049-130		10/08/15 09:15 AM	10/8/2015
1510076-02	CRCP-221049-131		10/08/15 09:15 AM	10/8/2015
1510076-03	CRCP-Holweger-130		10/08/15 10:05 AM	10/8/2015
1510076-04	CRCP-Buccheit-130		10/08/15 11:00 AM	10/8/2015
1510076-05	CRCP-58522-130		10/08/15 11:43 AM	10/8/2015

Lab Order: 1510076  
 Client: URS Corporation  
 Project: CRCP Travis County

**PREP DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1510076-01A	CRCP-221049-130	10/08/15 09:15 AM	Aqueous	TX1005	TX1005 Water Prep	10/09/15 10:40 AM	71812
1510076-01B	CRCP-221049-130	10/08/15 09:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-221049-130	10/08/15 09:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-221049-130	10/08/15 09:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
1510076-01C	CRCP-221049-130	10/08/15 09:15 AM	Aqueous	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510076-01D	CRCP-221049-130	10/08/15 09:15 AM	Aqueous	M2320 B	Alkalinity Preparation	10/12/15 09:10 AM	71826
	CRCP-221049-130	10/08/15 09:15 AM	Aqueous	E300	Anion Preparation	10/09/15 08:59 AM	71807
1510076-01E	CRCP-221049-130	10/08/15 09:15 AM	Aqueous	M2540D	TSS Preparation	10/09/15 08:12 AM	71806
1510076-02A	CRCP-221049-131	10/08/15 09:15 AM	Aqueous	TX1005	TX1005 Water Prep	10/09/15 10:40 AM	71812
1510076-02B	CRCP-221049-131	10/08/15 09:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-221049-131	10/08/15 09:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-221049-131	10/08/15 09:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
1510076-02C	CRCP-221049-131	10/08/15 09:15 AM	Aqueous	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510076-02D	CRCP-221049-131	10/08/15 09:15 AM	Aqueous	M2320 B	Alkalinity Preparation	10/12/15 09:10 AM	71826
	CRCP-221049-131	10/08/15 09:15 AM	Aqueous	E300	Anion Preparation	10/09/15 08:59 AM	71807
1510076-02E	CRCP-221049-131	10/08/15 09:15 AM	Aqueous	M2540D	TSS Preparation	10/09/15 08:12 AM	71806
1510076-03A	CRCP-Holweger-130	10/08/15 10:05 AM	Aqueous	TX1005	TX1005 Water Prep	10/09/15 10:40 AM	71812
1510076-03B	CRCP-Holweger-130	10/08/15 10:05 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-Holweger-130	10/08/15 10:05 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-Holweger-130	10/08/15 10:05 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-Holweger-130	10/08/15 10:05 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
1510076-03C	CRCP-Holweger-130	10/08/15 10:05 AM	Aqueous	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510076-03D	CRCP-Holweger-130	10/08/15 10:05 AM	Aqueous	M2320 B	Alkalinity Preparation	10/12/15 09:10 AM	71826
	CRCP-Holweger-130	10/08/15 10:05 AM	Aqueous	E300	Anion Preparation	10/09/15 08:59 AM	71807
1510076-03E	CRCP-Holweger-130	10/08/15 10:05 AM	Aqueous	M2540D	TSS Preparation	10/09/15 08:12 AM	71806
1510076-04A	CRCP-Buccheit-130	10/08/15 11:00 AM	Aqueous	TX1005	TX1005 Water Prep	10/09/15 10:40 AM	71812
1510076-04B	CRCP-Buccheit-130	10/08/15 11:00 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-Buccheit-130	10/08/15 11:00 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810

**Lab Order:** 1510076  
**Client:** URS Corporation  
**Project:** CRCP Travis County

**PREP DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1510076-04B	CRCP-Buccheit-130	10/08/15 11:00 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-Buccheit-130	10/08/15 11:00 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
1510076-04C	CRCP-Buccheit-130	10/08/15 11:00 AM	Aqueous	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510076-04D	CRCP-Buccheit-130	10/08/15 11:00 AM	Aqueous	M2320 B	Alkalinity Preparation	10/12/15 09:10 AM	71826
	CRCP-Buccheit-130	10/08/15 11:00 AM	Aqueous	E300	Anion Preparation	10/09/15 08:59 AM	71807
1510076-04E	CRCP-Buccheit-130	10/08/15 11:00 AM	Aqueous	M2540D	TSS Preparation	10/09/15 08:12 AM	71806
1510076-05A	CRCP-58522-130	10/08/15 11:43 AM	Aqueous	TX1005	TX1005 Water Prep	10/09/15 10:40 AM	71812
1510076-05B	CRCP-58522-130	10/08/15 11:43 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-58522-130	10/08/15 11:43 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
	CRCP-58522-130	10/08/15 11:43 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/09/15 10:08 AM	71810
1510076-05C	CRCP-58522-130	10/08/15 11:43 AM	Aqueous	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510076-05D	CRCP-58522-130	10/08/15 11:43 AM	Aqueous	M2320 B	Alkalinity Preparation	10/12/15 09:10 AM	71826
	CRCP-58522-130	10/08/15 11:43 AM	Aqueous	E300	Anion Preparation	10/09/15 08:59 AM	71807
	CRCP-58522-130	10/08/15 11:43 AM	Aqueous	E300	Anion Preparation	10/09/15 08:59 AM	71807
1510076-05E	CRCP-58522-130	10/08/15 11:43 AM	Aqueous	M2540D	TSS Preparation	10/09/15 08:12 AM	71806

Lab Order: 1510076  
 Client: URS Corporation  
 Project: CRCP Travis County

**ANALYTICAL DATES REPORT**

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1510076-01A	CRCP-221049-130	Aqueous	TX1005	Tx1005 TPH Water	71812	1	10/09/15 01:42 PM	GC12_151009B
1510076-01B	CRCP-221049-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/12/15 12:21 PM	ICP-MS4_151012B
	CRCP-221049-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/13/15 02:10 PM	ICP-MS4_151013B
	CRCP-221049-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	10	10/13/15 02:41 PM	ICP-MS4_151013B
1510076-01C	CRCP-221049-130	Aqueous	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510076-01D	CRCP-221049-130	Aqueous	M2320 B	Alkalinity	71826	1	10/12/15 11:45 AM	TITRATOR_151012B
	CRCP-221049-130	Aqueous	E300	Anions by IC method - Water	71807	1	10/09/15 10:33 AM	IC2_151009A
1510076-01E	CRCP-221049-130	Aqueous	M2540D	Total Suspended Solids	71806	1	10/09/15 10:40 AM	WC_151009A
1510076-02A	CRCP-221049-131	Aqueous	TX1005	Tx1005 TPH Water	71812	1	10/09/15 01:51 PM	GC12_151009B
1510076-02B	CRCP-221049-131	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/12/15 12:23 PM	ICP-MS4_151012B
	CRCP-221049-131	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/13/15 02:12 PM	ICP-MS4_151013B
	CRCP-221049-131	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	10	10/13/15 02:43 PM	ICP-MS4_151013B
1510076-02C	CRCP-221049-131	Aqueous	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510076-02D	CRCP-221049-131	Aqueous	M2320 B	Alkalinity	71826	1	10/12/15 12:06 PM	TITRATOR_151012B
	CRCP-221049-131	Aqueous	E300	Anions by IC method - Water	71807	1	10/09/15 10:48 AM	IC2_151009A
1510076-02E	CRCP-221049-131	Aqueous	M2540D	Total Suspended Solids	71806	1	10/09/15 10:40 AM	WC_151009A
1510076-03A	CRCP-Holweger-130	Aqueous	TX1005	Tx1005 TPH Water	71812	1	10/09/15 02:00 PM	GC12_151009B
1510076-03B	CRCP-Holweger-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	100	10/13/15 03:09 PM	ICP-MS4_151013B
	CRCP-Holweger-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/12/15 12:25 PM	ICP-MS4_151012B
	CRCP-Holweger-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/13/15 02:14 PM	ICP-MS4_151013B
	CRCP-Holweger-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	10	10/13/15 02:45 PM	ICP-MS4_151013B
1510076-03C	CRCP-Holweger-130	Aqueous	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510076-03D	CRCP-Holweger-130	Aqueous	M2320 B	Alkalinity	71826	1	10/12/15 12:18 PM	TITRATOR_151012B
	CRCP-Holweger-130	Aqueous	E300	Anions by IC method - Water	71807	1	10/09/15 11:02 AM	IC2_151009A
1510076-03E	CRCP-Holweger-130	Aqueous	M2540D	Total Suspended Solids	71806	1	10/09/15 10:40 AM	WC_151009A
1510076-04A	CRCP-Buccheit-130	Aqueous	TX1005	Tx1005 TPH Water	71812	1	10/09/15 02:09 PM	GC12_151009B
1510076-04B	CRCP-Buccheit-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/12/15 12:27 PM	ICP-MS4_151012B
	CRCP-Buccheit-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/13/15 02:16 PM	ICP-MS4_151013B

