

LANCE R. LEFLEUR  
DIRECTOR



ROBERT J. BENTLEY  
GOVERNOR

Alabama Department of Environmental Management  
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463  
Montgomery, Alabama 36130-1463  
(334) 271-7700 ■ FAX (334) 271-7950

OCT 13 2016

Jason Padgett, General Manager  
North Baldwin Utilities  
25 Hand Avenue  
Bay Minette, Alabama 36507

RE: Draft Permit  
NPDES Permit No. AL0049867  
Harry Still Sr. WWTP  
Baldwin County, Alabama

Dear Mr. Padgett:

Transmitted herein is a draft of the referenced permit.

We would appreciate your comments on the permit within **30 days** of the date of this letter. Please direct any comments of a technical or administrative nature to the undersigned.

By copy of this letter and the draft permit, we are also requesting comments within the same time frame from EPA.

The Alabama Department of Environmental Management encourages you to voluntarily consider pollution prevention practices and alternatives at your facility. Pollution Prevention may assist you in complying with effluent limitations, and possibly reduce or eliminate monitoring requirements.

Should you have any questions, please contact the undersigned by email at [sammons@adem.state.al.us](mailto:sammons@adem.state.al.us) or by phone at (334) 274-4151.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Ammons".

Stephanie Ammons  
Municipal Section  
Water Division

sba/mfc  
Enclosure

cc: Environmental Protection Agency Email  
Ms. Elaine Snyder/U.S. Fish and Wildlife Service  
Ms. Elizabeth Brown/Alabama Historical Commission  
Advisory Council on Historic Preservation  
Department of Conservation and Natural Resources

Birmingham Branch  
110 Vulcan Road  
Birmingham, AL 35209-4702  
(205) 942-6168  
(205) 941-1603 (FAX)

Decatur Branch  
2715 Sandlin Road, S.W.  
Decatur, AL 35603-1333  
(256) 353-1713  
(256) 340-9359 (FAX)



Mobile Branch  
2204 Perimeter Road  
Mobile, AL 36615-1131  
(251) 450-3400  
(251) 479-2593 (FAX)

Mobile-Coastal  
3664 Dauphin Street, Suite B  
Mobile, AL 36608  
(251) 304-1176  
(251) 304-1189 (FAX)



# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: North Baldwin Utilities  
25 Hand Avenue  
Bay Minette, Alabama 36507

FACILITY LOCATION: Harry Still Sr. WWTP (2.0 MGD)  
1000 East First Street  
Bay Minette, Alabama 36507  
Baldwin County

PERMIT NUMBER: AL0049867

RECEIVING WATERS: Hollinger Creek

*In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1388 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-17, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.*

ISSUANCE DATE:

EFFECTIVE DATE:

EXPIRATION DATE:

**Draft**

**MUNICIPAL SECTION  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
PERMIT**

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**ATTACHMENT:**  
FORM 421

NON-COMPLIANCE NOTIFICATION FORM

## PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

### DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

I. Outfall 0011 Discharge Limits

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 0011, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

| Parameter   | Discharge Limitations* |                |                 |                |               |                |                 | Monitoring Requirements** |                 |                           |              |
|---|------------------------|----------------|-----------------|----------------|---------------|----------------|-----------------|---------------------------|-----------------|---------------------------|--------------|
|   | Monthly Average        | Weekly Average | Monthly Average | Weekly Average | Daily Minimum | Daily Maximum  | Percent Removal | (1) Sample Location       | (2) Sample Type | (3) Measurement Frequency | (4) Seasonal |
| Oxygen, Dissolved (DO)<br>00300 1 0 0                   | *****                  | *****          | *****           | *****          | 6.0 mg/L      | *****          | *****           | E                         | GRAB            | C                         | *****        |
| pH<br>00400 1 0 0                                       | *****                  | *****          | *****           | *****          | 6.0 S.U.      | 8.5 S.U.       | *****           | E                         | GRAB            | C                         | *****        |
| Solids, Total Suspended<br>00530 1 0 0                  | 500 lbs/day            | 750 lbs/day    | 30.0 mg/L       | 45.0 mg/L      | *****         | *****          | *****           | E                         | COMP24          | C                         | *****        |
| Solids, Total Suspended<br>00530 G 0 0                  | REPORT lbs/day         | REPORT lbs/day | REPORT mg/L     | REPORT mg/L    | *****         | *****          | *****           | I                         | COMP24          | C                         | *****        |
| Nitrogen, Ammonia Total (As N)<br>00610 1 0 0           | 21.6 lbs/day           | 32.5 lbs/day   | 1.3 mg/L        | 1.9 mg/L       | *****         | *****          | *****           | E                         | COMP24          | C                         | S            |
| Nitrogen, Ammonia Total (As N)<br>00610 1 0 0           | 66.7 lbs/day           | 100 lbs/day    | 4.0 mg/L        | 6.0 mg/L       | *****         | *****          | *****           | E                         | COMP24          | C                         | W            |
| Nitrogen, Kjeldahl Total<br>00625 1 0 0                 | REPORT lbs/day         | REPORT lbs/day | REPORT mg/L     | REPORT mg/L    | *****         | *****          | *****           | E                         | COMP24          | G                         | *****        |
| Nitrite Plus Nitrate Total (As N)<br>00630 1 0 0        | REPORT lbs/day         | REPORT lbs/day | REPORT mg/L     | REPORT mg/L    | *****         | *****          | *****           | E                         | COMP24          | G                         | *****        |
| Phosphorus, Total<br>00665 1 0 0                        | REPORT lbs/day         | REPORT lbs/day | REPORT mg/L     | REPORT mg/L    | *****         | *****          | *****           | E                         | COMP24          | G                         | *****        |
| Flow, In Conduit or Thru Treatment Plant<br>50050 1 0 0 | REPORT MGD             | *****          | *****           | *****          | *****         | REPORT MGD     | *****           | E                         | CONTIN          | A                         | *****        |
| Chlorine, Total Residual (5)(6)<br>50060 1 0 0          | *****                  | *****          | 0.011 mg/L      | *****          | *****         | 0.019 mg/L     | *****           | E                         | GRAB            | C                         | *****        |
| E. Coli<br>51040 1 0 0                                  | *****                  | *****          | 126 col/100mL   | *****          | *****         | 487 col/100mL  | *****           | E                         | GRAB            | C                         | ECS          |
| E. Coli<br>51040 1 0 0                                  | *****                  | *****          | 548 col/100mL   | *****          | *****         | 2507 col/100mL | *****           | E                         | GRAB            | C                         | ECW          |
| BOD, Carbonaceous 05 Day, 20C<br>80082 1 0 0            | 66.7 lbs/day           | 100 lbs/day    | 4.0 mg/L        | 6.0 mg/L       | *****         | *****          | *****           | E                         | COMP24          | C                         | S            |
| BOD, Carbonaceous 05 Day, 20C<br>80082 1 0 0            | 216 lbs/day            | 325 lbs/day    | 13.0 mg/L       | 19.5 mg/L      | *****         | *****          | *****           | E                         | COMP24          | C                         | W            |
| BOD, Carbonaceous 05 Day, 20C<br>80082 G 0 0            | REPORT lbs/day         | REPORT lbs/day | REPORT mg/L     | REPORT mg/L    | *****         | *****          | *****           | I                         | COMP24          | C                         | *****        |
| BOD, Carb-5 Day, 20 Deg C, Percent Remvl<br>80091 K 0 0 | *****                  | *****          | *****           | *****          | *****         | *****          | 85.0%           | K                         | CALCTD          | G                         | *****        |
| Solids, Suspended Percent Removal<br>81011 K 0 0        | *****                  | *****          | *****           | *****          | *****         | *****          | 85.0%           | K                         | CALCTD          | G                         | *****        |

\* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

\*\* Monitoring Requirements

(1) Sample Location

I - Inflow

E - Effluent

X - End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB - Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May - November)

W = Winter (December - April)

ECS = E\_coli: Summer (June - September)

ECW = E\_coli: Winter (October - May)

(5) See Part IV.C. for Total Residual Chlorine (TRC). Monitoring for TRC is applicable if chlorine is utilized for disinfection purposes. If monitoring is not applicable during the monitoring period, enter \*9 on the monthly eDMR.

(6) A measurement of TRC below 0.05 mg/L shall be considered in compliance with the permit limitations above and should be reported as \*B on the monthly eDMR.

2. Outfall 001T Discharge Limits

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 001T, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

| Parameter                                     | Discharge Limitations* |                      |                 |                |               | Monitoring Requirements** |                 |                     |                 |                           |              |
|---|------------------------|----------------------|-----------------|----------------|---------------|---------------------------|-----------------|---------------------|-----------------|---------------------------|--------------|
|   | Monthly Average        | Weekly Average       | Monthly Average | Weekly Average | Daily Minimum | Daily Maximum             | Percent Removal | (1) Sample Location | (2) Sample Type | (3) Measurement Frequency | (4) Seasonal |
| Toxicity, Ceriodaphnia Chronic<br>61426 1 0 0 | *****                  | Pass = 0<br>Fail = 1 | *****           | *****          | *****         | *****                     | *****           | E                   | COMP24          | Q                         | *****        |
| Toxicity, Pimephales Chronic<br>61428 1 0 0   | *****                  | Pass = 0<br>Fail = 1 | *****           | *****          | *****         | *****                     | *****           | E                   | COMP24          | Q                         | *****        |

\* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

\*\* Monitoring Requirements

(1) Sample Location

I - Influent

E - Effluent

X - End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB - Grab

CALCTD - Calculated

(3) Measurement Frequency. See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May - November)

W = Winter (December - April)

ECS = E. coli Summer (June - September)

ECW = E. coli Winter (October - May)

**B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS**

1. Representative Sampling

Sample collection and measurement actions shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this permit. The effluent sampling point shall be at the nearest accessible location just prior to discharge and after final treatment, unless otherwise specified in the permit.

2. Measurement Frequency

Measurement frequency requirements found in Provision I.A. shall mean:

- a. Seven days per week shall mean daily.
- b. Five days per week shall mean any five days of discharge during a calendar weekly period of Sunday through Saturday.
- c. Three days per week shall mean any three days of discharge during a calendar week.
- d. Two days per week shall mean any two days of discharge during a calendar week.
- e. One day per week shall mean any day of discharge during a calendar week.
- f. Two days per month shall mean any two days of discharge during the month that are no less than seven days apart. However, if discharges occur only during one seven-day period in a month, then two days per month shall mean any two days of discharge during that seven day period.
- g. One day per month shall mean any day of discharge during the calendar month.
- h. Quarterly shall mean any day of discharge during each calendar quarter.
- i. The Permittee may increase the frequency of sampling, listed in Provisions I.B.2.a through I.B.2.h; however, all sampling results are to be reported to the Department.

3. Test Procedures

For the purpose of reporting and compliance, Permittees shall use one of the following procedures:

- a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h). If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance, however should EPA approve a method with a lower minimum level during the term of this permit the Permittee shall use the newly approved method.
- b. For pollutants parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.  
  
Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the Permittee during permit issuance, reissuance, modification, or during compliance schedule.  
  
In either case the measured value should be reported if the analytical result is at or above the ML and "0" reported for values below the ML.
- c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the permit limit. For the purpose of calculating a monthly average, "0" shall be used for values reported less than the detection limit.

The Minimum Level utilized for procedures a and b above shall be reported on the Permittee's DMR. When an EPA approved test procedure for analysis of a pollutant does not exist, the Director shall approve the procedure to be used.

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information:

- a. The facility name and location, point source number, date, time and exact place of sampling;

- b. The name(s) of person(s) who obtained the samples or measurements;
  - c. The dates and times the analyses were performed;
  - d. The name(s) of the person(s) who performed the analyses;
  - e. The analytical techniques or methods used, including source of method and method number; and
  - f. The results of all required analyses.
5. Records Retention and Production
- a. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the above reports or the application for this permit, for a period of at least three years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director or his designee, the Permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records should not be submitted unless requested.
  - b. All records required to be kept for a period of three years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.
6. Reduction, Suspension or Termination of Monitoring and/or Reporting
- a. The Director may, with respect to any point source identified in Provision I.A. of this permit, authorize the Permittee to reduce, suspend or terminate the monitoring and/or reporting required by this permit upon the submission of a written request for such reduction, suspension or termination by the Permittee, supported by sufficient data which demonstrates to the satisfaction of the Director that the discharge from such point source will continuously meet the discharge limitations specified in Provision I.A. of this permit.
  - b. It remains the responsibility of the Permittee to comply with the monitoring and reporting requirements of this permit until written authorization to reduce, suspend or terminate such monitoring and/or reporting is received by the Permittee from the Director.
7. Monitoring Equipment and Instrumentation
- All equipment and instrumentation used to determine compliance with the requirements of this permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. At a minimum, flow measurement devices shall be calibrated at least once every 12 months.

### C. DISCHARGE REPORTING REQUIREMENTS

1. Reporting of Monitoring Requirements
- a. The Permittee shall conduct the required monitoring in accordance with the following schedule:
    - (1) **MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY** shall be conducted during the first full month following the effective date of coverage under this permit and every month thereafter.
    - (2) **QUARTERLY MONITORING** shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The Permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring should be reported on the last DMR due for the quarter (i.e., March, June, September and December DMRs).
    - (3) **SEMIANNUAL MONITORING** shall be conducted at least once during the period of January through June and at least once during the period of July through December. The Permittee shall conduct the semiannual monitoring during the first complete calendar semiannual period following the effective date of this permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e., June and December DMRs).
    - (4) **ANNUAL MONITORING** shall be conducted at least once during the period of January through December. The Permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this permit and is then required to monitor once during each annual period thereafter.

Annual monitoring may be done anytime during the year, unless restricted elsewhere in this permit, but it should be reported on the December DMR.

- b. The Permittee shall submit discharge monitoring reports (DMRs) on the forms approved by the Department and in accordance with the following schedule:
- (1) **REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING** shall be submitted on a monthly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
  - (2) **REPORTS OF QUARTERLY TESTING** shall be submitted on a quarterly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
  - (3) **REPORTS OF SEMIANNUAL TESTING** shall be submitted on a semiannual basis. The reports are due on the 28th day of JANUARY and the 28th day of JULY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
  - (4) **REPORTS OF ANNUAL TESTING** shall be submitted on an annual basis. Unless specified elsewhere in the permit, the first report is due on the 28th day of JANUARY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
- c. Except as allowed by Provision I.C.1.c.(1) or (2), the permittee shall submit all Discharge Monitoring Reports (DMRs) required by Provision I.C.1.b. by utilizing the Department's web-based Electronic Environmental (E2) Reporting System.
- (1) If the permittee is unable to complete the electronic submittal of DMR data due to technical problems originating with the Department's E2 Reporting System (this could include entry/submittal issues with an entire set of DMRs or individual parameters), the permittee is not relieved of their obligation to submit DMR data to the Department by the date specified in Provision I.C.1.b., unless otherwise directed by the Department.  
  
If the E2 Reporting System is down on the 28<sup>th</sup> day of the month in which the DMR is due or is down for an extended period of time, as determined by the Department, when a DMR is required to be submitted, the permittee may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the E2 Reporting System resuming operation, the permittee shall enter the data into the E2 Reporting System, unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 DMR submittal verifying the original submittal date (date of the fax, copy of dated e-mail, or hand-delivery stamped date), if applicable.
  - (2) The permittee may submit a request to the Department for a temporary electronic reporting waiver for DMR submittals. The waiver request should include the permit number; permittee name; facility/site name; facility address; name, address, and contact information for the responsible official or duly authorized representative; a detailed statement regarding the basis for requesting such a waiver; and the duration for which the waiver is requested. Approved electronic reporting waivers are not transferrable.  
  
A permittee with an approved electronic reporting waiver for DMRs may submit hard copy DMRs for the period that the approved electronic reporting waiver request is effective. The permittee shall submit the Department-approved DMR forms to the address listed in Provision I.C.1.e.
  - (3) If a permittee is allowed to submit a hard copy DMR, the DMR must be legible and bear an original signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this permit.
  - (4) If the permittee, using approved analytical methods as specified in Provision I.B.2, monitors any discharge from a point source for a limited substance identified in Provision I.A. of this permit more frequently than required by this permit, the results of such monitoring shall be included in the calculation and reporting of values on the DMR and the increased frequency shall be indicated on the DMR.
  - (5) In the event no discharge from a point source identified in Provision I.A. of this permit and described more fully in the permittee's application occurs during a monitoring period, the permittee shall report "No Discharge" for such period on the appropriate DMR.
- d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules and Regulations, shall be electronically signed (or, if allowed by the Department, traditionally signed) by a "responsible

official" of the permittee as defined in ADEM Administrative Code Rule 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Administrative Code Rule 335-6-6-.09 and shall bear the following certification:

**"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."**

- e. Discharge Monitoring Reports required by this permit, the AWPCA, and the Department's Rules that are being submitted in hard copy shall be addressed to:

**Alabama Department of Environmental Management  
Environmental Data Section, Permits & Services Division  
Post Office Box 301463  
Montgomery, Alabama 36130-1463**

Certified and Registered Mail containing Discharge Monitoring Reports shall be addressed to:

**Alabama Department of Environmental Management  
Environmental Data Section, Permits & Services Division  
1400 Coliseum Boulevard  
Montgomery, Alabama 36110-2400**

- f. All other correspondence and reports required to be submitted by this permit, the AWPCA, and the Department's Rules shall be addressed to:

**Alabama Department of Environmental Management  
Municipal Section, Water Division  
Post Office Box 301463  
Montgomery, Alabama 36130-1463**

Certified and Registered Mail shall be addressed to:

**Alabama Department of Environmental Management  
Municipal Section, Water Division  
1400 Coliseum Boulevard  
Montgomery, Alabama 36110-2400**

- g. If this permit is a reissuance, then the permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.C.1.b. above.

2. Noncompliance Notification

- a. The Permittee must notify the Department if, for any reason, the Permittee's discharge:

- (1) Does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Provision I. A. of this permit which is denoted by an "(X)"
- (2) Potentially threatens human health or welfare,
- (3) Threatens fish or aquatic life
- (4) Causes an in-stream water quality criterion to be exceeded;
- (5) Does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a);
- (6) Contains a quantity of a hazardous substance that may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4);
- (7) Exceeds any discharge limitation for an effluent parameter listed in Part I.A as a result of an unanticipated bypass or upset; or
- (8) Is an unpermitted direct or indirect discharge of a pollutant to a water of the state (Note that unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision)

The Permittee shall orally or electronically report any of the above occurrences, describing the circumstances and potential effects, to the Department within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic report, the Permittee shall submit a written report to the Director or Designee, as provided in Provision I.C.2.c, no later than five days after becoming aware of the occurrence of such discharge or occurrence.

- b. If for any reason, the Permittee's discharge does not comply with any limitation of this permit, then the Permittee must submit a written report to the Director or Designee, as provided in Provision I.C.2.c below. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Provision I.C.1 of this permit after becoming aware of the occurrence of such noncompliance.
- c. Form 421 must be submitted to the Director or Designee in accordance with Provisions I.C.2a. or b. The completed form must document the following information:

- (1) A description of the discharge and cause of noncompliance;
- (2) The period of noncompliance, including exact dates, times, and duration of the noncompliance. If not corrected by the due date of the written report, then the Permittee is to state the anticipated timeframe that is expected to transpire before the noncompliance is resolved; and
- (3) A description of the steps taken by the Permittee and the steps planned to be taken by the Permittee to reduce or eliminate the noncompliant discharge, including all steps taken to prevent recurrence.

- d. Immediate notification

The permittee shall provide notification to the Director, the public, the county health department, and any other affected entity such as public water systems, as soon as possible upon becoming aware of any notifiable sanitary sewer overflow. The Permittee shall also report notification of the noncompliance event to any other affected entity such as the public.

