

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

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Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-91267-1

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:

2/15/2019 4:36:53 PM

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*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.*

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



# Table of Contents

|                                  |    |
|----------------------------------|----|
| Cover Page . . . . .             | 1  |
| Table of Contents . . . . .      | 2  |
| Definitions/Glossary . . . . .   | 3  |
| Case Narrative . . . . .         | 4  |
| Detection Summary . . . . .      | 5  |
| Client Sample Results . . . . .  | 6  |
| Surrogate Summary . . . . .      | 11 |
| QC Sample Results . . . . .      | 13 |
| QC Association Summary . . . . . | 27 |
| Lab Chronicle . . . . .          | 30 |
| Certification Summary . . . . .  | 31 |
| Method Summary . . . . .         | 32 |
| Sample Summary . . . . .         | 33 |
| Chain of Custody . . . . .       | 34 |
| Receipt Checklists . . . . .     | 35 |

# Definitions/Glossary

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

TestAmerica Job ID: 720-91267-1

## Qualifiers

### Metals

| Qualifier | Qualifier Description   |
|-----------|---|
| F1        | MS and/or MSD Recovery is outside acceptance limits.  |
| 4         | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|---|
| α              | 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: 720-91267-1

**Job ID: 720-91267-1**

**Laboratory: TestAmerica Pleasanton**

## Narrative

### Job Narrative 720-91267-1

#### 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.

#### GC/MS VOA

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-260268 and analytical batch 720-260260 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

#### GC/MS Semi VOA

Method(s) 8270C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-260039 and analytical batch 720-260273 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270C: The continuing calibration verification (CCV) associated with batch 720-260273 recovered above the upper control limit for 4-Nitroaniline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCV 720-260273/4).

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

#### GC Semi VOA

Method(s) 8082: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-260139 and analytical batch 720-260263 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: FEM020719 (720-91267-1), (LCS 720-260139/2-A) and (MB 720-260139/1-A).

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

#### Metals

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-260100 and analytical batch 720-260330 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-260330 was outside control limits for Barium-37%, Cobalt-33%, Chromium-41%, Nickel-33%, Vanadium-37%: (720-91267-A-1-D SD).

Method(s) 6010B: The following sample was diluted due to the abundance of non-target analytes: FEM020719 (720-91267-1). Elevated reporting limits (RLs) are provided.

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

#### Organic Prep

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

# Detection Summary

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

TestAmerica Job ID: 720-91267-1

**Client Sample ID: FEM020719**

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

| Analyte                         | Result | Qualifier | RL    | MDL | Unit  | Dil Fac | D | Method | Prep Type             |
|---------------------------------|--------|-----------|-------|-----|-------|---------|---|--------|-----------------------|
| Diesel Range Organics [C10-C28] | 2.9    |           | 1.9   |     | mg/Kg | 1       |   | 8015B  | Silica Gel<br>Cleanup |
| Arsenic                         | 3.5    |           | 3.2   |     | mg/Kg | 4       |   | 6010B  | Total/NA              |
| Barium                          | 140    |           | 1.6   |     | mg/Kg | 4       |   | 6010B  | Total/NA              |
| Beryllium                       | 1.3    |           | 0.32  |     | mg/Kg | 4       |   | 6010B  | Total/NA              |
| Chromium                        | 190    |           | 1.6   |     | mg/Kg | 4       |   | 6010B  | Total/NA              |
| Cobalt                          | 32     |           | 0.63  |     | mg/Kg | 4       |   | 6010B  | Total/NA              |
| Copper                          | 61     |           | 4.8   |     | mg/Kg | 4       |   | 6010B  | Total/NA              |
| Lead                            | 11     |           | 1.6   |     | mg/Kg | 4       |   | 6010B  | Total/NA              |
| Nickel                          | 130    |           | 1.6   |     | mg/Kg | 4       |   | 6010B  | Total/NA              |
| Vanadium                        | 150    |           | 1.6   |     | mg/Kg | 4       |   | 6010B  | Total/NA              |
| Zinc                            | 71     |           | 4.8   |     | mg/Kg | 4       |   | 6010B  | Total/NA              |
| Mercury                         | 0.036  |           | 0.016 |     | mg/Kg | 1       |   | 7471A  | Total/NA              |

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

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

TestAmerica Job ID: 720-91267-1

**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: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Methyl tert-butyl ether     | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Acetone                     | ND     |           | 47  |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Benzene                     | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Dichlorobromomethane        | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Bromobenzene                | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Chlorobromomethane          | ND     |           | 19  |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Bromoform                   | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Bromomethane                | ND     |           | 9.4 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 2-Butanone (MEK)            | ND     |           | 47  |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| n-Butylbenzene              | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| sec-Butylbenzene            | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| tert-Butylbenzene           | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Carbon disulfide            | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Carbon tetrachloride        | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Chlorobenzene               | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Chloroethane                | ND     |           | 9.4 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Chloroform                  | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Chloromethane               | ND     |           | 9.4 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 2-Chlorotoluene             | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 4-Chlorotoluene             | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Chlorodibromomethane        | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,3-Dichloropropane         | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,1-Dichloropropane         | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 9.4 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Ethylene Dibromide          | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Dibromomethane              | ND     |           | 9.4 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Dichlorodifluoromethane     | ND     |           | 9.4 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,1-Dichloroethane          | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,2-Dichloroethane          | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,1-Dichloroethene          | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,2-Dichloropropane         | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Ethylbenzene                | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Hexachlorobutadiene         | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 2-Hexanone                  | ND     |           | 47  |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Isopropylbenzene            | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 4-Isopropyltoluene          | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Methylene Chloride          | ND     |           | 9.4 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 47  |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Naphthalene                 | ND     |           | 9.4 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| N-Propylbenzene             | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Styrene                     | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,1,1,2-Tetrachloroethane   | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |

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# Client Sample Results

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

TestAmerica Job ID: 720-91267-1

**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: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte                                  | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| 1,1,2,2-Tetrachloroethane                | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Tetrachloroethene                        | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Toluene                                  | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,2,3-Trichlorobenzene                   | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,2,4-Trichlorobenzene                   | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,1,1-Trichloroethane                    | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,1,2-Trichloroethane                    | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Trichloroethene                          | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Trichlorofluoromethane                   | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,2,3-Trichloropropane                   | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane    | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,2,4-Trimethylbenzene                   | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,3,5-Trimethylbenzene                   | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Vinyl acetate                            | ND     |           | 19  |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Vinyl chloride                           | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Xylenes, Total                           | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 2,2-Dichloropropane                      | ND     |           | 4.7 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Gasoline Range Organics (GRO)<br>-C4-C12 | ND     |           | 240 |     | ug/Kg |   | 02/13/19 09:29 | 02/13/19 14:47 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene         | 102       |           | 45 - 131 | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| 1,2-Dichloroethane-d4 (Surr) | 113       |           | 60 - 140 | 02/13/19 09:29 | 02/13/19 14:47 | 1       |
| Toluene-d8 (Surr)            | 101       |           | 58 - 140 | 02/13/19 09:29 | 02/13/19 14:47 | 1       |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte                    | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Phenol                     | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Bis(2-chloroethyl)ether    | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2-Chlorophenol             | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 1,3-Dichlorobenzene        | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 1,4-Dichlorobenzene        | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Benzyl alcohol             | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 1,2-Dichlorobenzene        | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2-Methylphenol             | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Methylphenol, 3 & 4        | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| N-Nitrosodi-n-propylamine  | ND     |           | 130 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Hexachloroethane           | ND     |           | 130 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Nitrobenzene               | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Isophorone                 | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2-Nitrophenol              | ND     |           | 130 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2,4-Dimethylphenol         | ND     |           | 130 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Bis(2-chloroethoxy)methane | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2,4-Dichlorophenol         | ND     |           | 320 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 1,2,4-Trichlorobenzene     | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Naphthalene                | ND     |           | 130 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 4-Chloroaniline            | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Hexachlorobutadiene        | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 4-Chloro-3-methylphenol    | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2-Methylnaphthalene        | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-91267-1

**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: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Hexachlorocyclopentadiene   | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2,4,6-Trichlorophenol       | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2,4,5-Trichlorophenol       | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2-Chloronaphthalene         | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2-Nitroaniline              | ND     |           | 320 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Dimethyl phthalate          | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Acenaphthylene              | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 3-Nitroaniline              | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Acenaphthene                | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2,4-Dinitrophenol           | ND     |           | 640 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 4-Nitrophenol               | ND     |           | 320 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Dibenzofuran                | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2,4-Dinitrotoluene          | ND     |           | 130 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2,6-Dinitrotoluene          | ND     |           | 130 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Diethyl phthalate           | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 4-Chlorophenyl phenyl ether | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Fluorene                    | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 4-Nitroaniline              | ND     |           | 320 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2-Methyl-4,6-dinitrophenol  | ND     |           | 320 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| N-Nitrosodiphenylamine      | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 4-Bromophenyl phenyl ether  | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Hexachlorobenzene           | ND     |           | 130 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Pentachlorophenol           | ND     |           | 320 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Phenanthrene                | ND     |           | 130 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Anthracene                  | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Di-n-butyl phthalate        | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Fluoranthene                | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Pyrene                      | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Butyl benzyl phthalate      | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 3,3'-Dichlorobenzidine      | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Benzo[a]anthracene          | ND     |           | 320 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Bis(2-ethylhexyl) phthalate | ND     |           | 320 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Chrysene                    | ND     |           | 130 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Di-n-octyl phthalate        | ND     |           | 160 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Benzo[b]fluoranthene        | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Benzo[a]pyrene              | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Benzo[k]fluoranthene        | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Indeno[1,2,3-cd]pyrene      | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Benzo[g,h,i]perylene        | ND     |           | 130 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Benzoic acid                | ND     |           | 320 |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Azobenzene                  | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Dibenz(a,h)anthracene       | ND     |           | 65  |     | ug/Kg |   | 02/11/19 11:04 | 02/15/19 02:47 | 1       |

| Surrogate        | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|----------------|----------------|---------|
| Nitrobenzene-d5  | 74        |           | 21 - 98  | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2-Fluorobiphenyl | 83        |           | 30 - 112 | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Terphenyl-d14    | 126       |           | 59 - 134 | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| 2-Fluorophenol   | 75        |           | 28 - 98  | 02/11/19 11:04 | 02/15/19 02:47 | 1       |
| Phenol-d5        | 73        |           | 23 - 101 | 02/11/19 11:04 | 02/15/19 02:47 | 1       |

