

Final Analysis Report

LCRA Environmental Laboratory Services

Date: 06-Apr-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-WisianW1-050
Lab Order:	1203826	Collection Date:	3/26/2012 10:20:00 AM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1203826-001	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	89.5	0.200		mg/L	1	4/4/2012 11:32:45 AM
Magnesium	10.1	0.200		mg/L	1	4/4/2012 11:32:45 AM
Potassium	3.04	0.200		mg/L	1	4/4/2012 11:32:45 AM
Sodium	54.0	0.600		mg/L	1	4/4/2012 11:32:45 AM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	12.7	10.0		mg/L	10	3/27/2012 9:56:00 PM
Fluoride	0.410	0.100		mg/L	10	3/27/2012 9:56:00 PM
Nitrogen, Nitrate (As N)	8.03	0.100		mg/L	10	3/27/2012 9:56:00 PM
Sulfate	21.2	10.0		mg/L	10	3/27/2012 9:56:00 PM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO ₃)	300	2	A	mg/L CaCO ₃	1	4/2/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	4/2/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	3/29/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	< 1.0	1.0		mg/L	1	3/28/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 06-Apr-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-WisianW2-050
Lab Order:	1203826	Collection Date:	3/26/2012 9:35:00 AM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1203826-002	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	90.7	0.200		mg/L	1	4/4/2012 11:40:28 AM
Magnesium	10.8	0.200		mg/L	1	4/4/2012 11:40:28 AM
Potassium	2.47	0.200		mg/L	1	4/4/2012 11:40:28 AM
Sodium	118	0.600		mg/L	1	4/4/2012 11:40:28 AM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	10.6	10.0		mg/L	10	3/27/2012 11:37:00 PM
Fluoride	0.110	0.100		mg/L	10	3/27/2012 11:37:00 PM
Nitrogen, Nitrate (As N)	11.3	0.100	x	mg/L	10	3/27/2012 11:37:00 PM
Sulfate	27.9	10.0		mg/L	10	3/27/2012 11:37:00 PM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO3)	418	2	A	mg/L CaCO3	1	4/2/2012
Alkalinity, Carbonate (As CaCO3)	< 2	2	A	mg/L CaCO3	1	4/2/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	3/29/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	< 1.0	1.0		mg/L	1	3/28/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 06-Apr-12

CLIENT: URS Corporation	Client Sample ID: CRCP-5852213-050
Lab Order: 1203826	Collection Date: 3/26/2012 12:10:00 PM
Project: Colorado River Corridor - Groundwater	Matrix: GROUNDWATER
Lab ID: 1203826-003	Tag No:

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	150	0.200		mg/L	1	4/4/2012 11:48:29 AM
Magnesium	23.2	0.200		mg/L	1	4/4/2012 11:48:29 AM
Potassium	4.41	0.200		mg/L	1	4/4/2012 11:48:29 AM
Sodium	25.5	0.600		mg/L	1	4/4/2012 11:48:29 AM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	15.2	10.0		mg/L	10	3/27/2012 11:53:00 PM
Fluoride	0.230	0.100		mg/L	10	3/27/2012 11:53:00 PM
Nitrogen, Nitrate (As N)	< 0.100	0.100		mg/L	10	3/27/2012 11:53:00 PM
Sulfate	37.4	10.0		mg/L	10	3/27/2012 11:53:00 PM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO ₃)	425	2	A	mg/L CaCO ₃	1	4/2/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	4/2/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	0.909	0.020		mg/L	1	3/29/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	5.9	1.0		mg/L	1	3/28/2012

Qualifiers:

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 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 06-Apr-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-WisianW1-055
Lab Order:	1203826	Collection Date:	3/26/2012 10:35:00 AM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1203826-004	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	0.241	0.200		mg/L	1	4/4/2012 11:56:13 AM
Magnesium	< 0.200	0.200		mg/L	1	4/4/2012 11:56:13 AM
Potassium	< 0.200	0.200		mg/L	1	4/4/2012 11:56:13 AM
Sodium	< 0.600	0.600		mg/L	1	4/4/2012 11:56:13 AM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	< 10.0	10.0		mg/L	10	3/28/2012 12:10:00 AM
Fluoride	< 0.100	0.100		mg/L	10	3/28/2012 12:10:00 AM
Nitrogen, Nitrate (As N)	< 0.100	0.100		mg/L	10	3/28/2012 12:10:00 AM
Sulfate	< 10.0	10.0		mg/L	10	3/28/2012 12:10:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO3)	< 20	20	A	mg/L CaCO3	1	4/2/2012
Alkalinity, Carbonate (As CaCO3)	< 20	20	A	mg/L CaCO3	1	4/2/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	3/29/2012

Qualifiers:

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 H Holding Time Exceeded
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LCRA Environmental Laboratory Services

Date: 06-Apr-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-5852314-050
Lab Order:	1203826	Collection Date:	3/26/2012 1:50:00 PM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1203826-005	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	139	0.200		mg/L	1	4/4/2012 12:01:43 PM
Magnesium	40.7	0.200		mg/L	1	4/4/2012 12:01:43 PM
Potassium	1.98	0.200		mg/L	1	4/4/2012 12:01:43 PM
Sodium	85.8	0.600		mg/L	1	4/4/2012 12:01:43 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	53.3	10.0		mg/L	10	3/28/2012 12:27:00 AM
Fluoride	0.170	0.100		mg/L	10	3/28/2012 12:27:00 AM
Nitrogen, Nitrate (As N)	10.7	0.100	X	mg/L	10	3/28/2012 12:27:00 AM
Sulfate	192	10.0		mg/L	10	3/28/2012 12:27:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO ₃)	368	2	A	mg/L CaCO ₃	1	4/2/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	4/2/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	3/29/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	2.3	1.0		mg/L	1	3/28/2012

Qualifiers:

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 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 06-Apr-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-Buchheit-050
Lab Order:	1203826	Collection Date:	3/26/2012 3:20:00 PM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1203826-006	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	132	0.200		mg/L	1	4/4/2012 12:10:08 PM
Magnesium	12.3	0.200		mg/L	1	4/4/2012 12:10:08 PM
Potassium	2.40	0.200		mg/L	1	4/4/2012 12:10:08 PM
Sodium	56.4	0.600		mg/L	1	4/4/2012 12:10:08 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	37.3	10.0		mg/L	10	3/28/2012 12:44:00 AM
Fluoride	0.280	0.100		mg/L	10	3/28/2012 12:44:00 AM
Nitrogen, Nitrate (As N)	3.73	0.100		mg/L	10	3/28/2012 12:44:00 AM
Sulfate	77.2	10.0		mg/L	10	3/28/2012 12:44:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO3)	327	2	A	mg/L CaCO3	1	4/2/2012
Alkalinity, Carbonate (As CaCO3)	< 2	2	A	mg/L CaCO3	1	4/2/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	3/29/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	< 1.0	1.0		mg/L	1	3/28/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

CLIENT: URS Corporation
Project: Colorado River Corridor - Groundwater
Lab Order: 1203826

CASE NARRATIVE

Analytical Comments for METHOD E300.0, SAMPLE 1203826-002A, Batch R89485C: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E300.0, SAMPLE 1203826-005A, Batch R89485C: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E200.7, SAMPLE 1203826-006BLFM, Batch R89718A: The calcium and sodium LFM recoveries were not reported because the spike amount was less than 30 percent of the sample background concentration.

Analytical Comments for METHOD E200.7, SAMPLE 1203826-006BLFMD, Batch R89718A: The calcium and sodium LFMD recoveries were not reported because the spike amount was less than 30 percent of the sample background concentration.

CLIENT: URS Corporation
Work Order: 1203826
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT**BatchID: R89484**

Sample ID: MBLK	SampType: MBLK	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89484						
Client ID: PBW	Batch ID: R89484	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021646						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter)	< 1.0	1.0									

Sample ID: LCS	SampType: LCS	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89484						
Client ID: LCSW	Batch ID: R89484	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021647						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter)	100	20.0	100.0	0	100	80	120				

Sample ID: LCSD	SampType: LCSD	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89484						
Client ID: LCSS02	Batch ID: R89484	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021648						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter)	96.0	20.0	100.0	0	96.0	0	2000	100.0	4.08	20	

Sample ID: 1203827-001KDUP	SampType: DUP	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89484						
Client ID: ZZZZZZ	Batch ID: R89484	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021655						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter)	21.0	5.0						21.75	3.51	20	

Qualifiers: A Not Available for Accreditation
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

B Analyte Detected in Method Blank
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

E Value Above Quantitation Range
R RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203826
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89485B

Sample ID: 1203826-001ALFM	SampType: LFM	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: CRCP-WisianW1-05	Batch ID: R89485B	TestNo: E300.0		Analysis Date: 3/27/2012	SeqNo: 3021734						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	212	10.0	200.0	12.68	99.7	80	120				
Fluoride	10.3	0.100	10.00	0.4100	99.3	80	120				
Nitrogen, Nitrate (As N)	18.0	0.100	10.00	8.030	99.3	80	120				
Sulfate	217	10.0	200.0	21.20	97.8	80	120				

Sample ID: 1203826-001ALFMD	SampType: LFMD	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: CRCP-WisianW1-05	Batch ID: R89485B	TestNo: E300.0		Analysis Date: 3/27/2012	SeqNo: 3021735						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	212	10.0	200.0	12.68	99.6	0	2000	212.0	0.0991	20	
Fluoride	10.3	0.100	10.00	0.4100	99.2	0	2000	10.34	0.0968	20	
Nitrogen, Nitrate (As N)	18.0	0.100	10.00	8.030	99.2	0	2000	17.96	0.0557	20	
Sulfate	217	10.0	200.0	21.20	97.7	0	2000	216.8	0.120	20	

Sample ID: IC_120327_LFB	SampType: LFB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485B	TestNo: E300.0		Analysis Date: 3/27/2012	SeqNo: 3021736						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.3	1.00	30.00	0	101	90	110				
Fluoride	1.02	0.010	1.000	0	102	90	110				
Nitrogen, Nitrate (As N)	1.02	0.010	1.000	0	102	90	110				
Sulfate	29.7	1.00	30.00	0	98.9	90	110				

Sample ID: IC_120327_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485B	TestNo: E300.0		Analysis Date: 3/27/2012	SeqNo: 3021737						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.3	1.00	30.00	0	101	90	110				
Fluoride	1.02	0.010	1.000	0	102	90	110				
Nitrogen, Nitrate (As N)	1.02	0.010	1.000	0	102	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank	E	Value Above Quantitation Range
H	Holding Time Exceeded	N	Not Accredited	R	RPD Outside Recovery Limits
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)		

CLIENT: URS Corporation
Work Order: 1203826
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89485B

Sample ID: IC_120327_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485B	TestNo: E300.0		Analysis Date: 3/27/2012	SeqNo: 3021737						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	29.6	1.00	30.00	0	98.8	90	110				

Sample ID: IC_120327_LRB	SampType: LRB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485B	TestNo: E300.0		Analysis Date: 3/27/2012	SeqNo: 3021738						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	< 1.00	1.00									
Fluoride	< 0.010	0.010									
Nitrogen, Nitrate (As N)	< 0.010	0.010									
Sulfate	< 1.00	1.00									

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203826
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89485C

Sample ID: 1203848-004ALFM	SampType: LFM	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021749						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	211	10.0	200.0	11.76	99.5	80	120				
Fluoride	10.4	0.100	10.00	0.4300	99.4	80	120				
Nitrogen, Nitrate (As N)	25.0	0.100	10.00	15.22	97.3	80	120				
Sulfate	221	10.0	200.0	23.82	98.5	80	120				

Sample ID: 1203848-004ALFMD	SampType: LFMD	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021750						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	211	10.0	200.0	11.76	99.5	0	2000	210.7	0.0522		20
Fluoride	10.4	0.100	10.00	0.4300	99.4	0	2000	10.37	0		20
Nitrogen, Nitrate (As N)	24.9	0.100	10.00	15.22	97.1	0	2000	24.95	0.0802		20
Sulfate	221	10.0	200.0	23.82	98.5	0	2000	220.8	0.0272		20

Sample ID: IC_120327_LFB	SampType: LFB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021751						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.3	1.00	30.00	0	101	90	110				
Fluoride	1.01	0.010	1.000	0	101	90	110				
Nitrogen, Nitrate (As N)	1.01	0.010	1.000	0	101	90	110				
Sulfate	29.7	1.00	30.00	0	98.8	90	110				

Sample ID: IC_120327_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021752						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.4	1.00	30.00	0	101	90	110				
Fluoride	1.01	0.010	1.000	0	101	90	110				
Nitrogen, Nitrate (As N)	1.01	0.010	1.000	0	101	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank	E	Value Above Quantitation Range
H	Holding Time Exceeded	N	Not Accredited	R	RPD Outside Recovery Limits
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)		

CLIENT: URS Corporation
Work Order: 1203826
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89485C

Sample ID: IC_120327_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021752						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	29.7	1.00	30.00	0	98.9	90	110				

Sample ID: IC_120327_LRB	SampType: LRB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021753						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	< 1.00	1.00									
Fluoride	< 0.010	0.010									
Nitrogen, Nitrate (As N)	< 0.010	0.010									
Sulfate	< 1.00	1.00									

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203826
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89578B

Sample ID: 1203826-002CMS	SampType: MS	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: CRCP-WisianW2-05	Batch ID: R89578B	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024734						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	1.01	0.020	1.000	0	101	90	110				

Sample ID: NH3_LFB2	SampType: LFB	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: ZZZZZZ	Batch ID: R89578B	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024735						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	0.963	0.020	1.000	0	96.3	90	110				

Sample ID: NH3_LRB2	SampType: LRB	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: ZZZZZZ	Batch ID: R89578B	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024737						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	< 0.020	0.020									

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203826
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89578C

Sample ID: 1203848-005CMS	SampType: MS	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: ZZZZZZ	Batch ID: R89578C	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024748						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	1.05	0.020	1.000	0	105	90	110				

Sample ID: NH3_LFB3	SampType: LFB	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: ZZZZZZ	Batch ID: R89578C	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024749						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	0.976	0.020	1.000	0	97.6	90	110				

Sample ID: NH3_LRB3	SampType: LRB	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: ZZZZZZ	Batch ID: R89578C	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024751						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	< 0.020	0.020									

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203826
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89649

Sample ID: Blank	SampType: MBLK	TestCode: ALK	Units: mg/L CaCO3		Prep Date:				RunNo: 89649		
Client ID: PBW	Batch ID: R89649	TestNo: SM2320 B		Analysis Date: 4/2/2012				SeqNo: 3027371			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	< 2	2									A
Alkalinity, Carbonate (As CaCO3)	< 2	2									A

Sample ID: 1203826-001ADUP	SampType: DUP	TestCode: ALK	Units: mg/L CaCO3		Prep Date:				RunNo: 89649		
Client ID: CRCP-WisianW1-05	Batch ID: R89649	TestNo: SM2320 B		Analysis Date: 4/2/2012				SeqNo: 3027375			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	302	2						299.6	0.963	0	A
Alkalinity, Carbonate (As CaCO3)	< 2	2						0	0	0	A

Sample ID: Blank	SampType: MBLK	TestCode: ALK	Units: mg/L CaCO3		Prep Date:				RunNo: 89649		
Client ID: PBW	Batch ID: R89649	TestNo: SM2320 B		Analysis Date: 4/2/2012				SeqNo: 3027397			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	< 2	2									A
Alkalinity, Carbonate (As CaCO3)	< 2	2									A

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203826
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89718A

