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July 6, 2012

Ms. Susan Pelz, P.E.
Florida Department of Environmental Protection
Solid Waste Section
13051 Telecom Parkway
Temple Terrace, FL 33637

**Re: Southeast County Landfill
Leachate Treatment Plant
Effluent Analytical Data – Second Quarter (April - June, 2012)**

Dear Ms. Pelz:

In accordance with Specific Condition E.9.b(2) of the Southeast County Landfill (SCLF) Operation Permit No. 35435-014-SO/01, the Hillsborough County Public Utilities Department, is pleased to provide the analytical data for the second quarter effluent sampling of the leachate treatment plant located at the SCLF.

The referenced permit requires the monthly sampling of the leachate treatment plant effluent, and recording of the pH value on a weekly basis. The pH values recorded during the three month period ranged from 7.7– 8.4 pH units. The monthly samples of effluent collected are analyzed for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), and Nitrate.

On April 3, May 1, and June 5, 2012, the effluent samples were collected from the dedicated sampling port at the treatment plant. The samples were analyzed by our contracted laboratory, Test America, Inc. for the parameters listed above. The laboratory analytical data reports are provided herein for your technical review.

No significant changes in the concentrations of any parameters were noted during this quarterly reporting period.

Ms. Susan Pelz
July 6, 2012
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Should you have any questions or comments concerning the information provided in this submittal, please feel free to contact me at (813) 272-5977 extension 43944.

Sincerely,



David S. Adams, P.G.
Environmental Manager
Public Utilities Department



DSA/mdt
Enclosures

xc: Larry Ruiz, Public Utilities
Beth Schinella, Public Utilities
Ron Cope, EPC

G:enviro/self/leachate plant/ltp-effluent-2ndqtr2012.doc

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Tampa

6712 Benjamin Road

Suite 100

Tampa, FL 33634

Tel: (813)885-7427

TestAmerica Job ID: 660-46910-1

Client Project/Site: SELF, Leachate Trucks, EFF

For:

Hillsborough County Public Utilities Dep

Solid Waste Management Group

Brandon Support Operations Complex

332 North Falkenburg Rd, 2nd Floor

Tampa, Florida 33619

Attn: David Adams



Authorized for release by:

4/13/2012 2:40:48 PM

Nancy Robertson

Project Manager II

nancy.robertson@testamericainc.com

LINKS

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results through

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The
Expert**

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1



Qualifiers

General Chemistry

| Qualifier | Qualifier Description |
|-----------|--|
| J3 | Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria. |
| U | Indicates that the compound was analyzed for but not detected. |
| I | The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|--|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RL | Reporting Limit |
| 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: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

Job ID: 660-46910-1

Laboratory: TestAmerica Tampa



Narrative

Job Narrative
660-46910-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

General Chemistry

Method 353.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 122974 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method SM 5220D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 123168 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

Detection Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

Client Sample ID: Leachate Effluent

Lab Sample ID: 660-46910-1

| Analyte | Result | Qualifier | PQL | MDL | Unit | Dil | Fac | D | Method | Prep Type |
|---------------------------|--------|-----------|-----|-----|-----------|-----|-----|---|----------------|-----------|
| Nitrate as N | 110 | | 100 | 20 | mg/L | 200 | | | 353.2 | Total/NA |
| Chemical Oxygen Demand | 730 | | 100 | 50 | mg/L | 5 | | | 5220 D | Total/NA |
| Total Dissolved Solids | 4800 | | 250 | 250 | mg/L | 1 | | | SM 2540C | Total/NA |
| Total Suspended Solids | 19 | | 1.0 | 1.0 | mg/L | 1 | | | SM 2540D | Total/NA |
| Biochemical Oxygen Demand | 21 | | 12 | 12 | mg/L | 1 | | | SM 5210B | Total/NA |
| Field pH | 7.86 | | | | SU | 1 | | | Field Sampling | Total/NA |
| Field Temperature | 29.97 | | | | Degrees C | 1 | | | Field Sampling | Total/NA |
| Oxygen, Dissolved | 5.49 | | | | mg/L | 1 | | | Field Sampling | Total/NA |
| Specific Conductance | 10244 | | | | umhos/cm | 1 | | | Field Sampling | Total/NA |

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Client Sample ID: Equipment Blank

Lab Sample ID: 660-46910-2

No Detections

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

Client Sample ID: Leachate Effluent

Lab Sample ID: 660-46910-1

Date Collected: 04/03/12 13:40

Matrix: Water

Date Received: 04/03/12 15:30

General Chemistry

| Analyte | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----|-----|------|---|----------------|----------------|---------|
| Nitrate as N | 110 | | 100 | 20 | mg/L | | | 04/04/12 12:50 | 200 |
| Chemical Oxygen Demand | 730 | | 100 | 50 | mg/L | | 04/10/12 10:45 | 04/10/12 15:10 | 5 |
| Total Dissolved Solids | 4800 | | 250 | 250 | mg/L | | | 04/04/12 14:53 | 1 |
| Total Suspended Solids | 19 | | 1.0 | 1.0 | mg/L | | | 04/04/12 08:57 | 1 |
| Biochemical Oxygen Demand | 21 | | 12 | 12 | mg/L | | | 04/04/12 15:09 | 1 |



Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Field pH | 7.86 | | | | SU | | | 04/03/12 13:40 | 1 |
| Field Temperature | 29.97 | | | | Degrees C | | | 04/03/12 13:40 | 1 |
| Oxygen, Dissolved | 5.49 | | | | mg/L | | | 04/03/12 13:40 | 1 |
| Specific Conductance | 10244 | | | | umhos/cm | | | 04/03/12 13:40 | 1 |

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

Client Sample ID: Equipment Blank

Lab Sample ID: 660-46910-2

Date Collected: 04/03/12 13:35

Matrix: Water

Date Received: 04/03/12 15:30

General Chemistry

| Analyte | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Nitrate as N | 0.10 | U | 0.50 | 0.10 | mg/L | | | 04/04/12 11:01 | 1 |
| Chemical Oxygen Demand | 10 | U | 20 | 10 | mg/L | | 04/10/12 10:45 | 04/10/12 14:45 | 1 |
| Total Dissolved Solids | 5.0 | U | 5.0 | 5.0 | mg/L | | | 04/04/12 14:53 | 1 |
| Total Suspended Solids | 1.0 | U | 1.0 | 1.0 | mg/L | | | 04/04/12 08:57 | 1 |
| Biochemical Oxygen Demand | 2.0 | U | 2.0 | 2.0 | mg/L | | | 04/04/12 15:05 | 1 |

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

Method: 353.2 - Nitrate

Lab Sample ID: MB 660-122974/14
Matrix: Water
Analysis Batch: 122974

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

| Analyte | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------|--------------|-----------------|------|------|------|---|----------|----------------|---------|
| Nitrate as N | 0.10 | U | 0.50 | 0.10 | mg/L | | | 04/04/12 10:51 | 1 |

Lab Sample ID: LCS 660-122974/15
Matrix: Water
Analysis Batch: 122974

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Nitrate Nitrite as N | 1.00 | 1.00 | | mg/L | | 100 | 90 - 110 |
| Nitrite as N | 0.500 | 0.505 | | mg/L | | 101 | 90 - 110 |

Lab Sample ID: 660-46895-A-2 MS
Matrix: Water
Analysis Batch: 122974

Client Sample ID: Matrix Spike
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|------------------|---------------------|----------------|--------------|-----------------|------|---|------|-----------------|
| Nitrite as N | 0.30 | I | 0.500 | 0.800 | | mg/L | | 101 | 90 - 110 |

Lab Sample ID: 660-46895-A-2 MS ^2
Matrix: Water
Analysis Batch: 122974

Client Sample ID: Matrix Spike
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|------------------|---------------------|----------------|--------------|-----------------|------|---|------|-----------------|
| Nitrate Nitrite as N | 3.2 | J3 | 2.00 | 4.08 | J3 | mg/L | | 43 | 90 - 110 |

Lab Sample ID: 660-46895-A-2 MSD
Matrix: Water
Analysis Batch: 122974

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD Limit |
|--------------|------------------|---------------------|----------------|---------------|------------------|------|---|------|-----------------|--------------|
| Nitrate as N | 0.30 | I | 0.500 | 0.802 | | mg/L | | 101 | 90 - 110 | 0 30 |

Lab Sample ID: 660-46895-A-2 MSD ^2
Matrix: Water
Analysis Batch: 122974

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD Limit |
|----------------------|------------------|---------------------|----------------|---------------|------------------|------|---|------|-----------------|--------------|
| Nitrate Nitrite as N | 3.2 | J3 | 2.00 | 4.08 | J3 | mg/L | | 43 | 90 - 110 | 0 30 |

Method: 5220 D - Chemical Oxygen Demand

Lab Sample ID: MB 660-123153/4-A
Matrix: Water
Analysis Batch: 123164

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123153

| Analyte | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|--------------|-----------------|-----|-----|------|---|----------------|----------------|---------|
| Chemical Oxygen Demand | 10 | U | 20 | 10 | mg/L | | 04/10/12 10:45 | 04/10/12 14:45 | 1 |

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

Method: 5220 D - Chemical Oxygen Demand (Continued)

Lab Sample ID: LCS 660-123153/5-A

Matrix: Water

Analysis Batch: 123164

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 123153

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| Chemical Oxygen Demand | 50.0 | 46.7 | | mg/L | | 93 | 90 - 110 |

Lab Sample ID: 640-38050-A-4-C MS

Matrix: Water

Analysis Batch: 123164

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 123153

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Chemical Oxygen Demand | 10 | U | 50.0 | 49.0 | | mg/L | | 98 | 90 - 110 |

Lab Sample ID: 640-38050-A-4-D MSD

Matrix: Water

Analysis Batch: 123164

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 123153

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|------------------------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Chemical Oxygen Demand | 10 | U | 50.0 | 49.0 | | mg/L | | 98 | 90 - 110 | 0 | 20 |

Lab Sample ID: MB 660-123166/4-A

Matrix: Water

Analysis Batch: 123168

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 123166

| Analyte | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|--------------|-----|-----|------|---|----------------|----------------|---------|
| Chemical Oxygen Demand | 10 | U | 20 | 10 | mg/L | | 04/10/12 10:45 | 04/10/12 15:10 | 1 |