Lab Order: 1510076  
 Client: URS Corporation  
 Project: CRCP Travis County

**ANALYTICAL DATES REPORT**

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1510076-04B	CRCP-Buccheit-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	10	10/13/15 02:47 PM	ICP-MS4_151013B
	CRCP-Buccheit-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	100	10/13/15 03:11 PM	ICP-MS4_151013B
1510076-04C	CRCP-Buccheit-130	Aqueous	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510076-04D	CRCP-Buccheit-130	Aqueous	M2320 B	Alkalinity	71826	1	10/12/15 12:30 PM	TITRATOR_151012B
	CRCP-Buccheit-130	Aqueous	E300	Anions by IC method - Water	71807	1	10/09/15 11:17 AM	IC2_151009A
1510076-04E	CRCP-Buccheit-130	Aqueous	M2540D	Total Suspended Solids	71806	1	10/09/15 10:40 AM	WC_151009A
1510076-05A	CRCP-58522-130	Aqueous	TX1005	Tx1005 TPH Water	71812	1	10/09/15 02:18 PM	GC12_151009B
1510076-05B	CRCP-58522-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	1	10/12/15 12:45 PM	ICP-MS4_151012B
	CRCP-58522-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	10	10/13/15 02:49 PM	ICP-MS4_151013B
	CRCP-58522-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71810	100	10/13/15 03:13 PM	ICP-MS4_151013B
1510076-05C	CRCP-58522-130	Aqueous	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510076-05D	CRCP-58522-130	Aqueous	M2320 B	Alkalinity	71826	1	10/12/15 12:44 PM	TITRATOR_151012B
	CRCP-58522-130	Aqueous	E300	Anions by IC method - Water	71807	1	10/09/15 11:31 AM	IC2_151009A
	CRCP-58522-130	Aqueous	E300	Anions by IC method - Water	71807	10	10/09/15 12:52 PM	IC2_151009A
1510076-05E	CRCP-58522-130	Aqueous	M2540D	Total Suspended Solids	71806	1	10/09/15 10:40 AM	WC_151009A

**DHL Analytical, Inc.**

Date: 15-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510076

**Client Sample ID:** CRCP-221049-130  
**Lab ID:** 1510076-01  
**Collection Date:** 10/08/15 09:15 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.696	0.696	1.99		mg/L	1	10/09/15 01:42 PM
T/R Hydrocarbons: >C12-C28	<0.696	0.696	1.99		mg/L	1	10/09/15 01:42 PM
T/R Hydrocarbons: >C28-C35	<0.696	0.696	1.99		mg/L	1	10/09/15 01:42 PM
T/R Hydrocarbons: C6-C35	<0.696	0.696	1.99		mg/L	1	10/09/15 01:42 PM
Surr: Isopropylbenzene	86.5	0	70-130		%REC	1	10/09/15 01:42 PM
Surr: Octacosane	90.1	0	70-130		%REC	1	10/09/15 01:42 PM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	90.4	1.00	3.00		mg/L	10	10/13/15 02:41 PM
Magnesium	11.6	0.100	0.300		mg/L	1	10/13/15 02:10 PM
Potassium	1.87	0.100	0.300		mg/L	1	10/12/15 12:21 PM
Sodium	34.8	1.00	3.00		mg/L	10	10/13/15 02:41 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	18.5	0.300	1.00		mg/L	1	10/09/15 10:33 AM
Fluoride	0.127	0.100	0.400	J	mg/L	1	10/09/15 10:33 AM
Nitrate-N	11.7	0.100	0.500		mg/L	1	10/09/15 10:33 AM
Sulfate	22.5	1.00	3.00		mg/L	1	10/09/15 10:33 AM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	292	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 11:45 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 11:45 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 11:45 AM
Alkalinity, Total (As CaCO3)	292	20.0	20.0		mg/L @ pH 4.53	1	10/12/15 11:45 AM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	0.208	0.100	0.250	J	mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	<2.63	2.63	2.63		mg/L	1	10/09/15 10:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 15-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510076

**Client Sample ID:** CRCP-221049-131  
**Lab ID:** 1510076-02  
**Collection Date:** 10/08/15 09:15 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.680	0.680	1.94		mg/L	1	10/09/15 01:51 PM
T/R Hydrocarbons: >C12-C28	<0.680	0.680	1.94		mg/L	1	10/09/15 01:51 PM
T/R Hydrocarbons: >C28-C35	<0.680	0.680	1.94		mg/L	1	10/09/15 01:51 PM
T/R Hydrocarbons: C6-C35	<0.680	0.680	1.94		mg/L	1	10/09/15 01:51 PM
Surr: Isopropylbenzene	89.6	0	70-130		%REC	1	10/09/15 01:51 PM
Surr: Octacosane	91.8	0	70-130		%REC	1	10/09/15 01:51 PM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	89.2	1.00	3.00		mg/L	10	10/13/15 02:43 PM
Magnesium	11.4	0.100	0.300		mg/L	1	10/13/15 02:12 PM
Potassium	1.86	0.100	0.300		mg/L	1	10/12/15 12:23 PM
Sodium	34.6	1.00	3.00		mg/L	10	10/13/15 02:43 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	18.5	0.300	1.00		mg/L	1	10/09/15 10:48 AM
Fluoride	0.121	0.100	0.400	J	mg/L	1	10/09/15 10:48 AM
Nitrate-N	11.8	0.100	0.500		mg/L	1	10/09/15 10:48 AM
Sulfate	22.7	1.00	3.00		mg/L	1	10/09/15 10:48 AM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	294	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:06 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:06 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:06 PM
Alkalinity, Total (As CaCO3)	294	20.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:06 PM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	0.192	0.100	0.250	J	mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	<2.70	2.70	2.70		mg/L	1	10/09/15 10:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 15-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510076

**Client Sample ID:** CRCP-Holweger-130  
**Lab ID:** 1510076-03  
**Collection Date:** 10/08/15 10:05 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.689	0.689	1.97		mg/L	1	10/09/15 02:00 PM
T/R Hydrocarbons: >C12-C28	<0.689	0.689	1.97		mg/L	1	10/09/15 02:00 PM
T/R Hydrocarbons: >C28-C35	<0.689	0.689	1.97		mg/L	1	10/09/15 02:00 PM
T/R Hydrocarbons: C6-C35	<0.689	0.689	1.97		mg/L	1	10/09/15 02:00 PM
Surr: Isopropylbenzene	88.6	0	70-130		%REC	1	10/09/15 02:00 PM
Surr: Octacosane	93.1	0	70-130		%REC	1	10/09/15 02:00 PM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	103	10.0	30.0		mg/L	100	10/13/15 03:09 PM
Magnesium	16.0	0.100	0.300		mg/L	1	10/13/15 02:14 PM
Potassium	1.89	0.100	0.300		mg/L	1	10/12/15 12:25 PM
Sodium	34.5	1.00	3.00		mg/L	10	10/13/15 02:45 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	18.4	0.300	1.00		mg/L	1	10/09/15 11:02 AM
Fluoride	0.119	0.100	0.400	J	mg/L	1	10/09/15 11:02 AM
Nitrate-N	14.7	0.100	0.500		mg/L	1	10/09/15 11:02 AM
Sulfate	27.1	1.00	3.00		mg/L	1	10/09/15 11:02 AM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	327	10.0	20.0		mg/L @ pH 4.52	1	10/12/15 12:18 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.52	1	10/12/15 12:18 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.52	1	10/12/15 12:18 PM
Alkalinity, Total (As CaCO3)	327	20.0	20.0		mg/L @ pH 4.52	1	10/12/15 12:18 PM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	<0.100	0.100	0.250		mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	<2.63	2.63	2.63		mg/L	1	10/09/15 10:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 15-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510076