Sample ID: LFB-29684	SampType: LFB	TestCode: 200.7	Units: mg/L	Prep Date: 4/3/2012	RunNo: 89718						
Client ID: ZZZZZZ	Batch ID: R89718A	TestNo: E200.7		Analysis Date: 4/4/2012	SeqNo: 3028690						
Anaiyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	10.3	0.200	10.00	0	103	85	115				
Magnesium	9.73	0.200	10.00	0	97.3	85	115				
Potassium	9.95	0.200	10.00	0	99.5	85	115				
Sodium	10.2	0.600	10.00	0	102	85	115				

Sample ID: LFB-29684	SampType: LFB	TestCode: 200.7	Units: mg/L	Prep Date: 4/3/2012	RunNo: 89718						
Client ID: ZZZZZZ	Batch ID: R89718A	TestNo: E200.7		Analysis Date: 4/4/2012	SeqNo: 3028691						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	10.3	0.200	10.00	0	103	0	2000	10.29	0.0999	20	
Magnesium	9.71	0.200	10.00	0	97.1	0	2000	9.726	0.119	20	
Potassium	9.97	0.200	10.00	0	99.7	0	2000	9.946	0.206	20	
Sodium	10.4	0.600	10.00	0	104	0	2000	10.23	1.51	20	

Sample ID: LRB-29684	SampType: LRB	TestCode: 200.7	Units: mg/L	Prep Date: 4/3/2012	RunNo: 89718						
Client ID: ZZZZZZ	Batch ID: R89718A	TestNo: E200.7		Analysis Date: 4/4/2012	SeqNo: 3028692						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	< 0.200	0.200									
Magnesium	< 0.200	0.200									
Potassium	< 0.200	0.200									
Sodium	< 0.600	0.600									

Sample ID: 1203826-006BLFM	SampType: LFM	TestCode: 200.7	Units: mg/L	Prep Date: 4/3/2012	RunNo: 89718						
Client ID: CRCP-Buchheit-050	Batch ID: R89718A	TestNo: E200.7		Analysis Date: 4/4/2012	SeqNo: 3028699						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Magnesium	21.9	0.200	10.00	12.31	95.6	70	130				
Potassium	12.5	0.200	10.00	2.397	101	70	130				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank	E	Value Above Quantitation Range
H	Holding Time Exceeded	N	Not Accredited	R	RPD Outside Recovery Limits
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)		

CLIENT: URS Corporation
Work Order: 1203826
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89718A

Sample ID: 1203826-006BLFMD	SampType: LFMD	TestCode: 200.7	Units: mg/L	Prep Date: 4/3/2012	RunNo: 89718						
Client ID: CRCP-Buchheit-050	Batch ID: R89718A	TestNo: E200.7		Analysis Date: 4/4/2012	SeqNo: 3028700						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	22.9	0.200	10.00	12.31	105	0	2000	21.87	4.41	20	
Potassium	12.8	0.200	10.00	2.397	105	0	2000	12.49	2.87	20	

Sample ID: CCB2	SampType: CCB	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 89718						
Client ID: CCB	Batch ID: R89718A	TestNo: E200.7		Analysis Date: 4/4/2012	SeqNo: 3028705						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	< 0.200	0.200									
Magnesium	< 0.200	0.200									
Potassium	< 0.200	0.200									
Sodium	< 0.600	0.600									

Sample ID: IPC2	SampType: IPC	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 89718						
Client ID: ZZZZZZ	Batch ID: R89718A	TestNo: E200.7		Analysis Date: 4/4/2012	SeqNo: 3028706						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	103	0.200	100.0	0	103	90	110				
Magnesium	99.2	0.200	100.0	0	99.2	90	110				
Potassium	97.5	0.200	100.0	0	97.5	90	110				
Sodium	99.8	0.600	100.0	0	99.8	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank	E	Value Above Quantitation Range
H	Holding Time Exceeded	N	Not Accredited	R	RPD Outside Recovery Limits
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)		

LCRA Environmental Laboratory Services

REMIT TO: Lower Colorado River Authority
P. O. Box 200870
Houston, Texas 77216-0870
TEL: (512) 356-6022

INVOICE

DATE: April 03, 2012

Invoice No: LB93215
Customer No: 000000

Invoice TO: Environmental and Regulatory Affairs
Mail Stop: EL-101
3505 Montopolis Drive
Austin, TX 78744

PO Number:
2282009

Attn: Alicia C. Gill
Phone: (512) 356-6022

Work Order: 1203848 Order Name Colorado River Corridor - Grou Date Received 3/27/2012

Item	Remarks	Matrix	Qty	Mult	Quoted	Test Total
ALKALINITY	HCO3,CO3	Aqueous	6	1	\$24.00	\$144.00
AMMONIA as N	Ammonia-N	Aqueous	6	1	\$15.00	\$90.00
ANIONS by ION CHROMATOGRAPHY	Cl,F,NO3,SO4	Aqueous	6	1	\$72.00	\$432.00
AQPREP TOTAL RECOVERABLE METALS: I	Prep Ca,Mg,Na,	Aqueous	6	1	\$15.00	\$90.00
ICP METALS, TOTAL RECOVERABLE	Ca,Mg,Na,K	Aqueous	6	1	\$48.00	\$288.00
TOTAL SUSPENDED SOLIDS	TSS	Aqueous	6	1	\$12.00	\$72.00

Subtotal: \$1,116.00

Misc Charges: \$0.00

INVOICE Total: \$1,116.00

This is an internal billing for your records. Please do not forward to Accounts Payable.



April 03, 2012

Kevin Pasternak
URS Corporation
9400 Amberglen Blvd
Austin, TX 78729

TEL: (512) 419-5293

FAX

RE: Colorado River Corridor - Groundwater

COC ID.: 112493

Order No.: 1203848

Dear Kevin Pasternak:

On 3/27/2012, LCRA Environmental Laboratory Services (ELS) received 6 sample(s) for analyses under Lab Order No. 1203848. This final report provides results related only to the sample(s) as received for the above referenced lab order number.

ELS is accredited under the National Environmental Laboratory Accreditation Program (NELAP) and certifies that all reported results meet NELAP requirements, unless otherwise noted. The Case Narrative provides explanations for any deviations, additions to, or exclusions from the method requirements.

This report contains a total of 21 pages (including the cover letter) and may not be reproduced, except in full, without written approval from ELS.

Thank you for selecting ELS for your analytical needs. If you have questions regarding this report, please contact us at (512) 356-6022. We look forward to assisting you again.

Sincerely,

Tess Abbott
Project Manager



T104704218-12-6

CLIENT: URS Corporation
Project: Colorado River Corridor - Groundwater
Lab Order: 1203848

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Date Collected	Date Received
1203848-001A	CRCP-ATF1-050		3/27/2012 9:40:00 AM	3/27/2012 2:00:00 PM
1203848-001B	CRCP-ATF1-050		3/27/2012 9:40:00 AM	3/27/2012 2:00:00 PM
1203848-001C	CRCP-ATF1-050		3/27/2012 9:40:00 AM	3/27/2012 2:00:00 PM
1203848-001D	CRCP-ATF1-050		3/27/2012 9:40:00 AM	3/27/2012 2:00:00 PM
1203848-002A	CRCP-NTNW2-050		3/27/2012 10:25:00 AM	3/27/2012 2:00:00 PM
1203848-002B	CRCP-NTNW2-050		3/27/2012 10:25:00 AM	3/27/2012 2:00:00 PM
1203848-002C	CRCP-NTNW2-050		3/27/2012 10:25:00 AM	3/27/2012 2:00:00 PM
1203848-002D	CRCP-NTNW2-050		3/27/2012 10:25:00 AM	3/27/2012 2:00:00 PM
1203848-003A	CRCP-NTNW2-051		3/27/2012 10:25:00 AM	3/27/2012 2:00:00 PM
1203848-003B	CRCP-NTNW2-051		3/27/2012 10:25:00 AM	3/27/2012 2:00:00 PM
1203848-003C	CRCP-NTNW2-051		3/27/2012 10:25:00 AM	3/27/2012 2:00:00 PM
1203848-003D	CRCP-NTNW2-051		3/27/2012 10:25:00 AM	3/27/2012 2:00:00 PM
1203848-004A	CRCP-HOLWEGER-053		3/27/2012 11:15:00 AM	3/27/2012 2:00:00 PM
1203848-004B	CRCP-HOLWEGER-053		3/27/2012 11:15:00 AM	3/27/2012 2:00:00 PM
1203848-004C	CRCP-HOLWEGER-053		3/27/2012 11:15:00 AM	3/27/2012 2:00:00 PM
1203848-004D	CRCP-HOLWEGER-053		3/27/2012 11:15:00 AM	3/27/2012 2:00:00 PM
1203848-005A	CRCP-58522-050		3/27/2012 12:55:00 PM	3/27/2012 2:00:00 PM
1203848-005B	CRCP-58522-050		3/27/2012 12:55:00 PM	3/27/2012 2:00:00 PM
1203848-005C	CRCP-58522-050		3/27/2012 12:55:00 PM	3/27/2012 2:00:00 PM
1203848-005D	CRCP-58522-050		3/27/2012 12:55:00 PM	3/27/2012 2:00:00 PM
1203848-006A	CRCP-221049-050		3/27/2012 1:30:00 PM	3/27/2012 2:00:00 PM
1203848-006B	CRCP-221049-050		3/27/2012 1:30:00 PM	3/27/2012 2:00:00 PM
1203848-006C	CRCP-221049-050		3/27/2012 1:30:00 PM	3/27/2012 2:00:00 PM
1203848-006D	CRCP-221049-050		3/27/2012 1:30:00 PM	3/27/2012 2:00:00 PM

Final Analysis Report

LCRA Environmental Laboratory Services

Date: 03-Apr-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-ATF1-050
Lab Order:	1203848	Collection Date:	3/27/2012 9:40:00 AM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1203848-001	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE						
		E200.7				Analyst: MV
Calcium	222	0.200		mg/L	1	4/2/2012 1:57:01 PM
Magnesium	46.8	0.200		mg/L	1	4/2/2012 1:57:01 PM
Potassium	4.49	0.200		mg/L	1	4/2/2012 1:57:01 PM
Sodium	57.4	0.600		mg/L	1	4/2/2012 1:57:01 PM
ANIONS BY ION CHROMATOGRAPHY						
		E300.0				Analyst: WR
Chloride	83.6	10.0		mg/L	10	3/28/2012 1:18:00 AM
Fluoride	0.140	0.100		mg/L	10	3/28/2012 1:18:00 AM
Nitrogen, Nitrate (As N)	4.86	0.100		mg/L	10	3/28/2012 1:18:00 AM
Sulfate	175	10.0		mg/L	10	3/28/2012 1:18:00 AM
ALKALINITY						
		SM2320 B				Analyst: KH
Alkalinity, Bicarbonate (As CaCO ₃)	496	2	A	mg/L CaCO ₃	1	3/29/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	3/29/2012
AMMONIA AS N						
		E350.1				Analyst: JB
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	3/29/2012
TOTAL SUSPENDED SOLIDS						
		SM2540D				Analyst: JB
Suspended Solids (Residue, Non-Filterable)	1.7	1.0		mg/L	1	3/28/2012

Qualifiers:

PQL: Practical Quantitation Limit

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 03-Apr-12

CLIENT: URS Corporation

Client Sample ID: CRCP-NTNW2-050

Lab Order: 1203848

Collection Date: 3/27/2012 10:25:00 AM

Project: Colorado River Corridor - Groundwater

Matrix: GROUNDWATER

Lab ID: 1203848-002

Tag No:

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	216	0.200		mg/L	1	4/2/2012 2:05:04 PM
Magnesium	68.4	0.200		mg/L	1	4/2/2012 2:05:04 PM
Potassium	2.33	0.200		mg/L	1	4/2/2012 2:05:04 PM
Sodium	48.4	0.600		mg/L	1	4/2/2012 2:05:04 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	35.6	10.0		mg/L	10	3/28/2012 1:34:00 AM
Fluoride	0.200	0.100		mg/L	10	3/28/2012 1:34:00 AM
Nitrogen, Nitrate (As N)	29.4	0.250	X	mg/L	25	3/28/2012 11:47:00 PM
Sulfate	389	10.0		mg/L	10	3/28/2012 1:34:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO ₃)	336	2	A	mg/L CaCO ₃	1	3/29/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	3/29/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	3/29/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	< 1.1	1.1		mg/L	1.1	3/28/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 03-Apr-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-NTNW2-051
Lab Order:	1203848	Collection Date:	3/27/2012 10:25:00 AM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1203848-003	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	221	0.200		mg/L	1	4/2/2012 2:13:08 PM
Magnesium	69.4	0.200		mg/L	1	4/2/2012 2:13:08 PM
Potassium	2.43	0.200		mg/L	1	4/2/2012 2:13:08 PM
Sodium	48.8	0.600		mg/L	1	4/2/2012 2:13:08 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	35.2	10.0		mg/L	10	3/28/2012 1:51:00 AM
Fluoride	0.190	0.100		mg/L	10	3/28/2012 1:51:00 AM
Nitrogen, Nitrate (As N)	29.4	0.250	X	mg/L	25	3/29/2012 12:04:00 AM
Sulfate	385	10.0		mg/L	10	3/28/2012 1:51:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO3)	356	2	A	mg/L CaCO3	1	3/29/2012
Alkalinity, Carbonate (As CaCO3)	< 2	2	A	mg/L CaCO3	1	3/29/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	3/29/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	< 1.0	1.0		mg/L	1	3/28/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 03-Apr-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-HOLWEGGER-053
Lab Order:	1203848	Collection Date:	3/27/2012 11:15:00 AM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1203848-004	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	105	0.200		mg/L	1	4/2/2012 2:21:13 PM
Magnesium	15.3	0.200		mg/L	1	4/2/2012 2:21:13 PM
Potassium	1.98	0.200		mg/L	1	4/2/2012 2:21:13 PM
Sodium	37.5	0.600		mg/L	1	4/2/2012 2:21:13 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	11.8	10.0		mg/L	10	3/28/2012 2:08:00 AM
Fluoride	0.430	0.100		mg/L	10	3/28/2012 2:08:00 AM
Nitrogen, Nitrate (As N)	15.2	0.100	X	mg/L	10	3/28/2012 2:08:00 AM
Sulfate	23.8	10.0		mg/L	10	3/28/2012 2:08:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO ₃)	314	2	A	mg/L CaCO ₃	1	3/29/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	3/29/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	3/29/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	< 1.0	1.0		mg/L	1	3/28/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 03-Apr-12

CLIENT: URS Corporation
Lab Order: 1203848
Project: Colorado River Corridor - Groundwater
Lab ID: 1203848-005

Client Sample ID: CRCP-58522-050
Collection Date: 3/27/2012 12:55:00 PM
Matrix: GROUNDWATER
Tag No:

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	120	0.200		mg/L	1	4/2/2012 2:29:12 PM
Magnesium	33.1	0.200		mg/L	1	4/2/2012 2:29:12 PM
Potassium	2.14	0.200		mg/L	1	4/2/2012 2:29:12 PM
Sodium	75.2	0.600		mg/L	1	4/2/2012 2:29:12 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	92.1	10.0		mg/L	10	3/28/2012 3:49:00 AM
Fluoride	0.200	0.100		mg/L	10	3/28/2012 3:49:00 AM
Nitrogen, Nitrate (As N)	2.42	0.100		mg/L	10	3/28/2012 3:49:00 AM
Sulfate	76.1	10.0		mg/L	10	3/28/2012 3:49:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO ₃)	335	2	A	mg/L CaCO ₃	1	3/29/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	3/29/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	3/29/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	3.8	1.0		mg/L	1	3/28/2012

Qualifiers:

A Not Available for Accreditation
E Value Above Quantitation Range
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 03-Apr-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-221049-050
Lab Order:	1203848	Collection Date:	3/27/2012 1:30:00 PM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1203848-006	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	102	0.200		mg/L	1	4/2/2012 2:37:18 PM
Magnesium	11.5	0.200		mg/L	1	4/2/2012 2:37:18 PM
Potassium	1.88	0.200		mg/L	1	4/2/2012 2:37:18 PM
Sodium	30.5	0.600		mg/L	1	4/2/2012 2:37:18 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	10.2	10.0		mg/L	10	3/28/2012 4:06:00 AM
Fluoride	0.180	0.100		mg/L	10	3/28/2012 4:06:00 AM
Nitrogen, Nitrate (As N)	12.9	0.100	X	mg/L	10	3/28/2012 4:06:00 AM
Sulfate	14.9	10.0		mg/L	10	3/28/2012 4:06:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO3)	268	2	A	mg/L CaCO3	1	3/29/2012
Alkalinity, Carbonate (As CaCO3)	< 2	2	A	mg/L CaCO3	1	3/29/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	3/29/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	3.8	1.0		mg/L	1	3/28/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 03-Apr-12

CLIENT: URS Corporation
Project: Colorado River Corridor - Groundwater
Lab Order: 1203848

CASE NARRATIVE

Analytical Comments for METHOD E300.0, SAMPLE 1203848-002A, Batch R89527C: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E300.0, SAMPLE 1203848-003A, Batch R89527C: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E300.0, SAMPLE 1203848-004A, Batch R89485C: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E300.0, SAMPLE 1203848-006A, Batch R89485D: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E200.7, SAMPLE 1203848-006BLFM, Batch R89645B: The calcium LFM recovery was not reported because the spike amount was less than 30 percent of the sample background concentration.