Lab Sample ID: LCS 660-123166/5-A

Matrix: Water

Analysis Batch: 123168

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 123166

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| Chemical Oxygen Demand | 200 | 204 | | mg/L | | 102 | 90 - 110 |

Lab Sample ID: 640-38046-C-2-B MS

Matrix: Water

Analysis Batch: 123168

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 123166

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Chemical Oxygen Demand | 470 | J3 | 100 | 561 | J3 | mg/L | | 88 | 90 - 110 |

Lab Sample ID: 640-38046-C-2-C MSD

Matrix: Water

Analysis Batch: 123168

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 123166

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|------------------------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Chemical Oxygen Demand | 470 | J3 | 100 | 552 | J3 | mg/L | | 79 | 90 - 110 | 2 | 20 |

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 660-122955/1

Matrix: Water

Analysis Batch: 122955

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|--------------|-----------------|-----|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids | 5.0 | U | 5.0 | 5.0 | mg/L | | | 04/04/12 14:49 | 1 |

Lab Sample ID: LCS 660-122955/2

Matrix: Water

Analysis Batch: 122955

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Total Dissolved Solids | 10000 | 9940 | | mg/L | | 99 | 80 - 120 |

Lab Sample ID: 660-46895-A-1 DU

Matrix: Water

Analysis Batch: 122955

Client Sample ID: Duplicate

Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|------------------------|------------------|---------------------|--------------|-----------------|------|---|-----|--------------|
| Total Dissolved Solids | 1100 | | 1120 | | mg/L | | 4 | 20 |

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 660-122918/1

Matrix: Water

Analysis Batch: 122918

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|--------------|-----------------|-----|-----|------|---|----------|----------------|---------|
| Total Suspended Solids | 1.0 | U | 1.0 | 1.0 | mg/L | | | 04/04/12 08:57 | 1 |

Lab Sample ID: LCS 660-122918/2

Matrix: Water

Analysis Batch: 122918

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Total Suspended Solids | 100 | 98.4 | | mg/L | | 98 | 80 - 120 |

Lab Sample ID: 660-46906-C-1 DU

Matrix: Water

Analysis Batch: 122918

Client Sample ID: Duplicate

Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|------------------------|------------------|---------------------|--------------|-----------------|------|---|-----|--------------|
| Total Suspended Solids | 28 | | 31.2 | | mg/L | | 12 | 20 |

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: SCB 660-122938/2 SCB

Matrix: Water

Analysis Batch: 122938

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | SCB Result | SCB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|------------------|-----|-----|------|---|----------|----------------|---------|
| Biochemical Oxygen Demand | 2.0 | U | 2.0 | 2.0 | mg/L | | | 04/04/12 09:25 | 1 |

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

Method: SM 5210B - BOD, 5-Day (Continued)

Lab Sample ID: USB 660-122938/1 USB
Matrix: Water
Analysis Batch: 122938

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

| Analyte | USB Result | USB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|------------------|-----|-----|------|---|----------|----------------|---------|
| Biochemical Oxygen Demand | 2.0 | U | 2.0 | 2.0 | mg/L | | | 04/04/12 09:25 | 1 |

Lab Sample ID: LCS 660-122938/3
Matrix: Water
Analysis Batch: 122938

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Biochemical Oxygen Demand | 198 | 219 | | mg/L | | 110 | 85 - 115 |

Lab Sample ID: 660-46910-1 DU
Matrix: Water
Analysis Batch: 122938

Client Sample ID: Leachate Effluent
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---------------------------|------------------|---------------------|--------------|-----------------|------|---|-----|--------------|
| Biochemical Oxygen Demand | 21 | | 28.1 | J3 | mg/L | | 29 | 20 |

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

General Chemistry

Analysis Batch: 122918

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|----------|------------|
| 660-46906-C-1 DU | Duplicate | Total/NA | Water | SM 2540D | |
| 660-46910-1 | Leachate Effluent | Total/NA | Water | SM 2540D | |
| 660-46910-2 | Equipment Blank | Total/NA | Water | SM 2540D | |
| LCS 660-122918/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |
| MB 660-122918/1 | Method Blank | Total/NA | Water | SM 2540D | |

Analysis Batch: 122938

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|----------------------|--------------------|-----------|--------|----------|------------|
| 660-46910-1 | Leachate Effluent | Total/NA | Water | SM 5210B | |
| 660-46910-1 DU | Leachate Effluent | Total/NA | Water | SM 5210B | |
| 660-46910-2 | Equipment Blank | Total/NA | Water | SM 5210B | |
| LCS 660-122938/3 | Lab Control Sample | Total/NA | Water | SM 5210B | |
| SCB 660-122938/2 SCB | Method Blank | Total/NA | Water | SM 5210B | |
| USB 660-122938/1 USB | Method Blank | Total/NA | Water | SM 5210B | |

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Analysis Batch: 122955

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|----------|------------|
| 660-46895-A-1 DU | Duplicate | Total/NA | Water | SM 2540C | |
| 660-46910-1 | Leachate Effluent | Total/NA | Water | SM 2540C | |
| 660-46910-2 | Equipment Blank | Total/NA | Water | SM 2540C | |
| LCS 660-122955/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| MB 660-122955/1 | Method Blank | Total/NA | Water | SM 2540C | |

Analysis Batch: 122974

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|----------------------|------------------------|-----------|--------|--------|------------|
| 660-46895-A-2 MS | Matrix Spike | Total/NA | Water | 353.2 | |
| 660-46895-A-2 MS ^2 | Matrix Spike | Total/NA | Water | 353.2 | |
| 660-46895-A-2 MSD | Matrix Spike Duplicate | Total/NA | Water | 353.2 | |
| 660-46895-A-2 MSD ^2 | Matrix Spike Duplicate | Total/NA | Water | 353.2 | |
| 660-46910-1 | Leachate Effluent | Total/NA | Water | 353.2 | |
| 660-46910-2 | Equipment Blank | Total/NA | Water | 353.2 | |
| LCS 660-122974/15 | Lab Control Sample | Total/NA | Water | 353.2 | |
| MB 660-122974/14 | Method Blank | Total/NA | Water | 353.2 | |

Prep Batch: 123153

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|---------|------------|
| 640-38050-A-4-C MS | Matrix Spike | Total/NA | Water | SM 5220 | |
| 640-38050-A-4-D MSD | Matrix Spike Duplicate | Total/NA | Water | SM 5220 | |
| 660-46910-2 | Equipment Blank | Total/NA | Water | SM 5220 | |
| LCS 660-123153/5-A | Lab Control Sample | Total/NA | Water | SM 5220 | |
| MB 660-123153/4-A | Method Blank | Total/NA | Water | SM 5220 | |

Analysis Batch: 123164

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 640-38050-A-4-C MS | Matrix Spike | Total/NA | Water | 5220 D | 123153 |
| 640-38050-A-4-D MSD | Matrix Spike Duplicate | Total/NA | Water | 5220 D | 123153 |
| 660-46910-2 | Equipment Blank | Total/NA | Water | 5220 D | 123153 |
| LCS 660-123153/5-A | Lab Control Sample | Total/NA | Water | 5220 D | 123153 |
| MB 660-123153/4-A | Method Blank | Total/NA | Water | 5220 D | 123153 |

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

General Chemistry (Continued)

Prep Batch: 123166

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|---------|------------|
| 640-38046-C-2-B MS | Matrix Spike | Total/NA | Water | SM 5220 | |
| 640-38046-C-2-C MSD | Matrix Spike Duplicate | Total/NA | Water | SM 5220 | |
| 660-46910-1 | Leachate Effluent | Total/NA | Water | SM 5220 | |
| LCS 660-123166/5-A | Lab Control Sample | Total/NA | Water | SM 5220 | |
| MB 660-123166/4-A | Method Blank | Total/NA | Water | SM 5220 | |

Analysis Batch: 123168

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 640-38046-C-2-B MS | Matrix Spike | Total/NA | Water | 5220 D | 123166 |
| 640-38046-C-2-C MSD | Matrix Spike Duplicate | Total/NA | Water | 5220 D | 123166 |
| 660-46910-1 | Leachate Effluent | Total/NA | Water | 5220 D | 123166 |
| LCS 660-123166/5-A | Lab Control Sample | Total/NA | Water | 5220 D | 123166 |
| MB 660-123166/4-A | Method Blank | Total/NA | Water | 5220 D | 123166 |

8

Field Service / Mobile Lab

Analysis Batch: 123094

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|-------------------|-----------|--------|----------------|------------|
| 660-46910-1 | Leachate Effluent | Total/NA | Water | Field Sampling | |

Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

Client Sample ID: Leachate Effluent

Lab Sample ID: 660-46910-1

Date Collected: 04/03/12 13:40

Matrix: Water

Date Received: 04/03/12 15:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | SM 2540D | | 1 | 122918 | 04/04/12 08:57 | TO | TAL TAM |
| Total/NA | Analysis | SM 5210B | | 1 | 122938 | 04/04/12 15:09 | EM | TAL TAM |
| Total/NA | Analysis | SM 2540C | | 1 | 122955 | 04/04/12 14:53 | TO | TAL TAM |
| Total/NA | Analysis | 353.2 | | 200 | 122974 | 04/04/12 12:50 | KW | TAL TAM |
| Total/NA | Prep | SM 5220 | | | 123166 | 04/10/12 10:45 | EM | TAL TAM |
| Total/NA | Analysis | 5220 D | | 5 | 123168 | 04/10/12 15:10 | EM | TAL TAM |
| Total/NA | Analysis | Field Sampling | | 1 | 123094 | 04/03/12 13:40 | | TAL TAM |

9

Client Sample ID: Equipment Blank

Lab Sample ID: 660-46910-2

Date Collected: 04/03/12 13:35

Matrix: Water

Date Received: 04/03/12 15:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | SM 2540D | | 1 | 122918 | 04/04/12 08:57 | TO | TAL TAM |
| Total/NA | Analysis | SM 5210B | | 1 | 122938 | 04/04/12 15:05 | EM | TAL TAM |
| Total/NA | Analysis | SM 2540C | | 1 | 122955 | 04/04/12 14:53 | TO | TAL TAM |
| Total/NA | Analysis | 353.2 | | 1 | 122974 | 04/04/12 11:01 | KW | TAL TAM |
| Total/NA | Prep | SM 5220 | | | 123153 | 04/10/12 10:45 | EM | TAL TAM |
| Total/NA | Analysis | 5220 D | | 1 | 123164 | 04/10/12 14:45 | EM | TAL TAM |