**Client Sample ID:** CRCP-Buccheit-130  
**Lab ID:** 1510076-04  
**Collection Date:** 10/08/15 11:00 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.678	0.678	1.94		mg/L	1	10/09/15 02:09 PM
T/R Hydrocarbons: >C12-C28	<0.678	0.678	1.94		mg/L	1	10/09/15 02:09 PM
T/R Hydrocarbons: >C28-C35	<0.678	0.678	1.94		mg/L	1	10/09/15 02:09 PM
T/R Hydrocarbons: C6-C35	<0.678	0.678	1.94		mg/L	1	10/09/15 02:09 PM
Surr: Isopropylbenzene	87.7	0	70-130		%REC	1	10/09/15 02:09 PM
Surr: Octacosane	89.7	0	70-130		%REC	1	10/09/15 02:09 PM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	114	10.0	30.0		mg/L	100	10/13/15 03:11 PM
Magnesium	11.8	0.100	0.300		mg/L	1	10/13/15 02:16 PM
Potassium	2.30	0.100	0.300		mg/L	1	10/12/15 12:27 PM
Sodium	55.8	1.00	3.00		mg/L	10	10/13/15 02:47 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	36.2	0.300	1.00		mg/L	1	10/09/15 11:17 AM
Fluoride	0.202	0.100	0.400	J	mg/L	1	10/09/15 11:17 AM
Nitrate-N	5.39	0.100	0.500		mg/L	1	10/09/15 11:17 AM
Sulfate	98.9	1.00	3.00		mg/L	1	10/09/15 11:17 AM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	324	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:30 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:30 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:30 PM
Alkalinity, Total (As CaCO3)	324	20.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:30 PM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	<0.100	0.100	0.250		mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	<2.56	2.56	2.56		mg/L	1	10/09/15 10:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 15-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510076

**Client Sample ID:** CRCP-58522-130  
**Lab ID:** 1510076-05  
**Collection Date:** 10/08/15 11:43 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.689	0.689	1.97		mg/L	1	10/09/15 02:18 PM
T/R Hydrocarbons: >C12-C28	<0.689	0.689	1.97		mg/L	1	10/09/15 02:18 PM
T/R Hydrocarbons: >C28-C35	<0.689	0.689	1.97		mg/L	1	10/09/15 02:18 PM
T/R Hydrocarbons: C6-C35	<0.689	0.689	1.97		mg/L	1	10/09/15 02:18 PM
Surr: Isopropylbenzene	89.5	0	70-130		%REC	1	10/09/15 02:18 PM
Surr: Octacosane	93.4	0	70-130		%REC	1	10/09/15 02:18 PM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	105	10.0	30.0		mg/L	100	10/13/15 03:13 PM
Magnesium	34.0	1.00	3.00		mg/L	10	10/13/15 02:49 PM
Potassium	1.92	0.100	0.300		mg/L	1	10/12/15 12:45 PM
Sodium	70.8	1.00	3.00		mg/L	10	10/13/15 02:49 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	94.1	3.00	10.0		mg/L	10	10/09/15 12:52 PM
Fluoride	0.129	0.100	0.400	J	mg/L	1	10/09/15 11:31 AM
Nitrate-N	4.79	0.100	0.500		mg/L	1	10/09/15 11:31 AM
Sulfate	73.2	1.00	3.00		mg/L	1	10/09/15 11:31 AM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	382	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:44 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:44 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:44 PM
Alkalinity, Total (As CaCO3)	382	20.0	20.0		mg/L @ pH 4.53	1	10/12/15 12:44 PM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	<0.100	0.100	0.250		mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	<2.51	2.51	2.51		mg/L	1	10/09/15 10:40 AM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

**ANALYTICAL QC SUMMARY REPORT**

**RunID: GC12\_151009B**

The QC data in batch 71812 applies to the following samples: 1510076-01A, 1510076-02A, 1510076-03A, 1510076-04A, 1510076-05A

Sample ID <b>LCS-71812</b>	Batch ID: <b>71812</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 1:07:21 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	24.9	2.00	25.00	0	99.4	75	125			
Surr: Isopropylbenzene	2.20		2.500		88.1	70	130			
Surr: Octacosane	2.23		2.500		89.4	70	130			

Sample ID <b>LCS-D-71812</b>	Batch ID: <b>71812</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>LCS-D</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 1:16:23 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	24.7	2.00	25.00	0	98.9	75	125	0.490	20	
Surr: Isopropylbenzene	2.25		2.500		90.2	70	130	0	0	
Surr: Octacosane	2.26		2.500		90.2	70	130	0	0	

Sample ID <b>MB-71812</b>	Batch ID: <b>71812</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 1:25:25 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C12	<0.700	2.00								
T/R Hydrocarbons: >C12-C28	<0.700	2.00								
T/R Hydrocarbons: >C28-C35	<0.700	2.00								
T/R Hydrocarbons: C6-C35	<0.700	2.00								
Surr: Isopropylbenzene	2.20		2.500		88.1	70	130			
Surr: Octacosane	2.30		2.500		92.1	70	130			

Sample ID <b>1510076-05AMS</b>	Batch ID: <b>71812</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 2:27:25 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	24.9	1.96	24.47	0	102	75	125			
Surr: Isopropylbenzene	2.24		2.447		91.5	70	130			
Surr: Octacosane	2.20		2.447		90.0	70	130			

Sample ID <b>1510076-05AMSD</b>	Batch ID: <b>71812</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 2:36:26 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	24.6	1.97	24.65	0	99.7	75	125	1.23	20	
Surr: Isopropylbenzene	2.22		2.465		90.0	70	130	0	0	
Surr: Octacosane	2.21		2.465		89.7	70	130	0	0	

**Qualifiers:** B Analyte detected in the associated Method Blank DF Dilution Factor  
 J Analyte detected between MDL and RL MDL Method Detection Limit  
 ND Not Detected at the Method Detection Limit R RPD outside accepted control limits  
 RL Reporting Limit S Spike Recovery outside control limits  
 J Analyte detected between SDL and RL N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: GC12\_151009B**

Sample ID <b>ICV-151009</b>	Batch ID: <b>R82114</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>ICV</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 9:33:10 AM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	1090	2.00	1000	0	109	75	125			
Surr: Isopropylbenzene	45.4		50.00		90.9	70	130			
Surr: Octacosane	43.7		50.00		87.3	70	130			

Sample ID <b>CCV1-151009</b>	Batch ID: <b>R82114</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 12:57:56 PM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	564	2.00	500.0	0	113	75	125			
Surr: Isopropylbenzene	23.9		25.00		95.6	70	130			
Surr: Octacosane	25.8		25.00		103	70	130			

Sample ID <b>CCV2-151009</b>	Batch ID: <b>R82114</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 3:39:26 PM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	571	2.00	500.0	0	114	75	125			
Surr: Isopropylbenzene	23.9		25.00		95.7	70	130			
Surr: Octacosane	26.1		25.00		104	70	130			

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151012B**

The QC data in batch 71810 applies to the following samples: 1510076-01B, 1510076-02B, 1510076-03B, 1510076-04B, 1510076-05B

Sample ID <b>MB-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>MBLK</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 11:57:00 A</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	<0.100	0.300								
Potassium	<0.100	0.300								
Sodium	<0.100	0.300								

Sample ID <b>LCS-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCS</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:01:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.89	0.300	5.00	0	97.8	80	120			
Potassium	5.15	0.300	5.00	0	103	80	120			
Sodium	5.32	0.300	5.00	0	106	80	120			

Sample ID <b>LCSD-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCSD</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:03:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.67	0.300	5.00	0	93.5	80	120	4.56	15	
Potassium	4.97	0.300	5.00	0	99.4	80	120	3.65	15	
Sodium	5.05	0.300	5.00	0	101	80	120	5.19	15	

Sample ID <b>1510065-03B SD</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>SD</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:09:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	9.86	1.50	0	9.63				2.37	10	

Sample ID <b>1510065-03B PDS</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>PDS</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:29:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	14.1	0.300	5.00	9.63	89.8	80	120			

Sample ID <b>1510065-03B MS</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>MS</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:30:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	287	0.300	5.00	293	-117	80	120			S
Potassium	14.5	0.300	5.00	9.63	98.0	80	120			
Sodium	85.7	0.300	5.00	82.3	68.0	80	120			S

**Qualifiers:** B Analyte detected in the associated Method Blank      DF Dilution Factor  
J Analyte detected between MDL and RL      MDL Method Detection Limit  
ND Not Detected at the Method Detection Limit      R RPD outside accepted control limits  
RL Reporting Limit      S Spike Recovery outside control limits  
J Analyte detected between SDL and RL      N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151012B**

Sample ID: <b>1510065-03B MSD</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>MSD</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:32:00 P</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	280	0.300	5.00	293	-259	80	120	2.52	15	S
Potassium	13.9	0.300	5.00	9.63	85.6	80	120	4.36	15	
Sodium	82.6	0.300	5.00	82.3	4.71	80	120	3.76	15	S

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151012B**

Sample ID <b>ICV-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>ICV</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 11:16:00 A</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	2.51	0.300	2.50	0	100	90	110			
Potassium	2.70	0.300	2.50	0	108	90	110			
Sodium	2.74	0.300	2.50	0	110	90	110			

Sample ID <b>LCVL-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 11:21:00 A</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.0998	0.300	0.100	0	99.8	70	130			
Potassium	0.110	0.300	0.100	0	110	70	130			
Sodium	0.116	0.300	0.100	0	116	70	130			

Sample ID <b>CCV1-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 11:47:00 A</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.81	0.300	5.00	0	96.2	90	110			
Potassium	5.12	0.300	5.00	0	102	90	110			
Sodium	5.20	0.300	5.00	0	104	90	110			