- e. The Permittee shall keep an updated record of all known wastewater discharge points that are not authorized as permitted outfalls, including but not limited to SSOs. The Permittee shall submit annual Municipal Water Pollution Prevention Plan (MWPP) reports to the Department each year by May 31st for the prior calendar year period beginning January 1st and ending December 31st. The Annual MWPP Reports shall contain a list of all known wastewater discharge points that are not authorized as permitted outfalls and any discharges that occur prior to the headworks of the wastewater treatment plant covered by this permit. The MWPP shall also provide a list of any discharges reported in accordance with Provision I.C.2.a. The Permittee shall submit with its Annual MWPP Report the following information for each known unpermitted discharge that occurs:

- (1) The cause of the discharge;
- (2) Date, duration and volume of discharge (estimate if unknown);
- (3) Description of the source (e.g., manhole, lift station);
- (4) Location of the discharge, by street address or any other appropriate method;
- (5) The ultimate destination of the flow (e.g., surface waterbody, municipal separate storm sewer to surface waterbody). Location should be shown on a USGS quad sheet or copy thereof; and
- (6) Corrective actions or plans to eliminate future discharges.

- f. The Permittee shall report SSO and other illicit or anomalous discharge events on Form 415 in accordance with Part I.C.2.a. This form is available on the ADEM web page or upon request from the Permittee.

#### **D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS**

- 1. Anticipated Noncompliance

The Permittee shall give the Director written advance notice of any planned changes or other circumstances regarding a facility which may result in noncompliance with permit requirements.

- 2. Termination of Discharge

The Permittee shall notify the Director, in writing, when all discharges from any point source(s) identified in Provision I. A. of this permit have permanently ceased. This notification shall serve as sufficient cause for instituting procedures for modification or termination of the permit.

- 3. Updating Information

- a. The Permittee shall inform the Director of any change in the Permittee's mailing address or telephone number or in the Permittee's designation of a facility contact or office having the authority and responsibility to prevent and abate violations of the AWPCA, the Department's Rules and the terms and conditions of this permit, in writing, no later

than ten (10) days after such change. Upon request of the Director or his designee, the Permittee shall furnish the Director with an update of any information provided in the permit application.

- b. If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

The Permittee shall furnish to the Director, within a reasonable time, any information which the Director or his designee may request to determine whether cause exists for modifying, revoking and re-issuing, suspending, or terminating this permit, in whole or in part, or to determine compliance with this permit.

**E. SCHEDULE OF COMPLIANCE**

1. Compliance with discharge limits

The Permittee shall achieve compliance with the discharge limitations specified in Provision I. A. in accordance with the following schedule:

**COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT**

2. Schedule

No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

**PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES****A. OPERATIONAL AND MANAGEMENT REQUIREMENTS**

## 1. Facilities Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities only when necessary to achieve compliance with the conditions of the permit.

## 2. Best Management Practices (BMP)

- a. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director or his designee has granted prior written authorization for dilution to meet water quality requirements.
- b. The Permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 C.F.R. Section 112 if required thereby.
- c. The Permittee shall prepare, submit for approval and implement a BMP Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a significant potential for discharge, if so required by the Director or his designee. When submitted and approved, the BMP Plan shall become a part of this permit and all requirements of the BMP Plan shall become requirements of this permit.

## 3. Certified Operator

The Permittee shall not operate any wastewater treatment plant unless the competency of the operator to operate such plant has been duly certified by the Director pursuant to AWPCA, and meets the requirements specified in ADEM Administrative Code, Rule 335-10-1.

**B. OTHER RESPONSIBILITIES**

## 1. Duty to Mitigate Adverse Impacts

The Permittee shall promptly take all reasonable steps to mitigate and minimize or prevent any adverse impact on human health or the environment resulting from noncompliance with any discharge limitation specified in Provision I. A. of this permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as necessary to determine the nature and impact of the noncomplying discharge.

## 2. Right of Entry and Inspection

The Permittee shall allow the Director, or an authorized representative, upon the presentation of proper credentials and other documents as may be required by law to:

- (1) Enter upon the Permittee's premises where a regulated facility or activity or point source is located or conducted, or where records must be kept under the conditions of the permit;
- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permits;
- (3) Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and
- (4) Sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

**C. BYPASS AND UPSET**

## 1. Bypass

- a. Any bypass is prohibited except as provided in b. and c. below:
- b. A bypass is not prohibited if:
  - (1) It does not cause any discharge limitation specified in Provision I. A. of this permit to be exceeded;
  - (2) It enters the same receiving stream as the permitted outfall; and
  - (3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system.
- c. A bypass is not prohibited and need not meet the discharge limitations specified in Provision I. A. of this permit if:
  - (1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;

- (2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and
  - (3) The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the Permittee is granted such authorization, and the Permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.
- d. The Permittee has the burden of establishing that each of the conditions of Provision II. C. 1. b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in a. and an exemption, where applicable, from the discharge limitations specified in Provision I. A. of this permit.
2. Upset
- a. A discharge which results from an upset need not meet the discharge limitations specified in Provision I. A. of this permit if:
    - (1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director or his designee; and
    - (2) No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, or other relevant evidence, demonstrating that:
      - (i) An upset occurred;
      - (ii) The Permittee can identify the specific cause(s) of the upset;
      - (iii) The Permittee's facility was being properly operated at the time of the upset; and
      - (iv) The Permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.
  - b. The Permittee has the burden of establishing that each of the conditions of Provision II C. 2. a. of this permit have been met to qualify for an exemption from the discharge limitations specified in Provision I. A. of this permit.

#### **D. DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES**

1. Duty to Comply
  - a. The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.
  - b. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a Permittee in an enforcement action.
  - c. The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit.
  - d. The Permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this permit or to minimize or prevent any adverse impact of any permit violation.
  - e. Nothing in this permit shall be construed to preclude or negate the Permittee's responsibility to apply for, obtain, or comply with other Federal, State, or Local Government permits, certifications, or licenses or to preclude from obtaining other federal, state, or local approvals, including those applicable to other ADEM programs and regulations.
2. Removed Substances

Solids, sludges, filter backwash, or any other pollutant or other waste removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department Rules.
3. Loss or Failure of Treatment Facilities

Upon the loss or failure of any treatment facilities, including but not limited to the loss or failure of the primary source of power of the treatment facility, the Permittee shall, where necessary to maintain compliance with the discharge limitations specified in Provision I. A. of this permit, or any other terms or conditions of this permit, cease, reduce, or otherwise control production and/or all discharges until treatment is restored. If control of discharge during loss or failure of the

primary source of power is to be accomplished by means of alternate power sources, standby generators, or retention of inadequately treated effluent, the Permittee must furnish to the Director within six months a certification that such control mechanisms have been installed.

4. Compliance With Statutes and Rules

- a. This permit has been issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter, that are applicable to this permit, are hereby made a part of this permit. A copy of this chapter may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Boulevard Montgomery, Alabama 36110-2059.
- b. This permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

**E. PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE**

1. Duty to Reapply or Notify of Intent to Cease Discharge

- a. If the Permittee intends to continue to discharge beyond the expiration date of this permit, the Permittee shall file a complete permit application for reissuance of this permit at least 180 days prior to its expiration. If the Permittee does not intend to continue discharge beyond the expiration of this permit, the Permittee shall submit written notification of this intent which shall be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Administrative Code Rule 335-6-6-.09.
- b. Failure of the Permittee to apply for reissuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code Rule 335-6-6-.06 and should the permit not be reissued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

2. Change in Discharge

Prior to any facility expansion, process modification or any significant change in the method of operation of the Permittee's treatment works, the Permittee shall provide the Director with information concerning the planned expansion, modification or change. The Permittee shall apply for a permit modification at least 180 days prior to any facility expansion, process modification, any significant change in the method of operation of the Permittee's treatment works or other actions that could result in the discharge of additional pollutants or increase the quantity of a discharged pollutant or could result in an additional discharge point. This condition applies to pollutants that are or that are not subject to discharge limitations in this permit. No new or increased discharge may begin until the Director has authorized it by issuance of a permit modification or a reissued permit.

3. Transfer of Permit

This permit may not be transferred or the name of the Permittee changed without notice to the Director and subsequent modification or revocation and reissuance of the permit to identify the new Permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership or control of the Permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership or control of the Permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership or control, he may decide not to modify the existing permit and require the submission of a new permit application.

4. Permit Modification and Revocation

- a. This permit may be modified or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:
  - (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to revoke and reissue this permit instead of terminating the permit;
  - (2) If a request to transfer this permit has been received, the Director may decide to revoke and reissue or to modify the permit; or
  - (3) If modification or revocation and reissuance is requested by the Permittee and cause exists, the Director may grant the request.
- b. This permit may be modified during its term for cause, including but not limited to, the following:
  - (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to modify this permit instead of terminating this permit;

- (2) There are material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;
- (3) The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;
- (4) A new or revised requirement(s) of any applicable standard or limitation is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA;
- (5) Errors in calculation of discharge limitations or typographical or clerical errors were made;
- (6) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;
- (7) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permits may be modified to change compliance schedules;
- (8) To agree with a granted variance under 301(c), 301(g), 301(h), 301(k), or 316(a) of the FWPCA or for fundamentally different factors;
- (9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;
- (10) When required by the reopener conditions in this permit;
- (11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);
- (12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;
- (13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or
- (14) When requested by the Permittee and the Director determines that the modification has cause and will not result in a violation of federal or state law, regulations or rules.

#### 5. Termination

This permit may be terminated during its term for cause, including but not limited to, the following:

- a. Violation of any term or condition of this permit;
- b. The Permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance process or the Permittee's misrepresentation of any relevant facts at any time;
- c. Materially false or inaccurate statements or information in the permit application or the permit;
- d. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- e. The Permittee's discharge threatens human life or welfare or the maintenance of water quality standards;
- f. Permanent closure of the facility generating the wastewater permitted to be discharged by this permit or permanent cessation of wastewater discharge;
- g. New or revised requirements of any applicable standard or limitation that is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA that the Director determines cannot be complied with by the Permittee; or
- h. Any other cause allowed by the ADEM Administrative Code, Chapter 335-6-6.

#### 6. Suspension

This permit may be suspended during its term for noncompliance until the Permittee has taken action(s) necessary to achieve compliance.

#### 7. Stay

The filing of a request by the Permittee for modification, suspension or revocation of this permit, in whole or in part, does not stay any permit term or condition.

**F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION**

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a), for a toxic pollutant discharged by the Permittee, and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Provision I. A. of this permit or controls a pollutant not limited in Provision I. A. of this permit, this permit shall be modified to conform to the toxic pollutant effluent standard or prohibition, and the Permittee shall be notified of such modification. If this permit has not been modified to conform to the toxic pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the Permittee shall attain compliance with the requirements of the standard or prohibition within the time period required by the standard or prohibition and shall continue to comply with the standard or prohibition until this permit is modified or reissued.

**G. NOTICE TO DIRECTOR OF INDUSTRIAL USERS**

1. The Permittee shall not allow the introduction of wastewater, other than domestic wastewater, from a new direct discharger prior to approval and permitting, if applicable, of the discharge by the Department.
2. The Permittee shall not allow an existing indirect discharger to increase the quantity or change the character of its wastewater, other than domestic wastewater, prior to approval and permitting, if applicable, of the increased discharge by the Department.
3. The Permittee shall report to the Department any adverse impact caused or believed to be caused by an indirect discharger on the treatment process, quality of discharged water, or quality of sludge. Such report shall be submitted within seven days of the Permittee becoming aware of the adverse impacts.

**H. PROHIBITIONS**

The Permittee shall not allow, and shall take effective enforcement action to prevent and terminate, the introduction of any of the following into its treatment works by industrial users:

1. Pollutants which create a fire or explosion hazard in the treatment works;
2. Pollutants which will cause corrosive structural damage to the treatment works, or dischargers with a pH lower than 5.0 s.u., unless the works are specifically designed to accommodate such discharges;
3. Solid or viscous pollutants in amounts which will cause obstruction of flow in sewers, or other interference with the treatment works;
4. Pollutants, including oxygen demanding pollutants, released in a discharge of such volume or strength as to cause interference in the treatment works;
5. Heat in amounts which will inhibit biological activity in the treatment plant resulting in interference or in such quantities that the temperature of the treatment plant influent exceeds 40°C (104° F) unless the treatment plant is designed to accommodate such heat; and
6. Pollutants in amounts which exceed any applicable pretreatment standard under Section 307 of FWPCA or any approved revisions thereof.

## **PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS**

### **A. CIVIL AND CRIMINAL LIABILITY**

#### **1. Tampering**

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under the permit shall, upon conviction, be subject to penalties as provided by the AWPCA.

#### **2. False Statements**

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties as provided by the AWPCA.

#### **3. Permit Enforcement**

a. Any NPDES permit issued or reissued by the Department is a permit for the purpose of the AWPCA and the FWPCA, and as such, any terms, conditions, or limitations of the permit are enforceable under state and federal law.

b. Any person required to have a NPDES permit pursuant to ADEM Administrative Code Chapter 335-6-6 and who discharges pollutants without said permit, who violates the conditions of said permit, who discharges pollutants in a manner not authorized by the permit, or who violates applicable orders of the Department or any applicable rule or standard of the Department, is subject to any one or combination of the following enforcement actions under applicable state statutes:

- (1) An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;
- (2) An action for damages;
- (3) An action for injunctive relief; or
- (4) An action for penalties.

c. If the Permittee is not in compliance with the conditions of an expiring or expired permit the Director may choose to do any or all of the following provided the Permittee has made a timely and complete application for reissuance of the permit:

- (1) Initiate enforcement action based upon the permit which has been continued;
- (2) Issue a notice of intent to deny the permit reissuance. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
- (3) Reissue the new permit with appropriate conditions; or
- (4) Take other actions authorized by these rules and AWPCA.

#### **4. Relief from Liability**

Except as provided in Provision II. C. 1. (Bypass) and Provision II. C. 2. (Upset), nothing in this permit shall be construed to relieve the Permittee of civil or criminal liability under the AWPCA or FWPCA for noncompliance with any term or condition of this permit.

### **B. OIL AND HAZARDOUS SUBSTANCE LIABILITY**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities or penalties to which the Permittee is or may be subject under Section 311 of the FWPCA, 33 U.S.C. Section 1321.

### **C. PROPERTY AND OTHER RIGHTS**

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of federal, state, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the state or of the United States.

### **D. AVAILABILITY OF REPORTS**

Except for data determined to be confidential under Code of Alabama 1975, Section 22-22-9(c), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential.

**E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES**

1. If this permit was issued for a new discharger or new source, this permit shall expire eighteen months after the issuance date if construction of the facility has not begun during the eighteen-month period.
2. If this permit was issued or modified to allow the discharge of increased quantities of pollutants to accommodate the modification of an existing facility and if construction of this modification has not begun during the eighteen month period after issuance of this permit or permit modification, this permit shall be modified to reduce the quantities of pollutants allowed to be discharged to those levels that would have been allowed if the modification of the facility had not been planned.
3. Construction has begun when the owner or operator has:
  - a. Begun, or caused to begin as part of a continuous on-site construction program:
    - (1) Any placement, assembly, or installation of facilities or equipment; or
    - (2) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which are necessary for the placement, assembly, or installation of new source facilities or equipment; or
  - b. Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.
4. Final plans and specifications for a waste treatment facility at a new source or new discharger, or a modification to an existing waste treatment facility must be submitted to and examined by the Department prior to initiating construction of such treatment facility by the Permittee.
5. Upon completion of construction of waste treatment facilities and prior to operation of such facilities, the Permittee shall submit to the Department a certification from a registered professional engineer, licensed to practice in the State of Alabama, that the treatment facilities have been built according to plans and specifications submitted to and examined by the Department.

**F. COMPLIANCE WITH WATER QUALITY STANDARDS**

1. On the basis of the Permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this permit should assure compliance with the applicable water quality standards.
2. Compliance with permit terms and conditions notwithstanding, if the Permittee's discharge(s) from point sources identified in Provision I. A. of this permit cause or contribute to a condition in contravention of state water quality standards, the Department may require abatement action to be taken by the Permittee in emergency situations or modify the permit pursuant to the Department's Rules, or both.
3. If the Department determines, on the basis of a notice provided pursuant to this permit or any investigation, inspection or sampling, that a modification of this permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification, and, in cases of emergency, the Director may prohibit the discharge until the permit has been modified.

**G. GROUNDWATER**

Unless specifically authorized under this permit, this permit does not authorize the discharge of pollutants to groundwater. Should a threat of groundwater contamination occur, the Director may require groundwater monitoring to properly assess the degree of the problem, and the Director may require that the Permittee undertake measures to abate any such discharge and/or contamination.

**H. DEFINITIONS**

1. Average monthly discharge limitation – means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
2. Average weekly discharge limitation - means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).

3. Arithmetic Mean – means the summation of the individual values of any set of values divided by the number of individual values.
4. AWPCA – means the Alabama Water Pollution Control Act.
5. BOD – means the five-day measure of the pollutant parameter biochemical oxygen demand.
6. Bypass – means the intentional diversion of waste streams from any portion of a treatment facility.
7. CBOD – means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.
8. Daily discharge – means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.
9. Daily maximum – means the highest value of any individual sample result obtained during a day.
10. Daily minimum – means the lowest value of any individual sample result obtained during a day.
11. Day – means any consecutive 24-hour period.
12. Department – means the Alabama Department of Environmental Management.
13. Director – means the Director of the Department.
14. Discharge – means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other waste into waters of the state". Code of Alabama 1975, Section 22-22-1(b)(9).
15. Discharge Monitoring Report (DMR) – means the form approved by the Director to accomplish reporting requirements of an NPDES permit.
16. DO – means dissolved oxygen.
17. 8HC – means 8-hour composite sample, including any of the following:
  - a. The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 1 hour over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
  - b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
18. EPA – means the United States Environmental Protection Agency.
19. FC – means the pollutant parameter fecal coliform.
20. Flow – means the total volume of discharge in a 24-hour period.
21. FWPCA – means the Federal Water Pollution Control Act.
22. Geometric Mean – means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).
23. Grab Sample – means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.
24. Indirect Discharger – means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.
25. Industrial User – means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category "Division D – Manufacturing" and such other classes of significant waste producers as, by regulation, the Director deems appropriate.
26. MGD – means million gallons per day.
27. Monthly Average – means the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period.
28. New Discharger – means a person, owning or operating any building, structure, facility or installation:
  - a. From which there is or may be a discharge of pollutants;
  - b. From which the discharge of pollutants did not commence prior to August 13, 1979, and which is not a new source; and

- c. Which has never received a final effective NPDES permit for dischargers at that site.
- 29. NH<sub>3</sub>-N – means the pollutant parameter ammonia, measured as nitrogen.
- 30. Notifiable sanitary sewer overflow – means an overflow, spill, release or diversion of wastewater from a sanitary sewer system that:
  - a. Reaches a surface water of the State; or
  - b. May imminently and substantially endanger human health based on potential for public exposure including but not limited to close proximity to public or private water supply wells or in areas where human contact would be likely to occur.
- 31. Permit application – means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.
- 32. Point source – means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).
- 33. Pollutant – includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.
- 34. Privately Owned Treatment Works – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".
- 35. Publicly Owned Treatment Works – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
- 36. Receiving Stream – means the "waters" receiving a "discharge" from a "point source".
- 37. Severe property damage – means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 38. Significant Source – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work's capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.
- 39. TKN – means the pollutant parameter Total Kjeldahl Nitrogen.
- 40. TON – means the pollutant parameter Total Organic Nitrogen.
- 41. TRC – means Total Residual Chlorine.
- 42. TSS – means the pollutant parameter Total Suspended Solids.
- 43. 24HC – means 24-hour composite sample, including any of the following:
  - a. The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;
  - b. A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or
  - c. A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
- 44. Upset – means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- 45. Waters – means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground, or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.
- 46. Week – means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.