Laboratory References:

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Certification Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

| Laboratory | Authority | Program | EPA Region | Certification ID |
|-------------------|-----------|---------------|------------|------------------|
| TestAmerica Tampa | Alabama | State Program | 4 | 40610 |
| TestAmerica Tampa | Florida | NELAC | 4 | E84282 |
| TestAmerica Tampa | Georgia | State Program | 4 | 905 |
| TestAmerica Tampa | USDA | Federal | | P330-11-00177 |

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

10

Method Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

| Method | Method Description | Protocol | Laboratory |
|----------------|-------------------------------|----------|------------|
| 353.2 | Nitrate | MCAWW | TAL TAM |
| 5220 D | Chemical Oxygen Demand | SM20 | TAL TAM |
| SM 2540C | Solids, Total Dissolved (TDS) | SM | TAL TAM |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL TAM |
| SM 5210B | BOD, 5-Day | SM | TAL TAM |
| Field Sampling | Field Sampling | EPA | TAL TAM |

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

Laboratory References:

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427



Sample Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|-------------------|--------|----------------|----------------|
| 660-46910-1 | Leachate Effluent | Water | 04/03/12 13:40 | 04/03/12 15:30 |
| 660-46910-2 | Equipment Blank | Water | 04/03/12 13:35 | 04/03/12 15:30 |

12

660-46910

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET

LEACHATE TRUCKS AND TANKS MONITORING PROGRAMLEACHATE PLANT

PRECLEANED SAMPLE CONTAINERS:

RELINQUISHED BY: Caryl McMurtry

REP. OF CONTRACT LAB.

DATE | TIME

ACCEPTED BY: AB

REP. OF SOLID WASTE DEPT.

3/26/12 | 1:00
3-30-12 1:00LOCATION: LEACHATE EFFLUENTSAMPLE MATRIX: WATER OTHER MATRIX: PERSONAL ENGAGED IN SAMPLE COLLECTION: ☒ K. Balloon ☒ JC ☐FIELD PARAMETERS:

| BY | TIME | TEMP | COND | PH | DO | TURB |
|-------|------|-------|-------|------|------|------|
| AB JC | 1:40 | 29.97 | 10244 | 7.86 | 5.49 | N/A |

SAMPLE CONTAINERS

| QTY | CONTAINER DESCRIPTION | QTY | CONTAINER DESCRIPTION | PRESERVED |
|-----|-----------------------|-----|-----------------------|-----------|
| | 40 ml VIAL | | 40 ml VIAL | |
| | 125 ml. PLASTIC | | 125 ml. PLASTIC | |
| | 125 ml GLASS | | 125 ml GLASS | |
| 1 | 250 ml. PLASTIC | 1 | 250 ml. PLASTIC | |
| | 250 ml. GLASS | | 250 ml. GLASS | |
| | 500 ml. PLASTIC | | 500 ml. PLASTIC | |
| | 500 ml. GLASS | | 500 ml. GLASS | |
| 3 | LITER PLASTIC | | LITER PLASTIC | |
| | LITER GLASS | | LITER GLASS | |
| | BACTERIAL | | BACTERIAL | |

5

TOTAL No. OF SAMPLES COLLECTED:

COLORS & SHEENS: YES N/A NO

COLLECTED

DATE | TIME

3-3-12 | 1:40

ANALYSIS REQUESTED:MONTHLY LEACHATE PLANT PARAMETERSBODTSSNITRATETDSCODPRESERVED SAMPLES PH < 2.0 YES SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:

RELINQUISHED BY: AB

REP. OF SOLID WASTE DEPT.

DATE | TIME

ACCEPTED BY: JC

REP. OF CONTRACT LAB.

3-3-12 3:30
3-3-12 3:30COMMENT'S: W0# 0067

5.9% Cu-07

660-46910

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
LEACHATE TRUCKS AND TANKS MONITORING PROGRAM
LEACHATE PLANT EQUIPMENT BLANK

PRECLEANED SAMPLE CONTAINERS:

RELINQUISHED BY: Cayle McWhorter

REP. OF CONTRACT LAB.

DATE | TIME

3/26/12 1:00

ACCEPTED BY: [Signature]

REP. OF SOLID WASTE DEPT.

3-30-12 1:00

LOCATION: EQUIPMENT BLANK

SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION: ☒ A. Balloon ☒ JC ☐

FIELD PARAMETERS: N/A

SAMPLE CONTAINERS

| QTY | CONTAINER DESCRIPTION | QTY | CONTAINER DESCRIPTION | PRESERVED |
|-----|-----------------------|-----|-----------------------|-----------|
| | 40 ml VIAL | | 40 ml VIAL | |
| | 125 ml. PLASTIC | | 125 ml. PLASTIC | |
| | 125 ml GLASS | | 125 ml GLASS | |
| 1 | 250 ml. PLASTIC | 1 | 250 ml. PLASTIC | |
| | 250 ml. GLASS | | 250 ml. GLASS | |
| | 500 ml. PLASTIC | | 500 ml. PLASTIC | |
| | 500 ml. GLASS | | 500 ml. GLASS | |
| 3 | LITER PLASTIC | | LITER PLASTIC | |
| | LITER GLASS | | LITER GLASS | |
| | BACTERIAL | | BACTERIAL | |

5 TOTAL No. OF SAMPLES COLLECTED:

COLORS & SHEENS: YES N/A NO

COLLECTED

DATE | TIME

4-3-12 8:25 1:05

ANALYSIS REQUESTED:

MONTHLY LEACHATE PLANT PARAMETERS

BOD

TSS

NITRATE

TDS

COD

PRESERVED SAMPLES PH < 2.0 YES SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:

RELINQUISHED BY: [Signature]

REP. OF SOLID WASTE DEPT.

DATE | TIME

4-3-12 10:25 3:30

ACCEPTED BY: [Signature]

REP. OF CONTRACT LAB.

4-3-12 10:25 3:30

COMMENT'S: Watt 0067

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-46910-1

Login Number: 46910

List Source: TestAmerica Tampa

List Number: 1

Creator: Snead, Joshua

| Question | Answer | Comment |
|--|--------|-----------|
| Radioactivity either was not measured or, if measured, is at or below background | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| 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 | 5.9c Cu07 |
| 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 sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | 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. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

14

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Tampa

6712 Benjamin Road

Suite 100

Tampa, FL 33634

Tel: (813)885-7427

TestAmerica Job ID: 660-47403-1

Client Project/Site: Leachate Effluent

For:

Hillsborough County Public Utilities Dep

Solid Waste Management Group

Brandon Support Operations Complex

332 North Falkenburg Rd, 2nd Floor

Tampa, Florida 33619

Attn: David Adams



Authorized for release by:

5/18/2012 3:32:15 PM

Nancy Robertson

Project Manager II

nancy.robertson@testamericainc.com

LINKS

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results through

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The
Expert**

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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



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Definitions/Glossary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Qualifiers

General Chemistry

| Qualifier | Qualifier Description |
|-----------|--|
| J3 | Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria. |
| U | Indicates that the compound was analyzed for but not detected. |
| Q | Sample held beyond the accepted holding time. |
| I | The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|--|
| ☆ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RL | Reporting Limit |
| 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: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Job ID: 660-47403-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative
660-47403-1

Comments

No additional comments.

Receipt

The samples were received on 5/1/2012 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.7° C.

General Chemistry

Method SM 2540C: Due to a laboratory error, the TDS for sample Equipment Blank was analyzed after the hold time exceeded. The sample is flagged with Q.

Method SM 2540D: The sample duplicate %RPD associated with batch 124058 was outside control limits.

Method SM 5220D: matrix spike duplicate (MSD) recovery for batch 124296 was outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.



Detection Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Client Sample ID: LEACHATE EFFLUENT

Lab Sample ID: 660-47403-1

| Analyte | Result | Qualifier | PQL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------------------------|--------|-----------|-----|-----|-----------|---------|---|----------------|-----------|
| Nitrate as N | 120 | | 50 | 10 | mg/L | 100 | | 353.2 | Total/NA |
| Chemical Oxygen Demand | 510 | | 20 | 10 | mg/L | 1 | | 5220 D | Total/NA |
| Total Dissolved Solids | 4800 | | 250 | 250 | mg/L | 1 | | SM 2540C | Total/NA |
| Total Suspended Solids | 27 | | 1.2 | 1.2 | mg/L | 1 | | SM 2540D | Total/NA |
| Biochemical Oxygen Demand | 28 | | 12 | 12 | mg/L | 1 | | SM 5210B | Total/NA |
| Field pH | 7.68 | | | | SU | 1 | | Field Sampling | Total/NA |
| Field Temperature | 29.49 | | | | Degrees C | 1 | | Field Sampling | Total/NA |
| Oxygen, Dissolved | 6.20 | | | | mg/L | 1 | | Field Sampling | Total/NA |
| Specific Conductance | 9909 | | | | umhos/cm | 1 | | Field Sampling | Total/NA |

Client Sample ID: BLANK EQUIPMENT 47403

Lab Sample ID: 660-47403-2

No Detections

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Client Sample ID: LEACHATE EFFLUENT

Lab Sample ID: 660-47403-1

Date Collected: 05/01/12 12:50

Matrix: Water

Date Received: 05/01/12 14:40

General Chemistry

| Analyte | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----|-----|------|---|----------------|----------------|---------|
| Nitrate as N | 120 | | 50 | 10 | mg/L | | | 05/02/12 17:46 | 100 |
| Chemical Oxygen Demand | 510 | | 20 | 10 | mg/L | | 05/09/12 10:16 | 05/09/12 12:25 | 1 |
| Total Dissolved Solids | 4800 | | 250 | 250 | mg/L | | | 05/04/12 13:33 | 1 |
| Total Suspended Solids | 27 | | 1.2 | 1.2 | mg/L | | | 05/03/12 08:10 | 1 |
| Biochemical Oxygen Demand | 28 | | 12 | 12 | mg/L | | | 05/02/12 11:46 | 1 |