TestAmerica Pleasanton



# Client Sample Results

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

TestAmerica Job ID: 720-91267-1

**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: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Surrogate            | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol | 79        |           | 37 - 114 | 02/11/19 11:04 | 02/15/19 02:47 | 1       |

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

| Analyte                            | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Diesel Range Organics [C10-C28]    | 2.9    |           | 1.9 |     | mg/Kg |   | 02/11/19 11:10 | 02/14/19 18:50 | 1       |
| Motor Oil Range Organics [C24-C36] | ND     |           | 48  |     | mg/Kg |   | 02/11/19 11:10 | 02/14/19 18:50 | 1       |

| Surrogate          | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------------|-----------|-----------|----------|----------------|----------------|---------|
| p-Terphenyl        | 94        |           | 38 - 148 | 02/11/19 11:10 | 02/14/19 18:50 | 1       |
| Capric Acid (Surr) | 0         |           | 0 - 1    | 02/11/19 11:10 | 02/14/19 18:50 | 1       |

## Method: 8081A - Organochlorine Pesticides (GC)

| Analyte               | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Aldrin                | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Dieldrin              | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Endrin aldehyde       | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Endrin                | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Endrin ketone         | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Heptachlor            | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Heptachlor epoxide    | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| 4,4'-DDT              | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| 4,4'-DDE              | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| 4,4'-DDD              | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Endosulfan I          | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Endosulfan II         | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| alpha-BHC             | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| beta-BHC              | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| gamma-BHC (Lindane)   | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| delta-BHC             | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Endosulfan sulfate    | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Methoxychlor          | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Toxaphene             | ND     |           | 39  |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| Chlordane (technical) | ND     |           | 39  |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| cis-Chlordane         | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| trans-Chlordane       | ND     |           | 1.9 |     | ug/Kg |   | 02/11/19 08:56 | 02/15/19 10:30 | 1       |

| Surrogate              | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene   | 73        |           | 21 - 145 | 02/11/19 08:56 | 02/15/19 10:30 | 1       |
| DCB Decachlorobiphenyl | 100       |           | 21 - 136 | 02/11/19 08:56 | 02/15/19 10:30 | 1       |

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte  | Result | Qualifier | RL | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|----|-----|-------|---|----------------|----------------|---------|
| PCB-1016 | ND     |           | 48 |     | ug/Kg |   | 02/11/19 11:15 | 02/14/19 22:27 | 1       |
| PCB-1221 | ND     |           | 48 |     | ug/Kg |   | 02/11/19 11:15 | 02/14/19 22:27 | 1       |
| PCB-1232 | ND     |           | 48 |     | ug/Kg |   | 02/11/19 11:15 | 02/14/19 22:27 | 1       |
| PCB-1242 | ND     |           | 48 |     | ug/Kg |   | 02/11/19 11:15 | 02/14/19 22:27 | 1       |
| PCB-1248 | ND     |           | 48 |     | ug/Kg |   | 02/11/19 11:15 | 02/14/19 22:27 | 1       |
| PCB-1254 | ND     |           | 48 |     | ug/Kg |   | 02/11/19 11:15 | 02/14/19 22:27 | 1       |
| PCB-1260 | ND     |           | 48 |     | ug/Kg |   | 02/11/19 11:15 | 02/14/19 22:27 | 1       |

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-91267-1

**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**

| Surrogate              | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene   | 79        |           | 45 - 132 | 02/11/19 11:15 | 02/14/19 22:27 | 1       |
| DCB Decachlorobiphenyl | 129       |           | 42 - 146 | 02/11/19 11:15 | 02/14/19 22:27 | 1       |

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

| Analyte          | Result     | Qualifier | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------|------------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Antimony         | ND         | F1        | 1.6  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| <b>Arsenic</b>   | <b>3.5</b> |           | 3.2  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| <b>Barium</b>    | <b>140</b> |           | 1.6  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| <b>Beryllium</b> | <b>1.3</b> |           | 0.32 |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| Cadmium          | ND         |           | 0.40 |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| <b>Chromium</b>  | <b>190</b> |           | 1.6  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| <b>Cobalt</b>    | <b>32</b>  |           | 0.63 |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| <b>Copper</b>    | <b>61</b>  |           | 4.8  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| <b>Lead</b>      | <b>11</b>  |           | 1.6  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| Molybdenum       | ND         |           | 1.6  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| <b>Nickel</b>    | <b>130</b> |           | 1.6  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| Selenium         | ND         |           | 3.2  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| Silver           | ND         |           | 0.79 |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| Thallium         | ND         |           | 1.6  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| <b>Vanadium</b>  | <b>150</b> |           | 1.6  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |
| <b>Zinc</b>      | <b>71</b>  |           | 4.8  |     | mg/Kg |   | 02/09/19 11:11 | 02/13/19 18:19 | 4       |

**Method: 7471A - Mercury (CVAA)**

| Analyte        | Result       | Qualifier | RL    | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------|--------------|-----------|-------|-----|-------|---|----------------|----------------|---------|
| <b>Mercury</b> | <b>0.036</b> |           | 0.016 |     | mg/Kg |   | 02/13/19 18:35 | 02/14/19 16:44 | 1       |

# Surrogate Summary

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

TestAmerica Job ID: 720-91267-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID     | Client Sample ID       | BFB<br>(45-131) | DCA<br>(60-140) | TOL<br>(58-140) |
|-------------------|------------------------|-----------------|-----------------|-----------------|
| 720-91267-1       | FEM020719              | 102             | 113             | 101             |
| LCS 720-260260/4  | Lab Control Sample     | 106             | 113             | 106             |
| LCS 720-260260/6  | Lab Control Sample     | 108             | 113             | 105             |
| LCSD 720-260260/5 | Lab Control Sample Dup | 106             | 113             | 107             |
| LCSD 720-260260/7 | Lab Control Sample Dup | 105             | 112             | 104             |
| MB 720-260260/8   | Method Blank           | 105             | 112             | 103             |

#### Surrogate Legend

BFB = 4-Bromofluorobenzene  
 DCA = 1,2-Dichloroethane-d4 (Surr)  
 TOL = Toluene-d8 (Surr)

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID   | NBZ<br>(21-98) | FBP<br>(30-112) | TPHL<br>(59-134) | 2FP<br>(28-98) | PHL<br>(23-101) | TBP<br>(37-114) |
|--------------------|--------------------|----------------|-----------------|------------------|----------------|-----------------|-----------------|
| 720-91267-1        | FEM020719          | 74             | 83              | 126              | 75             | 73              | 79              |
| LCS 720-260039/2-A | Lab Control Sample | 81             | 80              | 92               | 64             | 62              | 78              |
| MB 720-260039/1-A  | Method Blank       | 74             | 77              | 115              | 65             | 62              | 72              |

#### Surrogate Legend

NBZ = Nitrobenzene-d5  
 FBP = 2-Fluorobiphenyl  
 TPHL = Terphenyl-d14  
 2FP = 2-Fluorophenol  
 PHL = Phenol-d5  
 TBP = 2,4,6-Tribromophenol

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Silica Gel Cleanup

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID   | TPH1<br>(38-148) | NDA1<br>(0-1) |
|--------------------|--------------------|------------------|---------------|
| 720-91267-1        | FEM020719          | 94               | 0             |
| LCS 720-260128/2-A | Lab Control Sample | 121              |               |
| MB 720-260128/1-A  | Method Blank       | 104              | 0             |

#### Surrogate Legend

TPH = p-Terphenyl  
 NDA = Capric Acid (Surr)

# Surrogate Summary

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

TestAmerica Job ID: 720-91267-1

## Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | TCX1<br>(21-145) | DCBP2<br>(21-136) |
|---------------|------------------|------------------|-------------------|
| 720-91267-1   | FEM020719        | 73               | 100               |

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

## Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID   | TCX2<br>(21-145) | DCBP2<br>(21-136) |
|--------------------|--------------------|------------------|-------------------|
| LCS 720-260121/2-A | Lab Control Sample | 98               | 112               |
| MB 720-260121/1-A  | Method Blank       | 88               | 107               |

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID   | TCX1<br>(45-132) | DCBP1<br>(42-146) |
|--------------------|--------------------|------------------|-------------------|
| 720-91267-1        | FEM020719          | 79               | 129               |
| LCS 720-260139/2-A | Lab Control Sample | 69               | 66                |
| MB 720-260139/1-A  | Method Blank       | 67               | 70                |

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 720-260260/8**

**Matrix: Solid**

**Analysis Batch: 260260**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

| Analyte                     | MB Result | MB Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|-----|-------|---|----------|----------------|---------|
| Methyl tert-butyl ether     | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Acetone                     | ND        |              | 50  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Benzene                     | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Dichlorobromomethane        | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Bromobenzene                | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Chlorobromomethane          | ND        |              | 20  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Bromoform                   | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Bromomethane                | ND        |              | 10  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 2-Butanone (MEK)            | ND        |              | 50  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| n-Butylbenzene              | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| sec-Butylbenzene            | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| tert-Butylbenzene           | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Carbon disulfide            | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Carbon tetrachloride        | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Chlorobenzene               | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Chloroethane                | ND        |              | 10  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Chloroform                  | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Chloromethane               | ND        |              | 10  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 2-Chlorotoluene             | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 4-Chlorotoluene             | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Chlorodibromomethane        | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,2-Dichlorobenzene         | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,3-Dichlorobenzene         | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,4-Dichlorobenzene         | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,3-Dichloropropane         | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,1-Dichloropropene         | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND        |              | 10  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Ethylene Dibromide          | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Dibromomethane              | ND        |              | 10  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Dichlorodifluoromethane     | ND        |              | 10  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,1-Dichloroethane          | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,2-Dichloroethane          | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,1-Dichloroethene          | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| cis-1,2-Dichloroethene      | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| trans-1,2-Dichloroethene    | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,2-Dichloropropane         | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| cis-1,3-Dichloropropene     | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| trans-1,3-Dichloropropene   | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Ethylbenzene                | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Hexachlorobutadiene         | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 2-Hexanone                  | ND        |              | 50  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Isopropylbenzene            | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 4-Isopropyltoluene          | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Methylene Chloride          | ND        |              | 10  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND        |              | 50  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Naphthalene                 | ND        |              | 10  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| N-Propylbenzene             | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Styrene                     | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 720-260260/8**  
**Matrix: Solid**  
**Analysis Batch: 260260**