47. Weekly (7-day and calendar week) Average – is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

**I. SEVERABILITY**

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

## PART IV SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS

### A. SLUDGE MANAGEMENT PRACTICES

1. Applicability
  - a. Provisions of Provision IV.A. apply to a sewage sludge generated or treated in treatment works that is applied to agricultural and non-agricultural land, or that is otherwise distributed, marketed, incinerated, or disposed in landfills or surface disposal sites.
  - b. Provisions of Provision IV.A. do not apply to:
    - (1) Sewage sludge generated or treated in a privately owned treatment works operated in conjunction with industrial manufacturing and processing facilities and which receive no domestic wastewater.
    - (2) Sewage sludge that is stored in surface impoundments located at the treatment works prior to ultimate disposal.
2. Submitting Information
  - a. If applicable, the Permittee must submit annually with its Municipal Water Pollution Prevention (MWPP) report the following:
    - (1) Type of sludge stabilization/digestion method;
    - (2) Daily or annual sludge production (dry weight basis);
    - (3) Ultimate sludge disposal practice(s).
  - b. The Permittee shall provide sludge inventory data to the Director as requested. These data may include, but are not limited to, sludge quantity and quality reported in Provision IV.A.2.a as well as other specific analyses required to comply with State and Federal laws regarding solid and hazardous waste disposal.
  - c. The Permittee shall give prior notice to the Director of at least 30 days of any change planned in the Permittee's sludge disposal practices.
3. Reopener or Modification
  - a. Upon review of information provided by the Permittee as required by Provision IV.A.2. or, based on the results of an on-site inspection, the permit shall be subject to modification to incorporate appropriate requirements.
  - b. If an applicable "acceptable management practice" or if a numerical limitation for a pollutant in sewage sludge promulgated under Section 405 of FWPCA is more stringent than the sludge pollutant limit or acceptable management practice in this permit. This permit shall be modified or revoked or reissued to conform to requirements promulgated under Section 405. The Permittee shall comply with the limitations no later than the compliance deadline specified in applicable regulations as required by Section 405 of FWPCA.

### B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS FOR CHRONIC TOXICITY

1. Chronic Toxicity Test
  - a. The permittee shall perform short-term chronic toxicity tests on the wastewater at Outfall 0011.
  - b. The samples shall be diluted using appropriate control water to the Instream Waste Concentration (IWC) which is **100 percent** effluent. The IWC is the actual concentration of effluent, after mixing, in the receiving stream during a 7-day, 10-year low flow period.
  - c. Any test result that shows a statistically significant reduction in survival, growth, or reproduction between the control and test samples at the 95% confidence level indicates chronic toxicity and shall constitute noncompliance with this permit.
2. General Test Requirements
  - a. A minimum of three (3) 24-hour composite samples shall be obtained for use in the above biomonitoring tests. Samples shall be collected every other day so that the laboratory receives water samples on the first, third, and fifth day of the seven-day test period. The holding time for each composite sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-013 (most current edition) or another control water selected by the Permittee and approved by the Department.
  - b. Test results shall be deemed unacceptable and the Permittee shall rerun the tests as soon as practical within the monitoring period for the following:
    - (1) For testing with *P. promelas*, effluent toxicity tests with control survival of less than 80% or if dry weight per surviving control organism is less than 0.25 mg;

- (2) For testing with *C. dubia*, if the number of young per surviving control organism is less than 15 or if less than 60% of surviving control females produce three broods; or
  - (3) If the other requirements of the EPA Test Procedure are not met.
  - c. In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are to be reported to the Department along with an explanation of the tests performed and the test results.
  - d. Toxicity tests shall be conducted for the duration of this permit in the month of **October**. Should results from the Annual Toxicity test indicate that Outfall 001-1 exhibits chronic toxicity, then the Permittee must conduct the follow-up testing described in Part IV.B.4.a. In addition, the Permittee may then also be required to conduct toxicity testing in the months of JANUARY, APRIL, JULY, and OCTOBER.
3. Reporting Requirements
- a. The Permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).
  - b. Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 2 of this part, an effluent toxicity report containing the information in Sections 2 and 6 shall be included with the DMR. Two copies of the test results must be submitted to the Department no later than 28 days after the month that tests were performed.
4. Additional Testing Requirements
- a. If chronic toxicity is indicated (i.e., noncompliance with permit limit), then the Permittee must perform two additional valid chronic toxicity tests in accordance with these procedures to determine the extent and duration of the toxic condition. The toxicity tests shall run consecutively beginning on the first calendar week following the date that the Permittee became aware of the permit noncompliance. The results of these follow-up tests shall be submitted to the Department no later than 28 days following the month the tests were performed.
  - b. After evaluation of the results of the follow-up tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures. The permittee may be required to perform a Toxicity Identification Evaluation (TIE) and/or a Toxicity Reduction Evaluation (TRE). The TIE/TRE shall be performed in accordance with the most recent protocols and guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600/R-91-003, EPA/600/R-92/081, EPA/833/B-99/022, and/or EPA/600/6-91/005F)
5. Test Methods
- The tests shall be performed in accordance with the latest edition of the "EPA Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms." The Larval Survival and Growth Test, Method 1000.0, shall be used for the fathead minnow (*Pimephales promelas*) test and the Survival and Reproduction Test, Method 1002.0, shall be used for the cladoceran (*Ceriodaphnia dubia*) test.
6. Effluent Toxicity Testing Reports
- The following information shall be submitted with each DMR unless otherwise directed by the Department. The Department may at any times suspend or reinstate this requirement or may decrease or increase the frequency of submittals.
- a. Introduction
    - (1) Facility name, location and county
    - (2) Permit number
    - (3) Toxicity testing requirements of permit
    - (4) Name of receiving water body
    - (5) Contract laboratory information (if tests are performed under contract)
      - (a) Name of firm
      - (b) Telephone number
      - (c) Address
    - (6) Objective of test
  - b. Plant Operations
    - (1) Discharge Operating schedule (if other than continuous)
    - (2) Volume of discharge during sample collection to include Mean daily discharge on sample collection dates (MGD, CFS, GPM)
    - (3) Design flow of treatment facility at time of sampling

c. Source of Effluent and Dilution Water

(1) Effluent samples

- (a) Sampling point
- (b) Sample collection dates and times (to include composite sample start and finish times)
- (c) Sample collection method
- (d) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)
- (e) Lapsed time from sample collection to delivery
- (f) Lapsed time from sample collection to test initiation
- (g) Sample temperature when received at the laboratory

(2) Dilution Water

- (a) Source
- (b) Collection/preparation date(s) and time(s)
- (c) Pretreatment (if applicable)
- (d) Physical and chemical characteristics (water temperature, pH, alkalinity, hardness, specific conductance, etc.)

d. Test Conditions

- (1) Toxicity test method utilized
- (2) End point(s) of test
- (3) Deviations from referenced method, if any, and reason(s)
- (4) Date and time test started
- (5) Date and time test terminated
- (6) Type and volume of test chambers
- (7) Volume of solution per chamber
- (8) Number of organisms per test chamber
- (9) Number of replicate test chambers per treatment
- (10) Test temperature, pH, and dissolved oxygen as recommended by the method (to include ranges)
- (11) Specify if aeration was needed
- (12) Feeding frequency, amount, and type of food
- (13) Specify if (and how) pH control measures were implemented
- (14) Light intensity (mean)

e. Test Organisms

- (1) Scientific name
- (2) Life stage and age
- (3) Source
- (4) Disease(s) treatment (if applicable)

f. Quality Assurance

- (1) Reference toxicant utilized and source
- (2) Date and time of most recent chronic reference toxicant test(s), raw data, and current control chart(s). (The most recent chronic reference toxicant test shall be conducted within 30 days of the routine.)
- (3) Dilution water utilized in reference toxicant test
- (4) Results of reference toxicant test(s) (NOEC, IC25, etc.); report concentration-response relationship and evaluate test sensitivity
- (5) Physical and chemical methods utilized

g. Results

- (1) Provide raw toxicity data in tabular form, including daily records of affected organisms in each concentration (including controls) and replicate
- (2) Provide table of endpoints: NOECs, IC25s, PASS/FAIL, etc. (as required in the applicable NPDES permit)
- (3) Indicate statistical methods used to calculate endpoints
- (4) Provide all physical and chemical data required by method
- (5) Results of test(s) (NOEC, IC25, PASS/FAIL, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD) calculated for sublethal endpoints determined by hypothesis testing.

h. Conclusions and Recommendations

- (1) Relationship between test endpoints and permit limits

(2) Actions to be taken

1/ Adapted from "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", Fourth Edition, October 2002 (EPA 821-R-02-013), Section 10, Report Preparation.

**C. TOTAL RESIDUAL CHLORINE (TRC) REQUIREMENTS**

1. If chlorine is not utilized for disinfection purposes, TRC monitoring under Part I of this Permit is not required. If TRC monitoring is not required, "NODI = 9" (conditional monitoring) should be reported on the DMR forms.
2. Testing for TRC shall be conducted according to either the amperometric titration method or the DPD colorimetric method as specified in Section 408(C) or (E), Standards Methods for the Examination of Water and Wastewater, 18th edition. If chlorine is not detected prior to actual discharge to the receiving stream using one of these methods (i.e., the analytical result is less than the detection level), the Permittee shall report on the DMR form "NODI = B" or "0". The Permittee shall then be considered to be in compliance with the daily maximum concentration limit for TRC.
3. This permit contains a maximum allowable TRC level in the effluent. The Permittee is responsible for determining the minimum TRC level needed in the chlorine contact chamber to comply with E.coli limits. The effluent shall be dechlorinated if necessary to meet the maximum allowable effluent TRC level.
4. The sample collection point for effluent TRC shall be at a point downstream of the chlorine contact chamber (downstream of dechlorination if applicable). The exact location is to be approved by the Director.

**D. PLANT CLASSIFICATION**

The Permittee shall report to the Director within 30 days of the effective date of this permit, the name, address and operator number of the certified wastewater operator in responsible charge of the facility. Unless specified elsewhere in this permit, this facility shall be classified in accordance with ADEM Admin. Code R. 335-10-1-.03.

**E. POLLUTANT SCANS**

The Permittee shall sample and analyze for the pollutants listed in 40 CFR 122 Appendix J Table 2. The Permittee shall provide data from a minimum of three samples collected within the four and one half years prior to submitting a permit application. Samples must be representative of the seasonal variation in the discharge from each outfall.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 WATER DIVISION – INDUSTRIAL AND MUNICIPAL SECTIONS  
**NONCOMPLIANCE NOTIFICATION FORM**

PERMITTEE NAME: \_\_\_\_\_ PERMIT NO: \_\_\_\_\_

FACILITY LOCATION: \_\_\_\_\_

DMR REPORTING PERIOD: \_\_\_\_\_

1. DESCRIPTION OF DISCHARGE: (Include outfall number (s))

2. DESCRIPTION OF NON-COMPLIANCE: (Attach additional pages if necessary):

| <b>LIST EFFLUENT VIOLATIONS (If applicable)</b>               |                            |  |                              |
|---|----------------------------|--|------------------------------|
| Outfall Number (s)  | NONCOMPLIANCE PARAMETER(S) | Result Reported (Include units)                        | Permit Limit (Include units) |
|   |                            |  |                              |
|   |                            |  |                              |
|   |                            |  |                              |
|   |                            |  |                              |
| <b>LIST MONITORING / REPORTING VIOLATIONS (If applicable)</b> |                            |  |                              |
| Outfall Number (s)  | NONCOMPLIANCE PARAMETER(S) | Monitoring / Reporting Violation (Provide description) |                              |
|   |                            |  |                              |
|   |                            |  |                              |
|   |                            |  |                              |
|   |                            |  |                              |

3. CAUSE OF NON-COMPLIANCE (Attach additional pages if necessary):

4. PERIOD OF NONCOMPLIANCE: (Include exact date(s) and time(s) or, if not corrected, the anticipated time the noncompliance is expected to continue):

5. DESCRIPTION OF STEPS TAKEN AND/OR BEING TAKEN TO REDUCE OR ELIMINATE THE NONCOMPLYING DISCHARGE AND TO PREVENT ITS RECURRENCE (attach additional pages if necessary):

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

\_\_\_\_\_  
 NAME AND TITLE OF RESPONSIBLE OFFICIAL (type or print)

\_\_\_\_\_  
 SIGNATURE OF RESPONSIBLE OFFICIAL / DATE SIGNED



Alabama Department of Environmental Management  
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463  
Montgomery, Alabama 36130-1463  
(334) 271-7700 ■ FAX (334) 271-7950

FACT SHEET

APPLICATION FOR  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
PERMIT TO DISCHARGE POLLUTANTS TO WATERS OF  
THE STATE OF ALABAMA

Date: October 12, 2016

Prepared By: Stephanie Ammons

NPDES Permit No. AL0049867

1. Name and Address of Applicant:

North Baldwin Utilities  
25 Hand Avenue  
Bay Minette, Alabama 36507

2. Name and Address of Facility:

Harry Still Sr. WWTP  
1000 East First Street  
Bay Minette, Alabama 36507

3. Description of Applicant's Type of Facility and/or Activity Generating the Discharge:

Waste Water Treatment Plant

4. Applicant's Receiving Waters

| <u>Receiving Waters</u> | <u>Classification</u> |
|-------------------------|-----------------------|
| Hollinger Creek         | Fish and Wildlife     |

For the Outfall latitude and longitude see the permit application.

5. Permit Conditions:

See attached Rationale and Draft Permit.

6. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Alabama Department of Environmental Management proposes to issue this NPDES permit subject to the limitations and special conditions outlined above. This determination is tentative.

Interested persons are invited to submit written comments on the draft permit to the following address:

Russell A. Kelly, Chief  
Permits and Services Division  
Alabama Department of Environmental Management  
1400 Coliseum Blvd



(Mailing Address: Post Office Box 301463; Zip 36130-1463)  
Montgomery, Alabama 36110-2059  
(334) 271-7714

All comments received prior to the closure of the public notice period (see public notice for date) will be considered in the formulation of the final determination with regard to this permit.

**b. Public Hearing**

A written request for a public hearing may be filed within the public notice period and must state the nature of the issues proposed to be raised in the hearing. A request for a hearing should be filed with the Department at the following address:

Russell A. Kelly, Chief  
Permits and Services Division  
Alabama Department of Environmental Management  
1400 Coliseum Blvd  
(Mailing Address: Post Office Box 301463; Zip 36130-1463)  
Montgomery, Alabama 36110-2059  
(334) 271-7714

The Director shall hold a public hearing whenever it is found, on the basis of hearing requests, that there exists a significant degree of public interest in a permit application or draft permit. The Director may hold a public hearing whenever such a hearing might clarify one or more issues involved in the permit decision. Public notice of such a hearing will be made in accordance with ADEM Admin. Code r. 335-6-6-.21.

**c. Issuance of the Permit**

All comments received during the public comment period shall be considered in making the final permit decision. At the time that any final permit decision is issued, the Department shall prepare a response to comments in accordance with ADEM Admin. Code r. 335-6-6-.21. **The permit record, including the response to comments, will be available to the public via the eFile System (<http://app.adem.alabama.gov/eFile/>) or an appointment to review the record may be made by writing the Permits and Services Division at the above address.**

Unless a request for a stay of a permit or permit provision is granted by the Environmental Management Commission, the proposed permit contained in the Director's determination shall be issued and effective, and such issuance will be the final administrative action of the Alabama Department of Environmental Management.

**d. Appeal Procedures**

As allowed under ADEM Admin. Code chap. 335-2-1, any person aggrieved by the Department's final administrative action may file a request for hearing to contest such action. Such requests should be received by the Environmental Management Commission within thirty days of issuance of the permit. Requests should be filed with the Commission at the following address:

Alabama Environmental Management Commission  
1400 Coliseum Blvd  
(Mailing Address: Post Office Box 301463; Zip 36130-1463)  
Montgomery, Alabama 36110-2059

All requests must be in writing and shall contain the information provided in ADEM Admin. Code r. 335-2-1-.04.

## NPDES PERMIT RATIONALE

NPDES Permit No: **AL0049867** Date: July 27, 2016

Permit Applicant: North Baldwin Utilities  
25 Hand Avenue  
Bay Minette, Alabama 36507

Location: Harry Still Sr. WWTP  
1000 East First Street  
Bay Minette, Alabama 36507

Draft Permit is: Initial Issuance:  
Reissuance due to expiration: X  
Modification of existing permit:  
Revocation and Reissuance:

Basis for Limitations: Water Quality Model: NH3-N, CBOD5, DO  
Reissuance with no modification: DO, pH, TSS, TRC, E.coli, TSS% Removal  
Instream calculation at 7Q10: 100%  
Toxicity based: TRC  
Secondary Treatment Levels: TSS, CBOD5% Removal, TSS% Removal  
Other (described below): pH, E.coli

Design Flow in Million Gallons per Day: 2.0 MGD

Major: Yes

Description of Discharge: Outfall Number 0011;  
The effluent discharges to Hollinger Creek, a Tier I stream classified as Fish and Wildlife in the Perdido-Escambia River Basin.

Discussion: This is a permit reissuance due to expiration. The permit regulates the discharge of treated domestic and industrial wastewater to Hollinger Creek, a Tier I stream classified as Fish and Wildlife in the Perdido-Escambia River Basin. The Permittee asserts that there are 3 significant industrial dischargers (i.e., 3 SID permits) to the treatment plant.

Hollinger Creek is not listed on Alabama's most recent 303(d) list, and there are no approved Total Maximum Daily Loads (TMDLs) affecting the discharge. The proposed permit limits are described below.

The Department completed a reasonable potential analysis (RPA) of the discharge based on the receiving stream's historical low flows and laboratory data provided in the Permittee's application. The Department also considers background data upstream of the point of discharge in the RPA; however, there is no available background data for this discharge. The RPA indicates whether or not any pollutants in treated effluent have the potential to contribute to any excursion of Alabama's in-stream water quality standards. A review of four and one half years of DMR data indicates Total Recoverable Zinc values below the method detection limit (MDL) for all monitoring periods excluding July 2013. The July 2013 DMR data indicates a Total Recoverable Zinc daily maximum value of 240 µg/L which is above the permitted daily maximum limit of 197 µg/L. The Permittee has indicated that the treatment plant receives discharge from one SID, DentalEZ, which includes Zinc in its process. The Permittee has submitted documentation indicating that DentalEZ has implemented improvements to its pretreatment system with a focus on Zinc reduction as well as improved its wastewater operations procedure. A detailed operating procedure for DentalEZ's discharge to the Harry Still Sr. WWTP, which includes no discharge to the treatment plant when Zinc levels are above the limits established in the DentalEZ SID permit, was implemented in October 2013. In consideration of the improvements made to the pretreatment system and operating procedures, the Department is considering only the Total Recoverable Zinc data reported after the October 2013 monitoring period in the RPA. Based on the RPA, it was determined that there is no reasonable potential for in-stream water quality standards to be exceeded for Zinc or any of the other pollutant analyzed in accordance with 40 CFR 122 Appendix J Table 2. Therefore, a Total Recoverable Zinc limit will not be included in this permit reissuance.

Limits for Dissolved Oxygen (DO), Five Day Carbonaceous Biochemical Oxygen Demand (CBOD5), and Total Ammonia as Nitrogen (NH3-N) were developed based on a Waste Load Allocation (WLA) model completed by ADEM's Water Quality Branch on December 31, 2015. The daily minimum DO limit is 6.0 mg/L. The monthly average CBOD5 limit is 4.0 mg/L during the summer season (May-November) and 13.0 mg/L during the winter season (December-April). The monthly average NH3-N limit is 1.3 mg/L during the summer season and 4.0 mg/L during the winter season. The previous permit imposed a winter monthly average NH3-N limit of 3.0 mg/L. Because of the significant reduction in CBOD5 winter limits, the anti-backsliding rule does not apply.

In addition to NH3-N, the Permittee is required to monitor and report effluent test results for Total Phosphorus (TP), Total Kjeldahl Nitrogen (TKN), and Nitrite plus Nitrate-Nitrogen (NO2+NO3-N). Monitoring for these nutrient-related parameters is imposed so that sufficient information will be available regarding the nutrient contribution from this point source, should it be necessary at some later time to impose nutrient limits on this discharge.

The *Escherichia coli* (E.coli) limits were determined based on the water-use classification of the receiving stream. Since Hollinger Creek is classified as Fish and Wildlife, the limits for June – September are 126 col/100mL (monthly average) and 487 col/100mL (daily maximum), while the limits for October – May are 548 col/100mL (monthly average) and 2507 col/100mL (daily maximum).

The pH limits were developed in accordance with the water-use classification of the receiving stream. The pH limits are 6.0 s.u (daily minimum) and 8.5 s.u. (daily maximum).