Analytical Comments for METHOD E200.7, SAMPLE 1203848-006BLFMD, Batch R89645B: The calcium LFM recovery was not reported because the spike amount was less than 30 percent of the sample background concentration.

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT**BatchID: R89484**

Sample ID: MBLK	SampType: MBLK	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89484						
Client ID: PBW	Batch ID: R89484	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021646						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	< 1.0	1.0									

Sample ID: LCS	SampType: LCS	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89484						
Client ID: LCSW	Batch ID: R89484	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021647						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	100	20.0	100.0	0	100	80	120				

Sample ID: LCSD	SampType: LCSD	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89484						
Client ID: LCSS02	Batch ID: R89484	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021648						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	96.0	20.0	100.0	0	96.0	0	2000	100.0	4.08	20	

Sample ID: 1203827-001KDUP	SampType: DUP	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89484						
Client ID: ZZZZZZ	Batch ID: R89484	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021655						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	21.0	5.0						21.75	3.51	20	

Qualifiers: A Not Available for Accreditation
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

B Analyte Detected in Method Blank
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

E Value Above Quantitation Range
R RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89485C

Sample ID: 1203848-004ALFM	SampType: LFM	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: CRCP-HOLWEGER-	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021749						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	211	10.0	200.0	11.76	99.5	80	120				
Fluoride	10.4	0.100	10.00	0.4300	99.4	80	120				
Nitrogen, Nitrate (As N)	25.0	0.100	10.00	15.22	97.3	80	120				
Sulfate	221	10.0	200.0	23.82	98.5	80	120				

Sample ID: 1203848-004ALFMD	SampType: LFMD	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: CRCP-HOLWEGER-	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021750						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	211	10.0	200.0	11.76	99.5	0	2000	210.7	0.0522	20	
Fluoride	10.4	0.100	10.00	0.4300	99.4	0	2000	10.37	0	20	
Nitrogen, Nitrate (As N)	24.9	0.100	10.00	15.22	97.1	0	2000	24.95	0.0802	20	
Sulfate	221	10.0	200.0	23.82	98.5	0	2000	220.8	0.0272	20	

Sample ID: IC_120327_LFB	SampType: LFB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021751						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.3	1.00	30.00	0	101	90	110				
Fluoride	1.01	0.010	1.000	0	101	90	110				
Nitrogen, Nitrate (As N)	1.01	0.010	1.000	0	101	90	110				
Sulfate	29.7	1.00	30.00	0	98.8	90	110				

Sample ID: IC_120327_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021752						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.4	1.00	30.00	0	101	90	110				
Fluoride	1.01	0.010	1.000	0	101	90	110				
Nitrogen, Nitrate (As N)	1.01	0.010	1.000	0	101	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank	E	Value Above Quantitation Range
H	Holding Time Exceeded	N	Not Accredited	R	RPD Outside Recovery Limits
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)		

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89485C

Sample ID: IC_120327_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021752						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	29.7	1.00	30.00	0	98.9	90	110				
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Sample ID: IC_120327_LRB	SampType: LRB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485C	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021753						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	< 1.00	1.00									
Fluoride	< 0.010	0.010									
Nitrogen, Nitrate (As N)	< 0.010	0.010									
Sulfate	< 1.00	1.00									

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89485D

Sample ID: 1203820-008ALFM	SampType: LFM	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485D	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021764						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	45.5	1.00	20.00	25.90	98.0	80	120				
Fluoride	1.01	0.010	1.000	0.03400	97.4	80	120				
Sulfate	44.1	1.00	20.00	24.09	100	80	120				

Sample ID: 1203820-008ALFMD	SampType: LFMD	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485D	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021765						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	45.5	1.00	20.00	25.90	98.0	0	2000	45.50	0.0264	20	
Fluoride	1.01	0.010	1.000	0.03400	97.6	0	2000	1.008	0.198	20	
Sulfate	44.1	1.00	20.00	24.09	100	0	2000	44.14	0.00906	20	

Sample ID: IC_120327_LFB	SampType: LFB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485D	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021766						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.3	1.00	30.00	0	101	90	110				
Fluoride	1.01	0.010	1.000	0	101	90	110				
Nitrogen, Nitrate (As N)	1.01	0.010	1.000	0	101	90	110				
Sulfate	29.6	1.00	30.00	0	98.7	90	110				

Sample ID: IC_120327_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485D	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021767						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.3	1.00	30.00	0	101	90	110				
Fluoride	1.01	0.010	1.000	0	101	90	110				
Nitrogen, Nitrate (As N)	1.02	0.010	1.000	0	102	90	110				
Sulfate	29.6	1.00	30.00	0	98.7	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89485D

Sample ID: IC_120327_LRB	SampType: LRB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89485						
Client ID: ZZZZZZ	Batch ID: R89485D	TestNo: E300.0		Analysis Date: 3/28/2012	SeqNo: 3021768						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	< 1.00	1.00									
Fluoride	< 0.010	0.010									
Nitrogen, Nitrate (As N)	< 0.010	0.010									
Sulfate	< 1.00	1.00									

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89487

Sample ID: MBLK	SampType: MBLK	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89487						
Client ID: PBW	Batch ID: R89487	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021798						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Suspended Solids (Residue, Non-Filter) < 1.0 1.0

Sample ID: LCS	SampType: LCS	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89487						
Client ID: LCSW	Batch ID: R89487	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021799						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Suspended Solids (Residue, Non-Filter) 98.0 20.0 100.0 0 98.0 80 120

Sample ID: LCSD	SampType: LCSD	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89487						
Client ID: LCSS02	Batch ID: R89487	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021800						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Suspended Solids (Residue, Non-Filter) 90.0 20.0 100.0 0 90.0 0 2000 98.00 8.51 20

Sample ID: 1203848-004DDUP	SampType: DUP	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 89487						
Client ID: CRCP-HOLWEGER-	Batch ID: R89487	TestNo: SM2540D		Analysis Date: 3/28/2012	SeqNo: 3021802						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Suspended Solids (Residue, Non-Filter) < 1.0 1.0 0 0 20

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89527C

Sample ID: 1203820-003ALFM	SampType: LFM	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89527						
Client ID: ZZZZZZ	Batch ID: R89527C	TestNo: E300.0		Analysis Date: 3/29/2012	SeqNo: 3023307						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	199	10.0	200.0	5.886	96.7	80	120				
Fluoride	10.1	0.100	10.00	0.07700	99.8	80	120				
Nitrogen, Nitrate (As N)	13.4	0.100	10.00	3.548	98.2	80	120				
Sulfate	207	10.0	200.0	6.202	100	80	120				

Sample ID: 1203820-003ALFMD	SampType: LFMD	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89527						
Client ID: ZZZZZZ	Batch ID: R89527C	TestNo: E300.0		Analysis Date: 3/29/2012	SeqNo: 3023308						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	199	10.0	200.0	5.886	96.7	0	2000	199.4	0.0140	20	
Fluoride	10.0	0.100	10.00	0.07700	99.5	0	2000	10.06	0.279	20	
Nitrogen, Nitrate (As N)	13.4	0.100	10.00	3.548	98.1	0	2000	13.36	0.0150	20	
Sulfate	207	10.0	200.0	6.202	100	0	2000	206.8	0.0832	20	

Sample ID: IC_120328_LFB	SampType: LFB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89527						
Client ID: ZZZZZZ	Batch ID: R89527C	TestNo: E300.0		Analysis Date: 3/29/2012	SeqNo: 3023309						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.4	1.00	30.00	0	101	90	110				
Fluoride	1.01	0.010	1.000	0	101	90	110				
Nitrogen, Nitrate (As N)	1.02	0.010	1.000	0	102	90	110				
Sulfate	29.7	1.00	30.00	0	99.0	90	110				

Sample ID: IC_120328_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89527						
Client ID: ZZZZZZ	Batch ID: R89527C	TestNo: E300.0		Analysis Date: 3/29/2012	SeqNo: 3023310						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.4	1.00	30.00	0	101	90	110				
Fluoride	1.01	0.010	1.000	0	101	90	110				
Nitrogen, Nitrate (As N)	1.02	0.010	1.000	0	102	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank	E	Value Above Quantitation Range
H	Holding Time Exceeded	N	Not Accredited	R	RPD Outside Recovery Limits
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)		

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89527C

Sample ID: IC_120328_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89527						
Client ID: ZZZZZZ	Batch ID: R89527C	TestNo: E300.0		Analysis Date: 3/29/2012	SeqNo: 3023310						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	29.7	1.00	30.00	0	98.8	90	110				

Sample ID: IC_120328_LRB	SampType: LRB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 89527						
Client ID: ZZZZZZ	Batch ID: R89527C	TestNo: E300.0		Analysis Date: 3/29/2012	SeqNo: 3023311						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	< 1.00	1.00									
Fluoride	< 0.010	0.010									
Nitrogen, Nitrate (As N)	< 0.010	0.010									
Sulfate	< 1.00	1.00									

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89554

Sample ID: Blank	SampType: MBLK	TestCode: ALK	Units: mg/L CaCO3	Prep Date:	RunNo: 89554						
Client ID: PBW	Batch ID: R89554	TestNo: SM2320 B		Analysis Date: 3/29/2012	SeqNo: 3024584						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Alkalinity, Bicarbonate (As CaCO3)	< 2	2									A
Alkalinity, Carbonate (As CaCO3)	< 2	2									A

Sample ID: 1203842-001ADUP	SampType: DUP	TestCode: ALK	Units: mg/L CaCO3	Prep Date:	RunNo: 89554						
Client ID: ZZZZZZ	Batch ID: R89554	TestNo: SM2320 B		Analysis Date: 3/29/2012	SeqNo: 3024588						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Alkalinity, Bicarbonate (As CaCO3)	311	2						306.2	1.48	0	A
Alkalinity, Carbonate (As CaCO3)	11	2						10.72	5.69	0	A

Sample ID: Blank	SampType: MBLK	TestCode: ALK	Units: mg/L CaCO3	Prep Date:	RunNo: 89554						
Client ID: PBW	Batch ID: R89554	TestNo: SM2320 B		Analysis Date: 3/29/2012	SeqNo: 3024610						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Alkalinity, Bicarbonate (As CaCO3)	< 2	2									A
Alkalinity, Carbonate (As CaCO3)	< 2	2									A

Qualifiers: A Not Available for Accreditation
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

B Analyte Detected in Method Blank
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

E Value Above Quantitation Range
 R RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89578C

Sample ID: 1203848-005CMS	SampType: MS	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: CRCP-58522-050	Batch ID: R89578C	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024748						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrogen, Ammonia (As N)	1.05	0.020	1.000	0	105	90	110				
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Sample ID: NH3_LFB3	SampType: LFB	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: ZZZZZZ	Batch ID: R89578C	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024749						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrogen, Ammonia (As N)	0.976	0.020	1.000	0	97.6	90	110				
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Sample ID: NH3_LRB3	SampType: LRB	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: ZZZZZZ	Batch ID: R89578C	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024751						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrogen, Ammonia (As N)	< 0.020	0.020									
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Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89578D

Sample ID: 1203908-005CMS	SampType: MS	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: ZZZZZZ	Batch ID: R89578D	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024762						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	1.06	0.020	1.000	0.01871	104	90	110				

Sample ID: NH3_LFB4	SampType: LFB	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: ZZZZZZ	Batch ID: R89578D	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024763						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	0.940	0.020	1.000	0	94.0	90	110				

Sample ID: NH3_LRB4	SampType: LRB	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 89578						
Client ID: ZZZZZZ	Batch ID: R89578D	TestNo: E350.1		Analysis Date: 3/29/2012	SeqNo: 3024765						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	< 0.020	0.020									

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1203848
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R89645B

Sample ID: 1203848-006BLFM	SampType: LFM	TestCode: 200.7	Units: mg/L	Prep Date: 3/30/2012	RunNo: 89645						
Client ID: CRCP-221049-050	Batch ID: R89645B	TestNo: E200.7		Analysis Date: 4/2/2012	SeqNo: 3026306						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Magnesium	21.8	0.200	10.00	11.53	103	70	130				
Potassium	12.3	0.200	10.00	1.878	104	70	130				
Sodium	41.6	0.600	10.00	30.54	110	70	130				

Sample ID: 1203848-006BLFMD	SampType: LFMD	TestCode: 200.7	Units: mg/L	Prep Date: 3/30/2012	RunNo: 89645						
Client ID: CRCP-221049-050	Batch ID: R89645B	TestNo: E200.7		Analysis Date: 4/2/2012	SeqNo: 3026307						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Magnesium	21.6	0.200	10.00	11.53	100	0	2000	21.79	0.991	20	
Potassium	12.2	0.200	10.00	1.878	103	0	2000	12.25	0.824	20	
Sodium	40.9	0.600	10.00	30.54	103	0	2000	41.55	1.64	20	

Sample ID: CCB3	SampType: CCB	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 89645						
Client ID: CCB	Batch ID: R89645B	TestNo: E200.7		Analysis Date: 4/2/2012	SeqNo: 3026309						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	< 0.200	0.200									
Magnesium	< 0.200	0.200									
Potassium	< 0.200	0.200									
Sodium	< 0.600	0.600									

Sample ID: IPC3	SampType: IPC	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 89645						
Client ID: ZZZZZZ	Batch ID: R89645B	TestNo: E200.7		Analysis Date: 4/2/2012	SeqNo: 3026310						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	102	0.200	100.0	0	102	90	110				
Magnesium	98.3	0.200	100.0	0	98.3	90	110				
Potassium	99.0	0.200	100.0	0	99.0	90	110				
Sodium	101	0.600	100.0	0	101	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank	E	Value Above Quantitation Range
H	Holding Time Exceeded	N	Not Accredited	R	RPD Outside Recovery Limits
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)		



**Environmental
Laboratory
Services**
The Solution Lab

LCRA ENVIRONMENTAL LABORATORY SERVICES (ELS) CHAIN OF CUSTODY RECORD

NOTE: Relinquishing sample(s) to ELS obligates the submitter to all Standard Terms and Conditions stated on the back of this form.