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

| Analyte                                  | MB Result | MB Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|--|-----------|--------------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane                | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,1,2,2-Tetrachloroethane                | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Tetrachloroethene                        | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Toluene                                  | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,2,3-Trichlorobenzene                   | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,2,4-Trichlorobenzene                   | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,1,1-Trichloroethane                    | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,1,2-Trichloroethane                    | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Trichloroethene                          | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Trichlorofluoromethane                   | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,2,3-Trichloropropane                   | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane    | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,2,4-Trimethylbenzene                   | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 1,3,5-Trimethylbenzene                   | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Vinyl acetate                            | ND        |              | 20  |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Vinyl chloride                           | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Xylenes, Total                           | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| 2,2-Dichloropropane                      | ND        |              | 5.0 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |
| Gasoline Range Organics (GRO)<br>-C4-C12 | ND        |              | 250 |     | ug/Kg |   |          | 02/13/19 11:15 | 1       |

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene         | 105          |              | 45 - 131 |          | 02/13/19 11:15 | 1       |
| 1,2-Dichloroethane-d4 (Surr) | 112          |              | 60 - 140 |          | 02/13/19 11:15 | 1       |
| Toluene-d8 (Surr)            | 103          |              | 58 - 140 |          | 02/13/19 11:15 | 1       |

**Lab Sample ID: LCS 720-260260/4**  
**Matrix: Solid**  
**Analysis Batch: 260260**

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

| Analyte                 | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|-------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Methyl tert-butyl ether | 50.0        | 54.2       |               | ug/Kg |   | 108  | 70 - 144     |
| Acetone                 | 250         | 241        |               | ug/Kg |   | 97   | 30 - 162     |
| Benzene                 | 50.0        | 49.7       |               | ug/Kg |   | 99   | 70 - 130     |
| Dichlorobromomethane    | 50.0        | 58.1       |               | ug/Kg |   | 116  | 70 - 140     |
| Bromobenzene            | 50.0        | 52.1       |               | ug/Kg |   | 104  | 70 - 130     |
| Chlorobromomethane      | 50.0        | 55.0       |               | ug/Kg |   | 110  | 70 - 130     |
| Bromoform               | 50.0        | 56.6       |               | ug/Kg |   | 113  | 59 - 158     |
| Bromomethane            | 50.0        | 53.5       |               | ug/Kg |   | 107  | 59 - 132     |
| 2-Butanone (MEK)        | 250         | 244        |               | ug/Kg |   | 98   | 59 - 159     |
| n-Butylbenzene          | 50.0        | 52.7       |               | ug/Kg |   | 105  | 70 - 142     |
| sec-Butylbenzene        | 50.0        | 51.8       |               | ug/Kg |   | 104  | 70 - 136     |
| tert-Butylbenzene       | 50.0        | 54.1       |               | ug/Kg |   | 108  | 70 - 130     |
| Carbon disulfide        | 50.0        | 48.3       |               | ug/Kg |   | 97   | 60 - 140     |
| Carbon tetrachloride    | 50.0        | 59.6       |               | ug/Kg |   | 119  | 70 - 142     |
| Chlorobenzene           | 50.0        | 52.5       |               | ug/Kg |   | 105  | 70 - 130     |
| Chloroethane            | 50.0        | 51.3       |               | ug/Kg |   | 103  | 65 - 130     |
| Chloroform              | 50.0        | 55.2       |               | ug/Kg |   | 110  | 77 - 127     |

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-260260/4  
 Matrix: Solid  
 Analysis Batch: 260260

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA

| Analyte                               | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|---------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Chloromethane                         | 50.0        | 45.6       |               | ug/Kg |   | 91   | 55 - 140     |
| 2-Chlorotoluene                       | 50.0        | 50.5       |               | ug/Kg |   | 101  | 70 - 138     |
| 4-Chlorotoluene                       | 50.0        | 50.2       |               | ug/Kg |   | 100  | 70 - 136     |
| Chlorodibromomethane                  | 50.0        | 58.4       |               | ug/Kg |   | 117  | 70 - 146     |
| 1,2-Dichlorobenzene                   | 50.0        | 51.5       |               | ug/Kg |   | 103  | 70 - 130     |
| 1,3-Dichlorobenzene                   | 50.0        | 51.9       |               | ug/Kg |   | 104  | 70 - 131     |
| 1,4-Dichlorobenzene                   | 50.0        | 50.4       |               | ug/Kg |   | 101  | 70 - 130     |
| 1,3-Dichloropropane                   | 50.0        | 51.9       |               | ug/Kg |   | 104  | 70 - 140     |
| 1,1-Dichloropropene                   | 50.0        | 53.1       |               | ug/Kg |   | 106  | 70 - 130     |
| 1,2-Dibromo-3-Chloropropane           | 50.0        | 46.4       |               | ug/Kg |   | 93   | 60 - 145     |
| Ethylene Dibromide                    | 50.0        | 52.5       |               | ug/Kg |   | 105  | 70 - 140     |
| Dibromomethane                        | 50.0        | 53.4       |               | ug/Kg |   | 107  | 70 - 139     |
| Dichlorodifluoromethane               | 50.0        | 48.5       |               | ug/Kg |   | 97   | 37 - 158     |
| 1,1-Dichloroethane                    | 50.0        | 51.9       |               | ug/Kg |   | 104  | 70 - 130     |
| 1,2-Dichloroethane                    | 50.0        | 59.2       |               | ug/Kg |   | 118  | 70 - 130     |
| 1,1-Dichloroethene                    | 50.0        | 51.8       |               | ug/Kg |   | 104  | 74 - 122     |
| cis-1,2-Dichloroethene                | 50.0        | 52.8       |               | ug/Kg |   | 106  | 70 - 138     |
| trans-1,2-Dichloroethene              | 50.0        | 52.1       |               | ug/Kg |   | 104  | 67 - 130     |
| 1,2-Dichloropropane                   | 50.0        | 50.9       |               | ug/Kg |   | 102  | 73 - 127     |
| cis-1,3-Dichloropropene               | 50.0        | 55.5       |               | ug/Kg |   | 111  | 68 - 147     |
| trans-1,3-Dichloropropene             | 50.0        | 55.7       |               | ug/Kg |   | 111  | 70 - 155     |
| Ethylbenzene                          | 50.0        | 52.6       |               | ug/Kg |   | 105  | 80 - 137     |
| Hexachlorobutadiene                   | 50.0        | 61.0       |               | ug/Kg |   | 122  | 70 - 132     |
| 2-Hexanone                            | 250         | 242        |               | ug/Kg |   | 97   | 62 - 158     |
| Isopropylbenzene                      | 50.0        | 56.5       |               | ug/Kg |   | 113  | 70 - 130     |
| 4-Isopropyltoluene                    | 50.0        | 53.8       |               | ug/Kg |   | 108  | 70 - 133     |
| Methylene Chloride                    | 50.0        | 52.6       |               | ug/Kg |   | 105  | 70 - 134     |
| 4-Methyl-2-pentanone (MIBK)           | 250         | 244        |               | ug/Kg |   | 97   | 60 - 160     |
| Naphthalene                           | 50.0        | 48.3       |               | ug/Kg |   | 97   | 60 - 147     |
| N-Propylbenzene                       | 50.0        | 51.6       |               | ug/Kg |   | 103  | 70 - 130     |
| Styrene                               | 50.0        | 56.6       |               | ug/Kg |   | 113  | 70 - 130     |
| 1,1,1,2-Tetrachloroethane             | 50.0        | 57.5       |               | ug/Kg |   | 115  | 70 - 130     |
| 1,1,1,2,2-Tetrachloroethane           | 50.0        | 45.2       |               | ug/Kg |   | 90   | 70 - 146     |
| Tetrachloroethene                     | 50.0        | 58.0       |               | ug/Kg |   | 116  | 70 - 132     |
| Toluene                               | 50.0        | 51.4       |               | ug/Kg |   | 103  | 75 - 120     |
| 1,2,3-Trichlorobenzene                | 50.0        | 54.6       |               | ug/Kg |   | 109  | 60 - 140     |
| 1,2,4-Trichlorobenzene                | 50.0        | 57.7       |               | ug/Kg |   | 115  | 60 - 140     |
| 1,1,1-Trichloroethane                 | 50.0        | 57.8       |               | ug/Kg |   | 116  | 70 - 130     |
| 1,1,2-Trichloroethane                 | 50.0        | 51.1       |               | ug/Kg |   | 102  | 70 - 130     |
| Trichloroethene                       | 50.0        | 54.8       |               | ug/Kg |   | 110  | 70 - 133     |
| Trichlorofluoromethane                | 50.0        | 58.3       |               | ug/Kg |   | 117  | 60 - 140     |
| 1,2,3-Trichloropropane                | 50.0        | 47.7       |               | ug/Kg |   | 95   | 70 - 146     |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 50.0        | 58.1       |               | ug/Kg |   | 116  | 60 - 140     |
| 1,2,4-Trimethylbenzene                | 50.0        | 54.5       |               | ug/Kg |   | 109  | 70 - 130     |
| 1,3,5-Trimethylbenzene                | 50.0        | 54.4       |               | ug/Kg |   | 109  | 70 - 131     |
| Vinyl acetate                         | 50.0        | 50.3       |               | ug/Kg |   | 101  | 38 - 176     |
| Vinyl chloride                        | 50.0        | 49.3       |               | ug/Kg |   | 99   | 58 - 125     |

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 720-260260/4**  
**Matrix: Solid**  
**Analysis Batch: 260260**

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

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|---------------------|-------------|------------|---------------|-------|---|------|--------------|
| m-Xylene & p-Xylene | 50.0        | 54.6       |               | ug/Kg |   | 109  | 70 - 146     |
| o-Xylene            | 50.0        | 56.0       |               | ug/Kg |   | 112  | 70 - 140     |
| 2,2-Dichloropropane | 50.0        | 58.1       |               | ug/Kg |   | 116  | 70 - 162     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene         | 106           |               | 45 - 131 |
| 1,2-Dichloroethane-d4 (Surr) | 113           |               | 60 - 140 |
| Toluene-d8 (Surr)            | 106           |               | 58 - 140 |

**Lab Sample ID: LCS 720-260260/6**  
**Matrix: Solid**  
**Analysis Batch: 260260**

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

| Analyte                                  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|--|-------------|------------|---------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)<br>-C4-C12 | 1000        | 997        |               | ug/Kg |   | 100  | 70 - 122     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene         | 108           |               | 45 - 131 |
| 1,2-Dichloroethane-d4 (Surr) | 113           |               | 60 - 140 |
| Toluene-d8 (Surr)            | 105           |               | 58 - 140 |

