

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Pleasanton  
1220 Quarry Lane  
Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-91267-2

Client Project/Site: Foothill Expressway Operational Improvem

For:  
County of Santa Clara  
2310 N. First Street  
San Jose, California 95131-1040

Attn: Chris Ellsbury



Authorized for release by:  
3/1/2019 3:06:39 PM

Afsaneh Salimpour, Senior Project Manager  
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### LINKS

Review your project  
results through  
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[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Definitions/Glossary

Client: County of Santa Clara  
Project/Site: Foothill Expressway Operational Improvem

TestAmerica Job ID: 720-91267-2

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: County of Santa Clara  
Project/Site: Foothill Expressway Operational Improvem

TestAmerica Job ID: 720-91267-2

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**Job ID: 720-91267-2**

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**Laboratory: TestAmerica Pleasanton**

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**Narrative**

**Job Narrative**  
**720-91267-2**

**Comments**

No additional comments.

**Receipt**

The sample was received on 2/8/2019 12:25 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5° C.

**Metals**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: County of Santa Clara  
Project/Site: Foothill Expressway Operational Improvem

TestAmerica Job ID: 720-91267-2

**Client Sample ID: FEM020719**

**Lab Sample ID: 720-91267-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.29		0.10		mg/L	1		6010B	STLC Citrate

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This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: County of Santa Clara  
 Project/Site: Foothill Expressway Operational Improvem

TestAmerica Job ID: 720-91267-2

**Client Sample ID: FEM020719**

**Lab Sample ID: 720-91267-1**

**Date Collected: 02/07/19 11:55**

**Matrix: Solid**

**Date Received: 02/08/19 12:25**

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		02/27/19 09:08	02/27/19 19:29	1

**Method: 6010B - Metals (ICP) - STLC Citrate**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.29		0.10		mg/L		03/01/19 08:21	03/01/19 11:32	1

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# QC Sample Results

Client: County of Santa Clara  
 Project/Site: Foothill Expressway Operational Improvem

TestAmerica Job ID: 720-91267-2

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 720-261047/1-A**  
**Matrix: Solid**  
**Analysis Batch: 261115**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 261047**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.010		mg/L		02/27/19 09:08	02/27/19 18:06	1

**Lab Sample ID: LCS 720-261047/2-A**  
**Matrix: Solid**  
**Analysis Batch: 261115**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 261047**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	1.00	0.988		mg/L		99	80 - 120

**Lab Sample ID: MB 720-261184/1-A**  
**Matrix: Solid**  
**Analysis Batch: 261208**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 261184**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.010		mg/L		03/01/19 08:21	03/01/19 10:58	1

**Lab Sample ID: LCS 720-261184/2-A**  
**Matrix: Solid**  
**Analysis Batch: 261208**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 261184**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	1.00	0.919		mg/L		92	80 - 120

**Lab Sample ID: LB 720-260878/1-B**  
**Matrix: Solid**  
**Analysis Batch: 261115**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 261047**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		02/27/19 09:08	02/27/19 18:15	1

**Lab Sample ID: LB4 720-260978/1-B**  
**Matrix: Solid**  
**Analysis Batch: 261208**

**Client Sample ID: Method Blank**  
**Prep Type: STLC Citrate**  
**Prep Batch: 261184**

Analyte	LB4 Result	LB4 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		03/01/19 08:21	03/01/19 11:07	1

**Lab Sample ID: 720-91267-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 261208**

**Client Sample ID: FEM020719**  
**Prep Type: STLC Citrate**  
**Prep Batch: 261184**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.29		10.0	8.48		mg/L		82	75 - 125

**Lab Sample ID: 720-91267-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 261208**

**Client Sample ID: FEM020719**  
**Prep Type: STLC Citrate**  
**Prep Batch: 261184**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	0.29		10.0	8.51		mg/L		82	75 - 125	0	20

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# QC Sample Results

Client: County of Santa Clara  
Project/Site: Foothill Expressway Operational Improvem

TestAmerica Job ID: 720-91267-2

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# QC Association Summary

Client: County of Santa Clara  
 Project/Site: Foothill Expressway Operational Improvem

TestAmerica Job ID: 720-91267-2

## Metals

### Leach Batch: 260878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91267-1	FEM020719	TCLP	Solid	1311	
LB 720-260878/1-B	Method Blank	TCLP	Solid	1311	

### Leach Batch: 260978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91267-1	FEM020719	STLC Citrate	Solid	CA WET Citrate	
LB4 720-260978/1-B	Method Blank	STLC Citrate	Solid	CA WET Citrate	
720-91267-1 MS	FEM020719	STLC Citrate	Solid	CA WET Citrate	
720-91267-1 MSD	FEM020719	STLC Citrate	Solid	CA WET Citrate	

### Prep Batch: 261047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91267-1	FEM020719	TCLP	Solid	3010A	260878
LB 720-260878/1-B	Method Blank	TCLP	Solid	3010A	260878
MB 720-261047/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 720-261047/2-A	Lab Control Sample	Total/NA	Solid	3010A	

### Analysis Batch: 261115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91267-1	FEM020719	TCLP	Solid	6010B	261047
LB 720-260878/1-B	Method Blank	TCLP	Solid	6010B	261047
MB 720-261047/1-A	Method Blank	Total/NA	Solid	6010B	261047
LCS 720-261047/2-A	Lab Control Sample	Total/NA	Solid	6010B	261047