The Total Residual Chlorine (TRC) limits are based on calculations to ensure that the acute and chronic toxic concentrations of TRC in the receiving stream are not exceeded. The TRC limits are 0.011 mg/L (monthly average) and 0.019 mg/L (daily maximum). In accordance with a letter dated August 11, 1998 from EPA Headquarters and a 1991 memorandum from EPA Region 4's Environmental Services Division (ESD), due to testing and method detection limitations, a TRC measurement below 0.05 mg/L shall be considered below detection for compliance purposes. The TRC limits are provisional. If chlorine disinfection is utilized then the imposed TRC limits will apply.

The monthly average Total Suspended Solids (TSS) limit is established at 30.0 mg/L in accordance with 40 CFR 133.102. A minimum percent removal limit of 85.0 percent is imposed for TSS in accordance with 40 CFR 133.102. A minimum percent removal limit of 85.0 percent is imposed for CBOD5 in accordance with 40 CFR 133.102 regarding Secondary Treatment. The previous permit did not impose a CBOD5 percent removal permit limit. The CBOD5 percent removal limit of 85.0 percent has been included in this permit to comply with 40 CFR part 133.102.

This permit imposes toxicity testing for both survival and life-cycle impairment (i.e., growth and reproduction). Chronic toxicity testing with two species (*Ceriodaphnia* and *Pimephales*) is required on an annual basis at the calculated Instream Waste Concentration (IWC) of 100 percent.

In the permit application, the Permittee indicated that there are no storm water outfalls from the treatment plant. All equipment is either under a shelter or installed in such a way so that storm water drains back into the treatment process. Therefore, storm water monitoring will not be required with this permit reissuance.

The frequency of monitoring for most parameters is three days per week. Nutrients are to be monitored monthly. Percent removals are to be calculated monthly. Flow is to be monitored continuously, seven days per week.

ADEM Administrative Rule 335-6-10-.12 requires applicants for new or expanded discharges to Tier II waters demonstrate that the proposed discharge is necessary for important economic or social development in the area in which the waters are located. The application submitted by the facility is not for a new or expanded discharge to a Tier II stream, so the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

Prepared by: Stephanie Ammons

## TOXICITY AND DISINFECTION RATIONALE

|  |                             |   |
|--|-----------------------------|---|
| Facility Name:                                 | <b>Harry Still Sr. WWTP</b> |   |
| NPDES Permit Number:                           | <b>AL0049867</b>            |   |
| Receiving Stream:                              | <b>Hollinger Creek</b>      |   |
| Facility Design Flow (Q <sub>w</sub> ):        | <b>2.000 MGD</b>            |   |
| Receiving Stream 7Q <sub>10</sub> :            | <b>0.000 cfs</b>            |   |
| Receiving Stream 1Q <sub>10</sub> :            | <b>0.000 cfs</b>            |   |
| Winter Headwater Flow (WHF):                   | <b>0.00 cfs</b>             |   |
| Summer Temperature for CCC:                    | <b>30 deg. Celsius</b>      |   |
| Winter Temperature for CCC:                    | <b>20 deg. Celsius</b>      |   |
| Headwater Background NH <sub>3</sub> -N Level: | <b>0.11 mg/l</b>            |   |
| Receiving Stream pH:                           | <b>7.0 s.u.</b>             |   |
| Headwater Background FC Level (summer):        | <b>N/A.</b>                 | <b>(Only applicable for facilities with diffusers.)</b> |
| (winter):                                      | <b>N/A.</b>                 |   |

The Stream Dilution Ratio (SDR) is calculated using the 7Q<sub>10</sub> for all stream classifications.

$$\text{Stream Dilution Ratio (SDR)} = \frac{Q_w}{7Q_{10} + Q_w} = 100.00\%$$

### AMMONIA TOXICITY LIMITATIONS

Toxicity-based ammonia limits are calculated in accordance with the *Ammonia Toxicity Protocol* and the *General Guidance for Writing Water Quality Based Toxicity Permits*.

If the Limiting Dilution is less than 1%, the waterbody is considered stream-dominated and the CMC applies.

If the Limiting Dilution is greater than 1%, the waterbody is considered effluent-dominated and the CCC applies.

$$\begin{aligned} \text{Limiting Dilution} &= \frac{Q_w}{7Q_{10} + Q_w} \\ &= 100.00\% \quad \text{Effluent-Dominated, CCC Applies} \end{aligned}$$

$$\begin{aligned} \text{Criterion Maximum Concentration (CMC):} & \quad \text{CMC} = 0.411 / (1 + 10^{(7.204 - \text{pH})}) + 58.4 / (1 + 10^{(\text{pH} - 7.204)}) \\ \text{Criterion Continuous Concentration (CCC):} & \quad \text{CCC} = [0.0577 / (1 + 10^{(7.688 - \text{pH})}) + 2.487 / (1 + 10^{(\text{pH} - 7.688)})] * \text{Min}[2.85, 1.45 * 10^{(0.028 * (25 - T))}] \end{aligned}$$

|   | <u>CMC</u>        | <u>CCC</u>       |
|---|-------------------|------------------|
| Allowable Summer Instream NH <sub>3</sub> -N: | <b>36.09 mg/l</b> | <b>2.18 mg/l</b> |
| Allowable Winter Instream NH <sub>3</sub> -N: | <b>36.09 mg/l</b> | <b>4.15 mg/l</b> |

$$\begin{aligned} \text{Summer NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (7Q_{10} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (7Q_{10})]}{Q_w} \\ &= 2.2 \text{ mg/l NH}_3\text{-N at 7Q}_{10} \end{aligned}$$

$$\begin{aligned} \text{Winter NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (\text{WHF} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (\text{WHF})]}{Q_w} \\ &= 4.2 \text{ mg/l NH}_3\text{-N at Winter Flow} \end{aligned}$$

The ammonia limits established in the permit will be the lesser of the DO-based ammonia limit (from the wasteload allocation model) or the toxicity limits calculated above.

|        | <u>DO-based NH<sub>3</sub>-N limit</u> | <u>Toxicity-based NH<sub>3</sub>-N limit</u> |
|--------|--|--|
| Summer | <b>1.30 mg/l NH<sub>3</sub>-N</b>      | <b>2.20 mg/l NH<sub>3</sub>-N</b>            |
| Winter | <b>4.00 mg/l NH<sub>3</sub>-N</b>      | <b>4.20 mg/l NH<sub>3</sub>-N</b>            |

**Summer: The DO based limit of 1.30 mg/l NH<sub>3</sub>-N applies.**

**Winter: The DO based limit of 4.00 mg/l NH<sub>3</sub>-N applies.**

**TOXICITY TESTING REQUIREMENTS (REFERENCE: MUNICIPAL BRANCH TOXICITY PERMITTING STRATEGY)**

The following factors trigger toxicity testing requirements:

1. Facility design flow is equal to or greater than 1.0 MGD (major facility).
2. There are significant industrial contributors (SID permits).

Acute toxicity testing is specified for A&I receiving streams, or for stream dilution ratios of 1% or less.  
 Chronic toxicity testing is specified for all other situations requiring toxicity testing.

**Chronic toxicity testing is required**

$$\text{Instream Waste Concentration (IWC)} = \frac{Q_w}{7Q_{10} + Q_w} = 100.00\% \quad \text{Note: This number will be rounded up for toxicity testing purposes.}$$

**DISINFECTION REQUIREMENTS**

Bacteria limits are required, and will be the water quality limit for the receiving stream, except where diffusers are used the limit may be adjusted for the dilution provided by the diffuser.

See the attached Disinfection Guidance for applicable stream standards.

(Non-coastal limits apply)  
 Applicable Stream Classification: **Fish & Wildlife**  
 Disinfection Type: **Chlorination**  
 Limit calculation method: **Limits based on meeting stream standards at the point of discharge.**

|   | Stream Standard<br>(colonies/100ml) | Effluent Limit<br>(colonies/100ml) |
|---|-------------------------------------|------------------------------------|
| <b><u>E. Coli (applies to Non-coastal and Shellfish Harvesting Coastal)</u></b> |                                     |                                    |
| Monthly limit as monthly average (October through May):                         | 548                                 | <b>548</b>                         |
| Monthly limit as monthly average (June through September):                      | 126                                 | <b>126</b>                         |
| Daily Max (October through May):  | 2507                                | <b>2507</b>                        |
| Daily Max (June through September):   | 487                                 | <b>487</b>                         |
| <b><u>Enterococci (applies to Coastal)</u></b>                                  |                                     |                                    |
| Monthly limit as geometric mean (October through May):                          | Not applicable                      | <b>Not applicable</b>              |
| Monthly limit as geometric mean (June through September):                       | Not applicable                      | <b>Not applicable</b>              |
| Daily Max (October through May):  | Not applicable                      | <b>Not applicable</b>              |
| Daily Max (June through September):   | Not applicable                      | <b>Not applicable</b>              |

**MAXIMUM ALLOWABLE CHLORINATION LIMITS**

Toxicity-based chlorine limits are calculated in accordance with the General Guidance for Writing Water Quality Based Toxicity Permits.

Chlorine has been shown to be acutely toxic at 0.019 mg/l and chronically toxic at 0.011 mg/l.

|                                    |       |               |
|------------------------------------|-------|---------------|
| Maximum allowable TRC in effluent: | 0.011 | (0.011)/(SDR) |
| Maximum allowable TRC in effluent: | 0.019 | (0.019)/(SDR) |

NOTE: A maximum chlorine limit will be imposed such that the instream concentration will not exceed acutely toxic concentrations in A & I streams and chronically toxic concentrations in all other streams, but may not exceed 1.0 mg/l.

Prepared By: Stephanie Ammons Date: 7/15/2016

| $Q_{d1} * C_{d1} + Q_{d2} * C_{d2} + Q_s * C_s = Q_r * C_r$ |                               |                    |        |  |             |  |             |  |             |   |   |  |
|---|-------------------------------|--------------------|--------|--|-------------|--|-------------|--|-------------|---|---|--|
| ID  | Pollutant                     | Carcinogen<br>Yes* | Type   | Background<br>from upstream<br>source ( $C_{d1}$ ) |             | Background<br>from upstream<br>source ( $C_{d2}$ ) |             | Background<br>Instream<br>( $C_s$ ) Daily<br>Monthly Ave |             | Enter Max<br>Daily<br>Discharge as<br>reported by<br>Applicant<br>( $C_{app}$ )<br>ug/l | Enter Avg<br>Daily<br>Discharge as<br>reported by<br>Applicant<br>( $C_{app}$ )<br>ug/l | Partition<br>Coefficient<br>(Stream /<br>Lake) |
|   |                               |                    |        | Daily Max  | Monthly Ave | Max  | Monthly Ave | Max  | Monthly Ave |   |   |  |
| 1   | Antimony                      |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 2   | Arsenic**,**                  | YES                | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | 0.574  |
| 3   | Beryllium                     |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | 0.236  |
| 4   | Cadmium**                     |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | 0.210  |
| 5   | Chromium / Chromium III**     |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | 0.388  |
| 6   | Chromium / Chromium VI**      |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | 0.206  |
| 7   | Copper**                      |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | 0.302  |
| 8   | Lead**                        |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | 0.505  |
| 9   | Mercury**                     |                    | Metals | 0  | 0           | 0  | 0           | 0.001  | 0.00098     | 0   | 0   | -  |
| 10  | Nickel**                      |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 11  | Selenium                      |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 12  | Silver                        |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 13  | Thallium                      |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 14  | Zinc**                        |                    | Metals | 0  | 0           | 0  | 0           | 0.025  | 0           | 0   | 0   | 0.330  |
| 15  | Cyanide                       |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 16  | Total Phenolic Compounds      |                    | Metals | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 17  | Hardness (As CaCO3)           |                    | Metals | 0  | 0           | 0  | 0           | 114000   | 105400      | 0   | 0   | -  |
| 18  | Acrolein                      |                    | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 19  | Acrylonitrile*                | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 20  | Aldrin                        | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 21  | Benzene*                      | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 22  | Bromoform*                    | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 23  | Carbon Tetrachloride*         | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 24  | Chloroethane                  | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 25  | Chlorobenzene                 | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 26  | Chlorobromo-Methane*          | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 27  | Chloroethane                  | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 28  | 2-Chloro-Ethylvinyl Ether     | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 29  | Chloroform*                   | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 23          | 15.6  | 0   | -  |
| 30  | 4,4'-DDE                      | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 31  | 4,4'-DDE                      | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 32  | 4,4'-DDT                      | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 33  | Dichlorobromo-Methane*        | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 34  | 1,1-Dichloroethane            | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 35  | 1,2-Dichloroethane*           | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 36  | Trans-1,2-Dichloro-Ethylene   | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 37  | 1,1-Dichloroethylene*         | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 38  | 1,2-Dichloropropane           | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 39  | 1,3-Dichloro-Propylene        | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 40  | Dieldrin                      | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 41  | Ethylbenzene                  | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 42  | Methyl Bromide                | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 43  | Methyl Chloride               | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 44  | Methylene Chloride*           | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 45  | 1,1,1,2-Tetrachloro-Ethane*   | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 46  | Tetrachloro-Ethylene*         | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 47  | Toluene                       | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 48  | Toxaphene                     | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 49  | Tributylamine (TBT)           | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 50  | 1,1,1-Trichloroethane         | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 51  | 1,1,1,2-Trichloroethane*      | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 52  | Trichloroethylene*            | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 53  | Vinyl Chloride*               | YES                | VOC    | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 54  | p-Chloro-m-Cresol             | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 55  | 2-Chlorophenol                | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 56  | 2,4-Dichlorophenol            | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 57  | 2,4-Dimethylphenol            | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 58  | 4,6-Dinitro-O-Cresol          | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 59  | 2,4-Dinitrophenol             | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 60  | 4,6-Dinitro-2-methylphenol    | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 61  | Dioxin (2,3,7,8-TCDD)         | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 62  | 2-Nitrophenol                 | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 63  | 4-Nitrophenol                 | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 64  | Pentachlorophenol*            | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 65  | Phenol                        | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 66  | 2,4,6-Trichlorophenol*        | YES                | Acids  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 67  | Acenaphthene                  | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 68  | Acenaphthylene                | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 69  | Anthracene                    | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 70  | Benzo(a)Anthracene*           | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 71  | Benzo(a)Anthracene*           | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 72  | Benzo(a)Pyrene*               | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 73  | 3,4-Benzo-Fluoranthene        | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 74  | Benzo(b)Fluoranthene          | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 75  | Benzo(k)Fluoranthene          | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 76  | Bis (2-Chloroethoxy) Methane  | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 77  | Bis (2-Chloroethyl)-Ether*    | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 78  | Bis (2-Chloro-Propyl) Ether   | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 79  | Bis (2-Ethylhexyl) Phthalate* | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 80  | 4-Bromophenyl Phenyl Ether    | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 81  | Butyl Benzyl Phthalate        | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 82  | 2-Chloronaphthalene           | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 83  | 4-Chlorophenyl Phenyl Ether   | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 84  | Chrysene*                     | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 85  | D,N-Butyl Phthalate           | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 86  | D,N-Octyl Phthalate           | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 87  | Dibenz(a,h)Anthracene*        | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 88  | 1,2-Dichlorobenzene           | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 89  | 1,3-Dichlorobenzene           | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 90  | 1,4-Dichlorobenzene           | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 91  | 3,3-Dichlorobenzene*          | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 92  | Diethyl Phthalate             | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 93  | Dimethyl Phthalate            | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 94  | 2,4-Dinitrotoluene*           | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 95  | 2,6-Dinitrotoluene            | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 96  | 1,2-Diphenylhydrazine         | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 97  | Endosulfan (alpha)            | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 98  | Endosulfan (beta)             | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 99  | Endosulfan sulfate            | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 100   | Endrin                        | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 101   | Endrin Aldehyde               | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 102   | Fluoranthene                  | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 103   | Fluorene                      | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 104   | Heptachlor                    | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 105   | Heptachlor Epoxide            | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 106   | Hexachlorobenzene*            | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 107   | Hexachlorobutadiene*          | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 108   | Hexachlorocyclohexan (alpha)  | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 109   | Hexachlorocyclohexan (beta)   | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 110   | Hexachlorocyclohexan (gamma)  | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 111   | Hexachlorocyclopentadiene     | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 112   | Hexachloroethane              | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 113   | Indeno(1,2,3-CD)Pyrene*       | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 114   | Isothorone                    | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 115   | Naphthalene                   | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 116   | Nitrobenzene                  | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 117   | N-Nitrosodi-N-Propylamine*    | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 118   | N-Nitrosodi-N-Methylamine*    | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 119   | N-Nitrosodi-N-Phenylamine*    | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 120   | PCB-1016                      | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 121   | PCB-1221                      | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 122   | PCB-1232                      | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 123   | PCB-1242                      | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 124   | PCB-1248                      | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 125   | PCB-1254                      | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 126   | PCB-1260                      | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 127   | Phenanthrene                  | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 128   | Pyrene                        | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |
| 129   | 1,2,4-Trichlorobenzene        | YES                | Bases  | 0  | 0           | 0  | 0           | 0  | 0           | 0   | 0   | -  |

|          |  |
|----------|--|
| 2        | Enter $Q_s$ = wastewater discharge flow from facility (MGD)  |
| 3.094458 | $Q_s$ = wastewater discharge flow (cfs) (this value is calculated from the MGD)  |
| 0        | Enter or estimated, $Q_{d1}$ = background stream flow from upstream source (cfs)   |
| 0        | Enter TQ10, $Q_s$ = background stream flow in cfs above point of discharge   |
| 0        | Enter or estimated, TQ10, $Q_s$ = background stream flow in cfs above point of discharge (TQ10 estimated at 75% of TQ10) |
| 0        | Enter flow from upstream discharge $Q_{d2}$ = background stream flow in MGD above point of discharge                     |
| 2.92     | Enter Mean Annual Flow, $Q_s$ = background stream flow in cfs above point of discharge                                   |
| 0        | Enter TQ2, $Q_s$ = background stream flow in cfs above point of  |