6

Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Field pH | 7.68 | | | | SU | | | 05/01/12 12:50 | 1 |
| Field Temperature | 29.49 | | | | Degrees C | | | 05/01/12 12:50 | 1 |
| Oxygen, Dissolved | 6.20 | | | | mg/L | | | 05/01/12 12:50 | 1 |
| Specific Conductance | 9909 | | | | umhos/cm | | | 05/01/12 12:50 | 1 |

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Client Sample ID: BLANK EQUIPMENT 47403

Lab Sample ID: 660-47403-2

Date Collected: 05/01/12 12:40

Matrix: Water

Date Received: 05/01/12 14:40

General Chemistry

| Analyte | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | DII Fac |
|---------------------------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Nitrate as N | 0.10 | U | 0.50 | 0.10 | mg/L | | | 05/02/12 17:39 | 1 |
| Chemical Oxygen Demand | 10 | U | 20 | 10 | mg/L | | 05/09/12 09:42 | 05/09/12 12:00 | 1 |
| Total Dissolved Solids | 5.0 | U Q | 5.0 | 5.0 | mg/L | | | 05/17/12 14:30 | 1 |
| Total Suspended Solids | 1.0 | U | 1.0 | 1.0 | mg/L | | | 05/03/12 08:10 | 1 |
| Biochemical Oxygen Demand | 2.0 | U | 2.0 | 2.0 | mg/L | | | 05/02/12 11:46 | 1 |



QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Method: 353.2 - Nitrate

Lab Sample ID: MB 660-124134/14
Matrix: Water
Analysis Batch: 124134

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

| Analyte | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------|--------------|-----------------|------|------|------|---|----------|----------------|---------|
| Nitrate as N | 0.10 | U | 0.50 | 0.10 | mg/L | | | 05/02/12 17:27 | 1 |

Lab Sample ID: LCS 660-124134/15
Matrix: Water
Analysis Batch: 124134

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Nitrate Nitrite as N | 1.00 | 0.978 | | mg/L | | 98 | 90 - 110 |
| Nitrite as N | 0.500 | 0.484 | I | mg/L | | 97 | 90 - 110 |

Lab Sample ID: 660-47418-L-1 MS
Matrix: Water
Analysis Batch: 124134

Client Sample ID: Matrix Spike
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|------------------|---------------------|----------------|--------------|-----------------|------|---|------|-----------------|
| Nitrate Nitrite as N | 0.10 | U | 1.00 | 1.03 | | mg/L | | 103 | 90 - 110 |
| Nitrite as N | 0.10 | U | 0.500 | 0.510 | | mg/L | | 102 | 90 - 110 |

Lab Sample ID: 660-47418-L-1 MSD
Matrix: Water
Analysis Batch: 124134

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------------------|------------------|---------------------|----------------|---------------|------------------|------|---|------|-----------------|-----|--------------|
| Nitrate Nitrite as N | 0.10 | U | 1.00 | 1.03 | | mg/L | | 103 | 90 - 110 | 0 | 30 |
| Nitrite as N | 0.10 | U | 0.500 | 0.509 | | mg/L | | 102 | 90 - 110 | 0 | 30 |

Method: 5220 D - Chemical Oxygen Demand

Lab Sample ID: MB 660-124279/4-A
Matrix: Water
Analysis Batch: 124297

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124279

| Analyte | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|--------------|-----------------|-----|-----|------|---|----------------|----------------|---------|
| Chemical Oxygen Demand | 10 | U | 20 | 10 | mg/L | | 05/09/12 09:42 | 05/09/12 12:00 | 1 |

Lab Sample ID: LCS 660-124279/5-A
Matrix: Water
Analysis Batch: 124297

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124279

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Chemical Oxygen Demand | 50.0 | 51.2 | | mg/L | | 102 | 90 - 110 |

Lab Sample ID: 660-47419-B-1-B MS
Matrix: Water
Analysis Batch: 124297

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 124279

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|------------------|---------------------|----------------|--------------|-----------------|------|---|------|-----------------|
| Chemical Oxygen Demand | 28 | | 50.0 | 75.8 | | mg/L | | 96 | 90 - 110 |

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Method: 5220 D - Chemical Oxygen Demand (Continued)

Lab Sample ID: 660-47419-B-1-C MSD

Matrix: Water

Analysis Batch: 124297

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 124279

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|------------------------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Chemical Oxygen Demand | 28 | | 50.0 | 75.2 | | mg/L | | 95 | 90 - 110 | 1 | 20 |

Lab Sample ID: MB 660-124281/4-A

Matrix: Water

Analysis Batch: 124296

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 124281

| Analyte | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|--------------|-----|-----|------|---|----------------|----------------|---------|
| Chemical Oxygen Demand | 10 | U | 20 | 10 | mg/L | | 05/09/12 10:16 | 05/09/12 12:25 | 1 |

Lab Sample ID: LCS 660-124281/5-A

Matrix: Water

Analysis Batch: 124296

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 124281

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| Chemical Oxygen Demand | 200 | 191 | | mg/L | | 96 | 90 - 110 |

Lab Sample ID: 640-38419-A-1-B MS

Matrix: Water

Analysis Batch: 124296

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 124281

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Chemical Oxygen Demand | 2700 | J3 | 100 | 2820 | | mg/L | | 90 | 90 - 110 |

Lab Sample ID: 640-38419-A-1-C MSD

Matrix: Water

Analysis Batch: 124296

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 124281

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|------------------------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Chemical Oxygen Demand | 2700 | J3 | 100 | 2820 | J3 | mg/L | | 86 | 90 - 110 | 0 | 20 |

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 660-124146/1

Matrix: Water

Analysis Batch: 124146

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|--------------|-----|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids | 5.0 | U | 5.0 | 5.0 | mg/L | | | 05/04/12 13:28 | 1 |

Lab Sample ID: LCS 660-124146/2

Matrix: Water

Analysis Batch: 124146

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| Total Dissolved Solids | 10000 | 9940 | | mg/L | | 99 | 80 - 120 |

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 660-47372-A-1 DU
Matrix: Water
Analysis Batch: 124146

Client Sample ID: Duplicate
Prep Type: Total/NA

| Analyte | Sample | Sample | DU | DU | Unit | D | RPD | Limit |
|------------------------|--------|-----------|--------|-----------|------|---|-----|-------|
| | Result | Qualifier | Result | Qualifier | | | | |
| Total Dissolved Solids | 1200 | | 1140 | | mg/L | | 3 | 20 |

Lab Sample ID: MB 660-124611/1
Matrix: Water
Analysis Batch: 124611

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

| Analyte | MB | MB | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Total Dissolved Solids | 5.0 | U | 5.0 | 5.0 | mg/L | | | 05/17/12 13:59 | 1 |

Lab Sample ID: LCS 660-124611/2
Matrix: Water
Analysis Batch: 124611

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| | | | | | | | |
| Total Dissolved Solids | 10000 | 9860 | | mg/L | | 99 | 80 - 120 |

Lab Sample ID: 660-47671-A-4 DU
Matrix: Water
Analysis Batch: 124611

Client Sample ID: Duplicate
Prep Type: Total/NA

| Analyte | Sample | Sample | DU | DU | Unit | D | RPD | Limit |
|------------------------|--------|-----------|--------|-----------|------|---|-----|-------|
| | Result | Qualifier | Result | Qualifier | | | | |
| Total Dissolved Solids | 200 | | 204 | | mg/L | | 4 | 20 |

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 660-124058/1
Matrix: Water
Analysis Batch: 124058

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

| Analyte | MB | MB | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Total Suspended Solids | 1.0 | U | 1.0 | 1.0 | mg/L | | | 05/03/12 08:10 | 1 |

Lab Sample ID: LCS 660-124058/2
Matrix: Water
Analysis Batch: 124058

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| | | | | | | | |
| Total Suspended Solids | 100 | 97.2 | | mg/L | | 97 | 80 - 120 |

Lab Sample ID: 660-47380-C-5 DU
Matrix: Water
Analysis Batch: 124058

Client Sample ID: Duplicate
Prep Type: Total/NA

| Analyte | Sample | Sample | DU | DU | Unit | D | RPD | Limit |
|------------------------|--------|-----------|--------|-----------|------|---|-----|-------|
| | Result | Qualifier | Result | Qualifier | | | | |
| Total Suspended Solids | 18 | | 27.2 | J3 | mg/L | | 41 | 20 |

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: SCB 660-124019/2 SCB
Matrix: Water
Analysis Batch: 124019

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

| Analyte | SCB SCB | | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------|-----------|-----|-----|------|---|----------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Biochemical Oxygen Demand | 2.0 | U | 2.0 | 2.0 | mg/L | | | 05/02/12 11:46 | 1 |

Lab Sample ID: USB 660-124019/1 USB
Matrix: Water
Analysis Batch: 124019

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

| Analyte | USB USB | | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------|-----------|-----|-----|------|---|----------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Biochemical Oxygen Demand | 2.0 | U | 2.0 | 2.0 | mg/L | | | 05/02/12 11:46 | 1 |

Lab Sample ID: LCS 660-124019/3
Matrix: Water
Analysis Batch: 124019

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

| Analyte | Spike Added | LCS LCS | | Unit | D | %Rec | %Rec. Limits |
|---------------------------|-------------|---------|-----------|------|---|------|--------------|
| | | Result | Qualifier | | | | |
| Biochemical Oxygen Demand | 198 | 215 | | mg/L | | 108 | 85 - 115 |

Lab Sample ID: 660-47390-F-4 DU
Matrix: Water
Analysis Batch: 124019

Client Sample ID: Duplicate
Prep Type: Total/NA

| Analyte | Sample Sample | | DU DU | | Unit | D | RPD | Limit |
|---------------------------|---------------|-----------|--------|-----------|------|---|-----|-------|
| | Result | Qualifier | Result | Qualifier | | | | |
| Biochemical Oxygen Demand | 2.7 | | 2.0 | U | mg/L | | NC | 20 |

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

General Chemistry

Analysis Batch: 124019

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|----------------------|-----------------------|-----------|--------|----------|------------|
| 660-47390-F-4 DU | Duplicate | Total/NA | Water | SM 5210B | |
| 660-47403-1 | LEACHATE EFFLUENT | Total/NA | Water | SM 5210B | |
| 660-47403-2 | BLANK EQUIPMENT 47403 | Total/NA | Water | SM 5210B | |
| LCS 660-124019/3 | Lab Control Sample | Total/NA | Water | SM 5210B | |
| SCB 660-124019/2 SCB | Method Blank | Total/NA | Water | SM 5210B | |
| USB 660-124019/1 USB | Method Blank | Total/NA | Water | SM 5210B | |