Sample ID <b>LCVL1-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 11:52:00 A</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.0949	0.300	0.100	0	94.9	70	130			
Potassium	0.114	0.300	0.100	0	114	70	130			
Sodium	0.114	0.300	0.100	0	114	70	130			

Sample ID <b>CCV2-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:34:00 P</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.90	0.300	5.00	0	97.9	90	110			
Potassium	5.08	0.300	5.00	0	102	90	110			
Sodium	5.26	0.300	5.00	0	105	90	110			

Sample ID <b>LCVL2-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:39:00 P</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.110	0.300	0.100	0	110	70	130			

**Qualifiers:**

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151012B**

Sample ID <b>LCVL2-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:39:00 P</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	0.102	0.300	0.100	0	102	70	130			
Sodium	0.114	0.300	0.100	0	114	70	130			

Sample ID <b>CCV3-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 12:57:00 P</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	5.10	0.300	5.00	0	102	90	110			

Sample ID <b>LCVL3-151012</b>	Batch ID: <b>R82128</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151012B</b>	Analysis Date: <b>10/12/2015 1:13:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	0.124	0.300	0.100	0	124	70	130			

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151013B**

The QC data in batch 71810 applies to the following samples: 1510076-01B, 1510076-02B, 1510076-03B, 1510076-04B, 1510076-05B

Sample ID <b>MB-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 1:54:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	<0.100	0.300								

Sample ID <b>LCS-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 1:56:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	4.75	0.300	5.00	0	95.0	80	120			

Sample ID <b>LCSD-71810</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCSD</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 1:58:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	4.64	0.300	5.00	0	92.7	80	120	2.44	15	

Sample ID <b>1510065-03B SD</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>SD</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:04:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	66.7	15.0	0	65.8				1.38	10	
Sodium	82.0	15.0	0	77.0				6.37	10	

Sample ID <b>1510065-03B PDS</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>PDS</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:17:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	115	3.00	50.0	65.8	98.0	80	120			
Sodium	127	3.00	50.0	77.0	101	80	120			

Sample ID <b>1510065-03B MS</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:19:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	69.5	3.00	5.00	65.8	73.8	80	120			S

Sample ID <b>1510065-03B MSD</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:21:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	67.7	3.00	5.00	65.8	37.8	80	120	2.62	15	S

**Qualifiers:**

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151013B**

Sample ID <b>1510065-03B SD</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>SD</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 3:03:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	293	150	0	291				0.817	10	

Sample ID <b>1510065-03B PDS</b>	Batch ID: <b>71810</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>PDS</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 3:05:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	752	30.0	500	291	92.1	80	120			

**Qualifiers:**

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151013B**

Sample ID <b>ICV-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>ICV</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 12:03:00 P</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	2.28	0.300	2.50	0	91.3	90	110			
Magnesium	2.43	0.300	2.50	0	97.1	90	110			
Potassium	2.40	0.300	2.50	0	96.0	90	110			
Sodium	2.40	0.300	2.50	0	95.9	90	110			

Sample ID <b>LCVL-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 12:08:00 P</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.0998	0.300	0.100	0	99.8	70	130			
Magnesium	0.0993	0.300	0.100	0	99.3	70	130			
Potassium	0.105	0.300	0.100	0	105	70	130			
Sodium	0.104	0.300	0.100	0	104	70	130			

Sample ID <b>CCV2-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 1:43:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	4.83	0.300	5.00	0	96.6	90	110			
Sodium	5.00	0.300	5.00	0	100	90	110			

Sample ID <b>LCVL2-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 1:49:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	0.0982	0.300	0.100	0	98.2	70	130			
Sodium	0.180	0.300	0.100	0	180	70	130			S

Sample ID <b>CCV3-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:23:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.74	0.300	5.00	0	94.7	90	110			
Magnesium	4.82	0.300	5.00	0	96.4	90	110			
Potassium	4.76	0.300	5.00	0	95.2	90	110			
Sodium	4.90	0.300	5.00	0	98.1	90	110			

Sample ID <b>LCVL3-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:28:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151013B**

Sample ID: <b>LCVL3-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:28:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.100	0.300	0.100	0	100	70	130			
Magnesium	0.0997	0.300	0.100	0	99.7	70	130			
Potassium	0.0992	0.300	0.100	0	99.2	70	130			
Sodium	0.148	0.300	0.100	0	148	70	130			S

Sample ID: <b>CCV4-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:53:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.74	0.300	5.00	0	94.7	90	110			
Magnesium	4.81	0.300	5.00	0	96.1	90	110			
Potassium	4.76	0.300	5.00	0	95.2	90	110			
Sodium	4.87	0.300	5.00	0	97.4	90	110			

Sample ID: <b>LCVL4-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 2:57:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.0938	0.300	0.100	0	93.8	70	130			
Magnesium	0.0980	0.300	0.100	0	98.0	70	130			
Potassium	0.0935	0.300	0.100	0	93.5	70	130			
Sodium	0.127	0.300	0.100	0	127	70	130			

Sample ID: <b>CCV5-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 3:15:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.72	0.300	5.00	0	94.4	90	110			

Sample ID: <b>LCVL5-151013</b>	Batch ID: <b>R82161</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151013B</b>	Analysis Date: <b>10/13/2015 3:20:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.101	0.300	0.100	0	101	70	130			

**Qualifiers:**

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: IC2\_151009A**

The QC data in batch 71807 applies to the following samples: 1510076-01D, 1510076-02D, 1510076-03D, 1510076-04D, 1510076-05D

Sample ID: <b>LCS-71807</b>	Batch ID: <b>71807</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 9:26:10 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.2	1.00	10.00	0	102	90	110			
Fluoride	3.71	0.400	4.000	0	92.8	90	110			
Nitrate-N	5.35	0.500	5.000	0	107	90	110			
Sulfate	30.2	3.00	30.00	0	101	90	110			

Sample ID: <b>LCSD-71807</b>	Batch ID: <b>71807</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>LCSD</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 9:40:45 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.1	1.00	10.00	0	101	90	110	0.615	20	
Fluoride	3.67	0.400	4.000	0	91.8	90	110	1.04	20	
Nitrate-N	5.30	0.500	5.000	0	106	90	110	1.06	20	
Sulfate	29.5	3.00	30.00	0	98.4	90	110	2.30	20	

Sample ID: <b>MB-71807</b>	Batch ID: <b>71807</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 9:55:19 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								
Fluoride	<0.100	0.400								
Nitrate-N	<0.100	0.500								
Sulfate	<1.00	3.00								

Sample ID: <b>1510091-01DMS</b>	Batch ID: <b>71807</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 2:02:26 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	266	10.0	200.0	53.64	106	90	110			
Fluoride	207	4.00	200.0	0	103	90	110			
Nitrate-N	61.0	5.00	45.16	9.262	115	90	110			S
Sulfate	357	30.0	200.0	123.7	117	90	110			S

Sample ID: <b>1510091-01DMSD</b>	Batch ID: <b>71807</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 2:17:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	264	10.0	200.0	53.64	105	90	110	0.589	20	
Fluoride	206	4.00	200.0	0	103	90	110	0.324	20	
Nitrate-N	60.3	5.00	45.16	9.262	113	90	110	1.24	20	S
Sulfate	359	30.0	200.0	123.7	118	90	110	0.724	20	S

**Qualifiers:**

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: IC2\_151009A**

Sample ID <b>ICV-151009</b>	Batch ID: <b>R82107</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>ICV</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 8:57:37 AM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	24.9	1.00	25.00	0	99.6	90	110			
Fluoride	10.1	0.400	10.00	0	101	90	110			
Nitrate-N	13.4	0.500	12.50	0	107	90	110			
Sulfate	75.8	3.00	75.00	0	101	90	110			

Sample ID <b>CCV1-151009</b>	Batch ID: <b>R82107</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 1:10:32 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.99	1.00	10.00	0	99.9	90	110			
Fluoride	3.94	0.400	4.000	0	98.5	90	110			
Nitrate-N	5.30	0.500	5.000	0	106	90	110			
Sulfate	29.6	3.00	30.00	0	98.6	90	110			

Sample ID <b>CCV2-151009</b>	Batch ID: <b>R82107</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 2:31:35 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.3	1.00	10.00	0	103	90	110			
Fluoride	4.12	0.400	4.000	0	103	90	110			
Nitrate-N	5.43	0.500	5.000	0	109	90	110			
Sulfate	31.0	3.00	30.00	0	103	90	110			

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: TITRATOR\_151012B**

The QC data in batch 71826 applies to the following samples: 1510076-01D, 1510076-02D, 1510076-03D, 1510076-04D, 1510076-05D