**Lab Sample ID: LCSD 720-260260/5**  
**Matrix: Solid**  
**Analysis Batch: 260260**

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

| Analyte                 | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Methyl tert-butyl ether | 50.0        | 51.7        |                | ug/Kg |   | 103  | 70 - 144     | 5   | 20        |
| Acetone                 | 250         | 232         |                | ug/Kg |   | 93   | 30 - 162     | 4   | 30        |
| Benzene                 | 50.0        | 48.7        |                | ug/Kg |   | 97   | 70 - 130     | 2   | 20        |
| Dichlorobromomethane    | 50.0        | 56.7        |                | ug/Kg |   | 113  | 70 - 140     | 2   | 20        |
| Bromobenzene            | 50.0        | 51.2        |                | ug/Kg |   | 102  | 70 - 130     | 2   | 20        |
| Chlorobromomethane      | 50.0        | 53.6        |                | ug/Kg |   | 107  | 70 - 130     | 2   | 20        |
| Bromoform               | 50.0        | 56.5        |                | ug/Kg |   | 113  | 59 - 158     | 0   | 20        |
| Bromomethane            | 50.0        | 52.8        |                | ug/Kg |   | 106  | 59 - 132     | 1   | 20        |
| 2-Butanone (MEK)        | 250         | 238         |                | ug/Kg |   | 95   | 59 - 159     | 2   | 20        |
| n-Butylbenzene          | 50.0        | 51.1        |                | ug/Kg |   | 102  | 70 - 142     | 3   | 20        |
| sec-Butylbenzene        | 50.0        | 50.4        |                | ug/Kg |   | 101  | 70 - 136     | 3   | 20        |
| tert-Butylbenzene       | 50.0        | 52.9        |                | ug/Kg |   | 106  | 70 - 130     | 2   | 20        |
| Carbon disulfide        | 50.0        | 47.2        |                | ug/Kg |   | 94   | 60 - 140     | 2   | 20        |
| Carbon tetrachloride    | 50.0        | 57.6        |                | ug/Kg |   | 115  | 70 - 142     | 3   | 20        |
| Chlorobenzene           | 50.0        | 51.6        |                | ug/Kg |   | 103  | 70 - 130     | 2   | 20        |
| Chloroethane            | 50.0        | 50.3        |                | ug/Kg |   | 101  | 65 - 130     | 2   | 20        |
| Chloroform              | 50.0        | 53.9        |                | ug/Kg |   | 108  | 77 - 127     | 2   | 20        |
| Chloromethane           | 50.0        | 44.9        |                | ug/Kg |   | 90   | 55 - 140     | 1   | 20        |
| 2-Chlorotoluene         | 50.0        | 49.8        |                | ug/Kg |   | 100  | 70 - 138     | 1   | 20        |
| 4-Chlorotoluene         | 50.0        | 49.6        |                | ug/Kg |   | 99   | 70 - 136     | 1   | 20        |
| Chlorodibromomethane    | 50.0        | 57.2        |                | ug/Kg |   | 114  | 70 - 146     | 2   | 20        |

TestAmerica Pleasanton



# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 720-260260/5**  
**Matrix: Solid**  
**Analysis Batch: 260260**

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

| Analyte                               | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------------------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| 1,2-Dichlorobenzene                   | 50.0        | 51.1        |                | ug/Kg |   | 102  | 70 - 130     | 1   | 20        |
| 1,3-Dichlorobenzene                   | 50.0        | 50.5        |                | ug/Kg |   | 101  | 70 - 131     | 3   | 20        |
| 1,4-Dichlorobenzene                   | 50.0        | 49.9        |                | ug/Kg |   | 100  | 70 - 130     | 1   | 20        |
| 1,3-Dichloropropane                   | 50.0        | 51.6        |                | ug/Kg |   | 103  | 70 - 140     | 1   | 20        |
| 1,1-Dichloropropene                   | 50.0        | 51.6        |                | ug/Kg |   | 103  | 70 - 130     | 3   | 20        |
| 1,2-Dibromo-3-Chloropropane           | 50.0        | 47.9        |                | ug/Kg |   | 96   | 60 - 145     | 3   | 20        |
| Ethylene Dibromide                    | 50.0        | 52.3        |                | ug/Kg |   | 105  | 70 - 140     | 0   | 20        |
| Dibromomethane                        | 50.0        | 52.9        |                | ug/Kg |   | 106  | 70 - 139     | 1   | 20        |
| Dichlorodifluoromethane               | 50.0        | 46.4        |                | ug/Kg |   | 93   | 37 - 158     | 4   | 20        |
| 1,1-Dichloroethane                    | 50.0        | 50.9        |                | ug/Kg |   | 102  | 70 - 130     | 2   | 20        |
| 1,2-Dichloroethane                    | 50.0        | 58.1        |                | ug/Kg |   | 116  | 70 - 130     | 2   | 20        |
| 1,1-Dichloroethene                    | 50.0        | 50.4        |                | ug/Kg |   | 101  | 74 - 122     | 3   | 20        |
| cis-1,2-Dichloroethene                | 50.0        | 52.0        |                | ug/Kg |   | 104  | 70 - 138     | 1   | 20        |
| trans-1,2-Dichloroethene              | 50.0        | 50.5        |                | ug/Kg |   | 101  | 67 - 130     | 3   | 20        |
| 1,2-Dichloropropane                   | 50.0        | 49.2        |                | ug/Kg |   | 98   | 73 - 127     | 3   | 20        |
| cis-1,3-Dichloropropene               | 50.0        | 54.3        |                | ug/Kg |   | 109  | 68 - 147     | 2   | 20        |
| trans-1,3-Dichloropropene             | 50.0        | 55.0        |                | ug/Kg |   | 110  | 70 - 155     | 1   | 20        |
| Ethylbenzene                          | 50.0        | 51.4        |                | ug/Kg |   | 103  | 80 - 137     | 2   | 20        |
| Hexachlorobutadiene                   | 50.0        | 60.1        |                | ug/Kg |   | 120  | 70 - 132     | 1   | 20        |
| 2-Hexanone                            | 250         | 238         |                | ug/Kg |   | 95   | 62 - 158     | 2   | 20        |
| Isopropylbenzene                      | 50.0        | 55.6        |                | ug/Kg |   | 111  | 70 - 130     | 2   | 20        |
| 4-Isopropyltoluene                    | 50.0        | 52.4        |                | ug/Kg |   | 105  | 70 - 133     | 3   | 20        |
| Methylene Chloride                    | 50.0        | 53.0        |                | ug/Kg |   | 106  | 70 - 134     | 1   | 20        |
| 4-Methyl-2-pentanone (MIBK)           | 250         | 241         |                | ug/Kg |   | 97   | 60 - 160     | 1   | 20        |
| Naphthalene                           | 50.0        | 50.7        |                | ug/Kg |   | 101  | 60 - 147     | 5   | 20        |
| N-Propylbenzene                       | 50.0        | 50.6        |                | ug/Kg |   | 101  | 70 - 130     | 2   | 20        |
| Styrene                               | 50.0        | 55.7        |                | ug/Kg |   | 111  | 70 - 130     | 2   | 20        |
| 1,1,1,2-Tetrachloroethane             | 50.0        | 57.0        |                | ug/Kg |   | 114  | 70 - 130     | 1   | 20        |
| 1,1,1,2,2-Tetrachloroethane           | 50.0        | 45.1        |                | ug/Kg |   | 90   | 70 - 146     | 0   | 20        |
| Tetrachloroethene                     | 50.0        | 56.6        |                | ug/Kg |   | 113  | 70 - 132     | 2   | 20        |
| Toluene                               | 50.0        | 50.3        |                | ug/Kg |   | 101  | 75 - 120     | 2   | 20        |
| 1,2,3-Trichlorobenzene                | 50.0        | 56.7        |                | ug/Kg |   | 113  | 60 - 140     | 4   | 20        |
| 1,2,4-Trichlorobenzene                | 50.0        | 58.1        |                | ug/Kg |   | 116  | 60 - 140     | 1   | 20        |
| 1,1,1-Trichloroethane                 | 50.0        | 56.0        |                | ug/Kg |   | 112  | 70 - 130     | 3   | 20        |
| 1,1,2-Trichloroethane                 | 50.0        | 50.7        |                | ug/Kg |   | 101  | 70 - 130     | 1   | 20        |
| Trichloroethene                       | 50.0        | 53.8        |                | ug/Kg |   | 108  | 70 - 133     | 2   | 20        |
| Trichlorofluoromethane                | 50.0        | 56.3        |                | ug/Kg |   | 113  | 60 - 140     | 3   | 20        |
| 1,2,3-Trichloropropane                | 50.0        | 46.9        |                | ug/Kg |   | 94   | 70 - 146     | 2   | 20        |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 50.0        | 55.7        |                | ug/Kg |   | 111  | 60 - 140     | 4   | 20        |
| 1,2,4-Trimethylbenzene                | 50.0        | 53.5        |                | ug/Kg |   | 107  | 70 - 130     | 2   | 20        |
| 1,3,5-Trimethylbenzene                | 50.0        | 52.9        |                | ug/Kg |   | 106  | 70 - 131     | 3   | 20        |
| Vinyl acetate                         | 50.0        | 49.7        |                | ug/Kg |   | 99   | 38 - 176     | 1   | 20        |
| Vinyl chloride                        | 50.0        | 48.3        |                | ug/Kg |   | 97   | 58 - 125     | 2   | 20        |
| m-Xylene & p-Xylene                   | 50.0        | 52.9        |                | ug/Kg |   | 106  | 70 - 146     | 3   | 20        |
| o-Xylene                              | 50.0        | 55.2        |                | ug/Kg |   | 110  | 70 - 140     | 1   | 20        |
| 2,2-Dichloropropane                   | 50.0        | 53.9        |                | ug/Kg |   | 108  | 70 - 162     | 7   | 20        |

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 720-260260/5**  
**Matrix: Solid**  
**Analysis Batch: 260260**

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

| Surrogate                    | LCSD %Recovery | LCSD Qualifier | Limits   |
|------------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene         | 106            |                | 45 - 131 |
| 1,2-Dichloroethane-d4 (Surr) | 113            |                | 60 - 140 |
| Toluene-d8 (Surr)            | 107            |                | 58 - 140 |