| Freshwater F&W classification. |                               |     |                   |  |  |  |   |                              |     |  |  |  | Freshwater Acute (µg/l) Q <sub>1</sub> = Q10 |                              |     | Freshwater Chronic (µg/l) Q <sub>1</sub> = Q10 |   |                              | Human Health Consumption Fish Only (µg/l)<br>Carcinogen Q <sub>1</sub> = Annual Average<br>Non-Carcinogen Q <sub>1</sub> = Q10 |  |  |
|--------------------------------|-------------------------------|-----|-------------------|--|--|--|---|------------------------------|-----|--|--|--|--|------------------------------|-----|--|---|------------------------------|--|--|--|
| ID                             | Pollutant                     | RP? | Carcinogen<br>yes | Background<br>from upstream<br>source (CG2)<br>Daily Max | Max Daily<br>Discharge as<br>reported by<br>Applicant<br>(C <sub>max</sub> ) | Water<br>Quality<br>Criteria (C <sub>1</sub> ) | Draft Permit<br>Limit (C <sub>max</sub> ) | 20% of Draft<br>Permit Limit | RP? | Background<br>from upstream<br>source (CG2)<br>Monthly Ave | Avg Daily<br>Discharge as<br>reported by<br>Applicant<br>(C <sub>max</sub> ) | Water<br>Quality<br>Criteria (C <sub>1</sub> ) | Draft Permit<br>Limit (C <sub>max</sub> )    | 20% of Draft<br>Permit Limit | RP? | Water Quality<br>Criteria (C <sub>1</sub> )    | Draft Permit<br>Limit (C <sub>max</sub> ) | 20% of Draft<br>Permit Limit | RP?  |  |  |
| 1                              | Antimony                      |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 3.73E+02                                       | 3.73E+02                                  | 7.47E+01                     | No   |  |  |
| 2                              | Arsenic                       |     | YES               | 0  | 0  | 592.334  | 592.334                                   | 118.467                      | No  | 0  | 0  | 261.324  | 261.324                                      | 52.265                       | No  | 3.03E-01                                       | 5.89E-01                                  | 1.18E-01                     | No   |  |  |
| 3                              | Beryllium                     |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 4                              | Cadmium                       |     |                   | 0  | 0  | 4.347  | 4.347                                     | 0.869                        | No  | 0  | 0  | 0.844  | 0.844  | 0.129                        | No  | -  | -   | -                            | -  |  |  |
| 5                              | Chromium/ Chromium III        |     |                   | 0  | 0  | 1537.913                                       | 1537.913                                  | 307.583                      | No  | 0  | 0  | 200.051  | 200.051                                      | 40.010                       | No  | -  | -   | -                            | -  |  |  |
| 6                              | Chromium/ Chromium VI         |     |                   | 0  | 0  | 16.000   | 16.000                                    | 3.200                        | No  | 0  | 0  | 11.000   | 11.000                                       | 2.200                        | No  | -  | -   | -                            | -  |  |  |
| 7                              | Copper                        |     |                   | 0  | 0  | 16.028   | 16.028                                    | 3.605                        | No  | 0  | 0  | 12.766   | 12.766                                       | 2.553                        | No  | 1.30E+03                                       | 1.30E+03                                  | 2.60E+02                     | No   |  |  |
| 8                              | Lead                          |     |                   | 0  | 0  | 146.291  | 146.291                                   | 29.258                       | No  | 0  | 0  | 5.701  | 5.701  | 1.140                        | No  | -  | -   | -                            | -  |  |  |
| 9                              | Mercury                       |     |                   | 0  | 0.001  | 2.400  | 2.400                                     | 0.480                        | No  | 0  | 0.00098  | 0.012  | 0.012  | 0.002                        | No  | 4.24E-02                                       | 4.24E-02                                  | 8.48E-03                     | No   |  |  |
| 10                             | Nickel                        |     |                   | 0  | 0  | 515.824  | 515.824                                   | 103.165                      | No  | 0  | 0  | 57.292   | 57.292                                       | 11.458                       | No  | 9.93E+02                                       | 9.93E+02                                  | 1.99E+02                     | No   |  |  |
| 11                             | Selenium                      |     |                   | 0  | 0  | 20.000   | 20.000                                    | 4.000                        | No  | 0  | 0  | 5.000  | 5.000  | 1.000                        | No  | 2.43E+03                                       | 2.43E+03                                  | 4.86E+02                     | No   |  |  |
| 12                             | Silver                        |     |                   | 0  | 0  | 0.976  | 0.976                                     | 0.195                        | No  | 0  | 0  | -  | -  | -                            | -   | -  | -   | -                            | -  |  |  |
| 13                             | Thallium                      |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 2.74E-01                                       | 2.74E-01                                  | 5.47E-02                     | No   |  |  |
| 14                             | Zinc                          |     |                   | 0  | 0.025  | 197.369  | 197.369                                   | 39.474                       | No  | 0  | 0  | 198.983  | 198.983                                      | 39.797                       | No  | 1.48E+04                                       | 1.48E+04                                  | 2.96E+03                     | No   |  |  |
| 15                             | Cyanide                       |     |                   | 0  | 0  | 22.000   | 22.000                                    | 4.400                        | No  | 0  | 0  | 5.200  | 5.200  | 1.040                        | No  | 9.33E+03                                       | 9.33E+03                                  | 1.87E+03                     | No   |  |  |
| 16                             | Total Phenolic Compounds      |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 17                             | Hardness (As CaCO3)           |     |                   | 0  | 114000   | -  | -   | -                            |     | 0  | 105400   | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 18                             | Acrolein                      |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 5.43E+00                                       | 5.43E+00                                  | 1.09E+00                     | No   |  |  |
| 19                             | Acrylonitrile                 |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.44E-01                                       | 2.89E-01                                  | 5.60E-02                     | No   |  |  |
| 20                             | Aldrin                        |     | YES               | 0  | 0  | 3.000  | 3.000                                     | 0.600                        | No  | 0  | 0  | 1.300  | 1.300  | 0.260                        | No  | 2.94E-05                                       | 5.71E-05                                  | 1.14E-05                     | No   |  |  |
| 21                             | Benzene                       |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.55E+01                                       | 3.01E+01                                  | 6.01E+00                     | No   |  |  |
| 22                             | Bromoform                     |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 7.88E+01                                       | 1.53E+02                                  | 3.06E+01                     | No   |  |  |
| 23                             | Carbon Tetrachloride          |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 9.57E-01                                       | 1.86E+00                                  | 3.72E-01                     | No   |  |  |
| 24                             | Chlordane                     |     | YES               | 0  | 0  | 2.400  | 2.400                                     | 0.480                        | No  | 0  | 0  | 0.004  | 0.004  | 0.001                        | No  | 4.73E-04                                       | 9.19E-04                                  | 1.84E-04                     | No   |  |  |
| 25                             | Chlorobenzene                 |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 9.06E+02                                       | 9.06E+02                                  | 1.81E+02                     | No   |  |  |
| 26                             | Chlorodibromo-Methane         |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 7.41E+00                                       | 1.44E+01                                  | 2.88E+00                     | No   |  |  |
| 27                             | Chloroethane                  |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 28                             | 2-Chloro-Ethylmethyl Ether    |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 29                             | Chloroform                    |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | 15.6   | -  | -  | -                            |     | 1.02E+02                                       | 1.98E+02                                  | 3.97E+01                     | No   |  |  |
| 30                             | 4,4'- DDD                     |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.81E-04                                       | 3.53E-04                                  | 7.05E-05                     | No   |  |  |
| 31                             | 4,4'- DDE                     |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.28E-04                                       | 2.49E-04                                  | 4.98E-05                     | No   |  |  |
| 32                             | 4,4'- DDT                     |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.28E-04                                       | 2.49E-04                                  | 4.98E-05                     | No   |  |  |
| 33                             | Dichlorobromo-Methane         |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.00E+01                                       | 1.95E+01                                  | 3.90E+00                     | No   |  |  |
| 34                             | 1, 1-Dichloroethane           |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 35                             | 1, 2-Dichloroethane           |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 2.14E+01                                       | 4.15E+01                                  | 8.31E+00                     | No   |  |  |
| 36                             | Trans-1, 2-Dichloro-Ethylene  |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 9.91E+03                                       | 5.91E+03                                  | 1.18E+03                     | No   |  |  |
| 37                             | 1, 1-Dichloroethylene         |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 4.17E+03                                       | 8.10E+03                                  | 1.62E+03                     | No   |  |  |
| 38                             | 1, 2-Dichloropropane          |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 6.49E+00                                       | 6.49E+00                                  | 1.70E+00                     | No   |  |  |
| 39                             | 1, 3-Dichloro-Propane         |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.23E+01                                       | 1.23E+01                                  | 2.46E+00                     | No   |  |  |
| 40                             | Dieldrin                      |     | YES               | 0  | 0  | 0.240  | 0.240                                     | 0.048                        | No  | 0  | 0  | 0.056  | 0.056  | 0.011                        | No  | 3.12E-05                                       | 6.07E-05                                  | 1.21E-05                     | No   |  |  |
| 41                             | Ethylbenzene                  |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.24E+03                                       | 1.24E+03                                  | 2.48E+02                     | No   |  |  |
| 42                             | Methyl Bromide                |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 8.71E+02                                       | 8.71E+02                                  | 1.74E+02                     | No   |  |  |
| 43                             | Methyl Chloride               |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 44                             | Methylene Chloride            |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 3.46E+02                                       | 6.72E+02                                  | 1.34E+02                     | No   |  |  |
| 45                             | 1, 1, 2, 2-Tetrachloro-Ethane |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 2.33E+00                                       | 4.54E+00                                  | 9.07E-01                     | No   |  |  |
| 46                             | Tetrachloro-Ethylene          |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.92E+00                                       | 3.73E+00                                  | 7.45E-01                     | No   |  |  |
| 47                             | Toluene                       |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 8.72E+03                                       | 8.72E+03                                  | 1.74E+03                     | No   |  |  |
| 48                             | Toxaphene                     |     | YES               | 0  | 0  | 0.730  | 0.730                                     | 0.146                        | No  | 0  | 0  | 0.0002   | 0.000  | 0.000                        | No  | 1.62E-04                                       | 3.15E-04                                  | 6.29E-05                     | No   |  |  |
| 49                             | Tributyltin (TBT)             |     | YES               | 0  | 0  | 0.460  | 0.460                                     | 0.092                        | No  | 0  | 0  | 0.072  | 0.072  | 0.014                        | No  | -  | -   | -                            | -  |  |  |
| 50                             | 1, 1, 1-Trichloroethane       |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 51                             | 1, 1, 2-Trichloroethane       |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 9.10E+00                                       | 1.77E+01                                  | 3.54E+00                     | No   |  |  |
| 52                             | Trichloroethylene             |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.75E+01                                       | 3.40E+01                                  | 6.79E+00                     | No   |  |  |
| 53                             | Vinyl Chloride                |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.42E+00                                       | 2.77E+00                                  | 5.54E-01                     | No   |  |  |
| 54                             | p-Chloro-m-Cresol             |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 55                             | 2-Chlorophenol                |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 8.71E+01                                       | 8.71E+01                                  | 1.74E+01                     | No   |  |  |
| 56                             | 2, 4-Dichlorophenol           |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.72E+02                                       | 1.72E+02                                  | 3.44E+01                     | No   |  |  |
| 57                             | 2, 4-Dimethylphenol           |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 4.98E+02                                       | 4.98E+02                                  | 9.95E+01                     | No   |  |  |
| 58                             | 4, 6-Dinitro-O-Cresol         |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 59                             | 2, 4-Dinitrophenol            |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 3.11E+03                                       | 3.11E+03                                  | 6.22E+02                     | No   |  |  |
| 60                             | 4,6-Dinitro-2-methylphenol    |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.65E+02                                       | 3.22E+02                                  | 6.43E+01                     | No   |  |  |
| 61                             | Dioxin (2,3,7,8-TCDD)         |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 2.87E-08                                       | 5.18E-08                                  | 1.04E-08                     | No   |  |  |
| 62                             | 2-Nitrophenol                 |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 63                             | 4-Nitrophenol                 |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 64                             | Pentachlorophenol             |     | YES               | 0  | 0  | 6.723  | 6.723                                     | 1.745                        | No  | 0  | 0  | 6.693  | 6.693  | 1.339                        | No  | 1.77E+00                                       | 3.44E+00                                  | 6.87E-01                     | No   |  |  |
| 65                             | Phenol                        |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 5.00E+05                                       | 5.00E+05                                  | 1.00E+05                     | No   |  |  |
| 66                             | 2, 4, 6-Trichlorophenol       |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.41E+00                                       | 2.75E+00                                  | 5.50E-01                     | No   |  |  |
| 67                             | Acenaphthene                  |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 5.79E+02                                       | 5.79E+02                                  | 1.16E+02                     | No   |  |  |
| 68                             | Acenaphthylene                |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 69                             | Anthracene                    |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 2.33E+04                                       | 2.33E+04                                  | 4.67E+03                     | No   |  |  |
| 70                             | Benzo(a)anthracene            |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.19E-04                                       | 1.19E-04                                  | 2.32E-05                     | No   |  |  |
| 71                             | Benzo(a)fluoranthene          |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.07E-02                                       | 2.07E-02                                  | 4.14E-03                     | No   |  |  |
| 72                             | Benzo(a)pyrene                |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.07E-02                                       | 2.07E-02                                  | 4.14E-03                     | No   |  |  |
| 73                             | 3, 4-Benzo-Fluoranthene       |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.07E-02                                       | 1.07E-02                                  | 2.13E-03                     | No   |  |  |
| 74                             | Benzo(ghi)perylene            |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 75                             | Benzo(k)fluoranthene          |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.07E-02                                       | 1.07E-02                                  | 2.13E-03                     | No   |  |  |
| 76                             | Bis (2-Chloroethoxy) Methane  |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 77                             | Bis (2-Chloroethyl)-Ether     |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 3.07E-01                                       | 5.98E-01                                  | 1.20E-01                     | No   |  |  |
| 78                             | Bis (2-Chloro-Propyl) Ether   |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 3.78E+04                                       | 3.78E+04                                  | 7.56E+03                     | No   |  |  |
| 79                             | Bis (2-Ethylhexyl) Phthalate  |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.29E+00                                       | 2.49E+00                                  | 4.98E-01                     | No   |  |  |
| 80                             | 4-Bromophenyl Phenyl Ether    |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 81                             | Butyl Benzyl Phthalate        |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.13E+03                                       | 1.13E+03                                  | 2.25E+02                     | No   |  |  |
| 82                             | 2-Chloronaphthalene           |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 9.24E+02                                       | 9.24E+02                                  | 1.85E+02                     | No   |  |  |
| 83                             | 4-Chlorophenyl Phenyl Ether   |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | -  | -   | -                            | -  |  |  |
| 84                             | Chrysene                      |     | YES               | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 1.07E-02                                       | 2.07E-02                                  | 4.14E-03                     | No   |  |  |
| 85                             | Di-N-Butyl Phthalate          |     |                   | 0  | 0  | -  | -   | -                            |     | 0  | -  | -  | -  | -                            |     | 2.62E+03                                       | 2.62E+03                                  | 5.24E+02                     | No   |  |  |
| 86                             | Di-N-Octyl Phthalate          |     |                   | 0  | 0  |  |   |                              |     |  |  |  |  |                              |     |  |   |                              |  |  |  |

Harry Still Sr. WWTP (Permit No. AL0049867)  
Total Recoverable Zinc Data

| <u>Monitoring Period</u> | <u>Monthly Average (µg/L)</u> | <u>Daily Maximum (µg/L)</u> |
|--------------------------|-------------------------------|-----------------------------|
| December 2011            | 0                             | 0                           |
| January 2012             | 0                             | 0                           |
| February 2012            | 0                             | 0                           |
| March 2012               | 0                             | 0                           |
| April 2012               | 0                             | 0                           |
| May 2012                 | 0                             | 0                           |
| June 2012                | 0                             | 0                           |
| July 2012                | 0                             | 0                           |
| August 2012              | 0                             | 0                           |
| September 2012           | 0                             | 0                           |
| October 2012             | 0                             | 0                           |
| November 2012            | 0                             | 0                           |
| December 2012            | 0                             | 0                           |
| January 2013             | 0                             | 0                           |
| February 2013            | 0                             | 0                           |
| March 2013               | 0                             | 0                           |
| April 2013               | 0                             | 0                           |
| May 2013                 | 0                             | 0                           |
| June 2013                | 0                             | 0                           |
| July 2013                | 240                           | 240                         |
| August 2013              | 0                             | 0                           |
| September 2013           | 0                             | 0                           |
| October 2013             | 0                             | 0                           |
| November 2013            | 0                             | 0                           |
| December 2013            | 0                             | 0                           |
| January 2014             | 0                             | 0                           |
| February 2014            | 0                             | 0                           |
| March 2014               | 0                             | 0                           |
| April 2014               | 0                             | 0                           |
| May 2014                 | 0                             | 0                           |
| June 2014                | 0                             | 0                           |
| July 2014                | 0                             | 0                           |
| August 2014              | 0                             | 0                           |
| September 2014           | 0                             | 0                           |
| October 2014             | 0                             | 0                           |
| November 2014            | 0                             | 0                           |
| December 2014            | 0                             | 0                           |
| January 2015             | 0                             | 0                           |
| February 2015            | 0                             | 0                           |
| March 2015               | 0                             | 0                           |
| April 2015               | 0                             | 0                           |
| May 2015                 | 0                             | 0                           |
| June 2015                | 0                             | 0                           |
| July 2015                | 0                             | 0                           |
| August 2015              | 0                             | 0                           |
| September 2015           | 0                             | 0                           |
| October 2015             | 0                             | 0                           |
| November 2015            | 0                             | 0                           |
| December 2015            | 0                             | 0                           |
| January 2016             | 0                             | 0                           |
| February 2016            | 0                             | 0                           |
| March 2016               | 0.025                         | 0.025                       |
| April 2016               | 0                             | 0                           |
| May 2016                 | 0                             | 0                           |
| Application #1           | 0                             | 0                           |
| Application #2           | 0                             | 0                           |
| Application #3           | 0                             | 0                           |

# Waste Load Allocation Summary

Page 1

## REQUEST INFORMATION

request number: 3265

|                      |                      |   |                   |                   |     |
|----------------------|----------------------|---|-------------------|-------------------|-----|
| From:                | Stephanie Ammons     | In Branch/Section                                 | Municipal         |                   |     |
| Date Submitted       | 10/16/2015           | Date Required                                     | 11/16/2015        | FUND Code         | 605 |
| Receiving Waterbody  | Hollinger Creek      | Date Permit application received by NPDES program | 9/15/2015         |                   |     |
| Previous Stream Name |                      |   |                   |                   |     |
| Facility Name        | Harry Still Sr. WWTP | (Name of Discharger-WQ will use to file)          |                   |                   |     |
|                      |                      | Previous Discharger Name                          |                   |                   |     |
| River Basin          | Perdido-Escambia     | Outfall Latitude                                  | 30.8866           | (decimal degrees) |     |
| *County              | Baldwin              | Outfall Longitude                                 | -87.7639          | (decimal degrees) |     |
| Permit Number        | AL0049867            | Permit Type                                       | Permit Reissuance |                   |     |
|                      |                      | Permit Status                                     | Active            |                   |     |
|                      |                      | Type of Discharger                                | MUNICIPAL         |                   |     |

Do other discharges exist that may impact the model?  Yes  No

If yes, impacting dischargers names.

|  |
|--|
|  |
|--|

Impacting dischargers permit numbers.

|  |
|--|
|  |
|--|

|                                |   |     |
|--------------------------------|---|-----|
| Existing Discharge Design Flow | 2 | MGD |
| Proposed Discharge Design Flow | 2 | MGD |

Note: The flow rates given should be those requested for modeling.

Comments included

 Yes  No

Information Verified By

JBR

Year File Was Created 1990

Lat/Long Method GPS

12 Digit HUC Code 031401060503

Use Classification F&amp;W

Site Visit Completed?  Yes  No

Date of Site Visit 10/22/2015

Waterbody Impaired?  Yes  No

Date of WLA Response 12/31/2015

Antidegradation  Yes  No

Approved TMDL?