Sample ID <b>MB-71826</b>	Batch ID: <b>71826</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.51</b>
SampType: <b>MBLK</b>	Run ID: <b>TITRATOR_151012B</b>	Analysis Date: <b>10/12/2015 11:28:00 A</b>	Prep Date: <b>10/12/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0								
Alkalinity, Total (As CaCO3)	<20.0	20.0								

Sample ID <b>LCS-71826</b>	Batch ID: <b>71826</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.52</b>
SampType: <b>LCS</b>	Run ID: <b>TITRATOR_151012B</b>	Analysis Date: <b>10/12/2015 11:33:00 A</b>	Prep Date: <b>10/12/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	53.7	20.0	50.00	0	107	74	129			

Sample ID <b>1510076-01D DUP</b>	Batch ID: <b>71826</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.53</b>
SampType: <b>DUP</b>	Run ID: <b>TITRATOR_151012B</b>	Analysis Date: <b>10/12/2015 11:55:00 A</b>	Prep Date: <b>10/12/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	292	20.0	0	292.4				0.103	20	
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Total (As CaCO3)	292	20.0	0	292.4				0.103	20	

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: TITRATOR\_151012B**

Sample ID <b>ICV-151012</b>	Batch ID: <b>R82152</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.53</b>
SampType: <b>ICV</b>	Run ID: <b>TITRATOR_151012B</b>	Analysis Date: <b>10/12/2015 11:26:00 A</b>	Prep Date: <b>10/12/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	6.24	20.0	0							
Alkalinity, Carbonate (As CaCO3)	93.6	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	99.8	20.0	100.0	0	99.8	98	102			

Sample ID <b>CCV1-151012</b>	Batch ID: <b>R82152</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.52</b>
SampType: <b>CCV</b>	Run ID: <b>TITRATOR_151012B</b>	Analysis Date: <b>10/12/2015 2:20:00 PM</b>	Prep Date: <b>10/12/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	6.88	20.0	0							
Alkalinity, Carbonate (As CaCO3)	93.6	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	100	20.0	100.0	0	100	90	110			

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: WC\_151009A**

The QC data in batch 71806 applies to the following samples: 1510076-01E, 1510076-02E, 1510076-03E, 1510076-04E, 1510076-05E

Sample ID <b>MB-71806</b>	Batch ID: <b>71806</b>	TestNo: <b>M2540D</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>WC_151009A</b>	Analysis Date: <b>10/9/2015 10:40:00 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	<2.50	2.50								

Sample ID <b>LCS-71806</b>	Batch ID: <b>71806</b>	TestNo: <b>M2540D</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>WC_151009A</b>	Analysis Date: <b>10/9/2015 10:40:00 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	108	25.0	100.0	0	108	85	115			

Sample ID <b>1510065-03E-DUP</b>	Batch ID: <b>71806</b>	TestNo: <b>M2540D</b>	Units: <b>mg/L</b>							
SampType: <b>DUP</b>	Run ID: <b>WC_151009A</b>	Analysis Date: <b>10/9/2015 10:40:00 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	21.7	8.33	0	20.67				4.72	5	

Sample ID <b>1510071-02E-DUP</b>	Batch ID: <b>71806</b>	TestNo: <b>M2540D</b>	Units: <b>mg/L</b>							
SampType: <b>DUP</b>	Run ID: <b>WC_151009A</b>	Analysis Date: <b>10/9/2015 10:40:00 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	81.0	25.0	0	82.00				1.23	5	

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: WC\_151009B**

The QC data in batch 71813 applies to the following samples: 1510076-01C, 1510076-02C, 1510076-03C, 1510076-04C, 1510076-05C

Sample ID <b>MB-71813</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N)                      <0.100              0.250

Sample ID <b>LCS-71813</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N)                      4.88              0.250              5.000              0              97.6              80              120

Sample ID <b>1510065-03CMS</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N)                      5.56              0.250              5.000              1.150              88.2              80              120

Sample ID <b>1510065-03CMSD</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N)                      6.19              0.250              5.000              1.150              101              80              120              10.7              25

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	DF Dilution Factor
	J Analyte detected between MDL and RL	MDL Method Detection Limit
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
	RL Reporting Limit	S Spike Recovery outside control limits
	J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510076  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: WC\_151009B**

Sample ID <b>ICV-151009</b>	Batch ID: <b>R82120</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>
SampType: <b>ICV</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Ammonia-N (As N)	2.48	0.250	2.500	0	99.2	80	120			
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Sample ID <b>CCV-151009</b>	Batch ID: <b>R82120</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Ammonia-N (As N)	5.19	0.250	5.000	0	104	80	120			
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Sample ID <b>CCV-151009</b>	Batch ID: <b>R82120</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Ammonia-N (As N)	5.08	0.250	5.000	0	102	80	120			
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<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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October 16, 2015

Kevin Pasternick  
URS Corporation  
9400 Amberglen Bldg E  
Austin, Texas 78729

TEL: (512) 454-4797

FAX (512) 454-8807

RE: CRCP Travis County

Order No.: 1510091

Dear Kevin Pasternick:

DHL Analytical, Inc. received 1 sample(s) on 10/9/2015 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in red ink, appearing to read 'John DuPont', written in a cursive style.

John DuPont  
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-15-15



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Sample Receipt Checklist

Client Name URS Corporation

Date Received: 10/9/2015

Work Order Number 1510091

Received by JB

Checklist completed by: [Signature] 10/9/2015
Signature Date

Reviewed by [Initials] 10/9/2015
Initials Date

Carrier name Hand Delivered

- Shipping container/cooler in good condition? Yes [checked] No [ ] Not Present [ ]
Custody seals intact on shipping container/cooler? Yes [ ] No [ ] Not Present [checked]
Custody seals intact on sample bottles? Yes [ ] No [ ] Not Present [checked]
Chain of custody present? Yes [checked] No [ ]
Chain of custody signed when relinquished and received? Yes [checked] No [ ]
Chain of custody agrees with sample labels? Yes [checked] No [ ]
Samples in proper container/bottle? Yes [checked] No [ ]
Sample containers intact? Yes [checked] No [ ]
Sufficient sample volume for indicated test? Yes [checked] No [ ]
All samples received within holding time? Yes [checked] No [ ]
Container/Temp Blank temperature in compliance? Yes [checked] No [ ] 0.9 °C
Water - VOA vials have zero headspace? Yes [checked] No [ ] No VOA vials submitted [ ]
Water - pH<2 acceptable upon receipt? Yes [checked] No [ ] NA [ ] LOT # 8086
Adjusted? [initials] Checked by [initials]
Water - ph>9 (S) or ph>12 (CN) acceptable upon receipt? Yes [ ] No [ ] NA [checked] LOT #
Adjusted? Checked by

Any No response must be detailed in the comments section below.

Client contacted Date contacted: Person contacted

Contacted by: Regarding

Comments:

Corrective Action

**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Lab Order:** 1510091

**CASE NARRATIVE**

Sample was analyzed using the methods outlined in the following references:

- Method E300 - Anions Analysis
- Method SW6020A - Metals Analysis
- Method TX1005 - Total Petroleum Hydrocarbons
- Method M2320 B - Alkalinity Analysis
- Method M4500-NH3 F - Nitrogen Ammonia Analysis
- Method M2540D - Total Suspended Solids

**LOG IN**

The samples were received and log-in performed on 10/9/2015. A total of 1 sample was received and analyzed. The sample arrived in good condition and was properly packaged.

**ANIONS ANALYSIS**

For Anions Analysis, the recoveries of two anions for the Matrix Spike and Matrix Spike Duplicate (1510091-01 MS/MSD) were slightly above the method control limits. These are flagged accordingly in the QC Summary Report. These anions were within method control limits the associated LCS. No further corrective action was taken.

**METALS ANALYSIS**

For Metals Analysis, the recovery of Sodium for the Low Level Calibration Verification (LCVL1-151015) was above the method control limits. The concentration of this analyte was detected in the associated sample as similar spike levels as the CCV. This analyte meets method control limits in the associated bracketing QC. No further corrective action was taken.

**TSS ANALYSIS**

As per the TCEQ-NELAP accreditation requirement the following must be noted: The Standard Methods for TSS analysis specifies a volume of 1 Liter of sample, and this will result in a minimum detection limit of 2.5 mg/L. For this project, the detection limit of 2.5 mg/L is not required and a smaller volume is being used. NELAP requires a note that if the full 1-liter volume is not utilized, the results must be discussed in the narrative. The client has been notified and has requested the Laboratory to proceed with analysis.

For TSS Analysis, the RPD of the Sample Duplicate (1510083-01 Dup) was above the method control limit. This is flagged accordingly in the QC Summary Report. The associated LCS was within method

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**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Lab Order:** 1510091

**CASE NARRATIVE**

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control limits. No further corrective action was taken.