Analysis Batch: 124058

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|-----------------------|-----------|--------|----------|------------|
| 660-47380-C-5 DU | Duplicate | Total/NA | Water | SM 2540D | |
| 660-47403-1 | LEACHATE EFFLUENT | Total/NA | Water | SM 2540D | |
| 660-47403-2 | BLANK EQUIPMENT 47403 | Total/NA | Water | SM 2540D | |
| LCS 660-124058/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |
| MB 660-124058/1 | Method Blank | Total/NA | Water | SM 2540D | |

Analysis Batch: 124134

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 660-47403-1 | LEACHATE EFFLUENT | Total/NA | Water | 353.2 | |
| 660-47403-2 | BLANK EQUIPMENT 47403 | Total/NA | Water | 353.2 | |
| 660-47418-L-1 MS | Matrix Spike | Total/NA | Water | 353.2 | |
| 660-47418-L-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 353.2 | |
| LCS 660-124134/15 | Lab Control Sample | Total/NA | Water | 353.2 | |
| MB 660-124134/14 | Method Blank | Total/NA | Water | 353.2 | |

Analysis Batch: 124146

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|----------|------------|
| 660-47372-A-1 DU | Duplicate | Total/NA | Water | SM 2540C | |
| 660-47403-1 | LEACHATE EFFLUENT | Total/NA | Water | SM 2540C | |
| LCS 660-124146/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| MB 660-124146/1 | Method Blank | Total/NA | Water | SM 2540C | |

Prep Batch: 124279

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|---------|------------|
| 660-47403-2 | BLANK EQUIPMENT 47403 | Total/NA | Water | SM 5220 | |
| 660-47419-B-1-B MS | Matrix Spike | Total/NA | Water | SM 5220 | |
| 660-47419-B-1-C MSD | Matrix Spike Duplicate | Total/NA | Water | SM 5220 | |
| LCS 660-124279/5-A | Lab Control Sample | Total/NA | Water | SM 5220 | |
| MB 660-124279/4-A | Method Blank | Total/NA | Water | SM 5220 | |

Prep Batch: 124281

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|---------|------------|
| 640-38419-A-1-B MS | Matrix Spike | Total/NA | Water | SM 5220 | |
| 640-38419-A-1-C MSD | Matrix Spike Duplicate | Total/NA | Water | SM 5220 | |
| 660-47403-1 | LEACHATE EFFLUENT | Total/NA | Water | SM 5220 | |
| LCS 660-124281/5-A | Lab Control Sample | Total/NA | Water | SM 5220 | |
| MB 660-124281/4-A | Method Blank | Total/NA | Water | SM 5220 | |

Analysis Batch: 124296

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 640-38419-A-1-B MS | Matrix Spike | Total/NA | Water | 5220 D | 124281 |
| 640-38419-A-1-C MSD | Matrix Spike Duplicate | Total/NA | Water | 5220 D | 124281 |
| 660-47403-1 | LEACHATE EFFLUENT | Total/NA | Water | 5220 D | 124281 |

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

General Chemistry (Continued)

Analysis Batch: 124296 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| LCS 660-124281/5-A | Lab Control Sample | Total/NA | Water | 5220 D | 124281 |
| MB 660-124281/4-A | Method Blank | Total/NA | Water | 5220 D | 124281 |

Analysis Batch: 124297

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 660-47403-2 | BLANK EQUIPMENT 47403 | Total/NA | Water | 5220 D | 124279 |
| 660-47419-B-1-B MS | Matrix Spike | Total/NA | Water | 5220 D | 124279 |
| 660-47419-B-1-C MSD | Matrix Spike Duplicate | Total/NA | Water | 5220 D | 124279 |
| LCS 660-124279/5-A | Lab Control Sample | Total/NA | Water | 5220 D | 124279 |
| MB 660-124279/4-A | Method Blank | Total/NA | Water | 5220 D | 124279 |

Analysis Batch: 124611

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|-----------------------|-----------|--------|----------|------------|
| 660-47403-2 | BLANK EQUIPMENT 47403 | Total/NA | Water | SM 2540C | |
| 660-47671-A-4 DU | Duplicate | Total/NA | Water | SM 2540C | |
| LCS 660-124611/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| MB 660-124611/1 | Method Blank | Total/NA | Water | SM 2540C | |

Field Service / Mobile Lab

Analysis Batch: 124064

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|-------------------|-----------|--------|----------------|------------|
| 660-47403-1 | LEACHATE EFFLUENT | Total/NA | Water | Field Sampling | |

Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Client Sample ID: LEACHATE EFFLUENT

Date Collected: 05/01/12 12:50

Date Received: 05/01/12 14:40

Lab Sample ID: 660-47403-1

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | SM 5210B | | 1 | 124019 | 05/02/12 11:46 | AG | TAL TAM |
| Total/NA | Analysis | SM 2540D | | 1 | 124058 | 05/03/12 08:10 | TO | TAL TAM |
| Total/NA | Analysis | 353.2 | | 100 | 124134 | 05/02/12 17:46 | EM | TAL TAM |
| Total/NA | Analysis | SM 2540C | | 1 | 124146 | 05/04/12 13:33 | TO | TAL TAM |
| Total/NA | Prep | SM 5220 | | | 124281 | 05/09/12 10:16 | EM | TAL TAM |
| Total/NA | Analysis | 5220 D | | 1 | 124296 | 05/09/12 12:25 | EM | TAL TAM |
| Total/NA | Analysis | Field Sampling | | 1 | 124064 | 05/01/12 12:50 | | TAL TAM |

9

Client Sample ID: BLANK EQUIPMENT 47403

Date Collected: 05/01/12 12:40

Date Received: 05/01/12 14:40

Lab Sample ID: 660-47403-2

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | SM 5210B | | 1 | 124019 | 05/02/12 11:46 | AG | TAL TAM |
| Total/NA | Analysis | SM 2540D | | 1 | 124058 | 05/03/12 08:10 | TO | TAL TAM |
| Total/NA | Analysis | 353.2 | | 1 | 124134 | 05/02/12 17:39 | EM | TAL TAM |
| Total/NA | Prep | SM 5220 | | | 124279 | 05/09/12 09:42 | EM | TAL TAM |
| Total/NA | Analysis | 5220 D | | 1 | 124297 | 05/09/12 12:00 | EM | TAL TAM |
| Total/NA | Analysis | SM 2540C | | 1 | 124611 | 05/17/12 14:30 | TO | TAL TAM |

Laboratory References:

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Certification Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

| Laboratory | Authority | Program | EPA Region | Certification ID |
|-------------------|-----------|---------------|------------|------------------|
| TestAmerica Tampa | Alabama | State Program | 4 | 40610 |
| TestAmerica Tampa | Florida | NELAC | 4 | E84282 |
| TestAmerica Tampa | Georgia | State Program | 4 | 905 |
| TestAmerica Tampa | USDA | Federal | | P330-11-00177 |

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.



Method Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

| Method | Method Description | Protocol | Laboratory |
|----------------|-------------------------------|----------|------------|
| 353.2 | Nitrate | MCAWW | TAL TAM |
| 5220 D | Chemical Oxygen Demand | SM20 | TAL TAM |
| SM 2540C | Solids, Total Dissolved (TDS) | SM | TAL TAM |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL TAM |
| SM 5210B | BOD, 5-Day | SM | TAL TAM |
| Field Sampling | Field Sampling | EPA | TAL TAM |

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

Laboratory References:

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427



Sample Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|-----------------------|--------|----------------|----------------|
| 660-47403-1 | LEACHATE EFFLUENT | Water | 05/01/12 12:50 | 05/01/12 14:40 |
| 660-47403-2 | BLANK EQUIPMENT 47403 | Water | 05/01/12 12:40 | 05/01/12 14:40 |

12

660-47403

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
LEACHATE TRUCKS AND TANKS MONITORING PROGRAM

LEACHATE PLANT

PRECLEANED SAMPLE CONTAINERS: _____ DATE | TIME
RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____
ACCEPTED BY: 12 CLG REP. OF SOLID WASTE DEPT. 5.1.12 | 10:00

LOCATION: LEACHATE EFFLUENT SAMPLE MATRIX: WATER OTHER MATRIX: _____
PERSONAL ENGAGED IN SAMPLE COLLECTION: ☒ A. Balloon 23 Clayton ☐

FIELD PARAMETERS:

| BY | TIME | TEMP | COND | PH | DO | TURB |
|-------|-------|-------|------|------|------|-------|
| AB JC | 12:50 | 29.47 | 9909 | 7.48 | 6.20 | N/A = |

SAMPLE CONTAINERS

| QTY | CONTAINER DESCRIPTION | QTY | CONTAINER DESCRIPTION | PRESERVED |
|-----|-----------------------|-----|-----------------------|-----------|
| | 40 ml VIAL | | 40 ml VIAL | |
| | 125 ml. PLASTIC | | 125 ml. PLASTIC | |
| | 125 ml GLASS | | 125 ml GLASS | |
| 1 | 250 ml. PLASTIC | 1 | 250 ml. PLASTIC | |
| 1 | 250 ml. GLASS | | 250 ml. GLASS | |
| | 500 ml. PLASTIC | | 500 ml. PLASTIC | |
| | 500 ml. GLASS | | 500 ml. GLASS | |
| 3 | LITER PLASTIC | | LITER PLASTIC | |
| | LITER GLASS | | LITER GLASS | |
| | BACTERIAL | | BACTERIAL | |

4 TOTAL No. OF SAMPLES COLLECTED:

COLORS & SHEENS: YES N/A NO

COLLECTED
DATE | TIME
5.1.12 | 12:50

ANALYSIS REQUESTED:

MONTHLY LEACHATE PLANT PARAMETERS BOD TSS NITRATE TDS COD

PRESERVED SAMPLES PH < 2.0 _____ SAMPLE STORAGE: COOLER & ICE TO 4.0 C

ABOVE LISTED SAMPLES: _____ DATE | TIME
RELINQUISHED BY: 12 CLG REP. OF SOLID WASTE DEPT. 5.1.12 | 1440
ACCEPTED BY: Carol McHenry REP. OF CONTRACT LAB. 5.1.12 | 1440

COMMENT'S: W00# 0067

4.7c C0-07

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
LEACHATE TRUCKS AND TANKS MONITORING PROGRAM

LEACHATE PLANT EQUIPMENT BLANK

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY:

REP. OF CONTRACT LAB.