 Yes  No

Waterbody Tier Level Tier I

Use Support Category 1

Approval Date of TMDL

## Waste Load Allocation Information

Modeled Reach Length 20.484

Miles

Date of Allocation 12/10/2015

Name of Model Used SWQM

Allocation Type 2 Seasons

Model Completed by JBR

Type of Model Used Desk-top

Allocation Developed by Water Quality Branch

# Waste Load Allocation Summary

| Annual Effluent Limits | Conventional Parameters |     |         |        | Other Parameters |         |     |     |         |     |  |
|------------------------|-------------------------|-----|---------|--------|------------------|---------|-----|-----|---------|-----|--|
|                        | Qw                      | 2   | MGD     | Qw     | 2                | MGD     | Qw  | MGD | Qw      | MGD |  |
| Season                 | Summer                  |     | Season  | Winter |                  | Season  |     |     | Season  |     |  |
| From                   | May                     |     | From    | Dec    |                  | From    |     |     | From    |     |  |
| Through                | Nov                     |     | Through | Apr    |                  | Through |     |     | Through |     |  |
| CBOD5                  | CBOD5                   | 4   | mg/L    | CBOD5  | 13               | mg/L    | TP  |     | TP      |     |  |
| NH3-N                  | NH3-N                   | 1.3 | mg/L    | NH3-N  | 4                | mg/L    | TN  |     | TN      |     |  |
| TKN                    | TKN                     |     | mg/L    | TKN    |                  | mg/L    | TSS |     | TSS     |     |  |
| D.O.                   | D.O.                    | 6   | mg/L    | D.O.   | 6                | mg/L    |     |     |         |     |  |

| "Monitor Only" Parameters for Effluent: | Parameter | Frequency | Parameter | Frequency |
|---|-----------|-----------|-----------|-----------|
|   | TP        | Monthly   |           |           |
|   | TKN       | Monthly   |           |           |
|   | NO2+NO3-N | Monthly   |           |           |

| Water Quality Characteristics Immediately Upstream of Discharge |        |      |        |      |
|---|--------|------|--------|------|
| Parameter   | Summer |      | Winter |      |
| CBODu   | 2      | mg/l | 2      | mg/l |
| NH3-N   | 0.11   | mg/l | 0.11   | mg/l |
| Temperature   | 30     | °C   | 20     | °C   |
| pH  | 7      | su   | 7      | su   |

| Hydrology at Discharge Location |      |       |
|---------------------------------|------|-------|
| Drainage Area                   | 1.46 | sq mi |
| Stream 7Q10                     | 0    | cfs   |
| Stream 1Q10                     | 0    | cfs   |
| Stream 7Q2                      | 0    | cfs   |
| Annual Average                  | 2.92 | cfs   |

| Method Used to Calculate      |
|-------------------------------|
| <5.0 sq mi - Bingham Equation |
| <5.0 sq mi - Bingham Equation |
| <5.0 sq mi - Bingham Equation |
| USGS Estimate                 |

Comments and/or Notations

|                             |   |   |       |  |     |   |   |  |  |   |   |   |    |       |
|-----------------------------|---|---|-------|--|-----|---|---|--|--|---|---|---|----|-------|
| FORM<br><b>1</b><br>GENERAL | <b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b><br><b>GENERAL INFORMATION</b><br><i>Consolidated Permits Program</i><br><i>(Read the "General Instructions" before starting.)</i> | I. EPA I.D. NUMBER<br><table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">S</td> <td style="width:70%;"></td> <td style="width:10%;">T/A</td> <td style="width:10%;">C</td> </tr> <tr> <td>F</td> <td></td> <td></td> <td>D</td> </tr> <tr> <td>1</td> <td>2</td> <td>13</td> <td>14 15</td> </tr> </table> | S     |  | T/A | C | F |  |  | D | 1 | 2 | 13 | 14 15 |
| S                           |   | T/A   | C     |  |     |   |   |  |  |   |   |   |    |       |
| F                           |   |   | D     |  |     |   |   |  |  |   |   |   |    |       |
| 1                           | 2   | 13  | 14 15 |  |     |   |   |  |  |   |   |   |    |       |

|   |                                  |   |
|---|----------------------------------|---|
| LABEL ITEMS<br>I. EPA I.D. NUMBER<br>III. FACILITY NAME<br>V. FACILITY MAILING ADDRESS<br>VI. FACILITY LOCATION | PLEASE PLACE LABEL IN THIS SPACE | GENERAL INSTRUCTIONS<br>If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected. |
|---|----------------------------------|---|

**II. POLLUTANT CHARACTERISTICS**

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms**.

| SPECIFIC QUESTIONS   | Mark "X" |    |               | SPECIFIC QUESTIONS  | Mark "X" |    |               |
|--|----------|----|---------------|---|----------|----|---------------|
|  | YES      | NO | FORM ATTACHED |   | YES      | NO | FORM ATTACHED |
| A. Is this facility a <b>publicly owned treatment works</b> which results in a <b>discharge to waters of the U.S.?</b> (FORM 2A)   | X        |    | X             | B. Does or will this facility (either existing or proposed) include a <b>concentrated animal feeding operation</b> or <b>aquatic animal production facility</b> which results in a <b>discharge to waters of the U.S.?</b> (FORM 2B)  |          | X  |               |
| C. Is this a facility which currently results in <b>discharges to waters of the U.S.</b> other than those described in A or B above? (FORM 2C)   |          | X  |               | D. Is this a proposed facility (other than those described in A or B above) which will result in a <b>discharge to waters of the U.S.?</b> (FORM 2D)  |          | X  |               |
| E. Does or will this facility treat, store, or dispose of <b>hazardous wastes?</b> (FORM 3)  |          | X  |               | F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)  |          | X  |               |
| G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4) |          | X  |               | H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)   |          | X  |               |
| I. Is this facility a proposed <b>stationary source</b> which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)          |          | X  |               | J. Is this facility a proposed <b>stationary source</b> which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5) |          | X  |               |

**III. NAME OF FACILITY**

|   |    |         |                      |    |
|---|----|---------|----------------------|----|
| c | 1  | SKIP    | Harry Still Sr. WWTP | 88 |
|   | 15 | 18 - 29 | 30                   |    |

**IV. FACILITY CONTACT**

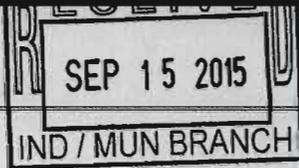
|  |    |                                   |                       |
|--|----|-----------------------------------|-----------------------|
| A. NAME & TITLE (last, first, & title) |    | B. PHONE (area code & no.)        |                       |
| c                                      | 2  | Dean, James Wastewater Supervisor | (251) 580-1853        |
|  | 15 | 19                                | 45 46 48 49 51 52- 55 |

**V. FACILITY MAILING ADDRESS**

|                       |    |                |                |
|-----------------------|----|----------------|----------------|
| A. STREET OR P.O. BOX |    |                |                |
| c                     | 3  | 25 Hand Avenue |                |
|                       | 15 | 18             | 45             |
| B. CITY OR TOWN       |    | C. STATE       | D. ZIP CODE    |
| c                     | 4  | Bay Minette    | AL 36507       |
|                       | 15 | 19             | 40 41 42 47 51 |

**VI. FACILITY LOCATION**

|   |    |                      |                       |
|---|----|----------------------|-----------------------|
| A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER |    |                      |                       |
| c   | 5  | 1000 East 1st Street |                       |
|   | 15 | 18                   | 45                    |
| B. COUNTY NAME                                    |    |                      |                       |
| c   | 6  | Baldwin County       |                       |
|   | 15 | 16                   | 48 70                 |
| C. CITY OR TOWN                                   |    | D. STATE             | E. ZIP CODE           |
| c   | 6  | Bay Minette          | AL 36507              |
|   | 15 | 16                   | 40 41 42 47 51 52 -54 |





Harry Still Sr. WWTP AL0049867

FORM  
**2A**  
NPDES**NPDES FORM 2A APPLICATION OVERVIEW****APPLICATION OVERVIEW**

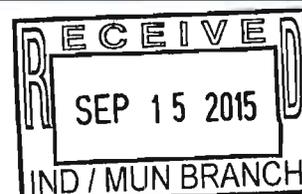
Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

**BASIC APPLICATION INFORMATION:**

- A. Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. Additional Application Information for Applicants with a Design Flow  $\geq$  0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. Certification.** All applicants must complete Part C (Certification).

**SUPPLEMENTAL APPLICATION INFORMATION:**

- D. Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
1. Has a design flow rate greater than or equal to 1 mgd,
  2. Is required to have a pretreatment program (or has one in place), or
  3. Is otherwise required by the permitting authority to provide the information.
- E. Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
1. Has a design flow rate greater than or equal to 1 mgd,
  2. Is required to have a pretreatment program (or has one in place), or
  3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
  2. Any other industrial user that:
    - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
    - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
    - c. Is designated as an SIU by the control authority.
- G. Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

**ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)**

**FACILITY NAME AND PERMIT NUMBER:**

Form Approved 1/14/99  
OMB Number 2040-0086

Harry Still Sr. WWTP AL0049867

**BASIC APPLICATION INFORMATION**

**PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:**

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

**A.1. Facility Information.**

Facility name Harry Still Sr. WWTP

Mailing Address 25 Hand Avenue  
Bay Minette, AL 36507

Contact person James Dean

Title Wastewater Supervisor

Telephone number (251) 580-1853

Facility Address 1000 East 1st Street  
(not P.O. Box) Bay Minette, AL 36507

**A.2. Applicant Information.** If the applicant is different from the above, provide the following:

Applicant name North Baldwin Utilities

Mailing Address 25 Hand Avenue  
Bay Minette, AL 36507

Contact person Jason M. Padgett

Title General Manager / CEO

Telephone number (251) 580-1626

**Is the applicant the owner or operator (or both) of the treatment works?**

owner       operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

facility       applicant

**A.3. Existing Environmental Permits.** Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES AL0049867 PSD \_\_\_\_\_

UIC \_\_\_\_\_ Other \_\_\_\_\_

RCRA \_\_\_\_\_ Other \_\_\_\_\_

**A.4. Collection System Information.** Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

| Name  | Population Served | Type of Collection System | Ownership        |
|---|-------------------|---------------------------|------------------|
| <u>Bay Minette</u>                          | <u>8,500</u>      | <u>Separate</u>           | <u>Municipal</u> |
| _____                                       | _____             | _____                     | _____            |
| _____                                       | _____             | _____                     | _____            |
| <b>Total population served</b> <u>8,500</u> |                   |                           |                  |

**FACILITY NAME AND PERMIT NUMBER:**

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**A.5. Indian Country.**

a. Is the treatment works located in Indian Country?

Yes  No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

Yes  No

**A.6. Flow.** Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 2.00 mgd

|                                   | <u>Two Years Ago</u> | <u>Last Year</u> | <u>This Year</u> |
|-----------------------------------|----------------------|------------------|------------------|
| b. Annual average daily flow rate | <u>1.29</u>          | <u>1.15</u>      | <u>0.94</u> mgd  |
| c. Maximum daily flow rate        | <u>4.69</u>          | <u>4.22</u>      | <u>3.80</u> mgd  |

**A.7. Collection System.** Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

Separate sanitary sewer 100.00 %  
 Combined storm and sanitary sewer \_\_\_\_\_ %

**A.8. Discharges and Other Disposal Methods.**

a. Does the treatment works discharge effluent to waters of the U.S.?  Yes  No

If yes, list how many of each of the following types of discharge points the treatment works uses:

- i. Discharges of treated effluent 1
- ii. Discharges of untreated or partially treated effluent 0
- iii. Combined sewer overflow points 0
- iv. Constructed emergency overflows (prior to the headworks) 0
- v. Other \_\_\_\_\_ 0

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?  Yes  No

If yes, provide the following for each surface impoundment:

Location: \_\_\_\_\_

Annual average daily volume discharged to surface impoundment(s) \_\_\_\_\_ mgd

Is discharge  continuous or  intermittent?

c. Does the treatment works land-apply treated wastewater?  Yes  No

If yes, provide the following for each land application site:

Location: \_\_\_\_\_

Number of acres: \_\_\_\_\_

Annual average daily volume applied to site: \_\_\_\_\_ Mgd

Is land application  continuous or  intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?  Yes  No

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If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

\_\_\_\_\_

If transport is by a party other than the applicant, provide:

Transporter name: NA \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

For each treatment works that receives this discharge, provide the following:

Name: NA \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

If known, provide the NPDES permit number of the treatment works that receives this discharge. \_\_\_\_\_

Provide the average daily flow rate from the treatment works into the receiving facility. \_\_\_\_\_ mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? \_\_\_\_\_ Yes  No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

\_\_\_\_\_

Annual daily volume disposed of by this method: \_\_\_\_\_

Is disposal through this method \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

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**WASTEWATER DISCHARGES:**

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

**A.9. Description of Outfall.**

- a. Outfall number 001
  - b. Location Bay Minette 36507  
(City or town, if applicable) (Zip Code)  
Baldwin  
(County) (State)  
30° 53' 12" N 87° 45' 49" W  
(Latitude) (Longitude)
  - c. Distance from shore (if applicable) \_\_\_\_\_ ft.
  - d. Depth below surface (if applicable) \_\_\_\_\_ ft.
  - e. Average daily flow rate \_\_\_\_\_ mgd
  - f. Does this outfall have either an intermittent or a periodic discharge?  
\_\_\_\_\_ Yes  No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: \_\_\_\_\_
  - Average duration of each discharge: \_\_\_\_\_
  - Average flow per discharge: \_\_\_\_\_ mgd
  - Months in which discharge occurs: \_\_\_\_\_
- g. Is outfall equipped with a diffuser? \_\_\_\_\_ Yes  No

**A.10. Description of Receiving Waters.**

- a. Name of receiving water Hollinger's Creek
- b. Name of watershed (if known) \_\_\_\_\_  
United States Soil Conservation Service 14-digit watershed code (if known): \_\_\_\_\_
- c. Name of State Management/River Basin (if known): \_\_\_\_\_  
United States Geological Survey 8-digit hydrologic cataloging unit code (if known): \_\_\_\_\_
- d. Critical low flow of receiving stream (if applicable):  
acute \_\_\_\_\_ cfs chronic \_\_\_\_\_ cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): \_\_\_\_\_ mg/l of CaCO<sub>3</sub>

**FACILITY NAME AND PERMIT NUMBER:**

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**A.11. Description of Treatment.**

a. What levels of treatment are provided? Check all that apply.

Primary                       Secondary  
 Advanced                       Other. Describe: \_\_\_\_\_

b. Indicate the following removal rates (as applicable):

Design BOD<sub>5</sub> removal or Design CBOD<sub>5</sub> removal                      85.00 %  
 Design SS removal                      85.00 %  
 Design P removal                      \_\_\_\_\_ %  
 Design N removal                      \_\_\_\_\_ %  
 Other NH3-N                      None Specified %

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall?                       Yes                       No

d. Does the treatment plant have post aeration?                       Yes                       No

**A.12. Effluent Testing Information.** All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

| PARAMETER            | MAXIMUM DAILY VALUE |       | AVERAGE DAILY VALUE |       |                   |
|----------------------|---------------------|-------|---------------------|-------|-------------------|
|                      | Value               | Units | Value               | Units | Number of Samples |
| pH (Minimum)         | 6.15                | s.u.  |                     |       |                   |
| pH (Maximum)         | 7.68                | s.u.  |                     |       |                   |
| Flow Rate            | 3.06                | MGD   | 0.72                | MGD   | 3.00              |
| Temperature (Winter) | 22.40               | C     | 20.40               | C     | 3.00              |
| Temperature (Summer) | 28.30               | C     | 26.70               | C     | 3.00              |

\* For pH please report a minimum and a maximum daily value

| POLLUTANT | MAXIMUM DAILY DISCHARGE |       | AVERAGE DAILY DISCHARGE |       |                   | ANALYTICAL METHOD | ML / MDL |
|-----------|-------------------------|-------|-------------------------|-------|-------------------|-------------------|----------|
|           | Conc.                   | Units | Conc.                   | Units | Number of Samples |                   |          |

**CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.**

| PARAMETER                              | UNIT   | MAXIMUM DAILY DISCHARGE | UNITS | AVERAGE DAILY DISCHARGE | UNITS | ANALYTICAL METHOD | ML / MDL     |
|--|--------|-------------------------|-------|-------------------------|-------|-------------------|--------------|
| BIOCHEMICAL OXYGEN DEMAND (Report one) | BOD-5  |                         |       |                         |       |                   |              |
|  | CBOD-5 | 5.22                    | mg/L  | 2.52                    | mg/L  | 3.00              | EPA 405.1    |
| FECAL COLIFORM                         |        | 14.00                   | cfu   | 2.61                    | cfu   | 3.00              | M-coliblu 24 |
| TOTAL SUSPENDED SOLIDS (TSS)           |        | 6.00                    | mg/L  | 3.17                    | mg/L  | 3.00              | EPA 160.1    |

**END OF PART A.**  
**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

FACILITY NAME AND PERMIT NUMBER:  
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**BASIC APPLICATION INFORMATION**

**PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).**

All applicants with a design flow rate  $\geq$  0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

**B.1. Inflow and Infiltration.** Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.  
3,000,000.00 gpd During Peak Rainfall

Briefly explain any steps underway or planned to minimize inflow and infiltration.  
Smoke test / Flow monitoring to identify, sewer rehab / replacement to eliminate

- B.2. Topographic Map.** Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)
- a. The area surrounding the treatment plant, including all unit processes.
  - b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
  - c. Each well where wastewater from the treatment plant is injected underground.
  - d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
  - e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
  - f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

**B.3. Process Flow Diagram or Schematic.** Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

**B.4. Operation/Maintenance Performed by Contractor(s).**  
Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?  Yes  No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone Number: \_\_\_\_\_

Responsibilities of Contractor: \_\_\_\_\_

**B.5. Scheduled Improvements and Schedules of Implementation.** Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.  
\_\_\_\_\_

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.  
 Yes  No

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c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

\_\_\_\_\_

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

| Implementation Stage       | Schedule         | Actual Completion |
|----------------------------|------------------|-------------------|
|                            | MM / DD / YYYY   | MM / DD / YYYY    |
| - Begin construction       | ___ / ___ / ____ | ___ / ___ / ____  |
| - End construction         | ___ / ___ / ____ | ___ / ___ / ____  |
| - Begin discharge          | ___ / ___ / ____ | ___ / ___ / ____  |
| - Attain operational level | ___ / ___ / ____ | ___ / ___ / ____  |

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained?  Yes  No

Describe briefly: \_\_\_\_\_  
\_\_\_\_\_

**B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).**

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: \_\_\_\_\_

| POLLUTANT  | MAXIMUM DAILY DISCHARGE |       | AVERAGE DAILY DISCHARGE |       |                   | ANALYTICAL METHOD | ML / MDL |
|--|-------------------------|-------|-------------------------|-------|-------------------|-------------------|----------|
|  | Conc.                   | Units | Conc.                   | Units | Number of Samples |                   |          |
| <b>CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.</b> |                         |       |                         |       |                   |                   |          |
| AMMONIA (as N)                                     | 0.12                    | mg/L  | 0.04                    | mg/L  | 3.00              |                   |          |
| CHLORINE (TOTAL RESIDUAL, TRC)                     | 0.00                    | mg/L  | 0.00                    | mg/L  | 3.00              |                   |          |
| DISSOLVED OXYGEN                                   | 11.40                   | mg/L  | 7.92                    | mg/L  | 3.00              |                   |          |
| TOTAL KJELDAHL NITROGEN (TKN)                      | 0.80                    | mg/L  | 0.30                    | mg/L  | 3.00              |                   |          |
| NITRATE PLUS NITRITE NITROGEN                      | 27.10                   | mg/L  | 21.20                   | mg/L  | 3.00              |                   |          |
| OIL and GREASE                                     |                         |       |                         |       |                   |                   |          |
| PHOSPHORUS (Total)                                 | 3.31                    | mg/L  | 2.33                    | mg/L  | 3.00              |                   |          |
| TOTAL DISSOLVED SOLIDS (TDS)                       |                         |       |                         |       |                   |                   |          |
| OTHER  |                         |       |                         |       |                   |                   |          |

**END OF PART B.  
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

**FACILITY NAME AND PERMIT NUMBER:**

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**BASIC APPLICATION INFORMATION**

**PART C. CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

**Indicate which parts of Form 2A you have completed and are submitting:**

Basic Application Information packet

Supplemental Application Information packet:

Part D (Expanded Effluent Testing Data)

Part E (Toxicity Testing: Biomonitoring Data)

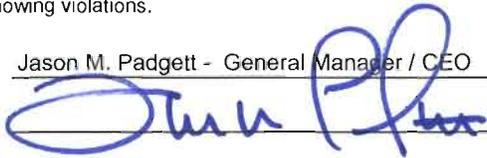
Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

Part G (Combined Sewer Systems)

**ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Jason M. Padgett - General Manager / CEO

Signature 

Telephone number (251) 580-1626

Date signed 9-11-2015

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

**SEND COMPLETED FORMS TO:**

FACILITY NAME AND PERMIT NUMBER:

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**SUPPLEMENTAL APPLICATION INFORMATION**