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**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Lab Order:** 1510091

**Work Order Sample Summary**

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<b>Lab Smp ID</b>	<b>Client Sample ID</b>	<b>Tag Number</b>	<b>Date Collected</b>	<b>Date Recved</b>
1510091-01	CRCP-ATF1-130		10/09/15 09:40 AM	10/9/2015

**Lab Order:** 1510091  
**Client:** URS Corporation  
**Project:** CRCP Travis County

**PREP DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1510091-01A	CRCP-ATF1-130	10/09/15 09:40 AM	Aqueous	TX1005	TX1005 Water Prep	10/09/15 11:35 AM	71812
1510091-01B	CRCP-ATF1-130	10/09/15 09:40 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/14/15 08:52 AM	71859
	CRCP-ATF1-130	10/09/15 09:40 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	10/14/15 08:52 AM	71859
1510091-01C	CRCP-ATF1-130	10/09/15 09:40 AM	Aqueous	M4500-NH3-D	Ammonia Preparation	10/09/15 10:46 AM	71813
1510091-01D	CRCP-ATF1-130	10/09/15 09:40 AM	Aqueous	M2320 B	Alkalinity Preparation	10/12/15 09:10 AM	71826
	CRCP-ATF1-130	10/09/15 09:40 AM	Aqueous	E300	Anion Preparation	10/09/15 11:35 AM	71807
	CRCP-ATF1-130	10/09/15 09:40 AM	Aqueous	E300	Anion Preparation	10/09/15 11:35 AM	71807
1510091-01E	CRCP-ATF1-130	10/09/15 09:40 AM	Aqueous	M2540D	TSS Preparation	10/13/15 03:15 PM	71855

Lab Order: 1510091  
 Client: URS Corporation  
 Project: CRCP Travis County

**ANALYTICAL DATES REPORT**

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1510091-01A	CRCP-ATF1-130	Aqueous	TX1005	Tx1005 TPH Water	71812	1	10/09/15 03:30 PM	GC12_151009B
1510091-01B	CRCP-ATF1-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71859	1	10/15/15 02:09 PM	ICP-MS4_151015A
	CRCP-ATF1-130	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	71859	100	10/15/15 12:14 PM	ICP-MS4_151015A
1510091-01C	CRCP-ATF1-130	Aqueous	M4500-NH3-D	Ammonia aqueous	71813	1	10/09/15 12:00 PM	WC_151009B
1510091-01D	CRCP-ATF1-130	Aqueous	M2320 B	Alkalinity	71826	1	10/12/15 01:00 PM	TITRATOR_151012B
	CRCP-ATF1-130	Aqueous	E300	Anions by IC method - Water	71807	10	10/09/15 01:47 PM	IC2_151009A
	CRCP-ATF1-130	Aqueous	E300	Anions by IC method - Water	71807	1	10/09/15 12:37 PM	IC2_151009A
1510091-01E	CRCP-ATF1-130	Aqueous	M2540D	Total Suspended Solids	71855	1	10/13/15 04:00 PM	WC_151013A

**DHL Analytical, Inc.**

Date: 16-Oct-15

**CLIENT:** URS Corporation  
**Project:** CRCP Travis County  
**Project No:** 60407569.41010113.101  
**Lab Order:** 1510091

**Client Sample ID:** CRCP-ATF1-130  
**Lab ID:** 1510091-01  
**Collection Date:** 10/09/15 09:40 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TX1005 TPH WATER</b>		<b>TX1005</b>		Analyst: <b>AV</b>			
T/R Hydrocarbons: C6-C12	<0.688	0.688	1.96		mg/L	1	10/09/15 03:30 PM
T/R Hydrocarbons: >C12-C28	<0.688	0.688	1.96		mg/L	1	10/09/15 03:30 PM
T/R Hydrocarbons: >C28-C35	<0.688	0.688	1.96		mg/L	1	10/09/15 03:30 PM
T/R Hydrocarbons: C6-C35	<0.688	0.688	1.96		mg/L	1	10/09/15 03:30 PM
Surr: Isopropylbenzene	91.6	0	70-130		%REC	1	10/09/15 03:30 PM
Surr: Octacosane	94.4	0	70-130		%REC	1	10/09/15 03:30 PM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>		Analyst: <b>RO</b>			
Calcium	160	10.0	30.0		mg/L	100	10/15/15 12:14 PM
Magnesium	37.1	10.0	30.0		mg/L	100	10/15/15 12:14 PM
Potassium	3.31	0.100	0.300		mg/L	1	10/15/15 02:09 PM
Sodium	38.5	10.0	30.0		mg/L	100	10/15/15 12:14 PM
<b>ANIONS BY IC METHOD - WATER</b>		<b>E300</b>		Analyst: <b>AV</b>			
Chloride	53.6	3.00	10.0		mg/L	10	10/09/15 01:47 PM
Fluoride	<0.100	0.100	0.400		mg/L	1	10/09/15 12:37 PM
Nitrate-N	9.56	0.100	0.500		mg/L	1	10/09/15 12:37 PM
Sulfate	125	1.00	3.00		mg/L	1	10/09/15 12:37 PM
<b>ALKALINITY</b>		<b>M2320 B</b>		Analyst: <b>LM</b>			
Alkalinity, Bicarbonate (As CaCO3)	453	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 01:00 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 01:00 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	10/12/15 01:00 PM
Alkalinity, Total (As CaCO3)	453	20.0	20.0		mg/L @ pH 4.53	1	10/12/15 01:00 PM
<b>AMMONIA AQUEOUS</b>		<b>M4500-NH3-D</b>		Analyst: <b>JL</b>			
Ammonia-N (As N)	0.104	0.100	0.250	J	mg/L	1	10/09/15 12:00 PM
<b>TOTAL SUSPENDED SOLIDS</b>		<b>M2540D</b>		Analyst: <b>BJT</b>			
Suspended Solids (Residue, Non-Filterable)	<2.60	2.60	2.60		mg/L	1	10/13/15 04:00 PM

**Qualifiers:**

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

**ANALYTICAL QC SUMMARY REPORT**

**RunID: GC12\_151009B**

The QC data in batch 71812 applies to the following samples: 1510091-01A

Sample ID <b>LCS-71812</b>	Batch ID: <b>71812</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 1:07:21 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	24.9	2.00	25.00	0	99.4	75	125			
Surr: Isopropylbenzene	2.20		2.500		88.1	70	130			
Surr: Octacosane	2.23		2.500		89.4	70	130			

Sample ID <b>LCS-D-71812</b>	Batch ID: <b>71812</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>LCS-D</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 1:16:23 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	24.7	2.00	25.00	0	98.9	75	125	0.490	20	
Surr: Isopropylbenzene	2.25		2.500		90.2	70	130	0	0	
Surr: Octacosane	2.26		2.500		90.2	70	130	0	0	

Sample ID <b>MB-71812</b>	Batch ID: <b>71812</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 1:25:25 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C12	<0.700	2.00								
T/R Hydrocarbons: >C12-C28	<0.700	2.00								
T/R Hydrocarbons: >C28-C35	<0.700	2.00								
T/R Hydrocarbons: C6-C35	<0.700	2.00								
Surr: Isopropylbenzene	2.20		2.500		88.1	70	130			
Surr: Octacosane	2.30		2.500		92.1	70	130			

Sample ID <b>1510076-05AMS</b>	Batch ID: <b>71812</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 2:27:25 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	24.9	1.96	24.47	0	102	75	125			
Surr: Isopropylbenzene	2.24		2.447		91.5	70	130			
Surr: Octacosane	2.20		2.447		90.0	70	130			

Sample ID <b>1510076-05AMSD</b>	Batch ID: <b>71812</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 2:36:26 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	24.6	1.97	24.65	0	99.7	75	125	1.23	20	
Surr: Isopropylbenzene	2.22		2.465		90.0	70	130	0	0	
Surr: Octacosane	2.21		2.465		89.7	70	130	0	0	

**Qualifiers:** B Analyte detected in the associated Method Blank DF Dilution Factor  
 J Analyte detected between MDL and RL MDL Method Detection Limit  
 ND Not Detected at the Method Detection Limit R RPD outside accepted control limits  
 RL Reporting Limit S Spike Recovery outside control limits  
 J Analyte detected between SDL and RL N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: GC12\_151009B**

Sample ID <b>ICV-151009</b>	Batch ID: <b>R82114</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>ICV</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 9:33:10 AM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	1090	2.00	1000	0	109	75	125			
Surr: Isopropylbenzene	45.4		50.00		90.9	70	130			
Surr: Octacosane	43.7		50.00		87.3	70	130			

Sample ID <b>CCV1-151009</b>	Batch ID: <b>R82114</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 12:57:56 PM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	564	2.00	500.0	0	113	75	125			
Surr: Isopropylbenzene	23.9		25.00		95.6	70	130			
Surr: Octacosane	25.8		25.00		103	70	130			