**Lab Sample ID: LCSD 720-260260/7**  
**Matrix: Solid**  
**Analysis Batch: 260260**

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

| Analyte                                  | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Gasoline Range Organics (GRO)<br>-C4-C12 | 1000        | 1000        |                | ug/Kg |   | 100  | 70 - 122     | 1   | 20        |

| Surrogate                    | LCSD %Recovery | LCSD Qualifier | Limits   |
|------------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene         | 105            |                | 45 - 131 |
| 1,2-Dichloroethane-d4 (Surr) | 112            |                | 60 - 140 |
| Toluene-d8 (Surr)            | 104            |                | 58 - 140 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 720-260039/1-A**  
**Matrix: Solid**  
**Analysis Batch: 260273**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 260039**

| Analyte                    | MB Result | MB Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------|-----------|--------------|-----|-----|-------|---|----------------|----------------|---------|
| Phenol                     | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Bis(2-chloroethyl)ether    | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2-Chlorophenol             | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 1,3-Dichlorobenzene        | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 1,4-Dichlorobenzene        | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Benzyl alcohol             | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 1,2-Dichlorobenzene        | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2-Methylphenol             | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Methylphenol, 3 & 4        | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| N-Nitrosodi-n-propylamine  | ND        |              | 130 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Hexachloroethane           | ND        |              | 130 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Nitrobenzene               | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Isophorone                 | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2-Nitrophenol              | ND        |              | 130 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2,4-Dimethylphenol         | ND        |              | 130 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Bis(2-chloroethoxy)methane | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2,4-Dichlorophenol         | ND        |              | 330 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 1,2,4-Trichlorobenzene     | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Naphthalene                | ND        |              | 130 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 4-Chloroaniline            | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Hexachlorobutadiene        | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 4-Chloro-3-methylphenol    | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2-Methylnaphthalene        | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Hexachlorocyclopentadiene  | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 720-260039/1-A**  
**Matrix: Solid**  
**Analysis Batch: 260273**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 260039**

| Analyte                     | MB Result | MB Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|-----|-------|---|----------------|----------------|---------|
| 2,4,6-Trichlorophenol       | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2,4,5-Trichlorophenol       | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2-Chloronaphthalene         | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2-Nitroaniline              | ND        |              | 330 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Dimethyl phthalate          | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Acenaphthylene              | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 3-Nitroaniline              | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Acenaphthene                | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2,4-Dinitrophenol           | ND        |              | 660 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 4-Nitrophenol               | ND        |              | 330 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Dibenzofuran                | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2,4-Dinitrotoluene          | ND        |              | 130 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2,6-Dinitrotoluene          | ND        |              | 130 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Diethyl phthalate           | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 4-Chlorophenyl phenyl ether | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Fluorene                    | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 4-Nitroaniline              | ND        |              | 330 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2-Methyl-4,6-dinitrophenol  | ND        |              | 330 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| N-Nitrosodiphenylamine      | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 4-Bromophenyl phenyl ether  | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Hexachlorobenzene           | ND        |              | 130 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Pentachlorophenol           | ND        |              | 330 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Phenanthrene                | ND        |              | 130 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Anthracene                  | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Di-n-butyl phthalate        | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Fluoranthene                | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Pyrene                      | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Butyl benzyl phthalate      | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 3,3'-Dichlorobenzidine      | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Benzo[a]anthracene          | ND        |              | 330 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Bis(2-ethylhexyl) phthalate | ND        |              | 330 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Chrysene                    | ND        |              | 130 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Di-n-octyl phthalate        | ND        |              | 170 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Benzo[b]fluoranthene        | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Benzo[a]pyrene              | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Benzo[k]fluoranthene        | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Indeno[1,2,3-cd]pyrene      | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Benzo[g,h,i]perylene        | ND        |              | 130 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Benzoic acid                | ND        |              | 330 |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Azobenzene                  | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Dibenz(a,h)anthracene       | ND        |              | 67  |     | ug/Kg |   | 02/11/19 10:56 | 02/13/19 15:39 | 1       |

| Surrogate        | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------|--------------|--------------|----------|----------------|----------------|---------|
| Nitrobenzene-d5  | 74           |              | 21 - 98  | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2-Fluorobiphenyl | 77           |              | 30 - 112 | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Terphenyl-d14    | 115          |              | 59 - 134 | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| 2-Fluorophenol   | 65           |              | 28 - 98  | 02/11/19 10:56 | 02/13/19 15:39 | 1       |
| Phenol-d5        | 62           |              | 23 - 101 | 02/11/19 10:56 | 02/13/19 15:39 | 1       |

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 720-260039/1-A**  
**Matrix: Solid**  
**Analysis Batch: 260273**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 260039**

| Surrogate            | MB MB<br>%Recovery Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------------|------------------------------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol | 72                           | 37 - 114 | 02/11/19 10:56 | 02/13/19 15:39 | 1       |

**Lab Sample ID: LCS 720-260039/2-A**  
**Matrix: Solid**  
**Analysis Batch: 260273**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 260039**

| Analyte                     | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit  | D | %Rec | %Rec.<br>Limits |
|-----------------------------|----------------|---------------|------------------|-------|---|------|-----------------|
| Phenol                      | 2670           | 1630          |                  | ug/Kg |   | 61   | 48 - 110        |
| Bis(2-chloroethyl)ether     | 2670           | 1680          |                  | ug/Kg |   | 63   | 40 - 110        |
| 2-Chlorophenol              | 2670           | 1770          |                  | ug/Kg |   | 66   | 45 - 110        |
| 1,3-Dichlorobenzene         | 2670           | 1570          |                  | ug/Kg |   | 59   | 38 - 110        |
| 1,4-Dichlorobenzene         | 2670           | 1600          |                  | ug/Kg |   | 60   | 40 - 110        |
| Benzyl alcohol              | 2670           | 1980          |                  | ug/Kg |   | 74   | 47 - 110        |
| 1,2-Dichlorobenzene         | 2670           | 1600          |                  | ug/Kg |   | 60   | 39 - 110        |
| 2-Methylphenol              | 2670           | 1760          |                  | ug/Kg |   | 66   | 50 - 110        |
| Methylphenol, 3 & 4         | 2670           | 1930          |                  | ug/Kg |   | 72   | 51 - 110        |
| N-Nitrosodi-n-propylamine   | 2670           | 1840          |                  | ug/Kg |   | 69   | 46 - 110        |
| Hexachloroethane            | 2670           | 1850          |                  | ug/Kg |   | 69   | 40 - 110        |
| Nitrobenzene                | 2670           | 2130          |                  | ug/Kg |   | 80   | 45 - 110        |
| Isophorone                  | 2670           | 2090          |                  | ug/Kg |   | 79   | 49 - 110        |
| 2-Nitrophenol               | 2670           | 1950          |                  | ug/Kg |   | 73   | 41 - 105        |
| 2,4-Dimethylphenol          | 2670           | 1980          |                  | ug/Kg |   | 74   | 52 - 100        |
| Bis(2-chloroethoxy)methane  | 2670           | 1930          |                  | ug/Kg |   | 72   | 46 - 110        |
| 2,4-Dichlorophenol          | 2670           | 1980          |                  | ug/Kg |   | 74   | 49 - 100        |
| 1,2,4-Trichlorobenzene      | 2670           | 1760          |                  | ug/Kg |   | 66   | 43 - 110        |
| Naphthalene                 | 2670           | 1880          |                  | ug/Kg |   | 71   | 44 - 110        |
| 4-Chloroaniline             | 2670           | 1970          |                  | ug/Kg |   | 74   | 42 - 110        |
| Hexachlorobutadiene         | 2670           | 1990          |                  | ug/Kg |   | 75   | 44 - 110        |
| 4-Chloro-3-methylphenol     | 2670           | 2200          |                  | ug/Kg |   | 83   | 58 - 104        |
| 2-Methylnaphthalene         | 2670           | 1870          |                  | ug/Kg |   | 70   | 49 - 110        |
| Hexachlorocyclopentadiene   | 2670           | 1770          |                  | ug/Kg |   | 67   | 24 - 106        |
| 2,4,6-Trichlorophenol       | 2670           | 1960          |                  | ug/Kg |   | 74   | 50 - 105        |
| 2,4,5-Trichlorophenol       | 2670           | 2280          |                  | ug/Kg |   | 86   | 53 - 106        |
| 2-Chloronaphthalene         | 2670           | 1830          |                  | ug/Kg |   | 69   | 52 - 110        |
| 2-Nitroaniline              | 2670           | 2070          |                  | ug/Kg |   | 78   | 51 - 115        |
| Dimethyl phthalate          | 2670           | 2100          |                  | ug/Kg |   | 79   | 56 - 103        |
| Acenaphthylene              | 2670           | 1880          |                  | ug/Kg |   | 70   | 53 - 102        |
| 3-Nitroaniline              | 2670           | 2030          |                  | ug/Kg |   | 76   | 50 - 110        |
| Acenaphthene                | 2670           | 1850          |                  | ug/Kg |   | 69   | 53 - 103        |
| 2,4-Dinitrophenol           | 5330           | 2910          |                  | ug/Kg |   | 55   | 10 - 115        |
| 4-Nitrophenol               | 5330           | 5670          |                  | ug/Kg |   | 106  | 54 - 117        |
| Dibenzofuran                | 2670           | 1970          |                  | ug/Kg |   | 74   | 55 - 101        |
| 2,4-Dinitrotoluene          | 2670           | 2040          |                  | ug/Kg |   | 76   | 54 - 115        |
| 2,6-Dinitrotoluene          | 2670           | 1970          |                  | ug/Kg |   | 74   | 54 - 107        |
| Diethyl phthalate           | 2670           | 2470          |                  | ug/Kg |   | 92   | 56 - 107        |
| 4-Chlorophenyl phenyl ether | 2670           | 2400          |                  | ug/Kg |   | 90   | 57 - 106        |
| Fluorene                    | 2670           | 2120          |                  | ug/Kg |   | 80   | 54 - 103        |
| 4-Nitroaniline              | 2670           | 2990          |                  | ug/Kg |   | 112  | 49 - 115        |

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 720-260039/2-A**  
**Matrix: Solid**  
**Analysis Batch: 260273**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 260039**