ACCEPTED BY:

Jim Clapp

REP. OF SOLID WASTE DEPT.

5.1.12 | *10:00*

LOCATION: **EQUIPMENT BLANK**

SAMPLE MATRIX: **WATER** OTHER MATRIX:

PERSONAL ENGAGED IN SAMPLE COLLECTION: ☒ A. Balloon ☒ *Jim Clapp* ☐

FIELD PARAMETERS: N/A

SAMPLE CONTAINERS

| QTY | CONTAINER DESCRIPTION | QTY | CONTAINER DESCRIPTION | PRESERVED |
|----------|-----------------------|----------|-----------------------|-----------|
| | 40 ml VIAL | | 40 ml VIAL | |
| | 125 ml. PLASTIC | | 125 ml. PLASTIC | |
| | 125 ml. GLASS | | 125 ml. GLASS | |
| <i>1</i> | 250 ml. PLASTIC | <i>1</i> | 250 ml. PLASTIC | |
| | 250 ml. GLASS | | 250 ml. GLASS | |
| | 500 ml. PLASTIC | | 500 ml. PLASTIC | |
| | 500 ml. GLASS | | 500 ml. GLASS | |
| <i>3</i> | LITER PLASTIC | | LITER PLASTIC | |
| | LITER GLASS | | LITER GLASS | |
| | BACTERIAL | | BACTERIAL | |

13

5 TOTAL No. OF SAMPLES COLLECTED:

COLORS & SHEENS: YES N/A NO

COLLECTED

DATE | TIME

5.1.12 | *12:40*

ANALYSIS REQUESTED:

MONTHLY LEACHATE PLANT PARAMETERS

BOD

TSS

NITRATE

TDS

COD

PRESERVED SAMPLES PH < 2.0 ☒

SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:

RELINQUISHED BY:

Jim Clapp

REP. OF SOLID WASTE DEPT.

DATE | TIME

5.1.12 | *2:40*

ACCEPTED BY:

Carol McMillan

REP. OF CONTRACT LAB.

5.1.12 | *2:40*

COMMENT'S:

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-47403-1

Login Number: 47403

List Source: TestAmerica Tampa

List Number: 1

Creator: McNulty, Carol

| Question | Answer | Comment |
|--|--------|-----------------|
| Radioactivity either was not measured or, if measured, is at or below background | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | 4.7 deg C Cu-07 |
| 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 sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | 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. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | True | |



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Tampa

6712 Benjamin Road

Suite 100

Tampa, FL 33634

Tel: (813)885-7427

TestAmerica Job ID: 660-48028-1

Client Project/Site: Leachate Effluent

For:

Hillsborough County Public Utilities Dep

Solid Waste Management Group

Brandon Support Operations Complex

332 North Falkenburg Rd, 2nd Floor

Tampa, Florida 33619

Attn: David Adams



Authorized for release by:

6/19/2012 1:31:14 PM

Nancy Robertson

Project Manager II

nancy.robertson@testamericainc.com

LINKS

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results through

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**? Ask
The
Expert**

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www.testamericainc.com

The test results in this report meet all 2003 NELAP and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

3

Qualifiers

General Chemistry

| Qualifier | Qualifier Description |
|-----------|--|
| U | Indicates that the compound was analyzed for but not detected. |
| J3 | Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|--|
| ☆ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RL | Reporting Limit |
| 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: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Job ID: 660-48028-1

Laboratory: TestAmerica Tampa

4

Narrative

Job Narrative 660-48028-1

Comments

No additional comments.

Receipt

The samples were received on 6/5/2012 2:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

General Chemistry

Method SM 5220D: Due to the high concentration of analyte, the matrix spike / matrix spike duplicate (MS/MSD) for batch 125234 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria. The sample is flagged with J3.

Method SM 5220D: The matrix spike (MS) recovery for batch 125421 was outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

Detection Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Client Sample ID: Leachate Effluent

Lab Sample ID: 660-48028-1

| Analyte | Result | Qualifier | PQL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-----------|---------|---|-----------------|-----------|
| Chemical Oxygen Demand | 660 | J3 | 20 | 10 | mg/L | 1 | | 5220 D | Total/NA |
| Nitrate as N | 0.82 | | 0.010 | 0.0047 | mg/L | 1 | | Nitrate by calc | Total/NA |
| Total Dissolved Solids | 5100 | | 250 | 250 | mg/L | 1 | | SM 2540C | Total/NA |
| Total Suspended Solids | 27 | | 1.0 | 1.0 | mg/L | 1 | | SM 2540D | Total/NA |
| Field pH | 8.00 | | | | SU | 1 | | Field Sampling | Total/NA |
| Field Temperature | 31.57 | | | | Degrees C | 1 | | Field Sampling | Total/NA |
| Oxygen, Dissolved | 5.18 | | | | mg/L | 1 | | Field Sampling | Total/NA |
| Specific Conductance | 10389 | | | | umhos/cm | 1 | | Field Sampling | Total/NA |

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Client Sample ID: Equipment Blank 48028

Lab Sample ID: 660-48028-2

No Detections

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Client Sample ID: Leachate Effluent

Lab Sample ID: 660-48028-1

Date Collected: 06/05/12 12:40

Matrix: Water

Date Received: 06/05/12 14:30

General Chemistry

| Analyte | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-------|--------|------|---|----------------|----------------|---------|
| Chemical Oxygen Demand | 660 | J3 | 20 | 10 | mg/L | | 06/06/12 12:00 | 06/06/12 16:30 | 1 |
| Nitrate as N | 0.82 | | 0.010 | 0.0047 | mg/L | | | 06/11/12 18:07 | 1 |
| Total Dissolved Solids | 5100 | | 250 | 250 | mg/L | | | 06/11/12 14:53 | 1 |
| Total Suspended Solids | 27 | | 1.0 | 1.0 | mg/L | | | 06/06/12 06:03 | 1 |
| Biochemical Oxygen Demand | 40 | U | 40 | 40 | mg/L | | | 06/06/12 10:40 | 1 |



Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Field pH | 8.00 | | | | SU | | | 06/05/12 12:40 | 1 |
| Field Temperature | 31.57 | | | | Degrees C | | | 06/05/12 12:40 | 1 |
| Oxygen, Dissolved | 5.18 | | | | mg/L | | | 06/05/12 12:40 | 1 |
| Specific Conductance | 10389 | | | | umhos/cm | | | 06/05/12 12:40 | 1 |

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Client Sample ID: Equipment Blank 48028

Lab Sample ID: 660-48028-2

Date Collected: 06/05/12 12:30

Matrix: Water

Date Received: 06/05/12 14:30

| General Chemistry | | | | | | | | | |
|---------------------------|--------|-----------|-------|--------|------|---|----------------|----------------|---------|
| Analyte | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Chemical Oxygen Demand | 10 | U | 20 | 10 | mg/L | | 06/12/12 11:13 | 06/12/12 13:39 | 1 |
| Nitrate as N | 0.0047 | U | 0.010 | 0.0047 | mg/L | | | 06/11/12 18:15 | 1 |
| Total Dissolved Solids | 5.0 | U | 5.0 | 5.0 | mg/L | | | 06/11/12 14:55 | 1 |
| Total Suspended Solids | 1.0 | U | 1.0 | 1.0 | mg/L | | | 06/06/12 06:03 | 1 |
| Biochemical Oxygen Demand | 2.0 | U | 2.0 | 2.0 | mg/L | | | 06/06/12 10:40 | 1 |

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Method: 5220 D - Chemical Oxygen Demand

| | | | | | | | | | | | | | | |
|------------------------------------|---------------|------------------|-------------|------------|---------------|------|---|----------------|----------------|--|-----------|--|--|--|
| Lab Sample ID: MB 660-125228/4-A | | | | | | | | | | Client Sample ID: Method Blank | | | | |
| Matrix: Water | | | | | | | | | | Prep Type: Total/NA | | | | |
| Analysis Batch: 125234 | | | | | | | | | | Prep Batch: 125228 | | | | |
| Analyte | MB Result | MB Qualifier | | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac | | | | |
| Chemical Oxygen Demand | 10 | U | | 20 | 10 | mg/L | | 06/06/12 12:00 | 06/06/12 16:30 | 1 | | | | |
| Lab Sample ID: LCS 660-125228/5-A | | | | | | | | | | Client Sample ID: Lab Control Sample | | | | |
| Matrix: Water | | | | | | | | | | Prep Type: Total/NA | | | | |
| Analysis Batch: 125234 | | | | | | | | | | Prep Batch: 125228 | | | | |
| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | | | | |
| Chemical Oxygen Demand | | | 200 | 187 | | mg/L | | 94 | 90 - 110 | | | | | |
| Lab Sample ID: 660-48028-1 MS | | | | | | | | | | Client Sample ID: Leachate Effluent | | | | |
| Matrix: Water | | | | | | | | | | Prep Type: Total/NA | | | | |
| Analysis Batch: 125234 | | | | | | | | | | Prep Batch: 125228 | | | | |
| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | | | | |
| Chemical Oxygen Demand | 660 | J3 | 100 | 667 | J3 | mg/L | | 3 | 90 - 110 | | | | | |
| Lab Sample ID: 660-48028-1 MSD | | | | | | | | | | Client Sample ID: Leachate Effluent | | | | |
| Matrix: Water | | | | | | | | | | Prep Type: Total/NA | | | | |
| Analysis Batch: 125234 | | | | | | | | | | Prep Batch: 125228 | | | | |
| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit | | | |
| Chemical Oxygen Demand | 660 | J3 | 100 | 649 | J3 | mg/L | | -16 | 90 - 110 | 3 | 20 | | | |
| Lab Sample ID: MB 660-125420/4-A | | | | | | | | | | Client Sample ID: Method Blank | | | | |
| Matrix: Water | | | | | | | | | | Prep Type: Total/NA | | | | |
| Analysis Batch: 125421 | | | | | | | | | | Prep Batch: 125420 | | | | |
| Analyte | MB Result | MB Qualifier | | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac | | | | |
| Chemical Oxygen Demand | 10 | U | | 20 | 10 | mg/L | | 06/12/12 11:13 | 06/12/12 13:39 | 1 | | | | |
| Lab Sample ID: LCS 660-125420/5-A | | | | | | | | | | Client Sample ID: Lab Control Sample | | | | |
| Matrix: Water | | | | | | | | | | Prep Type: Total/NA | | | | |
| Analysis Batch: 125421 | | | | | | | | | | Prep Batch: 125420 | | | | |
| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | | | | |
| Chemical Oxygen Demand | | | 50.0 | 53.5 | | mg/L | | 107 | 90 - 110 | | | | | |
| Lab Sample ID: 660-48101-H-1-B MS | | | | | | | | | | Client Sample ID: Matrix Spike | | | | |
| Matrix: Water | | | | | | | | | | Prep Type: Total/NA | | | | |
| Analysis Batch: 125421 | | | | | | | | | | Prep Batch: 125420 | | | | |
| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | | | | |
| Chemical Oxygen Demand | 33 | J3 | 50.0 | 103 | J3 | mg/L | | 141 | 90 - 110 | | | | | |
| Lab Sample ID: 660-48101-H-1-C MSD | | | | | | | | | | Client Sample ID: Matrix Spike Duplicate | | | | |
| Matrix: Water | | | | | | | | | | Prep Type: Total/NA | | | | |
| Analysis Batch: 125421 | | | | | | | | | | Prep Batch: 125420 | | | | |
| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit | | | |
| Chemical Oxygen Demand | 33 | J3 | 50.0 | 82.2 | J3 | mg/L | | 99 | 90 - 110 | 23 | 20 | | | |