Target Due Date: 4/10/12
Work Order No.: 1203848
COC No.: 112453
Page 1 of 1

Results To: Kevin Pasternak 9400 Amberglen Blvd Austin, TX 78729
Bill To: Travis County CRCP
Phone No.: 5124544191 Fax No.: 5124548801 Method of Transport: Hand Delivery TAT Requested: Normal Working days E-mail: kevin.pasternak@crs.com
Relinquished By: [Signature] Date: 3/27/12 Time: 1400 Received By: _____ Date: _____ Time: _____ Relinquished By: _____ Date: _____ Time: _____

Report Requirements
☐ Hardcopy ☒ E-mail ☐ Fax
☐ EDD (Generic)

Regulatory Requirements
☒ None ☐ NELAP

Received at ELS By: [Signature] Date: 3/27/12 Time: 1400
☒ Received on Ice Temp: 3.7 °C 74 °F
Login Review: [Signature] Date: 3-27-12

ELS Mgmt. Approval for RUSH: _____
Surcharge for RUSH: _____ %

ELS ID:	SAMPLE DESCRIPTION Custody Seals (circle): Cooler Bottles <u>None</u>	MATRIX	SAMPLE COLLECTION		CONTAINERS			ANALYSIS REQUESTED - Place an "x" in the box below to indicate request.										PRESERVATIVES	pH
			DATE	TIME	NUMBER	SIZE	TYPE	E350.1	E300.0	E300.0/Sm2320B	E200.7	Sm2540D							
001	CRCP-ATF1-050	W	3/27/12	0940	4	Var	Plast	X	X	X	X							HNO ₃ / H ₂ SO ₄	/
002	CRCP-NTNW2-050			1025				X	X	X	X								/
003	CRCP-NTNW2-051			1025				X	X	X	X								/
004	CRCP-Holweger-053			1115	5			X	X	X	X								/
005	CRCP-SB522-050			1255	4			X	X	X	X								/
006	CRCP-221049-050	✓	✓	1330	✓	✓	✓	X	X	X	X							✓	/

Special Instructions: E350.1-Ammonia; E300.0/Sm2320B-C1, F, SO₄, NO₃, carb, bicarb; E200.7-Ca, Mg, K, Na; Sm2540D-TSS
ELS Comments: MS/MSD on CRCP-Holweger-053
Cooler #33

LCRA Environmental Laboratory Services

REMIT TO: Lower Colorado River Authority
P. O. Box 200870
Houston, Texas 77216-0870
TEL: (512) 356-6022

INVOICE

DATE: May 17, 2012

Invoice No: LB94323
Customer No: 000000

Invoice TO: Environmental and Regulatory Affairs
Mail Stop: EL-101
3505 Montopolis Drive
Austin, TX 78744

PO Number:
2282009

Attn: Alicia C. Gill
Phone: (512) 356-6022

Work Order: 1205188 Order Name Colorado River Corridor - Grou Date Received 5/7/2012

Item	Remarks	Matrix	Qty	Mult	Quoted	Test Total
ALKALINITY	HCO3,CO3	Aqueous	7	1	\$24.00	\$168.00
AMMONIA as N	Ammonia-N	Aqueous	7	1	\$15.00	\$105.00
ANIONS by ION CHROMATOGRAPHY	Cl,F,NO3,SO4	Aqueous	7	1	\$72.00	\$504.00
AQPREP TOTAL RECOVERABLE METALS: I	Prep.Ca,Mg,Na,	Aqueous	7	1	\$15.00	\$105.00
ICP METALS, TOTAL RECOVERABLE	Ca,Mg,Na,K	Aqueous	7	1	\$48.00	\$336.00
TOTAL SUSPENDED SOLIDS	TSS	Aqueous	6	1	\$12.00	\$72.00

Subtotal: \$1,290.00

Misc Charges: \$0.00

INVOICE Total: \$1,290.00

This is an internal billing for your records. Please do not forward to Accounts Payable.



May 17, 2012

Kevin Pasternak
URS Corporation
9400 Amberglen Blvd
Austin, TX 78729

TEL: (512) 419-5293
FAX

RE: Colorado River Corridor - Groundwater

COC ID.: 113617

Order No.: 1205188

Dear Kevin Pasternak:

On 5/7/2012, LCRA Environmental Laboratory Services (ELS) received 7 sample(s) for analyses under Lab Order No. 1205188. This final report provides results related only to the sample(s) as received for the above referenced lab order number.

ELS is accredited under the National Environmental Laboratory Accreditation Program (NELAP) and certifies that all reported results meet NELAP requirements, unless otherwise noted. The Case Narrative provides explanations for any deviations, additions to, or exclusions from the method requirements.

This report contains a total of 26 pages (including the cover letter) and may not be reproduced, except in full, without written approval from ELS.

Thank you for selecting ELS for your analytical needs. If you have questions regarding this report, please contact us at (512) 356-6022. We look forward to assisting you again.

Sincerely,

Tess Abbott
Project Manager



T104704218-12-6

CLIENT: URS Corporation
Project: Colorado River Corridor - Groundwater
Lab Order: 1205188

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Date Collected	Date Received
1205188-001A	CRCP-5852213-060	5852213-60	5/7/2012 10:00:00 AM	5/7/2012 3:50:00 PM
1205188-001B	CRCP-5852213-060	5852213-60	5/7/2012 10:00:00 AM	5/7/2012 3:50:00 PM
1205188-001C	CRCP-5852213-060	5852213-60	5/7/2012 10:00:00 AM	5/7/2012 3:50:00 PM
1205188-001D	CRCP-5852213-060	5852213-60	5/7/2012 10:00:00 AM	5/7/2012 3:50:00 PM
1205188-002A	CRCP-5852314-060	5852213-60	5/7/2012 11:05:00 AM	5/7/2012 3:50:00 PM
1205188-002B	CRCP-5852314-060	5852213-60	5/7/2012 11:05:00 AM	5/7/2012 3:50:00 PM
1205188-002C	CRCP-5852314-060	5852213-60	5/7/2012 11:05:00 AM	5/7/2012 3:50:00 PM
1205188-002D	CRCP-5852314-060	5852213-60	5/7/2012 11:05:00 AM	5/7/2012 3:50:00 PM
1205188-003A	CRCP-WisianW1-060	WisianW1-060	5/7/2012 12:40:00 PM	5/7/2012 3:50:00 PM
1205188-003B	CRCP-WisianW1-060	WisianW1-060	5/7/2012 12:40:00 PM	5/7/2012 3:50:00 PM
1205188-003C	CRCP-WisianW1-060	WisianW1-060	5/7/2012 12:40:00 PM	5/7/2012 3:50:00 PM
1205188-003D	CRCP-WisianW1-060	WisianW1-060	5/7/2012 12:40:00 PM	5/7/2012 3:50:00 PM
1205188-004A	CRCP-WisianW1-065	WisianW1-065	5/7/2012 12:50:00 PM	5/7/2012 3:50:00 PM
1205188-004B	CRCP-WisianW1-065	WisianW1-065	5/7/2012 12:50:00 PM	5/7/2012 3:50:00 PM
1205188-004C	CRCP-WisianW1-065	WisianW1-065	5/7/2012 12:50:00 PM	5/7/2012 3:50:00 PM
1205188-005A	CRCP-WisianW2-060	WisianW2-060	5/7/2012 1:25:00 PM	5/7/2012 3:50:00 PM
1205188-005B	CRCP-WisianW2-060	WisianW2-060	5/7/2012 1:25:00 PM	5/7/2012 3:50:00 PM
1205188-005C	CRCP-WisianW2-060	WisianW2-060	5/7/2012 1:25:00 PM	5/7/2012 3:50:00 PM
1205188-005D	CRCP-WisianW2-060	WisianW2-060	5/7/2012 1:25:00 PM	5/7/2012 3:50:00 PM
1205188-006A	CRCP-58522-060	58522-060	5/7/2012 2:35:00 PM	5/7/2012 3:50:00 PM
1205188-006B	CRCP-58522-060	58522-060	5/7/2012 2:35:00 PM	5/7/2012 3:50:00 PM
1205188-006C	CRCP-58522-060	58522-060	5/7/2012 2:35:00 PM	5/7/2012 3:50:00 PM
1205188-006D	CRCP-58522-060	58522-060	5/7/2012 2:35:00 PM	5/7/2012 3:50:00 PM
1205188-007A	CRCP-Buchheit-060	Buchheit-060	5/7/2012 3:15:00 PM	5/7/2012 3:50:00 PM
1205188-007B	CRCP-Buchheit-060	Buchheit-060	5/7/2012 3:15:00 PM	5/7/2012 3:50:00 PM
1205188-007C	CRCP-Buchheit-060	Buchheit-060	5/7/2012 3:15:00 PM	5/7/2012 3:50:00 PM
1205188-007D	CRCP-Buchheit-060	Buchheit-060	5/7/2012 3:15:00 PM	5/7/2012 3:50:00 PM

Final Analysis Report

LCRA Environmental Laboratory Services

Date: 17-May-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-5852213-060
Lab Order:	1205188	Collection Date:	5/7/2012 10:00:00 AM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1205188-001	Tag No:	5852213-60

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE						
		E200.7				Analyst: MV
Calcium	150	0.200		mg/L	1	5/14/2012 2:01:51 PM
Magnesium	23.6	0.200		mg/L	1	5/14/2012 2:01:51 PM
Potassium	4.62	0.200		mg/L	1	5/14/2012 2:01:51 PM
Sodium	22.6	0.600		mg/L	1	5/14/2012 2:01:51 PM
ANIONS BY ION CHROMATOGRAPHY						
		E300.0				Analyst: WR
Chloride	18.5	1.00		mg/L	1	5/8/2012 7:25:00 PM
Fluoride	0.332	0.010		mg/L	1	5/8/2012 7:25:00 PM
Nitrogen, Nitrate (As N)	0.025	0.010		mg/L	1	5/8/2012 7:25:00 PM
Sulfate	14.6	1.00		mg/L	1	5/8/2012 7:25:00 PM
ALKALINITY						
		SM2320 B				Analyst: KH
Alkalinity, Bicarbonate (As CaCO3)	455	2	A	mg/L CaCO3	1	5/14/2012
Alkalinity, Carbonate (As CaCO3)	< 2	2	A	mg/L CaCO3	1	5/14/2012
AMMONIA AS N						
		E350.1				Analyst: JB
Nitrogen, Ammonia (As N)	1.22	0.020		mg/L	1	5/9/2012
TOTAL SUSPENDED SOLIDS						
		SM2540D				Analyst: JB
Suspended Solids (Residue, Non-Filterable)	7.0	2.0		mg/L	2	5/9/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 17-May-12

CLIENT: URS Corporation
Lab Order: 1205188
Project: Colorado River Corridor - Groundwater
Lab ID: 1205188-002

Client Sample ID: CRCP-5852314-060
Collection Date: 5/7/2012 11:05:00 AM
Matrix: GROUNDWATER
Tag No: 5852213-60

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	154	0.200		mg/L	1	5/14/2012 2:09:44 PM
Magnesium	42.5	0.200		mg/L	1	5/14/2012 2:09:44 PM
Potassium	2.53	0.200		mg/L	1	5/14/2012 2:09:44 PM
Sodium	79.4	0.600		mg/L	1	5/14/2012 2:09:44 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	61.3	1.00		mg/L	1	5/8/2012 7:43:00 PM
Fluoride	0.245	0.010		mg/L	1	5/8/2012 7:43:00 PM
Nitrogen, Nitrate (As N)	11.3	0.100	HX	mg/L	10	5/10/2012 9:06:00 PM
Nitrogen, Nitrate (As N)	10.3	0.010	EX	mg/L	1	5/8/2012 7:43:00 PM
Sulfate	192	10.0		mg/L	10	5/10/2012 9:06:00 PM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO ₃)	353	2	A	mg/L CaCO ₃	1	5/14/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	5/14/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	5/9/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	1.2	1.0		mg/L	1	5/9/2012

Qualifiers:

A Not Available for Accreditation
E Value Above Quantitation Range
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 17-May-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-WisianW1-060
Lab Order:	1205188	Collection Date:	5/7/2012 12:40:00 PM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1205188-003	Tag No:	WISIANW1-060

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	92.2	0.200		mg/L	1	5/14/2012 2:17:43 PM
Magnesium	10.8	0.200		mg/L	1	5/14/2012 2:17:43 PM
Potassium	2.79	0.200		mg/L	1	5/14/2012 2:17:43 PM
Sodium	53.9	0.600		mg/L	1	5/14/2012 2:17:43 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	17.3	1.00		mg/L	1	5/8/2012 8:00:00 PM
Fluoride	0.236	0.010		mg/L	1	5/8/2012 8:00:00 PM
Nitrogen, Nitrate (As N)	8.88	0.100	H	mg/L	10	5/10/2012 9:24:00 PM
Nitrogen, Nitrate (As N)	8.38	0.010	E	mg/L	1	5/8/2012 8:00:00 PM
Sulfate	27.5	1.00		mg/L	1	5/8/2012 8:00:00 PM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO3)	310	2	A	mg/L CaCO3	1	5/14/2012
Alkalinity, Carbonate (As CaCO3)	< 2	2	A	mg/L CaCO3	1	5/14/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	5/9/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	< 1.0	1.0		mg/L	1	5/9/2012

Qualifiers:

A Not Available for Accreditation
E Value Above Quantitation Range
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 17-May-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-WisianW1-065
Lab Order:	1205188	Collection Date:	5/7/2012 12:50:00 PM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1205188-004	Tag No:	WISIANW1-065

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	0.665	0.200		mg/L	1	5/14/2012 2:25:13 PM
Magnesium	< 0.200	0.200		mg/L	1	5/14/2012 2:25:13 PM
Potassium	0.545	0.200		mg/L	1	5/14/2012 2:25:13 PM
Sodium	< 0.600	0.600		mg/L	1	5/14/2012 2:25:13 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	< 1.00	1.00		mg/L	1	5/8/2012 8:17:00 PM
Fluoride	< 0.010	0.010		mg/L	1	5/8/2012 8:17:00 PM
Nitrogen, Nitrate (As N)	0.080	0.010		mg/L	1	5/8/2012 8:17:00 PM
Sulfate	< 1.00	1.00		mg/L	1	5/8/2012 8:17:00 PM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO3)	3	2	A	mg/L CaCO3	1	5/14/2012
Alkalinity, Carbonate (As CaCO3)	< 2	2	A	mg/L CaCO3	1	5/14/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	5/9/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 17-May-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-WisianW2-060
Lab Order:	1205188	Collection Date:	5/7/2012 1:25:00 PM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1205188-005	Tag No:	WISIANW2-060

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	99.4	0.200		mg/L	1	5/14/2012 2:30:36 PM
Magnesium	12.2	0.200		mg/L	1	5/14/2012 2:30:36 PM
Potassium	2.72	0.200		mg/L	1	5/14/2012 2:30:36 PM
Sodium	102	0.600		mg/L	1	5/14/2012 2:30:36 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	15.3	1.00		mg/L	1	5/8/2012 8:35:00 PM
Fluoride	0.120	0.010		mg/L	1	5/8/2012 8:35:00 PM
Nitrogen, Nitrate (As N)	12.3	0.100	HX	mg/L	10	5/10/2012 9:41:00 PM
Nitrogen, Nitrate (As N)	10.3	0.010	EX	mg/L	1	5/8/2012 8:35:00 PM
Sulfate	33.3	1.00		mg/L	1	5/8/2012 8:35:00 PM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO3)	403	2	A	mg/L CaCO3	1	5/14/2012
Alkalinity, Carbonate (As CaCO3)	< 2	2	A	mg/L CaCO3	1	5/14/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	5/9/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	< 1.0	1.0		mg/L	1	5/9/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 17-May-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-58522-060
Lab Order:	1205188	Collection Date:	5/7/2012 2:35:00 PM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1205188-006	Tag No:	58522-060