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| 2-Methyl-4,6-dinitrophenol  | 5330        | 3940       |               | ug/Kg |   | 74   | 31 - 122     |
| N-Nitrosodiphenylamine      | 2670        | 2050       |               | ug/Kg |   | 77   | 56 - 104     |
| 4-Bromophenyl phenyl ether  | 2670        | 2100       |               | ug/Kg |   | 79   | 53 - 104     |
| Hexachlorobenzene           | 2670        | 2150       |               | ug/Kg |   | 81   | 55 - 103     |
| Pentachlorophenol           | 5330        | 4020       |               | ug/Kg |   | 75   | 46 - 115     |
| Phenanthrene                | 2670        | 2150       |               | ug/Kg |   | 81   | 57 - 106     |
| Anthracene                  | 2670        | 2130       |               | ug/Kg |   | 80   | 55 - 105     |
| Di-n-butyl phthalate        | 2670        | 2390       |               | ug/Kg |   | 90   | 58 - 109     |
| Fluoranthene                | 2670        | 2040       |               | ug/Kg |   | 77   | 56 - 104     |
| Pyrene                      | 2670        | 2270       |               | ug/Kg |   | 85   | 52 - 115     |
| Butyl benzyl phthalate      | 2670        | 2750       |               | ug/Kg |   | 103  | 57 - 115     |
| 3,3'-Dichlorobenzidine      | 2670        | 1870       |               | ug/Kg |   | 70   | 47 - 110     |
| Benzo[a]anthracene          | 2670        | 2190       |               | ug/Kg |   | 82   | 55 - 103     |
| Bis(2-ethylhexyl) phthalate | 2670        | 2890       |               | ug/Kg |   | 108  | 58 - 115     |
| Chrysene                    | 2670        | 2170       |               | ug/Kg |   | 81   | 58 - 103     |
| Di-n-octyl phthalate        | 2670        | 2720       |               | ug/Kg |   | 102  | 58 - 109     |
| Benzo[b]fluoranthene        | 2670        | 2280       |               | ug/Kg |   | 85   | 57 - 109     |
| Benzo[a]pyrene              | 2670        | 2180       |               | ug/Kg |   | 82   | 57 - 106     |
| Benzo[k]fluoranthene        | 2670        | 2270       |               | ug/Kg |   | 85   | 55 - 110     |
| Indeno[1,2,3-cd]pyrene      | 2670        | 2140       |               | ug/Kg |   | 80   | 56 - 108     |
| Benzo[g,h,i]perylene        | 2670        | 2080       |               | ug/Kg |   | 78   | 56 - 115     |
| Benzoic acid                | 2670        | 1810       |               | ug/Kg |   | 68   | 10 - 128     |
| Azobenzene                  | 2670        | 2440       |               | ug/Kg |   | 92   | 52 - 103     |
| Dibenz(a,h)anthracene       | 2670        | 2140       |               | ug/Kg |   | 80   | 57 - 106     |

| Surrogate            | LCS %Recovery | LCS Qualifier | Limits   |
|----------------------|---------------|---------------|----------|
| Nitrobenzene-d5      | 81            |               | 21 - 98  |
| 2-Fluorobiphenyl     | 80            |               | 30 - 112 |
| Terphenyl-d14        | 92            |               | 59 - 134 |
| 2-Fluorophenol       | 64            |               | 28 - 98  |
| Phenol-d5            | 62            |               | 23 - 101 |
| 2,4,6-Tribromophenol | 78            |               | 37 - 114 |

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 720-260128/1-A**  
**Matrix: Solid**  
**Analysis Batch: 260257**

**Client Sample ID: Method Blank**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 260128**

| Analyte                            | MB Result | MB Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------------|-----------|--------------|-----|-----|-------|---|----------------|----------------|---------|
| Diesel Range Organics [C10-C28]    | ND        |              | 2.0 |     | mg/Kg |   | 02/11/19 10:36 | 02/13/19 11:22 | 1       |
| Motor Oil Range Organics [C24-C36] | ND        |              | 50  |     | mg/Kg |   | 02/11/19 10:36 | 02/13/19 11:22 | 1       |

| Surrogate          | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------------|--------------|--------------|----------|----------------|----------------|---------|
| p-Terphenyl        | 104          |              | 38 - 148 | 02/11/19 10:36 | 02/13/19 11:22 | 1       |
| Capric Acid (Surr) | 0            |              | 0 - 1    | 02/11/19 10:36 | 02/13/19 11:22 | 1       |

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: LCS 720-260128/2-A**  
**Matrix: Solid**  
**Analysis Batch: 260257**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 260128**

| Analyte                         | Spike Added   | LCS Result    | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|---------------------------------|---------------|---------------|---------------|-------|---|------|--------------|
| Diesel Range Organics [C10-C28] | 167           | 152           |               | mg/Kg |   | 91   | 36 - 112     |
| Surrogate                       | LCS %Recovery | LCS Qualifier | Limits        |       |   |      |              |
| <i>p-Terphenyl</i>              | 121           |               | 38 - 148      |       |   |      |              |

## Method: 8081A - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 720-260121/1-A**  
**Matrix: Solid**  
**Analysis Batch: 260176**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 260121**

| Analyte                       | MB Result    | MB Qualifier | RL       | MDL            | Unit           | D       | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|--------------|--------------|----------|----------------|----------------|---------|----------------|----------------|---------|
| Aldrin                        | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Dieldrin                      | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Endrin aldehyde               | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Endrin                        | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Endrin ketone                 | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Heptachlor                    | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Heptachlor epoxide            | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| 4,4'-DDT                      | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| 4,4'-DDE                      | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| 4,4'-DDD                      | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Endosulfan I                  | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Endosulfan II                 | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| alpha-BHC                     | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| beta-BHC                      | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| gamma-BHC (Lindane)           | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| delta-BHC                     | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Endosulfan sulfate            | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Methoxychlor                  | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Toxaphene                     | ND           |              | 40       |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Chlordane (technical)         | ND           |              | 40       |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| cis-Chlordane                 | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| trans-Chlordane               | ND           |              | 2.0      |                | ug/Kg          |         | 02/11/19 08:56 | 02/12/19 05:31 | 1       |
| Surrogate                     | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |                |                |         |
| <i>Tetrachloro-m-xylene</i>   | 88           |              | 21 - 145 | 02/11/19 08:56 | 02/12/19 05:31 | 1       |                |                |         |
| <i>DCB Decachlorobiphenyl</i> | 107          |              | 21 - 136 | 02/11/19 08:56 | 02/12/19 05:31 | 1       |                |                |         |

**Lab Sample ID: LCS 720-260121/2-A**  
**Matrix: Solid**  
**Analysis Batch: 260176**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 260121**

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| Aldrin   | 16.7        | 16.4       |               | ug/Kg |   | 98   | 65 - 120     |
| Dieldrin | 16.7        | 18.3       |               | ug/Kg |   | 110  | 72 - 120     |

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCS 720-260121/2-A**  
**Matrix: Solid**  
**Analysis Batch: 260176**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 260121**

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | Limits   |
|---------------------|-------------|------------|---------------|-------|---|------|----------|
| Endrin aldehyde     | 16.7        | 19.2       |               | ug/Kg |   | 115  | 68 - 120 |
| Endrin              | 16.7        | 19.3       |               | ug/Kg |   | 116  | 68 - 120 |
| Endrin ketone       | 16.7        | 19.2       |               | ug/Kg |   | 115  | 75 - 136 |
| Heptachlor          | 16.7        | 17.3       |               | ug/Kg |   | 104  | 69 - 120 |
| Heptachlor epoxide  | 16.7        | 18.2       |               | ug/Kg |   | 109  | 68 - 120 |
| 4,4'-DDT            | 16.7        | 18.6       |               | ug/Kg |   | 112  | 63 - 127 |
| 4,4'-DDE            | 16.7        | 18.7       |               | ug/Kg |   | 112  | 76 - 126 |
| 4,4'-DDD            | 16.7        | 19.0       |               | ug/Kg |   | 114  | 75 - 128 |
| Endosulfan I        | 16.7        | 18.8       |               | ug/Kg |   | 113  | 62 - 120 |
| Endosulfan II       | 16.7        | 19.3       |               | ug/Kg |   | 116  | 65 - 120 |
| alpha-BHC           | 16.7        | 15.9       |               | ug/Kg |   | 96   | 46 - 122 |
| beta-BHC            | 16.7        | 18.5       |               | ug/Kg |   | 111  | 78 - 136 |
| gamma-BHC (Lindane) | 16.7        | 16.8       |               | ug/Kg |   | 101  | 72 - 120 |
| delta-BHC           | 16.7        | 18.6       |               | ug/Kg |   | 111  | 43 - 125 |
| Endosulfan sulfate  | 16.7        | 19.1       |               | ug/Kg |   | 115  | 72 - 121 |
| Methoxychlor        | 16.7        | 19.9       |               | ug/Kg |   | 119  | 71 - 132 |
| cis-Chlordane       | 16.7        | 18.4       |               | ug/Kg |   | 111  | 70 - 120 |
| trans-Chlordane     | 16.7        | 18.2       |               | ug/Kg |   | 109  | 68 - 120 |

| Surrogate              | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------|---------------|---------------|----------|
| Tetrachloro-m-xylene   | 98            |               | 21 - 145 |
| DCB Decachlorobiphenyl | 112           |               | 21 - 136 |

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 720-260139/1-A**  
**Matrix: Solid**  
**Analysis Batch: 260263**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 260139**

| Analyte  | MB Result | MB Qualifier | RL | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|-----------|--------------|----|-----|-------|---|----------------|----------------|---------|
| PCB-1016 | ND        |              | 50 |     | ug/Kg |   | 02/11/19 11:15 | 02/13/19 19:57 | 1       |
| PCB-1221 | ND        |              | 50 |     | ug/Kg |   | 02/11/19 11:15 | 02/13/19 19:57 | 1       |
| PCB-1232 | ND        |              | 50 |     | ug/Kg |   | 02/11/19 11:15 | 02/13/19 19:57 | 1       |
| PCB-1242 | ND        |              | 50 |     | ug/Kg |   | 02/11/19 11:15 | 02/13/19 19:57 | 1       |
| PCB-1248 | ND        |              | 50 |     | ug/Kg |   | 02/11/19 11:15 | 02/13/19 19:57 | 1       |
| PCB-1254 | ND        |              | 50 |     | ug/Kg |   | 02/11/19 11:15 | 02/13/19 19:57 | 1       |
| PCB-1260 | ND        |              | 50 |     | ug/Kg |   | 02/11/19 11:15 | 02/13/19 19:57 | 1       |

| Surrogate              | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------------|--------------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene   | 67           |              | 45 - 132 | 02/11/19 11:15 | 02/13/19 19:57 | 1       |
| DCB Decachlorobiphenyl | 70           |              | 42 - 146 | 02/11/19 11:15 | 02/13/19 19:57 | 1       |

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: LCS 720-260139/2-A**  
**Matrix: Solid**  
**Analysis Batch: 260263**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 260139**