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QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

| Lab Sample ID: MB 660-125382/1 | | | | | | Client Sample ID: Method Blank | | | |
|--------------------------------|-----------|--------------|-----|-----|------|--------------------------------|----------|----------------|---------|
| Matrix: Water | | | | | | Prep Type: Total/NA | | | |
| Analysis Batch: 125382 | | | | | | | | | |
| Analyte | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Total Dissolved Solids | 5.0 | U | 5.0 | 5.0 | mg/L | | | 06/11/12 14:49 | 1 |

| Lab Sample ID: LCS 660-125382/2 | | | | | | Client Sample ID: Lab Control Sample | | | |
|---------------------------------|-------------|------------|---------------|------|---|--------------------------------------|--------------|--|--|
| Matrix: Water | | | | | | Prep Type: Total/NA | | | |
| Analysis Batch: 125382 | | | | | | | | | |
| Analyte | Spiko Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
| Total Dissolved Solids | 10000 | 9850 | | mg/L | | 99 | 80 - 120 | | |

| Lab Sample ID: 640-38915-A-1 DU | | | | | | Client Sample ID: Duplicate | | | |
|---------------------------------|---------------|------------------|-----------|--------------|------|-----------------------------|-----|-----------|--|
| Matrix: Water | | | | | | Prep Type: Total/NA | | | |
| Analysis Batch: 125382 | | | | | | | | | |
| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit | |
| Total Dissolved Solids | 94 | | 94.0 | | mg/L | | 0 | 20 | |

Method: SM 2540D - Solids, Total Suspended (TSS)

| Lab Sample ID: MB 660-125181/1 | | | | | | Client Sample ID: Method Blank | | | |
|--------------------------------|-----------|--------------|-----|-----|------|--------------------------------|----------|----------------|---------|
| Matrix: Water | | | | | | Prep Type: Total/NA | | | |
| Analysis Batch: 125181 | | | | | | | | | |
| Analyte | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Total Suspended Solids | 1.0 | U | 1.0 | 1.0 | mg/L | | | 06/06/12 06:03 | 1 |

| Lab Sample ID: LCS 660-125181/2 | | | | | | Client Sample ID: Lab Control Sample | | | |
|---------------------------------|-------------|------------|---------------|------|---|--------------------------------------|--------------|--|--|
| Matrix: Water | | | | | | Prep Type: Total/NA | | | |
| Analysis Batch: 125181 | | | | | | | | | |
| Analyte | Spiko Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
| Total Suspended Solids | 100 | 111 | | mg/L | | 111 | 80 - 120 | | |

| Lab Sample ID: 660-48024-C-1 DU | | | | | | Client Sample ID: Duplicate | | | |
|---------------------------------|---------------|------------------|-----------|--------------|------|-----------------------------|-----|-----------|--|
| Matrix: Water | | | | | | Prep Type: Total/NA | | | |
| Analysis Batch: 125181 | | | | | | | | | |
| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit | |
| Total Suspended Solids | 35 | | 40.0 | | mg/L | | 14 | 20 | |

Method: SM 5210B - BOD, 5-Day

| Lab Sample ID: SCB 660-125204/2 SCB | | | | | | Client Sample ID: Method Blank | | | |
|-------------------------------------|------------|---------------|-----|-----|------|--------------------------------|----------|----------------|---------|
| Matrix: Water | | | | | | Prep Type: Total/NA | | | |
| Analysis Batch: 125204 | | | | | | | | | |
| Analyte | SCB Result | SCB Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Biochemical Oxygen Demand | 2.0 | U | 2.0 | 2.0 | mg/L | | | 06/06/12 10:40 | 1 |

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Method: SM 5210B - BOD, 5-Day (Continued)

Lab Sample ID: USB 660-125204/1 USB

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 125204

| Analyte | USB USB | | PQL | MDL | Unit | D | Prepared | Analyzed | DII Fac |
|---------------------------|---------|-----------|-----|-----|------|---|----------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Biochemical Oxygen Demand | 2.0 | U | 2.0 | 2.0 | mg/L | | | 06/06/12 10:40 | 1 |

Lab Sample ID: LCS 660-125204/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 125204

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------|-------------|------------|---------------|------|---|------|--------------|
| | | | | | | | |
| Biochemical Oxygen Demand | 198 | 216 | | mg/L | | 109 | 85 - 115 |

Lab Sample ID: 660-48036-A-1 DU

Client Sample ID: Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 125204

| Analyte | Sample Sample | | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------------------------|---------------|-----------|-----------|--------------|------|---|-----|-------|
| | Result | Qualifier | | | | | | |
| Biochemical Oxygen Demand | 24 | U | 24 | U | mg/L | | NC | 20 |

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

General Chemistry

Analysis Batch: 93306

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|-----------------------|-----------|--------|-----------------|------------|
| 660-48028-1 | Leachate Effluent | Total/NA | Water | Nitrate by calc | |
| 660-48028-2 | Equipment Blank 48028 | Total/NA | Water | Nitrate by calc | |

Analysis Batch: 125181

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|-----------------------|-----------|--------|----------|------------|
| 660-48024-C-1 DU | Duplicate | Total/NA | Water | SM 2540D | |
| 660-48028-1 | Leachate Effluent | Total/NA | Water | SM 2540D | |
| 660-48028-2 | Equipment Blank 48028 | Total/NA | Water | SM 2540D | |
| LCS 660-125181/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |
| MB 660-125181/1 | Method Blank | Total/NA | Water | SM 2540D | |

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Analysis Batch: 125204

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|----------------------|-----------------------|-----------|--------|----------|------------|
| 660-48028-1 | Leachate Effluent | Total/NA | Water | SM 5210B | |
| 660-48028-2 | Equipment Blank 48028 | Total/NA | Water | SM 5210B | |
| 660-48036-A-1 DU | Duplicate | Total/NA | Water | SM 5210B | |
| LCS 660-125204/3 | Lab Control Sample | Total/NA | Water | SM 5210B | |
| SCB 660-125204/2 SCB | Method Blank | Total/NA | Water | SM 5210B | |
| USB 660-125204/1 USB | Method Blank | Total/NA | Water | SM 5210B | |

Prep Batch: 125228

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|---------|------------|
| 660-48028-1 | Leachate Effluent | Total/NA | Water | SM 5220 | |
| 660-48028-1 MS | Leachate Effluent | Total/NA | Water | SM 5220 | |
| 660-48028-1 MSD | Leachate Effluent | Total/NA | Water | SM 5220 | |
| LCS 660-125228/5-A | Lab Control Sample | Total/NA | Water | SM 5220 | |
| MB 660-125228/4-A | Method Blank | Total/NA | Water | SM 5220 | |

Analysis Batch: 125234

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 660-48028-1 | Leachate Effluent | Total/NA | Water | 5220 D | 125228 |
| 660-48028-1 MS | Leachate Effluent | Total/NA | Water | 5220 D | 125228 |
| 660-48028-1 MSD | Leachate Effluent | Total/NA | Water | 5220 D | 125228 |
| LCS 660-125228/5-A | Lab Control Sample | Total/NA | Water | 5220 D | 125228 |
| MB 660-125228/4-A | Method Blank | Total/NA | Water | 5220 D | 125228 |

Analysis Batch: 125382

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|-----------------------|-----------|--------|----------|------------|
| 640-38915-A-1 DU | Duplicate | Total/NA | Water | SM 2540C | |
| 660-48028-1 | Leachate Effluent | Total/NA | Water | SM 2540C | |
| 660-48028-2 | Equipment Blank 48028 | Total/NA | Water | SM 2540C | |
| LCS 660-125382/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| MB 660-125382/1 | Method Blank | Total/NA | Water | SM 2540C | |

Prep Batch: 125420

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|---------|------------|
| 660-48028-2 | Equipment Blank 48028 | Total/NA | Water | SM 5220 | |
| 660-48101-H-1-B MS | Matrix Spike | Total/NA | Water | SM 5220 | |
| 660-48101-H-1-C MSD | Matrix Spike Duplicate | Total/NA | Water | SM 5220 | |
| LCS 660-125420/5-A | Lab Control Sample | Total/NA | Water | SM 5220 | |
| MB 660-125420/4-A | Method Blank | Total/NA | Water | SM 5220 | |

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

General Chemistry (Continued)

Analysis Batch: 125421

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 660-48028-2 | Equipment Blank 48028 | Total/NA | Water | 5220 D | 125420 |
| 660-48101-H-1-B MS | Matrix Spike | Total/NA | Water | 5220 D | 125420 |
| 660-48101-H-1-C MSD | Matrix Spike Duplicate | Total/NA | Water | 5220 D | 125420 |
| LCS 660-125420/5-A | Lab Control Sample | Total/NA | Water | 5220 D | 125420 |
| MB 660-125420/4-A | Method Blank | Total/NA | Water | 5220 D | 125420 |