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	121	0.200		mg/L	1	5/16/2012 11:02:17 AM
Magnesium	32.9	0.200		mg/L	1	5/16/2012 11:02:17 AM
Potassium	1.84	0.200		mg/L	1	5/16/2012 11:02:17 AM
Sodium	70.7	0.600		mg/L	1	5/16/2012 11:02:17 AM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	93.5	10.0		mg/L	10	5/15/2012 2:31:00 AM
Fluoride	0.268	0.010		mg/L	1	5/8/2012 10:18:00 PM
Nitrogen, Nitrate (As N)	2.71	0.010		mg/L	1	5/8/2012 10:18:00 PM
Sulfate	76.7	10.0		mg/L	10	5/15/2012 2:31:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO ₃)	345	2	A	mg/L CaCO ₃	1	5/14/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	5/14/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	5/9/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	1.1	1.0		mg/L	1	5/9/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 17-May-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-Buchheit-060
Lab Order:	1205188	Collection Date:	5/7/2012 3:15:00 PM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1205188-007	Tag No:	BUCHHEIT-060

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	139	0.200		mg/L	1	5/14/2012 2:38:27 PM
Magnesium	13.0	0.200		mg/L	1	5/14/2012 2:38:27 PM
Potassium	2.59	0.200		mg/L	1	5/14/2012 2:38:27 PM
Sodium	53.6	0.600		mg/L	1	5/14/2012 2:38:27 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	39.9	1.00		mg/L	1	5/8/2012 10:36:00 PM
Fluoride	0.370	0.010		mg/L	1	5/8/2012 10:36:00 PM
Nitrogen, Nitrate (As N)	3.84	0.010		mg/L	1	5/8/2012 10:36:00 PM
Sulfate	85.2	10.0		mg/L	10	5/10/2012 11:25:00 PM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO3)	310	2	A	mg/L CaCO3	1	5/14/2012
Alkalinity, Carbonate (As CaCO3)	< 2	2	A	mg/L CaCO3	1	5/14/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	0.045	0.020		mg/L	1	5/9/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	1.2	1.0		mg/L	1	5/9/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

CLIENT: URS Corporation
Project: Colorado River Corridor - Groundwater
Lab Order: 1205188

CASE NARRATIVE

Analytical Comments for METHOD E300.0, SAMPLES 1205188-002A, 1205188-003A and 1205188-005A Batch R90734B: Nitrogen, Nitrate (As N) results reported as Estimated (E flag) from the 1x analysis and past 48-hour method hold time (H flag) from the 10x dilution analysis. Both results were included in the final report as per client's request.

Analytical Comments for METHOD E300.0, SAMPLE 1205188-002A, Batch R90667B: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E300.0, SAMPLE 1205188-005A, Batch R90667B: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E200.7, SAMPLE 1205206-001ALFM, Batch R90796A: The sodium LFM recovery was not reported because the spike amount was less than 30 percent of the sample background concentration.

Analytical Comments for METHOD E200.7, SAMPLE 1205206-001ALFMD, Batch R90796A: The sodium LFMD recovery was not reported because the spike amount was less than 30 percent of the sample background concentration.

Analytical Comments for METHOD E200.7, SAMPLE 1205190-002ALFM, Batch R90869A: The calcium and sodium LFM recoveries were not reported because the spike amount was less than 30 percent of the sample background concentration.

Analytical Comments for METHOD E200.7, SAMPLE 1205190-002ALFMD, Batch R90869A: The calcium and sodium LFMD recoveries were not reported because the spike amount was less than 30 percent of the sample background concentration.

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT**BatchID: R90667B**

Sample ID: 1205188-005ALFM	SampType: LFM	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: CRCP-WisianW2-06	Batch ID: R90667B	TestNo: E300.0		Analysis Date: 5/8/2012	SeqNo: 3054680						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	25.6	1.00	10.00	15.31	103	80	120				
Fluoride	2.12	0.010	2.000	0.1200	100	80	120				
Sulfate	42.8	1.00	10.00	33.27	95.1	80	120				

Sample ID: 1205188-005ALFMD	SampType: LFMD	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: CRCP-WisianW2-06	Batch ID: R90667B	TestNo: E300.0		Analysis Date: 5/8/2012	SeqNo: 3054681						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	25.6	1.00	20.00	15.31	51.6	0	2000	25.58	0.133	20	
Fluoride	2.12	0.010	1.000	0.1200	200	0	2000	2.122	0.0942	20	
Sulfate	42.8	1.00	20.00	33.27	47.4	0	2000	42.78	0.0503	20	

Sample ID: IC_120508_LFB	SampType: LFB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: ZZZZZZ	Batch ID: R90667B	TestNo: E300.0		Analysis Date: 5/8/2012	SeqNo: 3054682						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.4	1.00	30.00	0	101	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.04	0.010	1.000	0	104	90	110				
Sulfate	30.2	1.00	30.00	0	101	90	110				

Sample ID: IC_120508_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: ZZZZZZ	Batch ID: R90667B	TestNo: E300.0		Analysis Date: 5/8/2012	SeqNo: 3054683						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.4	1.00	30.00	0	101	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.04	0.010	1.000	0	104	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90667B

Sample ID: IC_120508_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: ZZZZZZ	Batch ID: R90667B	TestNo: E300.0		Analysis Date: 5/8/2012	SeqNo: 3054683						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	30.3	1.00	30.00	0	101	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90667C

Sample ID: 1205188-007ALFM	SampType: LFM	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: CRCP-Buchheit-060	Batch ID: R90667C	TestNo: E300.0		Analysis Date: 5/9/2012	SeqNo: 3054695						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	59.1	1.00	20.00	39.87	96.4	80	120				
Fluoride	1.37	0.010	1.000	0.3700	100	80	120				

Sample ID: 1205188-007ALFMD	SampType: LFMD	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: CRCP-Buchheit-060	Batch ID: R90667C	TestNo: E300.0		Analysis Date: 5/9/2012	SeqNo: 3054696						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	59.1	1.00	20.00	39.87	96.3	0	2000	59.14	0.0152	20	
Fluoride	1.38	0.010	1.000	0.3700	101	0	2000	1.371	0.654	20	

Sample ID: IC_120508_LFB	SampType: LFB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: ZZZZZZ	Batch ID: R90667C	TestNo: E300.0		Analysis Date: 5/9/2012	SeqNo: 3054697						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.4	1.00	30.00	0	101	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.04	0.010	1.000	0	104	90	110				
Sulfate	30.3	1.00	30.00	0	101	90	110				

Sample ID: IC_120508_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: ZZZZZZ	Batch ID: R90667C	TestNo: E300.0		Analysis Date: 5/9/2012	SeqNo: 3054698						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.4	1.00	30.00	0	101	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.04	0.010	1.000	0	104	90	110				
Sulfate	30.3	1.00	30.00	0	101	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90670

Sample ID: LCS	SampType: LCS	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 90670						
Client ID: LCSW	Batch ID: R90670	TestNo: SM2540D		Analysis Date: 5/9/2012	SeqNo: 3054149						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	94.0	20.0	100.0	0	94.0	80	120				

Sample ID: LCSD	SampType: LCSD	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 90670						
Client ID: LCSS02	Batch ID: R90670	TestNo: SM2540D		Analysis Date: 5/9/2012	SeqNo: 3054150						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	102	20.0	100.0	0	102	0	2000	94.00	8.16	20	

Sample ID: 1205188-001DDUP	SampType: DUP	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 90670						
Client ID: CRCP-5852213-060	Batch ID: R90670	TestNo: SM2540D		Analysis Date: 5/9/2012	SeqNo: 3054154						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	6.3	2.1						7.000	11.3	20	

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90697D

Sample ID: 1205214-002CMS	SampType: MS	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 90697						
Client ID: ZZZZZZ	Batch ID: R90697D	TestNo: E350.1		Analysis Date: 5/9/2012	SeqNo: 3054834						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	1.02	0.020	1.000	0.02044	100	90	110				

Sample ID: NH3_LFB4	SampType: LFB	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 90697						
Client ID: ZZZZZZ	Batch ID: R90697D	TestNo: E350.1		Analysis Date: 5/9/2012	SeqNo: 3054835						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	0.996	0.020	1.000	0	99.6	90	110				

Qualifiers: A Not Available for Accreditation
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

B Analyte Detected in Method Blank
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

E Value Above Quantitation Range
R RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90734B

Sample ID: 1205188-005ALFM	SampType: LFM	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90734						
Client ID: CRCP-WisianW2-06	Batch ID: R90734B	TestNo: E300.0		Analysis Date: 5/10/2012	SeqNo: 3055600						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	212	10.0	200.0	12.20	99.7	80	120				
Fluoride	10.4	0.100	10.00	0	104	80	120				
Nitrogen, Nitrate (As N)	22.4	0.100	10.00	12.34	101	80	120				
Sulfate	228	10.0	200.0	30.60	98.9	80	120				

Sample ID: 1205188-005ALFMD	SampType: LFMD	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90734						
Client ID: CRCP-WisianW2-06	Batch ID: R90734B	TestNo: E300.0		Analysis Date: 5/10/2012	SeqNo: 3055601						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	212	10.0	200.0	12.20	99.8	0	2000	0	0	20	
Fluoride	10.4	0.100	10.00	0	104	0	2000	0	0	20	
Nitrogen, Nitrate (As N)	22.4	0.100	10.00	12.34	101	0	2000	0	0	20	
Sulfate	228	10.0	200.0	30.60	98.9	0	2000	0	0	20	

Sample ID: IC_120510_LFB	SampType: LFB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90734						
Client ID: ZZZZZZ	Batch ID: R90734B	TestNo: E300.0		Anaiysis Date: 5/10/2012	SeqNo: 3055602						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Quai

Chloride	30.5	1.00	30.00	0	102	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.04	0.010	1.000	0	104	90	110				
Sulfate	30.4	1.00	30.00	0	101	90	110				

Sample ID: IC_120510_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90734						
Client ID: ZZZZZZ	Batch ID: R90734B	TestNo: E300.0		Analysis Date: 5/10/2012	SeqNo: 3055603						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.4	1.00	30.00	0	102	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.03	0.010	1.000	0	103	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank	E	Value Above Quantitation Range
H	Holding Time Exceeded	N	Not Accredited	R	RPD Outside Recovery Limits
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)		

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90734B

Sample ID: IC_120510_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90734						
Client ID: ZZZZZZ	Batch ID: R90734B	TestNo: E300.0		Analysis Date: 5/10/2012	SeqNo: 3055603						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	30.4	1.00	30.00	0	101	90	110				

Qualifiers:
A Not Available for Accreditation
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

B Analyte Detected in Method Blank
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

E Value Above Quantitation Range
R RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90734C

Sample ID: 1205188-007ALFM	SampType: LFM	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90734						
Client ID: CRCP-Buchheit-060	Batch ID: R90734C	TestNo: E300.0		Analysis Date: 5/11/2012	SeqNo: 3055615						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	284	10.0	200.0	33.61	125	80	120				S
Fluoride	10.7	0.100	10.00	0.5200	102	80	120				
Nitrogen, Nitrate (As N)	10.5	0.100	10.00	3.950	65.7	80	120				S
Sulfate	292	10.0	200.0	85.16	104	80	120				

Sample ID: 1205188-007ALFMD	SampType: LFMD	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90734						
Client ID: CRCP-Buchheit-060	Batch ID: R90734C	TestNo: E300.0		Analysis Date: 5/11/2012	SeqNo: 3055616						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	284	10.0	200.0	33.61	125	0	2000	284.2	0.0387	20	
Fluoride	10.7	0.100	10.00	0.5200	102	0	2000	10.74	0.373	20	
Nitrogen, Nitrate (As N)	10.5	0.100	10.00	3.950	65.4	0	2000	10.52	0.286	20	
Sulfate	293	10.0	200.0	85.16	104	0	2000	292.5	0.0171	20	

Sample ID: IC_120510_LFB	SampType: LFB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90734						
Client ID: ZZZZZZ	Batch ID: R90734C	TestNo: E300.0		Analysis Date: 5/11/2012	SeqNo: 3055617						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.6	1.00	30.00	0	102	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.04	0.010	1.000	0	104	90	110				
Sulfate	30.4	1.00	30.00	0	101	90	110				

Sample ID: IC_120510_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90734						
Client ID: ZZZZZZ	Batch ID: R90734C	TestNo: E300.0		Analysis Date: 5/11/2012	SeqNo: 3055618						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.8	1.00	30.00	0	103	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.05	0.010	1.000	0	105	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank	E	Value Above Quantitation Range
H	Holding Time Exceeded	N	Not Accredited	R	RPD Outside Recovery Limits
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)		

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90734C

Sample ID: IC_120510_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90734						
Client ID: ZZZZZZ	Batch ID: R90734C	TestNo: E300.0		Analysis Date: 5/11/2012	SeqNo: 3055618						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	30.6	1.00	30.00	0	102	90	110				

Qualifiers: A Not Available for Accreditation
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

B Analyte Detected in Method Blank
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

E Value Above Quantitation Range
R RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90795

Sample ID: 1205188-001ADUP	SampType: DUP	TestCode: ALK	Units: mg/L CaCO3	Prep Date:	RunNo: 90795						
Client ID: CRCP-5852213-060	Batch ID: R90795	TestNo: SM2320 B	Analysis Date: 5/14/2012	SeqNo: 3057834							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	460	10						454.6	1.14	0	A
Alkalinity, Carbonate (As CaCO3)	< 10	10						0	0	0	A

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90796A

Sample ID: LFB-30018	SampType: LFB	TestCode: 200.7	Units: mg/L	Prep Date: 5/9/2012	RunNo: 90796						
Client ID: ZZZZZZ	Batch ID: R90796A	TestNo: E200.7		Analysis Date: 5/14/2012	SeqNo: 3057797						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	10.6	0.200	10.00	0	106	85	115				
Magnesium	9.77	0.200	10.00	0	97.7	85	115				
Potassium	9.46	0.200	10.00	0	94.6	85	115				
Sodium	9.47	0.600	10.00	0	94.7	85	115				

Sample ID: LFBD-30018	SampType: LFBD	TestCode: 200.7	Units: mg/L	Prep Date: 5/9/2012	RunNo: 90796						
Client ID: ZZZZZZ	Batch ID: R90796A	TestNo: E200.7		Analysis Date: 5/14/2012	SeqNo: 3057798						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	10.8	0.200	10.00	0	108	0	2000	10.59	2.05	20	
Magnesium	10.0	0.200	10.00	0	100	0	2000	9.772	2.36	20	
Potassium	9.62	0.200	10.00	0	96.2	0	2000	9.457	1.73	20	
Sodium	9.56	0.600	10.00	0	95.6	0	2000	9.468	0.991	20	

Sample ID: 1205206-001ALFM	SampType: LFM	TestCode: 200.7	Units: mg/L	Prep Date: 5/9/2012	RunNo: 90796						
Client ID: ZZZZZZ	Batch ID: R90796A	TestNo: E200.7		Analysis Date: 5/14/2012	SeqNo: 3057809						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	26.8	0.200	10.00	15.28	115	70	130				
Magnesium	35.6	0.200	10.00	24.39	112	70	130				
Potassium	15.9	0.200	10.00	5.761	102	70	130				

Sample ID: 1205206-001ALFMD	SampType: LFMD	TestCode: 200.7	Units: mg/L	Prep Date: 5/9/2012	RunNo: 90796						
Client ID: ZZZZZZ	Batch ID: R90796A	TestNo: E200.7		Analysis Date: 5/14/2012	SeqNo: 3057810						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	26.3	0.200	10.00	15.28	110	0	2000	26.77	1.81	20	
Magnesium	34.9	0.200	10.00	24.39	105	0	2000	35.60	2.06	20	
Potassium	15.6	0.200	10.00	5.761	98.0	0	2000	15.95	2.43	20	