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | Limits   |
|----------|-------------|------------|---------------|-------|---|------|----------|
| PCB-1016 | 133         | 95.7       |               | ug/Kg |   | 72   | 65 - 121 |
| PCB-1260 | 133         | 91.2       |               | ug/Kg |   | 68   | 68 - 127 |

| Surrogate              | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------|---------------|---------------|----------|
| Tetrachloro-m-xylene   | 69            |               | 45 - 132 |
| DCB Decachlorobiphenyl | 66            |               | 42 - 146 |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 720-260100/1-A**  
**Matrix: Solid**  
**Analysis Batch: 260368**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 260100**

| Analyte    | MB Result | MB Qualifier | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------|-----------|--------------|------|-----|-------|---|----------------|----------------|---------|
| Antimony   | ND        |              | 0.50 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Arsenic    | ND        |              | 1.0  |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Barium     | ND        |              | 0.50 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Beryllium  | ND        |              | 0.10 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Cadmium    | ND        |              | 0.13 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Chromium   | ND        |              | 0.50 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Cobalt     | ND        |              | 0.20 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Copper     | ND        |              | 1.5  |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Lead       | ND        |              | 0.50 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Molybdenum | ND        |              | 0.50 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Nickel     | ND        |              | 0.50 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Selenium   | ND        |              | 1.0  |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Silver     | ND        |              | 0.25 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Thallium   | ND        |              | 0.50 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Vanadium   | ND        |              | 0.50 |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |
| Zinc       | ND        |              | 1.5  |     | mg/Kg |   | 02/09/19 11:11 | 02/14/19 11:28 | 1       |

**Lab Sample ID: LCS 720-260100/2-A**  
**Matrix: Solid**  
**Analysis Batch: 260330**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 260100**

| Analyte    | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | Limits   |
|------------|-------------|------------|---------------|-------|---|------|----------|
| Antimony   | 50.0        | 49.1       |               | mg/Kg |   | 98   | 80 - 120 |
| Arsenic    | 50.0        | 51.4       |               | mg/Kg |   | 103  | 80 - 120 |
| Barium     | 50.0        | 50.8       |               | mg/Kg |   | 102  | 80 - 120 |
| Beryllium  | 50.0        | 49.2       |               | mg/Kg |   | 98   | 80 - 120 |
| Cadmium    | 50.0        | 52.8       |               | mg/Kg |   | 106  | 80 - 120 |
| Chromium   | 50.0        | 54.1       |               | mg/Kg |   | 108  | 80 - 120 |
| Cobalt     | 50.0        | 53.1       |               | mg/Kg |   | 106  | 80 - 120 |
| Copper     | 50.0        | 54.2       |               | mg/Kg |   | 108  | 80 - 120 |
| Lead       | 50.0        | 53.5       |               | mg/Kg |   | 107  | 80 - 120 |
| Molybdenum | 50.0        | 54.5       |               | mg/Kg |   | 109  | 80 - 120 |
| Nickel     | 50.0        | 52.9       |               | mg/Kg |   | 106  | 80 - 120 |
| Selenium   | 50.0        | 50.9       |               | mg/Kg |   | 102  | 80 - 120 |

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# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 720-260100/2-A**  
**Matrix: Solid**  
**Analysis Batch: 260330**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 260100**

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | Limits   |
|----------|-------------|------------|---------------|-------|---|------|----------|
| Silver   | 25.0        | 26.1       |               | mg/Kg |   | 104  | 80 - 120 |
| Thallium | 50.0        | 51.6       |               | mg/Kg |   | 103  | 80 - 120 |
| Vanadium | 50.0        | 53.0       |               | mg/Kg |   | 106  | 80 - 120 |
| Zinc     | 50.0        | 53.9       |               | mg/Kg |   | 108  | 80 - 120 |

**Lab Sample ID: 720-91267-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 260330**

**Client Sample ID: FEM020719**  
**Prep Type: Total/NA**  
**Prep Batch: 260100**

| Analyte    | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | Limits   |
|------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Antimony   | ND            | F1               | 39.7        | 11.1      | F1           | mg/Kg |   | 26   | 75 - 125 |
| Arsenic    | 3.5           |                  | 39.7        | 40.0      |              | mg/Kg |   | 92   | 75 - 125 |
| Barium     | 140           |                  | 39.7        | 188       |              | mg/Kg |   | 121  | 75 - 125 |
| Beryllium  | 1.3           |                  | 39.7        | 40.9      |              | mg/Kg |   | 100  | 75 - 125 |
| Cadmium    | ND            |                  | 39.7        | 40.0      |              | mg/Kg |   | 100  | 75 - 125 |
| Chromium   | 190           |                  | 39.7        | 235       | 4            | mg/Kg |   | 114  | 75 - 125 |
| Cobalt     | 32            |                  | 39.7        | 70.8      |              | mg/Kg |   | 98   | 75 - 125 |
| Copper     | 61            |                  | 39.7        | 106       |              | mg/Kg |   | 114  | 75 - 125 |
| Lead       | 11            |                  | 39.7        | 47.6      |              | mg/Kg |   | 91   | 75 - 125 |
| Molybdenum | ND            |                  | 39.7        | 34.5      |              | mg/Kg |   | 87   | 75 - 125 |
| Nickel     | 130           |                  | 39.7        | 168       |              | mg/Kg |   | 108  | 75 - 125 |
| Selenium   | ND            |                  | 39.7        | 35.4      |              | mg/Kg |   | 89   | 75 - 125 |
| Silver     | ND            |                  | 19.8        | 20.6      |              | mg/Kg |   | 104  | 75 - 125 |
| Thallium   | ND            |                  | 39.7        | 33.3      |              | mg/Kg |   | 84   | 75 - 125 |
| Vanadium   | 150           |                  | 39.7        | 194       |              | mg/Kg |   | 111  | 75 - 125 |
| Zinc       | 71            |                  | 39.7        | 111       |              | mg/Kg |   | 101  | 75 - 125 |

**Lab Sample ID: 720-91267-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 260330**

**Client Sample ID: FEM020719**  
**Prep Type: Total/NA**  
**Prep Batch: 260100**

| Analyte    | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | Limits   | RPD | Limit |
|------------|---------------|------------------|-------------|------------|---------------|-------|---|------|----------|-----|-------|
| Antimony   | ND            | F1               | 40.0        | 10.5       | F1            | mg/Kg |   | 24   | 75 - 125 | 5   | 20    |
| Arsenic    | 3.5           |                  | 40.0        | 41.9       |               | mg/Kg |   | 96   | 75 - 125 | 4   | 20    |
| Barium     | 140           |                  | 40.0        | 182        |               | mg/Kg |   | 105  | 75 - 125 | 3   | 20    |
| Beryllium  | 1.3           |                  | 40.0        | 39.6       |               | mg/Kg |   | 96   | 75 - 125 | 3   | 20    |
| Cadmium    | ND            |                  | 40.0        | 39.3       |               | mg/Kg |   | 98   | 75 - 125 | 2   | 20    |
| Chromium   | 190           |                  | 40.0        | 215        | 4             | mg/Kg |   | 62   | 75 - 125 | 9   | 20    |
| Cobalt     | 32            |                  | 40.0        | 68.2       |               | mg/Kg |   | 91   | 75 - 125 | 4   | 20    |
| Copper     | 61            |                  | 40.0        | 101        |               | mg/Kg |   | 99   | 75 - 125 | 5   | 20    |
| Lead       | 11            |                  | 40.0        | 49.3       |               | mg/Kg |   | 95   | 75 - 125 | 4   | 20    |
| Molybdenum | ND            |                  | 40.0        | 34.0       |               | mg/Kg |   | 85   | 75 - 125 | 2   | 20    |
| Nickel     | 130           |                  | 40.0        | 155        |               | mg/Kg |   | 75   | 75 - 125 | 8   | 20    |
| Selenium   | ND            |                  | 40.0        | 34.3       |               | mg/Kg |   | 86   | 75 - 125 | 3   | 20    |
| Silver     | ND            |                  | 20.0        | 20.2       |               | mg/Kg |   | 101  | 75 - 125 | 2   | 20    |
| Thallium   | ND            |                  | 40.0        | 33.0       |               | mg/Kg |   | 82   | 75 - 125 | 1   | 20    |
| Vanadium   | 150           |                  | 40.0        | 181        |               | mg/Kg |   | 79   | 75 - 125 | 6   | 20    |
| Zinc       | 71            |                  | 40.0        | 108        |               | mg/Kg |   | 93   | 75 - 125 | 3   | 20    |

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-91267-1

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 720-260030/1-A**  
**Matrix: Solid**  
**Analysis Batch: 260393**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 260030**

| Analyte | MB Result | MB Qualifier | RL    | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|-------|-----|-------|---|----------------|----------------|---------|
| Mercury | ND        |              | 0.017 |     | mg/Kg |   | 02/13/19 18:35 | 02/14/19 15:04 | 1       |

**Lab Sample ID: LCS 720-260030/2-A**  
**Matrix: Solid**  
**Analysis Batch: 260393**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 260030**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | Limits   |
|---------|-------------|------------|---------------|-------|---|------|----------|
| Mercury | 0.833       | 0.780      |               | mg/Kg |   | 94   | 80 - 120 |

# QC Association Summary

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

TestAmerica Job ID: 720-91267-1

## GC/MS VOA

### Analysis Batch: 260260

| Lab Sample ID    | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------------|-----------|--------|--------|------------|
| 720-91267-1      | FEM020719              | Total/NA  | Solid  | 8260B  | 260268     |
| MB 720-260260/8  | Method Blank           | Total/NA  | Solid  | 8260B  |            |
| LCS 720-260260/4 | Lab Control Sample     | Total/NA  | Solid  | 8260B  |            |
| LCS 720-260260/6 | Lab Control Sample     | Total/NA  | Solid  | 8260B  |            |
| LCS 720-260260/5 | Lab Control Sample Dup | Total/NA  | Solid  | 8260B  |            |
| LCS 720-260260/7 | Lab Control Sample Dup | Total/NA  | Solid  | 8260B  |            |

### Prep Batch: 260268

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 720-91267-1   | FEM020719        | Total/NA  | Solid  | 5030B  |            |

## GC/MS Semi VOA

### Prep Batch: 260039

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 720-91267-1        | FEM020719          | Total/NA  | Solid  | 3546   |            |
| MB 720-260039/1-A  | Method Blank       | Total/NA  | Solid  | 3546   |            |
| LCS 720-260039/2-A | Lab Control Sample | Total/NA  | Solid  | 3546   |            |

### Analysis Batch: 260273

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| MB 720-260039/1-A  | Method Blank       | Total/NA  | Solid  | 8270C  | 260039     |
| LCS 720-260039/2-A | Lab Control Sample | Total/NA  | Solid  | 8270C  | 260039     |

### Analysis Batch: 260392

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 720-91267-1   | FEM020719        | Total/NA  | Solid  | 8270C  | 260039     |

## GC Semi VOA

### Prep Batch: 260121

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 720-91267-1        | FEM020719          | Total/NA  | Solid  | 3546   |            |
| MB 720-260121/1-A  | Method Blank       | Total/NA  | Solid  | 3546   |            |
| LCS 720-260121/2-A | Lab Control Sample | Total/NA  | Solid  | 3546   |            |