**PART D. EXPANDED EFFLUENT TESTING DATA**

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

**Effluent Testing: 1.0 mgd and Pretreatment Treatment Works.** If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

| POLLUTANT   | MAXIMUM DAILY DISCHARGE |       |      |       | AVERAGE DAILY DISCHARGE |       |      |       |                   | ANALYTICAL METHOD | ML/ MDL     |
|---|-------------------------|-------|------|-------|-------------------------|-------|------|-------|-------------------|-------------------|-------------|
|   | Conc.                   | Units | Mass | Units | Conc.                   | Units | Mass | Units | Number of Samples |                   |             |
| <b>METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.</b>  |                         |       |      |       |                         |       |      |       |                   |                   |             |
| ANTIMONY  | <0.006                  | mg/L  |      |       | <0.006                  | mg/L  |      |       | 3                 | EPA 200.8         | 0.006 mg/L  |
| ARSENIC   | <0.01                   | mg/L  |      |       | <0.01                   | mg/L  |      |       | 3                 | EPA 200.8         | 0.01 mg/L   |
| BERYLLIUM   | <0.002                  | mg/L  |      |       | <0.002                  | mg/L  |      |       | 3                 | EPA 200.8         | 0.002 mg/L  |
| CADMIUM   | <0.005                  | mg/L  |      |       | <0.005                  | mg/L  |      |       | 3                 | EPA 200.8         | 0.005 mg/L  |
| CHROMIUM  | <0.05                   | mg/L  |      |       | <0.05                   | mg/L  |      |       | 3                 | EPA 200.8         | 0.005 mg/L  |
| COPPER  | <0.01                   | mg/L  |      |       | <0.01                   | mg/L  |      |       | 3                 | EPA 200.8         | 0.01 mg/L   |
| LEAD  | <0.005                  | mg/L  |      |       | <0.005                  | mg/L  |      |       | 3                 | EPA 200.8         | 0.005 mg/L  |
| MERCURY   | <0.0005                 | mg/L  |      |       | <0.0005                 | mg/L  |      |       | 3                 | EPA 7470A         | 0.0005 mg/L |
| NICKEL  | <0.05                   | mg/L  |      |       | <0.05                   | mg/L  |      |       | 3                 | EPA 200.8         | 0.05 mg/L   |
| SELENIUM  | <0.02                   | mg/L  |      |       | <0.02                   | mg/L  |      |       | 3                 | EPA 200.8         | 0.02 mg/L   |
| SILVER  | <0.01                   | mg/L  |      |       | <0.01                   | mg/L  |      |       | 3                 | EPA 200.8         | 0.01 mg/L   |
| THALLIUM  | <0.002                  | mg/L  |      |       | <0.002                  | mg/L  |      |       | 3                 | EPA 200.8         | 0.002 mg/L  |
| ZINC  | <0.1                    | mg/L  |      |       | <0.1                    | mg/L  |      |       | 3                 | EPA 200.8         | 0.1 mg/L    |
| CYANIDE   | <0.02                   | mg/L  |      |       | <0.02                   | mg/L  |      |       | 3                 | 10-204-00-1-X     | 0.02 mg/L   |
| TOTAL PHENOLIC COMPOUNDS  | <0.05                   | mg/L  |      |       | <0.05                   | mg/L  |      |       | 3                 | EPA 420.4         | 0.05 mg/L   |
| HARDNESS (AS CaCO <sub>3</sub> )  | 114                     | mg/L  | 405  | kg    | 105.40                  | mg/L  | 375  | kg    | 3                 | SM 2340B          |             |
| Use this space (or a separate sheet) to provide information on other metals requested by the permit writer. |                         |       |      |       |                         |       |      |       |                   |                   |             |
|   |                         |       |      |       |                         |       |      |       |                   |                   |             |
|   |                         |       |      |       |                         |       |      |       |                   |                   |             |

**FACILITY NAME AND PERMIT NUMBER:**  
Harry Still Sr. WWTP AL0049867

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

| POLLUTANT                          | MAXIMUM DAILY DISCHARGE |       |      |       | AVERAGE DAILY DISCHARGE |       |      |       |                   | ANALYTICAL METHOD | ML/ MDL |
|------------------------------------|-------------------------|-------|------|-------|-------------------------|-------|------|-------|-------------------|-------------------|---------|
|                                    | Conc.                   | Units | Mass | Units | Conc.                   | Units | Mass | Units | Number of Samples |                   |         |
| <b>VOLATILE ORGANIC COMPOUNDS.</b> |                         |       |      |       |                         |       |      |       |                   |                   |         |
| ACROLEIN                           | <50                     | ug/L  |      |       | <50                     | ug/L  |      |       | 3                 | EPA 8260          | 50 ug/L |
| ACRYLONITRILE                      | <20                     | ug/L  |      |       | <20                     | ug/L  |      |       | 3                 | EPA 8260          | 20 ug/L |
| BENZENE                            | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| BROMOFORM                          | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| CARBON TETRACHLORIDE               | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| CLOROBENZENE                       | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| CHLORODIBROMO-METHANE              | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| CHLOROETHANE                       | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| 2-CHLORO-ETHYLVINYL ETHER          | <25                     | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| CHLOROFORM                         | 23                      | ug/L  | 80   | g     | 15.6                    | ug/L  | 50   | g     | 3                 | EPA 8260          | 5 ug/L  |
| DICHLOROBROMO-METHANE              | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| 1,1-DICHLOROETHANE                 | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| 1,2-DICHLOROETHANE                 | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| TRANS-1,2-DICHLORO-ETHYLENE        | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| 1,1-DICHLOROETHYLENE               | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| 1,2-DICHLOROPROPANE                | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| 1,3-DICHLORO-PROPYLENE             | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| ETHYLBENZENE                       | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| METHYL BROMIDE                     | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| METHYL CHLORIDE                    | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| METHYLENE CHLORIDE                 | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| 1,1,2,2-TETRACHLORO-ETHANE         | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| TETRACHLORO-ETHYLENE               | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| TOLUENE                            | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |

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Harry Still Sr. WWTP AL0049867

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| POLLUTANT             | MAXIMUM DAILY DISCHARGE |       |      |       | AVERAGE DAILY DISCHARGE |       |      |       |                   | ANALYTICAL METHOD | ML/ MDL |
|-----------------------|-------------------------|-------|------|-------|-------------------------|-------|------|-------|-------------------|-------------------|---------|
|                       | Conc.                   | Units | Mass | Units | Conc.                   | Units | Mass | Units | Number of Samples |                   |         |
| 1,1,1-TRICHLOROETHANE | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| 1,1,2-TRICHLOROETHANE | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| TRICHLORETHYLENE      | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 5 ug/L  |
| VINYL CHLORIDE        | <2                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8260          | 2 ug/L  |

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

|  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|

**ACID-EXTRACTABLE COMPOUNDS**

|                       |     |      |  |  |    |      |  |  |   |           |         |
|-----------------------|-----|------|--|--|----|------|--|--|---|-----------|---------|
| P-CHLORO-M-CRESOL     | <5  | ug/L |  |  | <5 | ug/L |  |  | 3 | EPA 8702D | 5 ug/L  |
| 2-CHLOROPHENOL        | <5  | ug/L |  |  | <5 | ug/L |  |  | 3 | EPA 8702D | 5 ug/L  |
| 2,4-DICHLOROPHENOL    | <10 | ug/L |  |  | <5 | ug/L |  |  | 3 | EPA 8702D | 10 ug/L |
| 2,4-DIMETHYLPHENOL    | <5  | ug/L |  |  | <5 | ug/L |  |  | 3 | EPA 8702D | 5 ug/L  |
| 4,6-DINITRO-O-CRESOL  | <5  | ug/L |  |  | <5 | ug/L |  |  | 3 | EPA 8702D | 5 ug/L  |
| 2,4-DINITROPHENOL     | <5  | ug/L |  |  | <5 | ug/L |  |  | 3 | EPA 8702D | 5 ug/L  |
| 2-NITROPHENOL         | <5  | ug/L |  |  | <5 | ug/L |  |  | 3 | EPA 8702D | 5 ug/L  |
| 4-NITROPHENOL         | <5  | ug/L |  |  | <5 | ug/L |  |  | 3 | EPA 8702D | 5 ug/L  |
| PENTACHLOROPHENOL     | <5  | ug/L |  |  | <5 | ug/L |  |  | 3 | EPA 8702D | 5 ug/L  |
| PHENOL                | <5  | ug/L |  |  | <5 | ug/L |  |  | 3 | EPA 8702D | 5 ug/L  |
| 2,4,6-TRICHLOROPHENOL | <5  | ug/L |  |  | <5 | ug/L |  |  | 3 | EPA 8702D | 5 ug/L  |

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

|  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|

**BASE-NEUTRAL COMPOUNDS.**

|                    |      |      |  |  |      |      |  |  |   |           |        |
|--------------------|------|------|--|--|------|------|--|--|---|-----------|--------|
| ACENAPHTHENE       | <5   | ug/L |  |  | <5   | ug/L |  |  | 3 | EPA 8702D | 5 ug/L |
| ACENAPHTHYLENE     | <5   | ug/L |  |  | <5   | ug/L |  |  | 3 | EPA 8702D | 5 ug/L |
| ANTHRACENE         | <5   | ug/L |  |  | <5   | ug/L |  |  | 3 | EPA 8702D | 5 ug/L |
| BENZIDINE          | <15  | ug/L |  |  | <15  | ug/L |  |  | 3 | EPA 8702D | 5 ug/L |
| BENZO(A)ANTHRACENE | <1   | ug/L |  |  | <1   | ug/L |  |  | 3 | EPA 8702D | 5 ug/L |
| BENZO(A)PYRENE     | <0.2 | ug/L |  |  | <0.2 | ug/L |  |  | 3 | EPA 8702D | 5 ug/L |

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| POLLUTANT                      | MAXIMUM DAILY DISCHARGE |       |      |       | AVERAGE DAILY DISCHARGE |       |      |       |                   | ANALYTICAL METHOD | ML/ MDL  |
|--------------------------------|-------------------------|-------|------|-------|-------------------------|-------|------|-------|-------------------|-------------------|----------|
|                                | Conc.                   | Units | Mass | Units | Conc.                   | Units | Mass | Units | Number of Samples |                   |          |
| 3,4 BENZO-FLUORANTHENE         | <1                      | ug/L  |      |       | <1                      | ug/L  |      |       | 3                 | EPA 8702D         | 1 ug/L   |
| BENZO(GHI)PERYLENE             | <0.5                    | ug/L  |      |       | <0.5                    | ug/L  |      |       | 3                 | EPA 8702D         | 0.5 ug/L |
| BENZO(K)FLUORANTHENE           | <0.5                    | ug/L  |      |       | <0.5                    | ug/L  |      |       | 3                 | EPA 8702D         | 0.5 ug/L |
| BIS (2-CHLOROETHOXY) METHANE   | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| BIS (2-CHLOROETHYL)-ETHER      | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| BIS (2-CHLOROISO-PROPYL) ETHER | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| BIS (2-ETHYLHEXYL) PHTHALATE   | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| 4-BROMOPHENYL PHENYL ETHER     | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| BUTYL BENZYL PHTHALATE         | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| 2-CHLORONAPHTHALENE            | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| 4-CHLORPHENYL PHENYL ETHER     | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| CHRYSENE                       | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| DI-N-BUTYL PHTHALATE           | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| DI-N-OCTYL PHTHALATE           | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| DIBENZO(A,H) ANTHRACENE        | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| 1,2-DICHLORO BENZENE           | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| 1,3-DICHLORO BENZENE           | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| 1,4-DICHLORO BENZENE           | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| 3,3-DICHLORO BENZIDINE         | <10                     | ug/L  |      |       | <10                     | ug/L  |      |       | 3                 | EPA 8702D         | 10 ug/L  |
| DIETHYL PHTHALATE              | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| DIMETHYL PHTHALATE             | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| 2,4-DINITROTOLUENE             | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| 2,6-DINITROTOLUENE             | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |
| 1,2-DIPHENYLHYDRAZINE          | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L   |

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| POLLUTANT                  | MAXIMUM DAILY DISCHARGE |       |      |       | AVERAGE DAILY DISCHARGE |       |      |       |                   | ANALYTICAL METHOD | ML/ MDL |
|----------------------------|-------------------------|-------|------|-------|-------------------------|-------|------|-------|-------------------|-------------------|---------|
|                            | Conc.                   | Units | Mass | Units | Conc.                   | Units | Mass | Units | Number of Samples |                   |         |
| FLUORANTHENE               | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| FLUORENE                   | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| HEXACHLOROBENZENE          | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| HEXACHLOROBUTADIENE        | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| HEXACHLOROCYCLO-PENTADIENE | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| HEXACHLOROETHANE           | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| INDENO(1,2,3-CD)PYRENE     | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| ISOPHORONE                 | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| NAPHTHALENE                | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| NITROBENZENE               | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 |                   | 5 ug/L  |
| N-NITROSODI-N-PROPYLAMINE  | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| N-NITROSODI- METHYLAMINE   | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| N-NITROSODI-PHENYLAMINE    | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| PHENANTHRENE               | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| PYRENE                     | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |
| 1,2,4-TRICHLOROBENZENE     | <5                      | ug/L  |      |       | <5                      | ug/L  |      |       | 3                 | EPA 8702D         | 5 ug/L  |

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

|  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

|  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|

**END OF PART D.  
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM  
2A YOU MUST COMPLETE**

**FACILITY NAME AND PERMIT NUMBER:**

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**SUPPLEMENTAL APPLICATION INFORMATION**

**PART E. TOXICITY TESTING DATA**

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

**E.1. Required Tests.**

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

chronic       acute

**E.2. Individual Test Data.** Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number:   1        Test number:   2        Test number:   3  

a. Test information.

|                                   |                    |                    |                    |
|-----------------------------------|--------------------|--------------------|--------------------|
| Test species & test method number | Ceriodaphnia Dubia | Ceriodaphnia Dubia | Ceriodaphnia Dubia |
| Age at initiation of test         | < 24 hours         | < 24 hours         | < 24 hours         |
| Outfall number                    | 001                | 001                | 001                |
| Dates sample collected            | 10/05/2014         | 10/06/2013         | 10/22/2012         |
| Date test started                 | 10/07/2014         | 10/08/2013         | 10/23/2012         |
| Duration                          | 7 Days             | 7 Days             | 7 Days             |

b. Give toxicity test methods followed.

|  |                           |                             |             |
|--|---------------------------|-----------------------------|-------------|
| Manual title                           | Methods for Measuring the | Acute Toxicity of Receiving | Waters      |
| Edition number and year of publication | 4th Edition               | 4th Edition                 | 4th Edition |
| Page number(s)                         | A5-A6                     | A5-A6                       | A5-A6       |

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

|                   |     |     |     |
|-------------------|-----|-----|-----|
| 24-Hour composite | Yes | Yes | Yes |
| Grab              | No  | No  | No  |

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

|                      |   |   |   |
|----------------------|---|---|---|
| Before disinfection  |   |   |   |
| After disinfection   |   |   |   |
| After dechlorination | X | X | X |

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Test number: 1.00

Test number: 2.00

Test number: 3.00

e. Describe the point in the treatment process at which the sample was collected.

|                       |          |          |          |
|-----------------------|----------|----------|----------|
| Sample was collected: | Effluent | Effluent | Effluent |
|-----------------------|----------|----------|----------|

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

|                  |     |     |     |
|------------------|-----|-----|-----|
| Chronic toxicity | Yes | Yes | Yes |
| Acute toxicity   | No  | No  | No  |

g. Provide the type of test performed.

|                |     |     |     |
|----------------|-----|-----|-----|
| Static         | No  | No  | No  |
| Static-renewal | Yes | Yes | Yes |
| Flow-through   | No  | No  | No  |

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

|                  |      |      |      |
|------------------|------|------|------|
| Laboratory water | MHRW | MHRW | MHRW |
| Receiving water  | No   | No   | No   |

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

|             |     |     |     |
|-------------|-----|-----|-----|
| Fresh water | Yes | Yes | Yes |
| Salt water  | No  | No  | No  |

j. Give the percentage effluent used for all concentrations in the test series.

|  |      |      |      |
|--|------|------|------|
|  | 100% | 100% | 100% |
|  | 0%   | 0%   | 0%   |
|  |      |      |      |

k. Parameters measured during the test. (State whether parameter meets test method specifications)

|                  |     |     |     |
|------------------|-----|-----|-----|
| pH               |     |     |     |
| Salinity         | No  | No  | No  |
| Temperature      | Yes | Yes | Yes |
| Ammonia          | Yes | Yes | Yes |
| Dissolved oxygen | Yes | Yes | Yes |

l. Test Results.

|                                   |          |          |          |
|-----------------------------------|----------|----------|----------|
| Acute:                            |          |          |          |
| Percent survival in 100% effluent | 100.00 % | 100.00 % | 100.00 % |
| LC <sub>50</sub>                  |          |          |          |
| 95% C.I.                          | %        | %        | %        |
| Control percent survival          | 100.00 % | 100.00 % | 100.00 % |
| Other (describe)                  | NA       | NA       | NA       |

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Chronic:

|                          |                        |                        |                        |
|--------------------------|------------------------|------------------------|------------------------|
| NOEC                     | %                      | %                      | %                      |
| IC <sub>25</sub>         | %                      | %                      | %                      |
| Control percent survival | %                      | %                      | %                      |
| Other (describe)         | Pass (Screeneing 100%) | Pass (Screeneing 100%) | Pass (Screeneing 100%) |

m. Quality Control/Quality Assurance.

|   |                  |                  |                  |
|---|------------------|------------------|------------------|
| Is reference toxicant data available?                   | Yes              | Yes              | Yes              |
| Was reference toxicant test within acceptable bounds?   | Yes              | Yes              | Yes              |
| What date was reference toxicant test run (MM/DD/YYYY)? | 09/09/2014       | 10/01/2013       | 09/28/2012       |
| Other (describe)  | NaCL as Toxicant | NaCL as Toxicant | NaCL as Toxicant |

**E.3. Toxicity Reduction Evaluation.** Is the treatment works involved in a Toxicity Reduction Evaluation?

Yes  No      If yes, describe: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**E.4. Summary of Submitted Biomonitoring Test Information.** If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: \_\_\_\_\_ (MM/DD/YYYY)

Summary of results: (see instructions)  
 \_\_\_\_\_  
 \_\_\_\_\_

**END OF PART E.**  
**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.**

FACILITY NAME AND PERMIT NUMBER:

Harry Still Sr. WWTP AL0049867

Form Approved 1/14/99  
OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

\_\_\_ Yes  No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 0

b. Number of CIUs. 0

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Plasmic Technology, Inc.

Mailing Address: 251 Newport Parkway  
Bay Minnette, AL 36507

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

\_\_\_\_\_

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): Dispersion of modified tall oil resin

Raw material(s): Tall oil resin, Anionic polymers, Cationic polymers, Water

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

4,500.00 gpd ( \_\_\_ continuous or  intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

\_\_\_\_\_ gpd ( \_\_\_ continuous or \_\_\_ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits \_\_\_ Yes  No

b. Categorical pretreatment standards \_\_\_ Yes  No

If subject to categorical pretreatment standards, which category and subcategory?

\_\_\_\_\_



**FACILITY NAME AND PERMIT NUMBER:**

Harry Still Sr. WWTP AL0049867

Form Approved 1/14/99  
OMB Number 2040-0086

**F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

Yes  No If yes, describe each episode.

\_\_\_\_\_  
\_\_\_\_\_

**RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:**

**F.9. RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?  Yes  No (go to F.12.)

**F.10. Waste Transport.** Method by which RCRA waste is received (check all that apply):

Truck  Rail  Dedicated Pipe

**F.11. Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

| <u>EPA Hazardous Waste Number</u> | <u>Amount</u> | <u>Units</u> |
|-----------------------------------|---------------|--------------|
| _____                             | _____         | _____        |
| _____                             | _____         | _____        |
| _____                             | _____         | _____        |

**CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:**

**F.12. Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

Yes (complete F.13 through F.15.)  No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

**F.13. Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA/other remedial waste originates (or is expected to originate in the next five years).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**F.14. Pollutants.** List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

\_\_\_\_\_  
\_\_\_\_\_

**F.15. Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

Yes  No

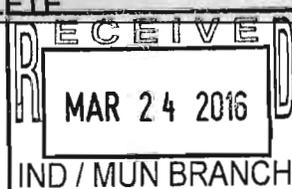
If yes, describe the treatment (provide information about the removal efficiency):

\_\_\_\_\_  
\_\_\_\_\_

b. Is the discharge (or will the discharge be) continuous or intermittent?

Continuous  Intermittent If intermittent, describe discharge schedule.

**END OF PART F.  
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM  
2A YOU MUST COMPLETE**



FACILITY NAME AND PERMIT NUMBER:

Harry Still Sr. WWTP AL0049867

Form Approved 1/14/99  
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SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

\_\_\_ Yes  No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 0

b. Number of CIUs. 0

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Dental EZ Integrated Solutions

Mailing Address: 2500 Hwy 31 South  
Bay Minnette, AL 36507

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

Paint Finishing (Parts Cleaning)

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): Pre-Paint Cleaning

Raw material(s): INI-25 NF (Iron Phosphatizer), Liquid 422 (Alkaline Cleaner) Secure Seal

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

493.00 gpd (\_\_\_ continuous or  intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

1,055.00 gpd ( continuous or \_\_\_ intermittent)

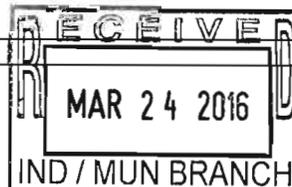
F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits \_\_\_ Yes  No

b. Categorical pretreatment standards \_\_\_ Yes  No

If subject to categorical pretreatment standards, which category and subcategory?