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90796A

Sample ID: CCB2	SampType: CCB	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 90796						
Client ID: CCB	Batch ID: R90796A	TestNo: E200.7		Analysis Date: 5/14/2012	SeqNo: 3057811						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	< 0.200	0.200									
Magnesium	< 0.200	0.200									
Potassium	0.225	0.200									
Sodium	< 0.600	0.600									

Sample ID: IPC2	SampType: IPC	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 90796						
Client ID: ZZZZZZ	Batch ID: R90796A	TestNo: E200.7		Analysis Date: 5/14/2012	SeqNo: 3057812						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	105	0.200	100.0	0	105	90	110				
Magnesium	103	0.200	100.0	0	103	90	110				
Potassium	94.7	0.200	100.0	0	94.7	90	110				
Sodium	92.4	0.600	100.0	0	92.4	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90802C

Sample ID: 1205188-006ALFM	SampType: LFM	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90802						
Client ID: CRCP-58522-060	Batch ID: R90802C	TestNo: E300.0		Analysis Date: 5/15/2012	SeqNo: 3058076						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	304	10.0	200.0	101.4	101	80	120				
Fluoride	10.8	0.100	10.00	0.2680	106	80	120				
Nitrogen, Nitrate (As N)	13.0	0.100	10.00	2.709	103	80	120				
Sulfate	285	10.0	200.0	85.68	99.9	80	120				

Sample ID: 1205188-006ALFMD	SampType: LFMD	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90802						
Client ID: CRCP-58522-060	Batch ID: R90802C	TestNo: E300.0		Analysis Date: 5/15/2012	SeqNo: 3058077						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	304	10.0	200.0	101.4	101	0	2000	303.5	0.00659	20	
Fluoride	10.8	0.100	10.00	0.2680	105	0	2000	10.85	0.564	20	
Nitrogen, Nitrate (As N)	13.1	0.100	10.00	2.709	104	0	2000	13.04	0.153	20	
Sulfate	285	10.0	200.0	85.68	99.7	0	2000	285.5	0.147	20	

Sample ID: IC_120514_LFB	SampType: LFB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90802						
Client ID: ZZZZZZ	Batch ID: R90802C	TestNo: E300.0		Analysis Date: 5/15/2012	SeqNo: 3058078						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.5	1.00	30.00	0	102	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.04	0.010	1.000	0	104	90	110				
Sulfate	30.4	1.00	30.00	0	101	90	110				

Sample ID: IC_120514_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90802						
Client ID: ZZZZZZ	Batch ID: R90802C	TestNo: E300.0		Analysis Date: 5/15/2012	SeqNo: 3058079						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.4	1.00	30.00	0	101	90	110				
Fluoride	1.04	0.010	1.000	0	104	90	110				
Nitrogen, Nitrate (As N)	1.04	0.010	1.000	0	104	90	110				

Qualifiers:
A Not Available for Accreditation
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

B Analyte Detected in Method Blank
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

E Value Above Quantitation Range
R RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90802C

Sample ID: IC_120514_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90802						
Client ID: ZZZZZZ	Batch ID: R90802C	TestNo: E300.0		Analysis Date: 5/15/2012	SeqNo: 3058079						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	30.4	1.00	30.00	0	101	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90869A

Sample ID: LFB-30045	SampType: LFB	TestCode: 200.7	Units: mg/L	Prep Date: 5/11/2012	RunNo: 90869						
Client ID: ZZZZZZ	Batch ID: R90869A	TestNo: E200.7		Analysis Date: 5/16/2012	SeqNo: 3062559						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	10.9	0.200	10.00	0	109	85	115				
Magnesium	10.2	0.200	10.00	0	102	85	115				
Potassium	9.63	0.200	10.00	0	96.3	85	115				
Sodium	9.72	0.600	10.00	0	97.2	85	115				

Sample ID: LFB-30045	SampType: LFB	TestCode: 200.7	Units: mg/L	Prep Date: 5/11/2012	RunNo: 90869						
Client ID: ZZZZZZ	Batch ID: R90869A	TestNo: E200.7		Analysis Date: 5/16/2012	SeqNo: 3062560						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	10.8	0.200	10.00	0	108	0	2000	10.93	1.52	20	
Magnesium	10.0	0.200	10.00	0	100	0	2000	10.19	1.79	20	
Potassium	9.41	0.200	10.00	0	94.1	0	2000	9.632	2.28	20	
Sodium	9.52	0.600	10.00	0	95.2	0	2000	9.715	1.98	20	

Sample ID: 1205190-002ALFM	SampType: LFM	TestCode: 200.7	Units: mg/L	Prep Date: 5/11/2012	RunNo: 90869						
Client ID: ZZZZZZ	Batch ID: R90869A	TestNo: E200.7		Analysis Date: 5/16/2012	SeqNo: 3062564						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Magnesium	24.9	0.200	10.00	14.69	102	70	130				
Potassium	20.6	0.200	10.00	9.776	109	70	130				

Sample ID: 1205190-002ALFMD	SampType: LFMD	TestCode: 200.7	Units: mg/L	Prep Date: 5/11/2012	RunNo: 90869						
Client ID: ZZZZZZ	Batch ID: R90869A	TestNo: E200.7		Analysis Date: 5/16/2012	SeqNo: 3062565						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Magnesium	24.3	0.200	10.00	14.69	95.6	0	2000	24.89	2.60	20	
Potassium	20.2	0.200	10.00	9.776	104	0	2000	20.65	2.07	20	

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205188
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90869A

Sample ID: CCB2	SampType: CCB	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 90869						
Client ID: CCB	Batch ID: R90869A	TestNo: E200.7		Analysis Date: 5/16/2012	SeqNo: 3062569						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	< 0.200	0.200									
Magnesium	< 0.200	0.200									
Potassium	< 0.200	0.200									
Sodium	< 0.600	0.600									

Sample ID: IPC2	SampType: IPC	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 90869						
Client ID: ZZZZZZ	Batch ID: R90869A	TestNo: E200.7		Analysis Date: 5/16/2012	SeqNo: 3062570						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	103	0.200	100.0	0	103	90	110				
Magnesium	99.9	0.200	100.0	0	99.9	90	110				
Potassium	101	0.200	100.0	0	101	90	110				
Sodium	96.3	0.600	100.0	0	96.3	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits



LCRA ENVIRONMENTAL LABORATORY SERVICES (ELS)
CHAIN OF CUSTODY RECORD

Target Due Date: 5/21/12
Work Order No. 1205188
COC No.: 113617
Page 1 of 1

NOTE: Relinquishing sample(s) to ELS obligates the submitter to all Standard Terms and Conditions stated on the back of this form.

Results To: Kevin Pasternak 9400 Amberglenn Blvd Austin TX 78729 Sampled By: K. Nguyen, A. Potts
Bill To: Travis County CRCP PO No.:
Phone No.: 5124544197 Fax No.: 5124548807 Method of Transport: Hand Delivery TAT Requested: Normal Working days Email: kevin.pasternak@crs.wa
Relinquished By: [Signature] Date: 5/1/12 Time: 1550 Received By: _____ Date: _____ Time: _____ Relinquished By: _____ Date: _____ Time: _____

Report Requirements
☐ Hardcopy ☒ E-mail ☐ Fax
☐ EDD (Generic)

Regulatory Requirements
☒ None ☐ NELAP

Received at ELS By: [Signature] Date: 5/1/12 Time: 1550 ELS Mgmt. Approval for RUSH:
☒ Received on Ice Temp: 4.1 °C T4
Login Review: [Signature] Date: 5-8-12 Surcharge for RUSH: _____ %

ELS ID:	SAMPLE DESCRIPTION Custody Seals (circle): Cooler Bottles <u>None</u>	MATRIX	SAMPLE COLLECTION		CONTAINERS			ANALYSIS REQUESTED - Place an "x" in the box below to indicate request.										PRESERVATIVES	pH
			DATE	TIME	NUMBER	SIZE	TYPE	E350.1	E300.0	5022.008	E200.7	5m2540D							
001	CRCP-SB52213-060	W	5/1/12	1000	4	Vary	Plaq	X	X	X	X							HNO ₃ , H ₂ SO ₄	
002	CRCP-SB52314-060			1105	4														
003	CRCP-WislanW1-060			1240	4														
004	CRCP-WislanW1-065			1250	3														
005	CRCP-WislanW2-060			1325	4							X							
006	CRCP-SB522-060			1435	4														
007	CRCP-Buchheit-060	✓	✓	1515	4	✓	✓	✓	✓	✓	✓	✓							

Special Instructions: _____

ELS Comments: _____

Cooler 11

LCRA Environmental Laboratory Services

REMIT TO: Lower Colorado River Authority
P. O. Box 200870
Houston, Texas 77216-0870
TEL: (512) 356-6022

INVOICE

DATE: May 21, 2012

Invoice No:	LB94395
Customer No:	000000

Invoice TO: Environmental and Regulatory Affairs
Mail Stop: EL-101
3505 Montopolis Drive
Austin, TX 78744

PO Number:
2282009

Attn: Alicia C. Gill
Phone: (512) 356-6022

Work Order: 1205214 Order Name Colorado River Corridor - Grou Date Received 5/8/2012

Item	Remarks	Matrix	Qty	Mult	Quoted	Test Total
ALKALINITY	HCO3,CO3	Aqueous	5	1	\$24.00	\$120.00
AMMONIA as N	Ammonia-N	Aqueous	5	1	\$15.00	\$75.00
ANIONS by ION CHROMATOGRAPHY	Cl,F,NO3,SO4	Aqueous	5	1	\$72.00	\$360.00
AQPREP TOTAL RECOVERABLE METALS: I	Prep Ca,Mg,Na,	Aqueous	5	1	\$15.00	\$75.00
ICP METALS, TOTAL RECOVERABLE	Ca,Mg,Na,K	Aqueous	5	1	\$48.00	\$240.00
TOTAL SUSPENDED SOLIDS	TSS	Aqueous	5	1	\$12.00	\$60.00

Subtotal: \$930.00

Misc Charges: \$0.00

INVOICE Total: \$930.00

This is an internal billing for your records. Please do not forward to Accounts Payable.



May 21, 2012

Kevin Pasternak
URS Corporation
9400 Amberglen Blvd
Austin, TX 78729

TEL: (512) 419-5293
FAX

RE: Colorado River Corridor - Groundwater

COC ID.: 113643

Order No.: 1205214

Dear Kevin Pasternak:

On 5/8/2012, LCRA Environmental Laboratory Services (ELS) received 5 sample(s) for analyses under Lab Order No. 1205214. This final report provides results related only to the sample(s) as received for the above referenced lab order number.

ELS is accredited under the National Environmental Laboratory Accreditation Program (NELAP) and certifies that all reported results meet NELAP requirements, unless otherwise noted. The Case Narrative provides explanations for any deviations, additions to, or exclusions from the method requirements.

This report contains a total of 22 pages (including the cover letter) and may not be reproduced, except in full, without written approval from ELS.

Thank you for selecting ELS for your analytical needs. If you have questions regarding this report, please contact us at (512) 356-6022. We look forward to assisting you again.

Sincerely,

Tess Abbott
Project Manager



T104704218-12-6

CLIENT: URS Corporation
Project: Colorado River Corridor - Groundwater
Lab Order: 1205214

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Date Collected	Date Received
1205214-001A	CRCP-ATF1-060		5/8/2012 9:05:00 AM	5/8/2012 11:45:00 AM
1205214-001B	CRCP-ATF1-060		5/8/2012 9:05:00 AM	5/8/2012 11:45:00 AM
1205214-001C	CRCP-ATF1-060		5/8/2012 9:05:00 AM	5/8/2012 11:45:00 AM
1205214-001D	CRCP-ATF1-060		5/8/2012 9:05:00 AM	5/8/2012 11:45:00 AM
1205214-002A	CRCP-NTNW2-060		5/8/2012 9:55:00 AM	5/8/2012 11:45:00 AM
1205214-002B	CRCP-NTNW2-060		5/8/2012 9:55:00 AM	5/8/2012 11:45:00 AM
1205214-002C	CRCP-NTNW2-060		5/8/2012 9:55:00 AM	5/8/2012 11:45:00 AM
1205214-002D	CRCP-NTNW2-060		5/8/2012 9:55:00 AM	5/8/2012 11:45:00 AM
1205214-003A	CRCP-NTNW2-061		5/8/2012 9:55:00 AM	5/8/2012 11:45:00 AM
1205214-003B	CRCP-NTNW2-061		5/8/2012 9:55:00 AM	5/8/2012 11:45:00 AM
1205214-003C	CRCP-NTNW2-061		5/8/2012 9:55:00 AM	5/8/2012 11:45:00 AM
1205214-003D	CRCP-NTNW2-061		5/8/2012 9:55:00 AM	5/8/2012 11:45:00 AM
1205214-004A	CRCP-HOLWEGER-063		5/8/2012 10:35:00 AM	5/8/2012 11:45:00 AM
1205214-004B	CRCP-HOLWEGER-063		5/8/2012 10:35:00 AM	5/8/2012 11:45:00 AM
1205214-004C	CRCP-HOLWEGER-063		5/8/2012 10:35:00 AM	5/8/2012 11:45:00 AM
1205214-004D	CRCP-HOLWEGER-063		5/8/2012 10:35:00 AM	5/8/2012 11:45:00 AM
1205214-005A	CRCP-221049-060		5/8/2012 11:10:00 AM	5/8/2012 11:45:00 AM
1205214-005B	CRCP-221049-060		5/8/2012 11:10:00 AM	5/8/2012 11:45:00 AM
1205214-005C	CRCP-221049-060		5/8/2012 11:10:00 AM	5/8/2012 11:45:00 AM
1205214-005D	CRCP-221049-060		5/8/2012 11:10:00 AM	5/8/2012 11:45:00 AM