### Prep Batch: 260128

| Lab Sample ID      | Client Sample ID   | Prep Type          | Matrix | Method | Prep Batch |
|--------------------|--------------------|--------------------|--------|--------|------------|
| 720-91267-1        | FEM020719          | Silica Gel Cleanup | Solid  | 3546   |            |
| MB 720-260128/1-A  | Method Blank       | Silica Gel Cleanup | Solid  | 3546   |            |
| LCS 720-260128/2-A | Lab Control Sample | Silica Gel Cleanup | Solid  | 3546   |            |

### Prep Batch: 260139

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 720-91267-1        | FEM020719          | Total/NA  | Solid  | 3546   |            |
| MB 720-260139/1-A  | Method Blank       | Total/NA  | Solid  | 3546   |            |
| LCS 720-260139/2-A | Lab Control Sample | Total/NA  | Solid  | 3546   |            |

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-91267-1

## GC Semi VOA (Continued)

### Analysis Batch: 260176

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| MB 720-260121/1-A  | Method Blank       | Total/NA  | Solid  | 8081A  | 260121     |
| LCS 720-260121/2-A | Lab Control Sample | Total/NA  | Solid  | 8081A  | 260121     |

### Analysis Batch: 260257

| Lab Sample ID      | Client Sample ID   | Prep Type          | Matrix | Method | Prep Batch |
|--------------------|--------------------|--------------------|--------|--------|------------|
| MB 720-260128/1-A  | Method Blank       | Silica Gel Cleanup | Solid  | 8015B  | 260128     |
| LCS 720-260128/2-A | Lab Control Sample | Silica Gel Cleanup | Solid  | 8015B  | 260128     |

### Analysis Batch: 260263

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| MB 720-260139/1-A  | Method Blank       | Total/NA  | Solid  | 8082   | 260139     |
| LCS 720-260139/2-A | Lab Control Sample | Total/NA  | Solid  | 8082   | 260139     |

### Analysis Batch: 260332

| Lab Sample ID | Client Sample ID | Prep Type          | Matrix | Method | Prep Batch |
|---------------|------------------|--------------------|--------|--------|------------|
| 720-91267-1   | FEM020719        | Silica Gel Cleanup | Solid  | 8015B  | 260128     |

### Analysis Batch: 260334

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 720-91267-1   | FEM020719        | Total/NA  | Solid  | 8082   | 260139     |

### Analysis Batch: 260397

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 720-91267-1   | FEM020719        | Total/NA  | Solid  | 8081A  | 260121     |

## Metals

### Prep Batch: 260030

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 720-91267-1        | FEM020719          | Total/NA  | Solid  | 7471A  |            |
| MB 720-260030/1-A  | Method Blank       | Total/NA  | Solid  | 7471A  |            |
| LCS 720-260030/2-A | Lab Control Sample | Total/NA  | Solid  | 7471A  |            |

### Prep Batch: 260100

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 720-91267-1        | FEM020719          | Total/NA  | Solid  | 3050B  |            |
| MB 720-260100/1-A  | Method Blank       | Total/NA  | Solid  | 3050B  |            |
| LCS 720-260100/2-A | Lab Control Sample | Total/NA  | Solid  | 3050B  |            |
| 720-91267-1 MS     | FEM020719          | Total/NA  | Solid  | 3050B  |            |
| 720-91267-1 MSD    | FEM020719          | Total/NA  | Solid  | 3050B  |            |

### Analysis Batch: 260330

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 720-91267-1        | FEM020719          | Total/NA  | Solid  | 6010B  | 260100     |
| LCS 720-260100/2-A | Lab Control Sample | Total/NA  | Solid  | 6010B  | 260100     |
| 720-91267-1 MS     | FEM020719          | Total/NA  | Solid  | 6010B  | 260100     |
| 720-91267-1 MSD    | FEM020719          | Total/NA  | Solid  | 6010B  | 260100     |

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-91267-1

## Metals (Continued)

### Analysis Batch: 260368

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| MB 720-260100/1-A | Method Blank     | Total/NA  | Solid  | 6010B  | 260100     |

### Analysis Batch: 260393

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 720-91267-1        | FEM020719          | Total/NA  | Solid  | 7471A  | 260030     |
| MB 720-260030/1-A  | Method Blank       | Total/NA  | Solid  | 7471A  | 260030     |
| LCS 720-260030/2-A | Lab Control Sample | Total/NA  | Solid  | 7471A  | 260030     |

# Lab Chronicle

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

TestAmerica Job ID: 720-91267-1

**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     |
|--------------------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA           | Prep       | 5030B        |     |                 | 260268       | 02/13/19 09:29       | LRC     | TAL PLS |
| Total/NA           | Analysis   | 8260B        |     | 1               | 260260       | 02/13/19 14:47       | JRM     | TAL PLS |
| Total/NA           | Prep       | 3546         |     |                 | 260039       | 02/11/19 11:04       | KLM     | TAL PLS |
| Total/NA           | Analysis   | 8270C        |     | 1               | 260392       | 02/15/19 02:47       | MQL     | TAL PLS |
| Silica Gel Cleanup | Prep       | 3546         |     |                 | 260128       | 02/11/19 11:10       | KLM     | TAL PLS |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1               | 260332       | 02/14/19 18:50       | JXL     | TAL PLS |
| Total/NA           | Prep       | 3546         |     |                 | 260121       | 02/11/19 08:56       | KLM     | TAL PLS |
| Total/NA           | Analysis   | 8081A        |     | 1               | 260397       | 02/15/19 10:30       | JZT     | TAL PLS |
| Total/NA           | Prep       | 3546         |     |                 | 260139       | 02/11/19 11:15       | KLM     | TAL PLS |
| Total/NA           | Analysis   | 8082         |     | 1               | 260334       | 02/14/19 22:27       | DCH     | TAL PLS |
| Total/NA           | Prep       | 3050B        |     |                 | 260100       | 02/09/19 11:11       | SUN     | TAL PLS |
| Total/NA           | Analysis   | 6010B        |     | 4               | 260330       | 02/13/19 18:19       | OBI     | TAL PLS |
| Total/NA           | Prep       | 7471A        |     |                 | 260030       | 02/13/19 18:35       | GLL     | TAL PLS |
| Total/NA           | Analysis   | 7471A        |     | 1               | 260393       | 02/14/19 16:44       | 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: 720-91267-1

## 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 |
|-----------------|-------------|--------|---------|
|-----------------|-------------|--------|---------|

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Method Summary

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

TestAmerica Job ID: 720-91267-1

| Method | Method Description                                     | Protocol | Laboratory |
|--------|--|----------|------------|
| 8260B  | Volatile Organic Compounds (GC/MS)                     | SW846    | TAL PLS    |
| 8270C  | Semivolatile Organic Compounds (GC/MS)                 | SW846    | TAL PLS    |
| 8015B  | Diesel Range Organics (DRO) (GC)                       | SW846    | TAL PLS    |
| 8081A  | Organochlorine Pesticides (GC)                         | SW846    | TAL PLS    |
| 8082   | Polychlorinated Biphenyls (PCBs) by Gas Chromatography | SW846    | TAL PLS    |
| 6010B  | Metals (ICP)   | SW846    | TAL PLS    |
| 7471A  | Mercury (CVAA)   | SW846    | TAL PLS    |
| 3050B  | Preparation, Metals                                    | SW846    | TAL PLS    |
| 3546   | Microwave Extraction                                   | SW846    | TAL PLS    |
| 5030B  | Purge and Trap   | SW846    | TAL PLS    |
| 7471A  | Preparation, Mercury                                   | SW846    | TAL PLS    |

**Protocol References:**

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: 720-91267-1

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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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1

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10

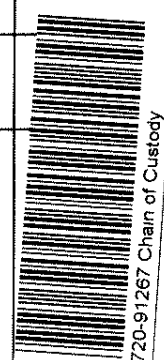
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15

|  |  |   |  |  |  |  |  |
|--|--|---|--|--|--|--|--|
| <b>Client Contact</b><br>Santa Clara County Roads and Airports Department<br>1505 Schallenberger Road<br>San Jose, CA 95131<br>(408) 690-9190<br>(408) 297-0530<br>Project Name: Foothill Expressway Operational Improvements<br>Site: Foothill Expressway at San Antonio Road & El Monte Ave<br>P O # CW2227585 (Service Agreement #) |  | <b>Project Manager: Elisbury</b><br>Tel/Fax: _____<br>Analysis Turnaround Time<br>Calendar (C) or Work Days (W) <u>5</u> work days<br>TAT if different from Below _____<br><input type="checkbox"/> 2 weeks<br><input type="checkbox"/> 1 week<br><input type="checkbox"/> 2 days<br><input type="checkbox"/> 1 day |  | <b>Site Contact:</b><br>Date: February 7, 2019<br>Carrier: _____<br>Job No _____<br>SDG No. _____<br>Sample Specific Notes<br>If Lead or Chromium TTH C exceeds _____<br>50 mg/kg then run STL C If Pb or Cr _____<br>TTLC exceeds 100 mg/kg then run _____<br>then run TCLP _____ |  | <b>Lab Contact:</b><br>CAM 17 TTLC<br>VOCs _____<br>SVOCs _____<br>Pesticides _____<br>PCBs _____<br>TPH - m/diesel (with SG cleanup) _____<br>TPH - Gasoline _____<br>pH _____<br>Identifiability _____ |  |
| <b>Sample Identification</b><br>FEM020719<br><br>720-91267 Chain of Custody   |  | Sample Date: 2/7/2019 11:55 AM<br>Sample Time: _____<br>Sample Type: Soil<br>Matrix: _____<br># of Cont: 2  |  | Filtered Sample _____<br>Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months<br>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  |  |  |  |
| Relinquished by: _____<br>Relinquished by: _____<br>Relinquished by: _____   |  | Company: F-A<br>Company: TAPLS<br>Company: _____  |  | Date/Time: 2/8/19 11:00<br>Date/Time: 2/8/19 11:00<br>Date/Time: _____   |  |  |  |

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other  
 Possible Hazard Identification  
 Non-hazard  Flammable  Skin Irritant  Poison B  Unknown

Special Instructions/QC Requirements & Comments: Samples taken at depth of 12-13 inches  
 Median west of San Antonio Road

1.50



# Login Sample Receipt Checklist

Client: County of Santa Clara

Job Number: 720-91267-1

**Login Number: 91267**  
**List Number: 1**  
**Creator: Arauz, Dennis**

**List Source: TestAmerica Pleasanton**

| 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    |         |