Sample ID <b>CCV2-151009</b>	Batch ID: <b>R82114</b>	TestNo: <b>TX1005</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>GC12_151009B</b>	Analysis Date: <b>10/9/2015 3:39:26 PM</b>	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	571	2.00	500.0	0	114	75	125			
Surr: Isopropylbenzene	23.9		25.00		95.7	70	130			
Surr: Octacosane	26.1		25.00		104	70	130			

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	DF Dilution Factor	
	J Analyte detected between MDL and RL	MDL Method Detection Limit	
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits	
	RL Reporting Limit	S Spike Recovery outside control limits	
	J Analyte detected between SDL and RL	N Parameter not NELAC certified	

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151015A**

The QC data in batch 71859 applies to the following samples: 1510091-01B

Sample ID <b>MB-71859</b>	Batch ID: <b>71859</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>MBLK</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 12:00:00 P</b>	Prep Date: <b>10/14/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	<0.100	0.300								
Magnesium	<0.100	0.300								
Potassium	<0.100	0.300								
Sodium	<0.100	0.300								

Sample ID <b>LCS-71859</b>	Batch ID: <b>71859</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCS</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 12:04:00 P</b>	Prep Date: <b>10/14/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.78	0.300	5.00	0	95.7	80	120			
Magnesium	4.82	0.300	5.00	0	96.4	80	120			
Potassium	4.83	0.300	5.00	0	96.7	80	120			
Sodium	4.92	0.300	5.00	0	98.4	80	120			

Sample ID <b>LCSD-71859</b>	Batch ID: <b>71859</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>LCSD</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 12:06:00 P</b>	Prep Date: <b>10/14/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.06	0.300	5.00	0	101	80	120	5.70	15	
Magnesium	5.04	0.300	5.00	0	101	80	120	4.55	15	
Potassium	5.04	0.300	5.00	0	101	80	120	4.18	15	
Sodium	5.11	0.300	5.00	0	102	80	120	3.84	15	

Sample ID <b>1510111-01A SD</b>	Batch ID: <b>71859</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>SD</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 12:12:00 P</b>	Prep Date: <b>10/14/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	<0.500	1.50	0	0				0	10	
Magnesium	<0.500	1.50	0	0				0	10	
Potassium	<0.500	1.50	0	0				0	10	
Sodium	<0.500	1.50	0	0				0	10	

Sample ID <b>1510111-01A PDS</b>	Batch ID: <b>71859</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>
SampType: <b>PDS</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 12:31:00 P</b>	Prep Date: <b>10/14/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.61	0.300	5.00	0	112	80	120			
Magnesium	4.94	0.300	5.00	0	98.7	80	120			
Potassium	4.95	0.300	5.00	0	98.9	80	120			
Sodium	5.78	0.300	5.00	0	116	80	120			

**Qualifiers:**

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151015A**

Sample ID: <b>1510111-01A MS</b>	Batch ID: <b>71859</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 12:33:00 P</b>	Prep Date: <b>10/14/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.11	0.300	5.00	0	102	80	120			
Magnesium	4.86	0.300	5.00	0	97.1	80	120			
Potassium	4.96	0.300	5.00	0	99.1	80	120			
Sodium	5.22	0.300	5.00	0	104	80	120			

Sample ID: <b>1510111-01A MSD</b>	Batch ID: <b>71859</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 12:35:00 P</b>	Prep Date: <b>10/14/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.02	0.300	5.00	0	100	80	120	1.77	15	
Magnesium	4.97	0.300	5.00	0	99.3	80	120	2.24	15	
Potassium	5.06	0.300	5.00	0	101	80	120	1.98	15	
Sodium	5.18	0.300	5.00	0	104	80	120	0.800	15	

**Qualifiers:**

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151015A**

Sample ID <b>ICV-151015</b>	Batch ID: <b>R82194</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>ICV</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 11:38:00 A</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	2.29	0.300	2.50	0	91.7	90	110			
Magnesium	2.42	0.300	2.50	0	96.6	90	110			
Potassium	2.35	0.300	2.50	0	93.9	90	110			
Sodium	2.38	0.300	2.50	0	95.3	90	110			

Sample ID <b>LCVL-151015</b>	Batch ID: <b>R82194</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 11:54:00 A</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.110	0.300	0.100	0	110	70	130			
Magnesium	0.107	0.300	0.100	0	107	70	130			
Potassium	0.106	0.300	0.100	0	106	70	130			
Sodium	0.106	0.300	0.100	0	106	70	130			

Sample ID <b>CCV1-151015</b>	Batch ID: <b>R82194</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 12:37:00 P</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.85	0.300	5.00	0	97.0	90	110			
Magnesium	4.78	0.300	5.00	0	95.7	90	110			
Potassium	4.91	0.300	5.00	0	98.1	90	110			
Sodium	4.97	0.300	5.00	0	99.4	90	110			

Sample ID <b>LCVL1-151015</b>	Batch ID: <b>R82194</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 12:55:00 P</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.109	0.300	0.100	0	109	70	130			
Magnesium	0.105	0.300	0.100	0	105	70	130			
Potassium	0.103	0.300	0.100	0	103	70	130			
Sodium	0.135	0.300	0.100	0	135	70	130			S

Sample ID <b>CCV2-151015</b>	Batch ID: <b>R82194</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 1:20:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	4.88	0.300	5.00	0	97.7	90	110			

**Qualifiers:**

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: ICP-MS4\_151015A**

Sample ID <b>LCVL2-151015</b>	Batch ID: <b>R82194</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 1:51:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Potassium	0.107	0.300	0.100	0	107	70	130			
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Sample ID <b>CCV3-151015</b>	Batch ID: <b>R82194</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 2:11:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Potassium	4.75	0.300	5.00	0	95.1	90	110			
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Sample ID <b>LCVL3-151015</b>	Batch ID: <b>R82194</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCVL</b>	Run ID: <b>ICP-MS4_151015A</b>	Analysis Date: <b>10/15/2015 2:18:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Potassium	0.102	0.300	0.100	0	102	70	130			
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<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	DF Dilution Factor
	J Analyte detected between MDL and RL	MDL Method Detection Limit
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
	RL Reporting Limit	S Spike Recovery outside control limits
	J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: IC2\_151009A**

The QC data in batch 71807 applies to the following samples: 1510091-01D

Sample ID: <b>LCS-71807</b>	Batch ID: <b>71807</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 9:26:10 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.2	1.00	10.00	0	102	90	110			
Fluoride	3.71	0.400	4.000	0	92.8	90	110			
Nitrate-N	5.35	0.500	5.000	0	107	90	110			
Sulfate	30.2	3.00	30.00	0	101	90	110			

Sample ID: <b>LCSD-71807</b>	Batch ID: <b>71807</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>LCSD</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 9:40:45 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.1	1.00	10.00	0	101	90	110	0.615	20	
Fluoride	3.67	0.400	4.000	0	91.8	90	110	1.04	20	
Nitrate-N	5.30	0.500	5.000	0	106	90	110	1.06	20	
Sulfate	29.5	3.00	30.00	0	98.4	90	110	2.30	20	

Sample ID: <b>MB-71807</b>	Batch ID: <b>71807</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 9:55:19 AM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								
Fluoride	<0.100	0.400								
Nitrate-N	<0.100	0.500								
Sulfate	<1.00	3.00								

Sample ID: <b>1510091-01DMS</b>	Batch ID: <b>71807</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 2:02:26 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	266	10.0	200.0	53.64	106	90	110			
Fluoride	207	4.00	200.0	0	103	90	110			
Nitrate-N	61.0	5.00	45.16	9.262	115	90	110			S
Sulfate	357	30.0	200.0	123.7	117	90	110			S

Sample ID: <b>1510091-01DMSD</b>	Batch ID: <b>71807</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 2:17:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	264	10.0	200.0	53.64	105	90	110	0.589	20	
Fluoride	206	4.00	200.0	0	103	90	110	0.324	20	
Nitrate-N	60.3	5.00	45.16	9.262	113	90	110	1.24	20	S
Sulfate	359	30.0	200.0	123.7	118	90	110	0.724	20	S

**Qualifiers:**

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: IC2\_151009A**

Sample ID <b>ICV-151009</b>	Batch ID: <b>R82107</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>ICV</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 8:57:37 AM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	24.9	1.00	25.00	0	99.6	90	110			
Fluoride	10.1	0.400	10.00	0	101	90	110			
Nitrate-N	13.4	0.500	12.50	0	107	90	110			
Sulfate	75.8	3.00	75.00	0	101	90	110			