Final Analysis Report

LCRA Environmental Laboratory Services

Date: 21-May-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-ATF1-060
Lab Order:	1205214	Collection Date:	5/8/2012 9:05:00 AM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1205214-001	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE						
		E200.7				Analyst: MV
Calcium	201	0.200		mg/L	1	5/16/2012 11:37:27 AM
Magnesium	41.2	0.200		mg/L	1	5/16/2012 11:37:27 AM
Potassium	3.58	0.200		mg/L	1	5/16/2012 11:37:27 AM
Sodium	50.2	0.600		mg/L	1	5/16/2012 11:37:27 AM
ANIONS BY ION CHROMATOGRAPHY						
		E300.0				Analyst: WR
Chloride	65.2	10.0		mg/L	10	5/9/2012 8:59:00 AM
Fluoride	0.360	0.100		mg/L	10	5/9/2012 8:59:00 AM
Nitrogen, Nitrate (As N)	8.91	0.100		mg/L	10	5/9/2012 8:59:00 AM
Sulfate	143	10.0		mg/L	10	5/9/2012 8:59:00 AM
ALKALINITY						
		SM2320 B				Analyst: KH
Alkalinity, Bicarbonate (As CaCO ₃)	461	2	A	mg/L CaCO ₃	1	5/14/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	5/14/2012
AMMONIA AS N						
		E350.1				Analyst: JB
Nitrogen, Ammonia (As N)	0.073	0.020		mg/L	1	5/9/2012
TOTAL SUSPENDED SOLIDS						
		SM2540D				Analyst: JB
Suspended Solids (Residue, Non-Filterable)	2.3	1.0		mg/L	1	5/9/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 21-May-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-NTNW2-060
Lab Order:	1205214	Collection Date:	5/8/2012 9:55:00 AM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1205214-002	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	233	0.200		mg/L	1	5/14/2012 3:21:56 PM
Magnesium	76.7	0.200		mg/L	1	5/14/2012 3:21:56 PM
Potassium	2.51	0.200		mg/L	1	5/14/2012 3:21:56 PM
Sodium	44.2	0.600		mg/L	1	5/14/2012 3:21:56 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	37.5	10.0		mg/L	10	5/9/2012 9:16:00 AM
Fluoride	0.420	0.100		mg/L	10	5/9/2012 9:16:00 AM
Nitrogen, Nitrate (As N)	31.1	0.100	X	mg/L	10	5/9/2012 9:16:00 AM
Sulfate	406	10.0		mg/L	10	5/9/2012 9:16:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO3)	347	2	A	mg/L CaCO3	1	5/14/2012
Alkalinity, Carbonate (As CaCO3)	< 2	2	A	mg/L CaCO3	1	5/14/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	0.020	0.020		mg/L	1	5/9/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	< 1.0	1.0		mg/L	1	5/9/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 21-May-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-NTNW2-061
Lab Order:	1205214	Collection Date:	5/8/2012 9:55:00 AM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1205214-003	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	242	0.200		mg/L	1	5/14/2012 3:29:52 PM
Magnesium	81.0	0.200		mg/L	1	5/14/2012 3:29:52 PM
Potassium	2.53	0.200		mg/L	1	5/14/2012 3:29:52 PM
Sodium	44.2	0.600		mg/L	1	5/14/2012 3:29:52 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	37.7	10.0		mg/L	10	5/9/2012 9:34:00 AM
Fluoride	0.430	0.100		mg/L	10	5/9/2012 9:34:00 AM
Nitrogen, Nitrate (As N)	30.5	0.100	X	mg/L	10	5/9/2012 9:34:00 AM
Sulfate	395	10.0		mg/L	10	5/9/2012 9:34:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO ₃)	343	2	A	mg/L CaCO ₃	1	5/16/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	5/16/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	5/9/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	< 1.0	1.0		mg/L	1	5/9/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 21-May-12

CLIENT: URS Corporation
Lab Order: 1205214
Project: Colorado River Corridor - Groundwater
Lab ID: 1205214-004

Client Sample ID: CRCP-HOLWEGGER-063
Collection Date: 5/8/2012 10:35:00 AM
Matrix: GROUNDWATER
Tag No:

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE		E200.7		Analyst: MV		
Calcium	113	0.200		mg/L	1	5/14/2012 3:37:51 PM
Magnesium	16.5	0.200		mg/L	1	5/14/2012 3:37:51 PM
Potassium	1.94	0.200		mg/L	1	5/14/2012 3:37:51 PM
Sodium	31.9	0.600		mg/L	1	5/14/2012 3:37:51 PM
ANIONS BY ION CHROMATOGRAPHY		E300.0		Analyst: WR		
Chloride	11.9	10.0		mg/L	10	5/9/2012 11:17:00 AM
Fluoride	0.390	0.100		mg/L	10	5/9/2012 11:17:00 AM
Nitrogen, Nitrate (As N)	16.1	0.100	x	mg/L	10	5/9/2012 11:17:00 AM
Sulfate	21.1	10.0		mg/L	10	5/9/2012 11:17:00 AM
ALKALINITY		SM2320 B		Analyst: KH		
Alkalinity, Bicarbonate (As CaCO ₃)	287	2	A	mg/L CaCO ₃	1	5/16/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	5/16/2012
AMMONIA AS N		E350.1		Analyst: JB		
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	5/9/2012
TOTAL SUSPENDED SOLIDS		SM2540D		Analyst: JB		
Suspended Solids (Residue, Non-Filterable)	< 1.0	1.0		mg/L	1	5/9/2012

Qualifiers:

A Not Available for Accreditation
E Value Above Quantitation Range
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

LCRA Environmental Laboratory Services

Date: 21-May-12

CLIENT:	URS Corporation	Client Sample ID:	CRCP-221049-060
Lab Order:	1205214	Collection Date:	5/8/2012 11:10:00 AM
Project:	Colorado River Corridor - Groundwater	Matrix:	GROUNDWATER
Lab ID:	1205214-005	Tag No:	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL RECOVERABLE						
		E200.7				Analyst: MV
Calcium	106	0.200		mg/L	1	5/14/2012 4:02:27 PM
Magnesium	12.2	0.200		mg/L	1	5/14/2012 4:02:27 PM
Potassium	1.83	0.200		mg/L	1	5/14/2012 4:02:27 PM
Sodium	25.8	0.600		mg/L	1	5/14/2012 4:02:27 PM
ANIONS BY ION CHROMATOGRAPHY						
		E300.0				Analyst: WR
Chloride	10.2	10.0		mg/L	10	5/9/2012 11:35:00 AM
Fluoride	0.430	0.100		mg/L	10	5/9/2012 11:35:00 AM
Nitrogen, Nitrate (As N)	13.3	0.100	X	mg/L	10	5/9/2012 11:35:00 AM
Sulfate	15.2	10.0		mg/L	10	5/9/2012 11:35:00 AM
ALKALINITY						
		SM2320 B				Analyst: KH
Alkalinity, Bicarbonate (As CaCO ₃)	267	2	A	mg/L CaCO ₃	1	5/16/2012
Alkalinity, Carbonate (As CaCO ₃)	< 2	2	A	mg/L CaCO ₃	1	5/16/2012
AMMONIA AS N						
		E350.1				Analyst: JB
Nitrogen, Ammonia (As N)	< 0.020	0.020		mg/L	1	5/9/2012
TOTAL SUSPENDED SOLIDS						
		SM2540D				Analyst: JB
Suspended Solids (Residue, Non-Filterable)	2.9	1.0		mg/L	1	5/9/2012

Qualifiers:

A Not Available for Accreditation
 E Value Above Quantitation Range
 N Not Accredited
 X Value Exceeds Maximum Contaminant Level (MCL)

B Analyte Detected in Method Blank
 H Holding Time Exceeded
 S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Values Below PQL Considered Estimated

CLIENT: URS Corporation
Project: Colorado River Corridor - Groundwater
Lab Order: 1205214

CASE NARRATIVE

Analytical Comments for METHOD E300.0, SAMPLE 1205214-002A, Batch R90667E: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E300.0, SAMPLE 1205214-003A, Batch R90667E: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E300.0, SAMPLE 1205214-004A, Batch R90667F: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E300.0, SAMPLE 1205214-005A, Batch R90667F: The nitrate MCL of 10 mg/L has been exceeded under the EPA National Primary Drinking Water Standards.

Analytical Comments for METHOD E200.7, SAMPLE 1205214-004BLFM, Batch R90796B: The calcium LFM recovery was not reported because the spike amount was less than 30 percent of the sample background concentration.

Analytical Comments for METHOD E200.7, SAMPLE 1205214-004BLFMD, Batch R90796B: The calcium LFMD recovery was not reported because the spike amount was less than 30 percent of the sample background concentration.

Analytical Comments for METHOD E200.7, SAMPLE 1205190-002ALFM, Batch R90869A: The calcium and sodium LFM recoveries were not reported because the spike amount was less than 30 percent of the sample background concentration.

Analytical Comments for METHOD E200.7, SAMPLE 1205190-002ALFMD, Batch R90869A: The calcium and sodium LFMD recoveries were not reported because the spike amount was less than 30 percent of the sample background concentration.

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT**BatchID: R90667E**

Sample ID: 1205214-003ALFM		SampType: LFM		TestCode: 300_48H		Units: mg/L		Prep Date:		RunNo: 90667	
Client ID: CRCP-NTNW2-061		Batch ID: R90667E		TestNo: E300.0		Analysis Date: 5/9/2012		SeqNo: 3054725			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	232	10.0	200.0	37.70	97.0	80	120				
Fluoride	10.0	0.100	10.00	0.4300	96.1	80	120				
Nitrogen, Nitrate (As N)	39.6	0.100	10.00	30.48	91.6	80	120				
Sulfate	587	10.0	200.0	395.3	95.6	80	120				

Sample ID: 1205214-003ALFMD		SampType: LFMD		TestCode: 300_48H		Units: mg/L		Prep Date:		RunNo: 90667	
Client ID: CRCP-NTNW2-061		Batch ID: R90667E		TestNo: E300.0		Analysis Date: 5/9/2012		SeqNo: 3054726			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	232	10.0	200.0	37.70	97.0	0	2000	231.6	0	20	
Fluoride	10.1	0.100	10.00	0.4300	96.3	0	2000	10.04	0.199	20	
Nitrogen, Nitrate (As N)	39.6	0.100	10.00	30.48	91.1	0	2000	39.64	0.126	20	
Sulfate	586	10.0	200.0	395.3	95.4	0	2000	586.6	0.0877	20	

Sample ID: IC_120508_LFB		SampType: LFB		TestCode: 300_48H		Units: mg/L		Prep Date:		RunNo: 90667	
Client ID: ZZZZZZ		Batch ID: R90667E		TestNo: E300.0		Analysis Date: 5/9/2012		SeqNo: 3054728			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.4	1.00	30.00	0	101	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.04	0.010	1.000	0	104	90	110				
Sulfate	30.3	1.00	30.00	0	101	90	110				

Sample ID: IC_120508_IPC		SampType: IPC		TestCode: 300_48H		Units: mg/L		Prep Date:		RunNo: 90667	
Client ID: ZZZZZZ		Batch ID: R90667E		TestNo: E300.0		Analysis Date: 5/9/2012		SeqNo: 3054728			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.4	1.00	30.00	0	101	90	110				

Qualifiers: A Not Available for Accreditation
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

B Analyte Detected in Method Blank
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

E Value Above Quantitation Range
R RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90667E

Sample ID: IC_120508_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: ZZZZZZ	Batch ID: R90667E	TestNo: E300.0		Analysis Date: 5/9/2012	SeqNo: 3054728						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	1.06	0.010	1.000	0	106	90	110				
Nitrogen, Nitrate (As N)	1.04	0.010	1.000	0	104	90	110				
Sulfate	30.3	1.00	30.00	0	101	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90667F

Sample ID: IC_120508_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: ZZZZZZ	Batch ID: R90667F	TestNo: E300.0		Analysis Date: 5/9/2012	SeqNo: 3054739						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.0	1.00	30.00	0	100	90	110				
Fluoride	1.04	0.010	1.000	0	104	90	110				
Nitrogen, Nitrate (As N)	1.03	0.010	1.000	0	103	90	110				
Sulfate	29.9	1.00	30.00	0	99.7	90	110				

Sample ID: 1205239-001ALFM	SampType: LFM	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: ZZZZZZ	Batch ID: R90667F	TestNo: E300.0		Analysis Date: 5/9/2012	SeqNo: 3054742						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	76.3	1.00	20.00	58.31	89.7	80	120				
Fluoride	1.54	0.010	1.000	0.5130	103	80	120				

Sample ID: 1205239-001ALFMD	SampType: LFMD	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: ZZZZZZ	Batch ID: R90667F	TestNo: E300.0		Analysis Date: 5/9/2012	SeqNo: 3054743						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	76.3	1.00	20.00	58.31	89.8	0	2000	76.25	0.0354	20	
Fluoride	1.54	0.010	1.000	0.5130	103	0	2000	1.539	0.195	20	

Sample ID: IC_120508_LFB	SampType: LFB	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90667						
Client ID: ZZZZZZ	Batch ID: R90667F	TestNo: E300.0		Analysis Date: 5/9/2012	SeqNo: 3054744						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	30.4	1.00	30.00	0	101	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.05	0.010	1.000	0	105	90	110				
Sulfate	30.3	1.00	30.00	0	101	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90670

Sample ID: LCS	SampType: LCS	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 90670						
Client ID: LCSW	Batch ID: R90670	TestNo: SM2540D		Analysis Date: 5/9/2012	SeqNo: 3054149						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	94.0	20.0	100.0	0	94.0	80	120				

Sample ID: LCSD	SampType: LCSD	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 90670						
Client ID: LCSS02	Batch ID: R90670	TestNo: SM2540D		Analysis Date: 5/9/2012	SeqNo: 3054150						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	102	20.0	100.0	0	102	0	2000	94.00	8.16	20	

Sample ID: 1205188-001DDUP	SampType: DUP	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 90670						
Client ID: ZZZZZZ	Batch ID: R90670	TestNo: SM2540D		Analysis Date: 5/9/2012	SeqNo: 3054154						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	6.3	2.1						7.000	11.3	20	

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90676

Sample ID: LCS	SampType: LCS	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 90676						
Client ID: LCSW	Batch ID: R90676	TestNo: SM2540D		Analysis Date: 5/9/2012	SeqNo: 3054258						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	92.0	20.0	100.0	0	92.0	80	120				

Sample ID: LCSD	SampType: LCSD	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 90676						
Client ID: LCSS02	Batch ID: R90676	TestNo: SM2540D		Analysis Date: 5/9/2012	SeqNo: 3054259						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	102	20.0	100.0	0	102	0	2000	92.00	10.3	20	

Sample ID: 1205214-004DDUP	SampType: DUP	TestCode: TSS_SM	Units: mg/L	Prep Date:	RunNo: 90676						
Client ID: CRCP-HOLWEGE-	Batch ID: R90676	TestNo: SM2540D		Analysis Date: 5/9/2012	SeqNo: 3054262						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	< 1.0	1.0						0	0	20	

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90697D

Sample ID: 1205214-002CMS	SampType: MS	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 90697						
Client ID: CRCP-NTNW2-060	Batch ID: R90697D	TestNo: E350.1		Analysis Date: 5/9/2012	SeqNo: 3054834						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	1.02	0.020	1.000	0.02044	100	90	110				

Sample ID: NH3_LFB4	SampType: LFB	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 90697						
Client ID: ZZZZZZ	Batch ID: R90697D	TestNo: E350.1		Analysis Date: 5/9/2012	SeqNo: 3054835						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	0.996	0.020	1.000	0	99.6	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90697E

Sample ID: 1205214-004CMS	SampType: MS	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 90697						
Client ID: CRCP-HOLWEGER-	Batch ID: R90697E	TestNo: E350.1		Analysis Date: 5/9/2012	SeqNo: 3054848						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	0.976	0.020	1.000	0.008310	96.7	90	110				

Sample ID: NH3_LFB5	SampType: LFB	TestCode: NH3-N	Units: mg/L	Prep Date:	RunNo: 90697						
Client ID: ZZZZZZ	Batch ID: R90697E	TestNo: E350.1		Analysis Date: 5/9/2012	SeqNo: 3054849						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	0.954	0.020	1.000	0	95.4	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90734C

Sample ID: 1205188-007ALFM		SampType: LFM		TestCode: 300_48H		Units: mg/L		Prep Date:		RunNo: 90734	
Client ID: ZZZZZZ		Batch ID: R90734C		TestNo: E300.0		Analysis Date: 5/11/2012		SeqNo: 3055615			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	284	10.0	200.0	33.61	125	80	120				S
Fluoride	10.7	0.100	10.00	0.5200	102	80	120				
Nitrogen, Nitrate (As N)	10.5	0.100	10.00	3.950	65.7	80	120				S
Sulfate	292	10.0	200.0	85.16	104	80	120				

Sample ID: 1205188-007ALFMD		SampType: LFMD		TestCode: 300_48H		Units: mg/L		Prep Date:		RunNo: 90734	
Client ID: ZZZZZZ		Batch ID: R90734C		TestNo: E300.0		Analysis Date: 5/11/2012		SeqNo: 3055616			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	284	10.0	200.0	33.61	125	0	2000	284.2	0.0387	20	
Fluoride	10.7	0.100	10.00	0.5200	102	0	2000	10.74	0.373	20	
Nitrogen, Nitrate (As N)	10.5	0.100	10.00	3.950	65.4	0	2000	10.52	0.286	20	
Sulfate	293	10.0	200.0	85.16	104	0	2000	292.5	0.0171	20	