Field Service / Mobile Lab

Analysis Batch: 125197

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|-------------------|-----------|--------|----------------|------------|
| 660-48028-1 | Leachate Effluent | Total/NA | Water | Field Sampling | |

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Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Client Sample ID: Leachate Effluent

Lab Sample ID: 660-48028-1

Date Collected: 06/05/12 12:40

Matrix: Water

Date Received: 06/05/12 14:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|-----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | Nitrate by calc | | 1 | 93306 | 06/11/12 18:07 | TBW | TAL TAL |
| Total/NA | Analysis | SM 2540D | | 1 | 125181 | 06/06/12 06:03 | TO | TAL TAM |
| Total/NA | Analysis | SM 5210B | | 1 | 125204 | 06/06/12 10:40 | AG | TAL TAM |
| Total/NA | Prep | SM 5220 | | | 125228 | 06/06/12 12:00 | RWF | TAL TAM |
| Total/NA | Analysis | 5220 D | | 1 | 125234 | 06/06/12 16:30 | RWF | TAL TAM |
| Total/NA | Analysis | SM 2540C | | 1 | 125382 | 06/11/12 14:53 | TO | TAL TAM |
| Total/NA | Analysis | Field Sampling | | 1 | 125197 | 06/05/12 12:40 | | TAL TAM |

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Client Sample ID: Equipment Blank 48028

Lab Sample ID: 660-48028-2

Date Collected: 06/05/12 12:30

Matrix: Water

Date Received: 06/05/12 14:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|-----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | Nitrate by calc | | 1 | 93306 | 06/11/12 18:15 | TBW | TAL TAL |
| Total/NA | Analysis | SM 2540D | | 1 | 125181 | 06/06/12 06:03 | TO | TAL TAM |
| Total/NA | Analysis | SM 5210B | | 1 | 125204 | 06/06/12 10:40 | AG | TAL TAM |
| Total/NA | Analysis | SM 2540C | | 1 | 125382 | 06/11/12 14:55 | TO | TAL TAM |
| Total/NA | Prep | SM 5220 | | | 125420 | 06/12/12 11:13 | RWF | TAL TAM |
| Total/NA | Analysis | 5220 D | | 1 | 125421 | 06/12/12 13:39 | RWF | TAL TAM |

Laboratory References:

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Certification Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

| Laboratory | Authority | Program | EPA Region | Certification ID |
|-------------------------|------------|---------------|------------|------------------|
| TestAmerica Tampa | Alabama | State Program | 4 | 40610 |
| TestAmerica Tampa | Florida | NELAC | 4 | E84282 |
| TestAmerica Tampa | Georgia | State Program | 4 | 905 |
| TestAmerica Tampa | USDA | Federal | | P330-11-00177 |
| TestAmerica Tallahassee | Florida | NELAC | 4 | E81005 |
| TestAmerica Tallahassee | Louisiana | NELAC | 6 | 30663 |
| TestAmerica Tallahassee | New Jersey | NELAC | 2 | FL012 |
| TestAmerica Tallahassee | Oklahoma | State Program | 6 | 9986 |
| TestAmerica Tallahassee | Texas | NELAC | 6 | T104704459-11-2 |
| TestAmerica Tallahassee | USDA | Federal | | P330-08-00158 |

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.



Method Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

| Method | Method Description | Protocol | Laboratory |
|-----------------|-------------------------------|----------|------------|
| 5220 D | Chemical Oxygen Demand | SM20 | TAL TAM |
| Nitrate by calc | Nitrogen, Nitrate-Nitrite | SM | TAL TAL |
| SM 2540C | Solids, Total Dissolved (TDS) | SM | TAL TAM |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL TAM |
| SM 5210B | BOD, 5-Day | SM | TAL TAM |
| Field Sampling | Field Sampling | EPA | TAL TAM |

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

Laboratory References:

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Sample Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|-----------------------|--------|----------------|----------------|
| 660-48028-1 | Leachate Effluent | Water | 06/05/12 12:40 | 06/05/12 14:30 |
| 660-48028-2 | Equipment Blank 48028 | Water | 06/05/12 12:30 | 06/05/12 14:30 |

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660-48028

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
LEACHATE TRUCKS AND TANKS MONITORING PROGRAM
LEACHATE PLANT

PRECLEANED SAMPLE CONTAINERS: _____ DATE | TIME
RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____
ACCEPTED BY: Jim Clough REP. OF SOLID WASTE DEPT. 6.4.12 | 14:00

LOCATION: LEACHATE EFFLUENT SAMPLE MATRIX: WATER OTHER MATRIX: _____
PERSONAL ENGAGED IN SAMPLE COLLECTION: ☒ A. Balloon ☒ S. Clayton ☐

FIELD PARAMETERS:

| BY | TIME | TEMP | COND | PH | DO | TURB |
|-------|-------|-------|-------|------|------|------|
| AB JC | 9:15 | 31.57 | 10389 | 8.00 | 5.18 | N/A |
| | 12:40 | | | | | |

SAMPLE CONTAINERS

| QTY | CONTAINER DESCRIPTION | QTY | CONTAINER DESCRIPTION | PRESERVED |
|-----|-----------------------|-----|-----------------------|-----------|
| | 40 ml VIAL | | 40 ml VIAL | |
| | 125 ml. PLASTIC | | 125 ml. PLASTIC | |
| | 125 ml GLASS | | 125 ml GLASS | |
| 1 | 250 ml. PLASTIC | 1 | 250 ml. PLASTIC | |
| | 250 ml. GLASS | | 250 ml. GLASS | |
| | 500 ml. PLASTIC | | 500 ml. PLASTIC | |
| | 500 ml. GLASS | | 500 ml. GLASS | |
| 3 | LITER PLASTIC | | LITER PLASTIC | |
| | LITER GLASS | | LITER GLASS | |
| | BACTERIAL | | BACTERIAL | |

5 TOTAL No. OF SAMPLES COLLECTED:

COLORS & SHEENS: YES. N/A NO

COLLECTED
DATE | TIME
6.5.12 | 12:40

ANALYSIS REQUESTED:

MONTHLY LEACHATE PLANT PARAMETERS BOD TSS NITRATE TDS COD

PRESERVED SAMPLES PH < 2.0 ☒ SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:
RELINQUISHED BY: Jim Clough REP. OF SOLID WASTE DEPT. 6.5.12 | 2:30
ACCEPTED BY: Carol McHally REP. OF CONTRACT LAB. 6.5.12 | 2:30

COMMENT'S: W040061

3.3°C cu07

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
LEACHATE TRUCKS AND TANKS MONITORING PROGRAM
LEACHATE PLANT EQUIPMENT BLANK

PRECLEANED SAMPLE CONTAINERS: _____ DATE | TIME _____
 RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____
 ACCEPTED BY: *Jim Claggs* REP. OF SOLID WASTE DEPT. 6.4.12 | 4:00
 LOCATION: EQUIPMENT BLANK SAMPLE MATRIX: WATER OTHER MATRIX: _____
 PERSONAL ENGAGED IN SAMPLE COLLECTION: ☒ A. Balloon ☒ J. Claggs ☐

FIELD PARAMETERS: N/A

SAMPLE CONTAINERS

| QTY | CONTAINER DESCRIPTION | QTY | CONTAINER DESCRIPTION | PRESERVED |
|----------|-----------------------|----------|-----------------------|-----------|
| | 40 ml VIAL | | 40 ml VIAL | |
| | 125 ml. PLASTIC | | 125 ml. PLASTIC | |
| | 125 ml GLASS | | 125 ml GLASS | |
| <u>1</u> | 250 ml. PLASTIC | <u>1</u> | 250 ml. PLASTIC | |
| | 250 ml. GLASS | | 250 ml. GLASS | |
| | 500 ml. PLASTIC | | 500 ml. PLASTIC | |
| | 500 ml. GLASS | | 500 ml. GLASS | |
| <u>9</u> | LITER PLASTIC | | LITER PLASTIC | |
| | LITER GLASS | | LITER GLASS | |
| | BACTERIAL | | BACTERIAL | |

5 TOTAL No. OF SAMPLES COLLECTED:

COLORS & SHEENS: YES N/A NO

COLLECTED
 DATE | TIME
6.5.12 | 12:30

ANALYSIS REQUESTED:

MONTHLY LEACHATE PLANT PARAMETERS BOD TSS NITRATE TDS COD

PRESERVED SAMPLES PH < 2.0 ☒ SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES: _____ DATE | TIME _____
 RELINQUISHED BY: *Jim Claggs* REP. OF SOLID WASTE DEPT. 6.5.12 | 2:30
 ACCEPTED BY: *Carol McHugh* REP. OF CONTRACT LAB. 6.5.12 | 2:30

COMMENT'S: wo #0001

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-48028-1

Login Number: 48028

List Source: TestAmerica Tampa

List Number: 1

Creator: McNulty, Carol

| Question | Answer | Comment |
|--|--------|-----------------|
| Radioactivity either was not measured or, if measured, is at or below background | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | 3.3 deg C Cu-07 |
| 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 sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | 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. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | True | |

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Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-48028-1

Login Number: 48028

List Source: TestAmerica Tallahassee

List Number: 1

List Creation: 06/07/12 03:52 PM

Creator: Wallace, Tiffany B

| Question | Answer | Comment |
|--|--------|---------|
| Radioactivity either was not measured or, if measured, is at or below background | | |
| The cooler's custody seal, if present, is intact. | | |
| The cooler or samples do not appear to have been compromised or tampered with. | | |
| Samples were received on ice. | | |
| Cooler Temperature is acceptable. | | |
| Cooler Temperature is recorded. | | |
| COC is present. | | |
| COC is filled out in ink and legible. | | |
| COC is filled out with all pertinent information. | | |
| Is the Field Sampler's name present on COC? | | |
| There are no discrepancies between the sample IDs on the containers and the COC. | | |
| Samples are received within Holding Time. | | |
| Sample containers have legible labels. | | |
| Containers are not broken or leaking. | | |
| Sample collection date/times are provided. | | |
| Appropriate sample containers are used. | | |
| Sample bottles are completely filled. | | |
| Sample Preservation Verified. | | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | | |
| Multiphasic samples are not present. | | |
| Samples do not require splitting or compositing. | | |
| Residual Chlorine Checked. | | |

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