Sample ID <b>CCV1-151009</b>	Batch ID: <b>R82107</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 1:10:32 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.99	1.00	10.00	0	99.9	90	110			
Fluoride	3.94	0.400	4.000	0	98.5	90	110			
Nitrate-N	5.30	0.500	5.000	0	106	90	110			
Sulfate	29.6	3.00	30.00	0	98.6	90	110			

Sample ID <b>CCV2-151009</b>	Batch ID: <b>R82107</b>	TestNo: <b>E300</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>IC2_151009A</b>	Analysis Date: <b>10/9/2015 2:31:35 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.3	1.00	10.00	0	103	90	110			
Fluoride	4.12	0.400	4.000	0	103	90	110			
Nitrate-N	5.43	0.500	5.000	0	109	90	110			
Sulfate	31.0	3.00	30.00	0	103	90	110			

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: TITRATOR\_151012B**

The QC data in batch 71826 applies to the following samples: 1510091-01D

Sample ID <b>MB-71826</b>	Batch ID: <b>71826</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.51</b>							
SampType: <b>MBLK</b>	Run ID: <b>TITRATOR_151012B</b>	Analysis Date: <b>10/12/2015 11:28:00 A</b>	Prep Date: <b>10/12/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0
Alkalinity, Total (As CaCO3)	<20.0	20.0

Sample ID <b>LCS-71826</b>	Batch ID: <b>71826</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.52</b>							
SampType: <b>LCS</b>	Run ID: <b>TITRATOR_151012B</b>	Analysis Date: <b>10/12/2015 11:33:00 A</b>	Prep Date: <b>10/12/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Alkalinity, Total (As CaCO3)	53.7	20.0	50.00	0	107	74	129
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Sample ID <b>1510076-01D DUP</b>	Batch ID: <b>71826</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.53</b>							
SampType: <b>DUP</b>	Run ID: <b>TITRATOR_151012B</b>	Analysis Date: <b>10/12/2015 11:55:00 A</b>	Prep Date: <b>10/12/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Alkalinity, Bicarbonate (As CaCO3)	292	20.0	0	292.4				0.103	20
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0	0	0				0	20
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0	0				0	20
Alkalinity, Total (As CaCO3)	292	20.0	0	292.4				0.103	20

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	DF Dilution Factor
	J Analyte detected between MDL and RL	MDL Method Detection Limit
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
	RL Reporting Limit	S Spike Recovery outside control limits
	J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: TITRATOR\_151012B**

Sample ID <b>ICV-151012</b>	Batch ID: <b>R82152</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.53</b>
SampType: <b>ICV</b>	Run ID: <b>TITRATOR_151012B</b>	Analysis Date: <b>10/12/2015 11:26:00 A</b>	Prep Date: <b>10/12/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	6.24	20.0	0							
Alkalinity, Carbonate (As CaCO3)	93.6	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	99.8	20.0	100.0	0	99.8	98	102			

Sample ID <b>CCV1-151012</b>	Batch ID: <b>R82152</b>	TestNo: <b>M2320 B</b>	Units: <b>mg/L @ pH 4.52</b>
SampType: <b>CCV</b>	Run ID: <b>TITRATOR_151012B</b>	Analysis Date: <b>10/12/2015 2:20:00 PM</b>	Prep Date: <b>10/12/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	6.88	20.0	0							
Alkalinity, Carbonate (As CaCO3)	93.6	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	100	20.0	100.0	0	100	90	110			

<p><b>Qualifiers:</b></p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: WC\_151009B**

The QC data in batch 71813 applies to the following samples: 1510091-01C

Sample ID <b>MB-71813</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N)	<0.100	0.250
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Sample ID <b>LCS-71813</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N)	4.88	0.250	5.000	0	97.6	80	120
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Sample ID <b>1510065-03CMS</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N)	5.56	0.250	5.000	1.150	88.2	80	120
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Sample ID <b>1510065-03CMSD</b>	Batch ID: <b>71813</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ammonia-N (As N)	6.19	0.250	5.000	1.150	101	80	120	10.7	25
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<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	DF Dilution Factor
	J Analyte detected between MDL and RL	MDL Method Detection Limit
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
	RL Reporting Limit	S Spike Recovery outside control limits
	J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: WC\_151009B**

Sample ID <b>ICV-151009</b>	Batch ID: <b>R82120</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>
SampType: <b>ICV</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Ammonia-N (As N)	2.48	0.250	2.500	0	99.2	80	120			
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Sample ID <b>CCV-151009</b>	Batch ID: <b>R82120</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Ammonia-N (As N)	5.19	0.250	5.000	0	104	80	120			
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Sample ID <b>CCV-151009</b>	Batch ID: <b>R82120</b>	TestNo: <b>M4500-NH3-D</b>	Units: <b>mg/L</b>
SampType: <b>CCV</b>	Run ID: <b>WC_151009B</b>	Analysis Date: <b>10/9/2015 12:00:00 PM</b>	Prep Date: <b>10/9/2015</b>

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Ammonia-N (As N)	5.08	0.250	5.000	0	102	80	120			
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<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	DF Dilution Factor
	J Analyte detected between MDL and RL	MDL Method Detection Limit
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
	RL Reporting Limit	S Spike Recovery outside control limits
	J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

## ANALYTICAL QC SUMMARY REPORT

**RunID: WC\_151013A**

The QC data in batch 71855 applies to the following samples: 1510091-01E

Sample ID <b>MB-71855</b>	Batch ID: <b>71855</b>	TestNo: <b>M2540D</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>WC_151013A</b>	Analysis Date: <b>10/13/2015 4:00:00 PM</b>	Prep Date: <b>10/13/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	<2.50	2.50								

Sample ID <b>LCS-71855</b>	Batch ID: <b>71855</b>	TestNo: <b>M2540D</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>WC_151013A</b>	Analysis Date: <b>10/13/2015 4:00:00 PM</b>	Prep Date: <b>10/13/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	105	25.0	100.0	0	105	85	115			

Sample ID <b>1510083-01E-DUP</b>	Batch ID: <b>71855</b>	TestNo: <b>M2540D</b>	Units: <b>mg/L</b>							
SampType: <b>DUP</b>	Run ID: <b>WC_151013A</b>	Analysis Date: <b>10/13/2015 4:00:00 PM</b>	Prep Date: <b>10/13/2015</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	80.0	50.0	0	72.00				10.5	5	R

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	DF Dilution Factor
	J Analyte detected between MDL and RL	MDL Method Detection Limit
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
	RL Reporting Limit	S Spike Recovery outside control limits
	J Analyte detected between SDL and RL	N Parameter not NELAC certified

**CLIENT:** URS Corporation  
**Work Order:** 1510091  
**Project:** CRCP Travis County

**MQL SUMMARY REPORT**

<b>TestNo: TX1005</b>	<b>MDL</b>	<b>MQL</b>
<b>Analyte</b>	<b>mg/L</b>	<b>mg/L</b>
T/R Hydrocarbons: C6-C12	0.700	2.00
T/R Hydrocarbons: >C12-C28	0.700	2.00
T/R Hydrocarbons: >C28-C35	0.700	2.00
T/R Hydrocarbons: C6-C35	0.700	2.00

<b>TestNo: E300</b>	<b>MDL</b>	<b>MQL</b>
<b>Analyte</b>	<b>mg/L</b>	<b>mg/L</b>
Chloride	0.300	1.00
Fluoride	0.100	0.400
Nitrate-N	0.100	0.500
Sulfate	1.00	3.00

<b>TestNo: M2320 B</b>	<b>MDL</b>	<b>MQL</b>
<b>Analyte</b>	<b>ig/L @ pH 4.5</b>	<b>ig/L @ pH 4.5</b>
Alkalinity, Bicarbonate (As CaCO <sub>3</sub> )	10.0	20.0
Alkalinity, Carbonate (As CaCO <sub>3</sub> )	10.0	20.0
Alkalinity, Hydroxide (As CaCO <sub>3</sub> )	10.0	20.0
Alkalinity, Total (As CaCO <sub>3</sub> )	20.0	20.0

<b>TestNo: M4500-NH3-D</b>	<b>MDL</b>	<b>MQL</b>
<b>Analyte</b>	<b>mg/L</b>	<b>mg/L</b>
Ammonia-N (As N)	0.100	0.250

<b>TestNo: SW6020A</b>	<b>MDL</b>	<b>MQL</b>
<b>Analyte</b>	<b>mg/L</b>	<b>mg/L</b>
Calcium	0.100	0.300
Magnesium	0.100	0.300
Potassium	0.100	0.300
Sodium	0.100	0.300

<b>TestNo: M2540D</b>	<b>MDL</b>	<b>MQL</b>
<b>Analyte</b>	<b>mg/L</b>	<b>mg/L</b>
Suspended Solids (Residue, Non-Fil)	2.50	2.50

**Qualifiers:** MQL -Method Quantitation Limit as defined by TRRP  
MDL -Method Detection Limit as defined by TRRP