Sample ID: IC_120510_LFB		SampType: LFB		TestCode: 300_48H		Units: mg/L		Prep Date:		RunNo: 90734	
Client ID: ZZZZZZ		Batch ID: R90734C		TestNo: E300.0		Analysis Date: 5/11/2012		SeqNo: 3055617			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.6	1.00	30.00	0	102	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.04	0.010	1.000	0	104	90	110				
Sulfate	30.4	1.00	30.00	0	101	90	110				

Sample ID: IC_120510_IPC		SampType: IPC		TestCode: 300_48H		Units: mg/L		Prep Date:		RunNo: 90734	
Client ID: ZZZZZZ		Batch ID: R90734C		TestNo: E300.0		Analysis Date: 5/11/2012		SeqNo: 3055618			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	30.8	1.00	30.00	0	103	90	110				
Fluoride	1.05	0.010	1.000	0	105	90	110				
Nitrogen, Nitrate (As N)	1.05	0.010	1.000	0	105	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90734C

Sample ID: IC_120510_IPC	SampType: IPC	TestCode: 300_48H	Units: mg/L	Prep Date:	RunNo: 90734						
Client ID: ZZZZZZ	Batch ID: R90734C	TestNo: E300.0		Analysis Date: 5/11/2012	SeqNo: 3055618						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	30.6	1.00	30.00	0	102	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90795

Sample ID: 1205188-001ADUP	SampType: DUP	TestCode: ALK	Units: mg/L CaCO3	Prep Date:	RunNo: 90795						
Client ID: ZZZZZZ	Batch ID: R90795	TestNo: SM2320 B	Analysis Date: 5/14/2012	SeqNo: 3057834							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	460	10						454.6	1.14	0	A
Alkalinity, Carbonate (As CaCO3)	< 10	10						0	0	0	A

Qualifiers:
A Not Available for Accreditation
H Holding Time Exceeded
S Spike Recovery Outside Recovery Limits

B Analyte Detected in Method Blank
N Not Accredited
X Value Exceeds Maximum Contaminant Level (MCL)

E Value Above Quantitation Range
R RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90796B

Sample ID: 1205214-004BLFM	SampType: LFM	TestCode: 200.7	Units: mg/L	Prep Date: 5/9/2012	RunNo: 90796						
Client ID: CRCP-HOLWEGER-	Batch ID: R90796B	TestNo: E200.7		Analysis Date: 5/14/2012	SeqNo: 3057816						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	28.1	0.200	10.00	16.52	116	70	130				
Potassium	11.5	0.200	10.00	1.938	95.7	70	130				
Sodium	41.8	0.600	10.00	31.87	98.8	70	130				

Sample ID: 1205214-004BLFMD	SampType: LFMD	TestCode: 200.7	Units: mg/L	Prep Date: 5/9/2012	RunNo: 90796						
Client ID: CRCP-HOLWEGER-	Batch ID: R90796B	TestNo: E200.7		Analysis Date: 5/14/2012	SeqNo: 3057817						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	27.4	0.200	10.00	16.52	109	0	2000	28.10	2.49	20	
Potassium	11.3	0.200	10.00	1.938	93.3	0	2000	11.51	2.08	20	
Sodium	40.7	0.600	10.00	31.87	88.0	0	2000	41.76	2.64	20	

Sample ID: CCB3	SampType: CCB	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 90796						
Client ID: CCB	Batch ID: R90796B	TestNo: E200.7		Analysis Date: 5/14/2012	SeqNo: 3057819						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	< 0.200	0.200									
Magnesium	< 0.200	0.200									
Potassium	0.291	0.200									
Sodium	< 0.600	0.600									

Sample ID: IPC3	SampType: IPC	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 90796						
Client ID: ZZZZZZ	Batch ID: R90796B	TestNo: E200.7		Analysis Date: 5/14/2012	SeqNo: 3057820						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	108	0.200	100.0	0	108	90	110				
Magnesium	108	0.200	100.0	0	108	90	110				
Potassium	94.2	0.200	100.0	0	94.2	90	110				
Sodium	92.0	0.600	100.0	0	92.0	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90869A

Sample ID: LFB-30045		SampType: LFB		TestCode: 200.7		Units: mg/L		Prep Date: 5/11/2012		RunNo: 90869	
Client ID: ZZZZZZ		Batch ID: R90869A		TestNo: E200.7		Analysis Date: 5/16/2012		SeqNo: 3062559			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	10.9	0.200	10.00	0	109	85	115				
Magnesium	10.2	0.200	10.00	0	102	85	115				
Potassium	9.63	0.200	10.00	0	96.3	85	115				
Sodium	9.72	0.600	10.00	0	97.2	85	115				

Sample ID: LFB-30045		SampType: LFB		TestCode: 200.7		Units: mg/L		Prep Date: 5/11/2012		RunNo: 90869	
Client ID: ZZZZZZ		Batch ID: R90869A		TestNo: E200.7		Analysis Date: 5/16/2012		SeqNo: 3062560			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	10.8	0.200	10.00	0	108	0	2000	10.93	1.52	20	
Magnesium	10.0	0.200	10.00	0	100	0	2000	10.19	1.79	20	
Potassium	9.41	0.200	10.00	0	94.1	0	2000	9.632	2.28	20	
Sodium	9.52	0.600	10.00	0	95.2	0	2000	9.715	1.98	20	

Sample ID: 1205190-002ALFM		SampType: LFM		TestCode: 200.7		Units: mg/L		Prep Date: 5/11/2012		RunNo: 90869	
Client ID: ZZZZZZ		Batch ID: R90869A		TestNo: E200.7		Analysis Date: 5/16/2012		SeqNo: 3062564			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	24.9	0.200	10.00	14.69	102	70	130				
Potassium	20.6	0.200	10.00	9.776	109	70	130				

Sample ID: 1205190-002ALFMD		SampType: LFMD		TestCode: 200.7		Units: mg/L		Prep Date: 5/11/2012		RunNo: 90869	
Client ID: ZZZZZZ		Batch ID: R90869A		TestNo: E200.7		Analysis Date: 5/16/2012		SeqNo: 3062565			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	24.3	0.200	10.00	14.69	95.6	0	2000	24.89	2.60	20	
Potassium	20.2	0.200	10.00	9.776	104	0	2000	20.65	2.07	20	

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90869A

Sample ID: CCB2	SampType: CCB	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 90869						
Client ID: CCB	Batch ID: R90869A	TestNo: E200.7		Analysis Date: 5/16/2012	SeqNo: 3062569						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	< 0.200	0.200									
Magnesium	< 0.200	0.200									
Potassium	< 0.200	0.200									
Sodium	< 0.600	0.600									

Sample ID: IPC2	SampType: IPC	TestCode: 200.7	Units: mg/L	Prep Date:	RunNo: 90869						
Client ID: ZZZZZZ	Batch ID: R90869A	TestNo: E200.7		Analysis Date: 5/16/2012	SeqNo: 3062570						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	103	0.200	100.0	0	103	90	110				
Magnesium	99.9	0.200	100.0	0	99.9	90	110				
Potassium	101	0.200	100.0	0	101	90	110				
Sodium	96.3	0.600	100.0	0	96.3	90	110				

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

CLIENT: URS Corporation
Work Order: 1205214
Project: Colorado River Corridor - Groundwater

ANALYTICAL QC SUMMARY REPORT

BatchID: R90883

Sample ID: 1205214-004ADUP	SampType: DUP	TestCode: ALK	Units: mg/L CaCO3	Prep Date:	RunNo: 90883						
Client ID: CRCP-HOLWEGER-	Batch ID: R90883	TestNo: SM2320 B		Analysis Date: 5/16/2012	SeqNo: 3063076						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	291	10						287.0	1.38	0	A
Alkalinity, Carbonate (As CaCO3)	< 10	10						0	0	0	A

Qualifiers:

A	Not Available for Accreditation	B	Analyte Detected in Method Blank
H	Holding Time Exceeded	N	Not Accredited
S	Spike Recovery Outside Recovery Limits	X	Value Exceeds Maximum Contaminant Level (MCL)

E	Value Above Quantitation Range
R	RPD Outside Recovery Limits

 Environmental Laboratory Services The Solution Lab	LCRA ENVIRONMENTAL LABORATORY SERVICES (ELS) CHAIN OF CUSTODY RECORD				Target Due Date: <u>5/22/11</u> Work Order No.: <u>1205214</u> COC No.: <u>112643</u> Page <u>1</u> of <u>1</u>	
	NOTE: Relinquishing sample(s) to ELS obligates the submitter to all Standard Terms and Conditions stated on the back of this form.					
Results To: <u>Kevin Pasternak</u> <u>9400 Amberglens Blvd Austin, TX 78729</u> NAME ADDRESS CITY STATE ZIP		Sampled By: <u>K. Nguyen, A. Potts</u>				
Bill To: <u>Travis County CRCP</u> NAME ADDRESS CITY STATE ZIP		PO No.: _____				
Phone No.: <u>512 454 717</u> Fax No.: <u>512 454 8807</u> Method of Transport: <u>Hand Delivery</u> TAT Requested: <u>Normal</u> Working days _____ E-mail: <u>kevin.pasternak@els.com</u>						
Relinquished By: <u>[Signature]</u> Date: <u>5/8/12</u> Time: <u>1145</u> Received By: _____ Date: _____ Time: _____ Relinquished By: _____ Date: _____ Time: _____						
Report Requirements ☐ Hardcopy ☒ E-mail ☐ Fax ☐ EDD (Generic)		Regulatory Requirements ☒ None ☐ NELAP		Received at ELS By: <u>[Signature]</u> Date: <u>5/8</u> Time: <u>1145</u> ☒ Received on Ice Temp: <u>2.3</u> °C (°F) <u>38</u> Login Review: <u>[Signature]</u> Date: <u>5/8/12</u>		
				ELS Mgmt. Approval for RUSH: _____ Surcharge for RUSH: _____ %		

ELS ID:	SAMPLE DESCRIPTION Custody Seals (circle): Cooler Bottles <u>None</u>	MATRIX	SAMPLE COLLECTION		CONTAINERS			ANALYSIS REQUESTED - Place an "X" in the box below to indicate request.										PRESERVATIVES	pH		
			DATE	TIME	NUMBER	SIZE	TYPE	E300.1	E200.2	E200.3	E200.4	E200.5	E200.6	E200.7	E200.8	E200.9	E200.10			E200.11	E200.12
001	CRCP-ATF1-060	W	5/8/12	0905	4	Var	Plast	X	X	X	X									HNO ₃ , H ₂ SO ₄	
002	CRCP-NTNW2-060			0955	4			X	X	X	X										
003	CRCP-NTNW2-061			0955	4			X	X	X	X										
004	CRCP-Holweger-063			1035	5			X	X	X	X										
005	CRCP-221049-060			1110	4			X	X	X	X										

Special Instructions: MS/MSD on CRCP-Holweger-063
 ELS Comments: _____

PM_{2.5} Gravimetric Analysis Results**Travis County**

Sample ID	Tare Analysis Date	Exposed Analysis Date	Maximum Exposed Transportation Temperature (°C)	Mass (mg)		
				Tare	Gross	Net
P0278501	10/10/11	11/15/11	14.0	141.022	141.099	0.077
P0278502	10/10/11	11/15/11	14.0	141.565	141.744	0.179
P0278503	10/10/11	11/15/11	14.0	139.923	140.000	0.077
P0278504	10/10/11	11/15/11	14.0	140.803	140.946	0.143
P0278509	10/10/11	11/15/11	14.0	140.256	140.261	0.005
P0279997	10/10/11	11/15/11	14.0	145.278	145.333	0.055
P0279998	10/10/11	11/15/11	14.0	146.520	146.722	0.202
P0279999	10/10/11	11/15/11	14.0	146.195	146.249	0.054
P0280000	10/10/11	11/15/11	14.0	146.427	146.541	0.114
P0280270	10/24/11	11/15/11	14.0	145.041	145.106	0.065
P0280271	10/24/11	11/15/11	14.0	144.581	144.655	0.074
P0280272	10/24/11	11/15/11	14.0	148.950	149.109	0.159
P0280273	10/24/11	11/15/11	14.0	146.513	146.526	0.013
P0280274	10/24/11	11/15/11	14.0	143.630	143.683	0.053
P0280275	10/24/11	11/15/11	14.0	145.990	146.188	0.198
P0280276	10/24/11	11/15/11	14.0	145.819	145.903	0.084
P0280277	10/24/11	11/15/11	14.0	145.810	145.973	0.163
P0280278	10/24/11	11/15/11	14.0	143.527	143.625	0.098
P0280279	10/24/11	11/15/11	14.0	145.729	145.935	0.206
P0280280	10/24/11	11/15/11	14.0	143.552	143.600	0.048
P0280281	10/24/11	11/15/11	14.0	144.247	144.358	0.111

Exposed Comments

TC1PM25102311005

TC2PM10102311006

TC3PM25102311007

TC4PM10102311008

TCB110411025-Trip blank

TC1PM25102011001

TC2PM10102011002

TC3PM25102011003

TC4PM10102011004

TC1PM25102911013

TC2PM25102911015

TC2PM10102911016

TC2PM10110411024

TC2PM25110411023

TC1PM10102911014

TC1PM25110111017

TC1PM10110111018

TC2PM25110111019

TC2PM10110111020

TC1PM25110411021-Torn

TC1PM10110411022

PM_{2.5} Gravimetric Analysis Results**Travis County**

Sample ID	Tare Analysis Date	Exposed Analysis Date	Maximum Exposed Transportation Temperature (°C)	Mass (mg)			Exposed Comments
				Tare	Gross	Net	
P0278505	10/10/11	11/17/11	25.0	141.827	141.885	0.058	TC1PM25102611009
P0278506	10/10/11	11/17/11	25.0	141.553	141.639	0.086	TC2PM10102611010
P0278507	10/10/11	11/17/11	25.0	139.691	139.750	0.059	TC3PM25102611011
P0278508	10/10/11	11/17/11	25.0	141.907	142.015	0.108	TC4PM10102611012

SampleID	LocationShippedTo	TareEquilDateTime	TareDate	TareCondAvg24HrTemp
P0278501	Travis County	10/7/2011	10/10/2011	21.2
P0278502	Travis County	10/7/2011	10/10/2011	21.2
P0278503	Travis County	10/7/2011	10/10/2011	21.2
P0278504	Travis County	10/7/2011	10/10/2011	21.2
P0278509	Travis County	10/7/2011	10/10/2011	21.2
P0279997	Travis County	10/7/2011	10/10/2011	21.2
P0279998	Travis County	10/7/2011	10/10/2011	21.2
P0279999	Travis County	10/7/2011	10/10/2011	21.2
P0280000	Travis County	10/7/2011	10/10/2011	21.2
P0280270	Travis County	10/21/2011	10/24/2011	21.3
P0280271	Travis County	10/21/2011	10/24/2011	21.3
P0280272	Travis County	10/21/2011	10/24/2011	21.3
P0280273	Travis County	10/21/2011	10/24/2011	21.3
P0280274	Travis County	10/21/2011	10/24/2011	21.3
P0280275	Travis County	10/21/2011	10/24/2011	21.3
P0280276	Travis County	10/21/2011	10/24/2011	21.3
P0280277	Travis County	10/21/2011	10/24/2011	21.3
P0280278	Travis County	10/21/2011	10/24/2011	21.3
P0280279	Travis County	10/21/2011	10/24/2011	21.3
P0280280	Travis County	10/21/2011	10/24/2011	21.3
P0280281	Travis County	10/21/2011	10/24/2011	21.3

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