### Prep Batch: 261184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91267-1	FEM020719	STLC Citrate	Solid	3005A	260978
LB4 720-260978/1-B	Method Blank	STLC Citrate	Solid	3005A	260978
MB 720-261184/1-A	Method Blank	Total Recoverable	Solid	3005A	
LCS 720-261184/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
720-91267-1 MS	FEM020719	STLC Citrate	Solid	3005A	260978
720-91267-1 MSD	FEM020719	STLC Citrate	Solid	3005A	260978

### Analysis Batch: 261208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91267-1	FEM020719	STLC Citrate	Solid	6010B	261184
LB4 720-260978/1-B	Method Blank	STLC Citrate	Solid	6010B	261184
MB 720-261184/1-A	Method Blank	Total Recoverable	Solid	6010B	261184
LCS 720-261184/2-A	Lab Control Sample	Total Recoverable	Solid	6010B	261184
720-91267-1 MS	FEM020719	STLC Citrate	Solid	6010B	261184
720-91267-1 MSD	FEM020719	STLC Citrate	Solid	6010B	261184

# Lab Chronicle

Client: County of Santa Clara  
Project/Site: Foothill Expressway Operational Improvem

TestAmerica Job ID: 720-91267-2

**Client Sample ID: FEM020719**

**Lab Sample ID: 720-91267-1**

**Date Collected: 02/07/19 11:55**

**Matrix: Solid**

**Date Received: 02/08/19 12:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			260978	02/26/19 12:25	SUN	TAL PLS
STLC Citrate	Prep	3005A			261184	03/01/19 08:21	MAA	TAL PLS
STLC Citrate	Analysis	6010B		1	261208	03/01/19 11:32	OBI	TAL PLS
TCLP	Leach	1311			260878	02/26/19 16:08	GLL	TAL PLS
TCLP	Prep	3010A			261047	02/27/19 09:08	MAA	TAL PLS
TCLP	Analysis	6010B		1	261115	02/27/19 19:29	MAG	TAL PLS

**Laboratory References:**

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



# Accreditation/Certification Summary

Client: County of Santa Clara  
Project/Site: Foothill Expressway Operational Improvem

TestAmerica Job ID: 720-91267-2

## Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
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# Method Summary

Client: County of Santa Clara  
Project/Site: Foothill Expressway Operational Improvem

TestAmerica Job ID: 720-91267-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL PLS
1311	TCLP Extraction	SW846	TAL PLS
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PLS
3010A	Preparation, Total Metals	SW846	TAL PLS
CA WET Citrate	California - Waste Extraction Test with Citrate Leach	CA-WET	TAL PLS

**Protocol References:**

CA-WET = California Waste Extraction Test, from Title 22

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



# Sample Summary

Client: County of Santa Clara  
Project/Site: Foothill Expressway Operational Improvem

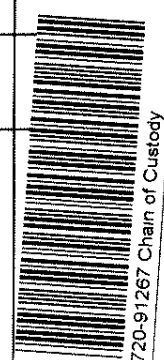
TestAmerica Job ID: 720-91267-2

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-91267-1	FEM020719	Solid	02/07/19 11:55	02/08/19 12:25

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<b>Client Contact</b> Santa Clara County Roads and Airports Department 1505 Schallenberger Road San Jose, CA 95131 (408) 690-9190 (408) 297-0530 Project Name: Foothill Expressway Operational Improvements Site: Foothill Expressway at San Antonio Road & El Monte Ave P O # CW2227585 (Service Agreement #)		<b>Project Manager: Elisbury</b> Tel/Fax: _____ Analysis Turnaround Time Calendar (C) or Work Days (W) <u>5</u> work days TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		<b>Site Contact:</b> Date: February 7, 2019 Carrier: _____ Job No _____ SDG No. _____ Sample Specific Notes If Lead or Chromium TTH C exceeds _____ 50 mg/kg then run STL C If Pb or Cr _____ TTLC exceeds 100 mg/kg then run _____ then run TCLP _____		<b>Lab Contact:</b> CAM 17 TTLC VOCs _____ SVOCs _____ Pesticides _____ PCBs _____ TPH - m/diesel (with SG cleanup) _____ TPH - Gasoline _____ pH _____ Identifiability _____	
<b>Sample Identification</b> FEM020719  720-91267 Chain of Custody		Sample Date: 2/7/2019 11:55 AM Sample Time: 11:55 AM Sample Type: Soil Matrix: _____ # of Cont: 2		Filtered Sample CAM 17 TTLC VOCs _____ SVOCs _____ Pesticides _____ PCBs _____ TPH - m/diesel (with SG cleanup) _____ TPH - Gasoline _____ pH _____ Identifiability _____			
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other Possible Hazard Identification <input type="checkbox"/> Non-hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements & Comments: Samples taken at depth of 12-13 inches Median west of San Antonio Road			
Relinquished by: _____ Relinquished by: James G. Lavender Relinquished by: _____		Company: FTA Company: TAPLS Company: _____		Date/Time: 2/8/19 11:00 Date/Time: 2/8/19 11:00 Date/Time: 2/8/19 12:25			

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## Login Sample Receipt Checklist

Client: County of Santa Clara

Job Number: 720-91267-2

**Login Number: 91267**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Arauz, Dennis**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	