\_\_\_\_\_



**FACILITY NAME AND PERMIT NUMBER:**

Harry Still Sr. WWTP AL0049867

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**F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

Yes  No If yes, describe each episode.

\_\_\_\_\_  
\_\_\_\_\_

**RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:**

**F.9. RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?  Yes  No (go to F.12.)

**F.10. Waste Transport.** Method by which RCRA waste is received (check all that apply):

Truck  Rail  Dedicated Pipe

**F.11. Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

| <u>EPA Hazardous Waste Number</u> | <u>Amount</u> | <u>Units</u> |
|-----------------------------------|---------------|--------------|
| _____                             | _____         | _____        |
| _____                             | _____         | _____        |
| _____                             | _____         | _____        |

**CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:**

**F.12. Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

Yes (complete F.13 through F.15.)  No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

**F.13. Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA/other remedial waste originates (or is expected to originate in the next five years).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**F.14. Pollutants.** List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

\_\_\_\_\_  
\_\_\_\_\_

**F.15. Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

Yes  No

If yes, describe the treatment (provide information about the removal efficiency):

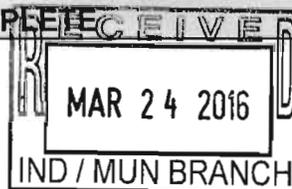
\_\_\_\_\_  
\_\_\_\_\_

b. Is the discharge (or will the discharge be) continuous or intermittent?

Continuous  Intermittent If intermittent, describe discharge schedule.

\_\_\_\_\_

**END OF PART F.  
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM  
2A YOU MUST COMPLETE**



**FACILITY NAME AND PERMIT NUMBER:**

Harry Still Sr. WWTP AL0049867

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**SUPPLEMENTAL APPLICATION INFORMATION**

**PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES**

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

**GENERAL INFORMATION:**

**F.1. Pretreatment Program.** Does the treatment works have, or is it subject to, an approved pretreatment program?

Yes  No

**F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs).** Provide the number of each of the following types of industrial users that discharge to the treatment works.

- a. Number of non-categorical SIUs. 0
- b. Number of CIUs. 0

**SIGNIFICANT INDUSTRIAL USER INFORMATION:**

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

**F.3. Significant Industrial User Information.** Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Baldwin Pole & Piling Company, Inc.

Mailing Address: P.O. Drawer 758  
Bay Minnette, AL 36057

**F.4. Industrial Processes.** Describe all of the industrial processes that affect or contribute to the SIU's discharge.

1% Process wastewater from pentachlorophenol wood preserving; 99% Groundwater from RCRA corrective action

**F.5. Principal Product(s) and Raw Material(s).** Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): Pentachlorophenol Wood Poles

Raw material(s): Pentachlorophenol, Wood Poles

**F.6. Flow Rate.**

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

1,500.00 gpd ( continuous or  intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

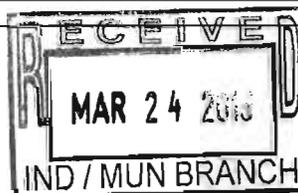
14,000.00 gpd ( continuous or  intermittent)

**F.7. Pretreatment Standards.** Indicate whether the SIU is subject to the following:

- a. Local limits  Yes  No
- b. Categorical pretreatment standards  Yes  No

If subject to categorical pretreatment standards, which category and subcategory?

40 CFR 429.95 Timber Products



**FACILITY NAME AND PERMIT NUMBER:**

Harry Still Sr. WWTP AL0049867

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OMB Number 2040-0086

**F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

Yes  No If yes, describe each episode.

\_\_\_\_\_  
\_\_\_\_\_

**RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:**

**F.9. RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?  Yes  No (go to F.12.)

**F.10. Waste Transport.** Method by which RCRA waste is received (check all that apply):

Truck  Rail  Dedicated Pipe

**F.11. Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

| <u>EPA Hazardous Waste Number</u> | <u>Amount</u> | <u>Units</u> |
|-----------------------------------|---------------|--------------|
| _____                             | _____         | _____        |
| _____                             | _____         | _____        |
| _____                             | _____         | _____        |

**CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:**

**F.12. Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

Yes (complete F.13 through F.15.)  No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

**F.13. Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA/ or other remedial waste originates (or is expected to originate in the next five years).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**F.14. Pollutants.** List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

\_\_\_\_\_  
\_\_\_\_\_

**F.15. Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

Yes  No

If yes, describe the treatment (provide information about the removal efficiency):

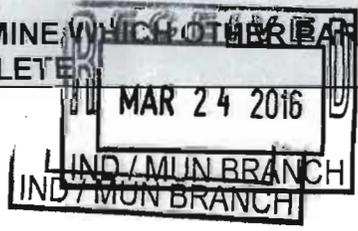
\_\_\_\_\_  
\_\_\_\_\_

b. Is the discharge (or will the discharge be) continuous or intermittent?

Continuous  Intermittent If intermittent, describe discharge schedule.

\_\_\_\_\_

**END OF PART F.  
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**



**FACILITY NAME AND PERMIT NUMBER:**

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**SUPPLEMENTAL APPLICATION INFORMATION**

**PART G. COMBINED SEWER SYSTEMS**

**If the treatment works has a combined sewer system, complete Part G.**

**G.1. System Map.** Provide a map indicating the following: (may be included with Basic Application Information)

- a. All CSO discharge points.
- b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- c. Waters that support threatened and endangered species potentially affected by CSOs.

**G.2. System Diagram.** Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- a. Locations of major sewer trunk lines, both combined and separate sanitary.
- b. Locations of points where separate sanitary sewers feed into the combined sewer system.
- c. Locations of in-line and off-line storage structures.
- d. Locations of flow-regulating devices.
- e. Locations of pump stations.

**CSO OUTFALLS:**

**Complete questions G.3 through G.6 once for each CSO discharge point.**

**G.3. Description of Outfall.**

- a. Outfall number \_\_\_\_\_
- b. Location \_\_\_\_\_  
 (City or town, if applicable) (Zip Code)  
 \_\_\_\_\_  
 (County) (State)  
 \_\_\_\_\_  
 (Latitude) (Longitude)
- c. Distance from shore (if applicable) \_\_\_\_\_ ft.
- d. Depth below surface (if applicable) \_\_\_\_\_ ft.
- e. Which of the following were monitored during the last year for this CSO?  
 \_\_\_ Rainfall      \_\_\_ CSO pollutant concentrations      \_\_\_ CSO frequency  
 \_\_\_ CSO flow volume      \_\_\_ Receiving water quality
- f. How many storm events were monitored during the last year? \_\_\_\_\_

**G.4. CSO Events.**

- a. Give the number of CSO events in the last year.  
 \_\_\_\_\_ events (\_\_\_ actual or \_\_\_ approx.)
- b. Give the average duration per CSO event.  
 \_\_\_\_\_ hours (\_\_\_ actual or \_\_\_ approx.)

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- c. Give the average volume per CSO event.  
\_\_\_\_\_ million gallons (\_\_\_\_ actual or \_\_\_\_ approx.)
- d. Give the minimum rainfall that caused a CSO event in the last year.  
\_\_\_\_\_ inches of rainfall

**G.5. Description of Receiving Waters.**

- a. Name of receiving water: \_\_\_\_\_
- b. Name of watershed/river/stream system: \_\_\_\_\_  
  
United States Soil Conservation Service 14-digit watershed code (if known): \_\_\_\_\_
- c. Name of State Management/River Basin: \_\_\_\_\_  
  
United States Geological Survey 8-digit hydrologic cataloging unit code (if known): \_\_\_\_\_

**G.6. CSO Operations.**

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

\_\_\_\_\_  
\_\_\_\_\_

**END OF PART G.  
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM  
2A YOU MUST COMPLETE.**

**SUPPLEMENTARY INFORMATION**  
**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**  
**PERMIT APPLICATION FORM 188- Municipal, Semi-Public & Private Facilities**

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
WATER DIVISION – MUNICIPAL PERMIT SECTION  
POST OFFICE BOX 301463  
MONTGOMERY, ALABAMA 36130-1463

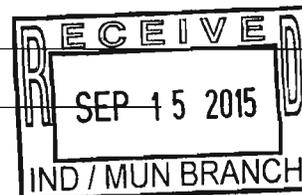
**INSTRUCTIONS:** APPLICATIONS SHOULD BE TYPED OR PRINTED IN INK AND SUBMITTED TO THE DEPARTMENT. PLEASE CONTINUE ON AN ATTACHED SHEET OF PAPER IF INSUFFICIENT SPACE IS AVAILABLE TO ADDRESS ANY ITEM BELOW. PLEASE MARK N/A IN THE APPROPRIATE BOX WHEN AN ITEM IS NON-APPLICABLE TO THE APPLICANT.

**PURPOSE OF THIS APPLICATION**

- |  |   |
|--|---|
| <input type="checkbox"/> INITIAL PERMIT APPLICATION FOR NEW FACILITY | <input type="checkbox"/> INITIAL PERMIT APPLICATION FOR EXISTING FACILITY |
| <input type="checkbox"/> MODIFICATION OF EXISTING PERMIT             | <input checked="" type="checkbox"/> REISSUANCE OF EXISTING PERMIT         |
| <input type="checkbox"/> REVOCATION & REISSUANCE OF EXISTING PERMIT  |   |

**SECTION A – GENERAL INFORMATION**

1. Facility Name: Harry Still Sr. WWTP
- a. Operator Name: North Baldwin Utilities
- b. Is the operator identified in 1.a, the owner of the facility? Yes  No   
If no, provide name and address of the operator and submit information indicating the operator's scope of responsibility for the facility.
- c. Name of Permittee\* if different than Operator: NA  
*\*Permittee will be responsible for compliance with the conditions of the permit*
2. NPDES Permit Number AL 0049867 (Not applicable if initial permit application)
3. Facility Location: (**Attach a map with location marked; street, route no. or other specific identifier**)  
Street: 1000 East 1st Street  
City: Bay Minette County: Baldwin State: AL Zip: 36507  
Facility (Front Gate) Location: Latitude (Deg Min Sec): 30° 53' 07" N Longitude (Deg. Min Sec): 87° 45' 52" W
4. Facility Mailing Address (Street or Post Office Box): 25 Hand Avenue  
City: Bay Minette County: Baldwin State: AL Zip: 36507
5. Responsible Official (as described on page 7 of this application):  
Name and Title: Jason M. Padgett -- General Manager / CEO  
Address: 25 Hand Avenue  
City: Bay Minette State: AL Zip: 36507  
Phone Number: (251)-580-1626  
Email Address: (Optional): jpadgett@nbumail.com



6. Designated Facility/DMR Contact:

Name and Title: James Dean -- Wastewater Supervisor

Phone Number: (251)-580-1853

DMR Email Address (Optional – for receipt of blank DMR Forms): JDean@NBUMAIL.COM

7. Please complete this section if the Applicant's business entity is a Proprietorship or limited liability Corporation with a responsible official not listed in Item 5.

a) Proprietor:

Name: NA

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

8. Permit numbers for Applicant's previously issued NPDES Permits and identification of any other State Environmental Permits presently held by the Applicant within the State of Alabama:

| <u>Permit Name</u>          | <u>Permit Number</u> | <u>Held by</u>                 |
|-----------------------------|----------------------|--------------------------------|
| <u>Harry Still Sr. WWTP</u> | <u>AL0049867</u>     | <u>North Baldwin Utilities</u> |
| <u>Westside WWTP</u>        | <u>AL0027448</u>     | <u>North Baldwin Utilities</u> |
| _____                       | _____                | _____                          |
| _____                       | _____                | _____                          |

9. Identify all Administrative Complaints, Notices of Violation, Directives, or Administrative Orders, Consent Decrees, or Litigation concerning water pollution or other permit violations, if any against the Applicant within the State of Alabama in the past five years (attach additional sheets if necessary):

| <u>Facility Name</u> | <u>Permit Number</u> | <u>Type of Action</u> | <u>Date of Action</u> |
|----------------------|----------------------|-----------------------|-----------------------|
| _____                | _____                | _____                 | _____                 |
| _____                | _____                | _____                 | _____                 |
| _____                | _____                | _____                 | _____                 |
| _____                | _____                | _____                 | _____                 |
| _____                | _____                | _____                 | _____                 |

**SECTION B – WASTEWATER DISCHARGE INFORMATION**

1. List the following historical monthly flow rates recorded for the past five years for each outfall:

| <u>Outfall Number</u> | <u>Highest in Last 12 Months<br/>MGD</u> | <u>Highest Daily Flow<br/>MGD</u> | <u>Average Flow<br/>MGD</u> |
|-----------------------|--|-----------------------------------|-----------------------------|
| <u>001</u>            | <u>3.802</u>                             | <u>6.327</u>                      | <u>1.126</u>                |

2. Report E-coli (Freshwater) or Enterococci (Coastal Waters) monitoring results for the past five years for each outfall if available:

| Outfall Number | Ecoli or Enterococci | Maximum Daily E-coli / Enterococci Discharge (per 100 ml) | Maximum Monthly Average E-Coli / Enterococci Discharge (per 100 ml) | No. of Analyses | Analytical Method | ML/MDL |
|----------------|----------------------|---|---|-----------------|-------------------|--------|
| 001            | Ecoli                | 1259  | 104.12  | 48              |                   |        |
|                |                      |   |   |                 |                   |        |
|                |                      |   |   |                 |                   |        |

3. Attached a process flow schematic of the treatment process, including the size of each unit operation.
4. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Current:      Flow Metering      Yes       No       N/A   
                  Sampling Equipment      Yes       No       N/A

Planned:      Flow Metering      Yes       No       N/A   
                  Sampling Equipment      Yes       No       N/A

If so, please attach a schematic diagram of the sewer system indicating the present or future location of this equipment and describe the equipment below:

Automatic Composite Sampler for Influent (parshall flume located prior to fine screens) and Effluent (Weir located at end of contact chamber)

Continuous Flow Monitor for Influent (parshall flume located prior to fine screens) and Effluent (Weir located at end of contact chamber)

5. Are any wastewater collection or treatment modifications or expansions planned during the next three years that could alter wastewater volumes or characteristics (Note: Permit Modification may be required)? Yes  No

Briefly describe these changes and any potential or anticipated effects on the wastewater quality and quantity: (Attach additional sheets if needed.)

\_\_\_\_\_

\_\_\_\_\_

**SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION**

Describe the location of all sites used for the storage of solids or liquids that have any potential for accidental discharge to a water of the state, either directly or indirectly via storm sewer, municipal sewer, municipal wastewater treatment plants, or other collection or distribution systems that are located at or operated by the subject existing or proposed NPDES-permitted facility. Indicate the location of any potential release areas and provide a map or detailed narrative description of the areas of concern as an attachment to this application:

| Description of Waste | Description of Storage Location |
|----------------------|---------------------------------|
| NA                   |                                 |

Describe the location of any sites used for the ultimate disposal of solid or liquid waste materials or residuals (e.g. sludges) generated by any wastewater treatment system located at the facility.

| Description of Waste | Quantity (lbs/day) | Disposal Method*  |
|----------------------|--------------------|-------------------|
| Activated Sludge     | 253                | Storage in Lagoon |

\*Indicate any wastes disposed at an off-site treatment facility and any wastes that are disposed on-site

**SECTION D – INDUSTRIAL INDIRECT DISCHARGE CONTRIBUTORS**

1. List the existing and proposed industrial source wastewater contributions to the municipal wastewater treatment system (Attach other sheets if necessary)

| Company Name          | Description of Industrial Wastewater | Existing or Proposed | Flow (MGD) | Subject to SID Permit? Y/N |
|-----------------------|--------------------------------------|----------------------|------------|----------------------------|
| Dental EZ             |                                      | Existing             | 0.00495    | 10 33-02-00055             |
| Baldwin Pole and Pile |                                      | Existing             | 0.00911    | 10 33-02-00027             |
| Plasmine Technology   |                                      | Existing             | 0.012      | IV 33-02-00058             |
|                       |                                      |                      |            |                            |

2. Are industrial wastewater contributions regulated via a locally approved sewer use ordinance ? If so, please attach a copy of the ordinance.

**SECTION E – COASTAL ZONE INFORMATION**

Is the discharge(s) located within the 10-foot elevation contour and within the limits of Mobile or Baldwin County?  
 Yes  No  If yes, then complete items A through M below:

|  | YES                      | NO                       |
|--|--------------------------|--------------------------|
| A. Does the project require new construction?  | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Will the project be a source of new air emissions?  | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Does the project involve dredging and/or filling of a wetland area or water way?  | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the Corps of Engineers (COE) permit been issued?   | <input type="checkbox"/> | <input type="checkbox"/> |
| Corps Project Number _____   |                          |                          |
| D. Does the project involve wetlands and/or submersed grassbeds?   | <input type="checkbox"/> | <input type="checkbox"/> |
| E. Are oyster reefs located near the project site?<br>(Include a map showing project and discharge location with respect to oyster reefs)              | <input type="checkbox"/> | <input type="checkbox"/> |
| F. Does the project involve the site development, construction and operation of an energy facility as defined in ADEM Admin. Code R. 335-8-1-.02(bb)?  | <input type="checkbox"/> | <input type="checkbox"/> |
| G. Does the project involve mitigation of shoreline or coastal area erosion?   | <input type="checkbox"/> | <input type="checkbox"/> |
| H. Does the project involve construction on beaches or dunes areas?  | <input type="checkbox"/> | <input type="checkbox"/> |
| I. Will the project interfere with public access to coastal waters?  | <input type="checkbox"/> | <input type="checkbox"/> |
| J. Does the project lie within the 100-year floodplain?  | <input type="checkbox"/> | <input type="checkbox"/> |
| K. Does the project involve the registration, sale, use, or application of pesticides?   | <input type="checkbox"/> | <input type="checkbox"/> |
| L. Does the project propose or require construction of a new well or to alter an existing groundwater well to pump more than 50 gallons per day (GPD)? | <input type="checkbox"/> | <input type="checkbox"/> |
| M. Has the applicable permit for groundwater recovery or for groundwater well installation been obtained?  | <input type="checkbox"/> | <input type="checkbox"/> |

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**SECTION F – ANTI-DEGRADATION EVALUATION**

It is the applicant's responsibility to demonstrate the social and economic importance of the proposed activity, if subject to antidegradation requirements. In accordance with 40 CFR 131.12 and Section 335-6-10-.04 of the Alabama Department of Environmental Management Administrative Code, the following information must be provided, if applicable. If further information is required to make this demonstration, attach additional sheets to the application.

1. Is this a new or increased discharge that began after April 3, 1991? Yes  No .  
If "yes", complete question 2 below. If "no", do not complete this section.

2. Has an Anti-Degradation Analysis been previously conducted and submitted to the Department for the new or increased discharge referenced in question 1? Yes  No .

If "no" and the discharge is to a Tier II waterbody as defined in ADEM Admin. Code r. 335-6-10-.12(4), complete questions A through F below and also ADEM forms 311 and 312 or 313, whichever is applicable, (attached). Form 312 or 313, whichever is applicable, must be provided for each treatment discharge alternative considered technically viable. If "yes", do not complete this section.

Information required for new or increased discharges to high quality waters:

- A. What environmental or public health problem will the discharger be correcting?
- B. Explain if and to what degree the discharger will be increasing employment as a result of the proposed discharge, either at its existing facility or as the result of the start-up of a related new facility or industry.
- C. Explain if and to what degree the discharge will prevent employment reductions?
- D. Describe any additional state or local taxes that the prospective discharger will be paying.
- E. Describe any public service the discharger will be providing to the community.
- F. Describe the economic or social benefit the discharger will be providing to the community.

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**SECTION G – EPA Application Forms**

All Applicants must submit certain EPA permit application forms. More than one application form may be required from a municipal facility depending on the number and types of discharges or outfalls. The EPA application forms are found on the Department's website at <http://www.adem.state.al.us/> and are also listed in Attachment 4.

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**SECTION H– ENGINEERING REPORT/BMP PLAN REQUIREMENTS**

Any Engineering Report or Best Management Practice (BMP) Plans required to be submitted to ADEM by the applicant must be in accordance with ADEM 335-6-6-.08(i) & (j).

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**SECTION I– RECEIVING WATERS**

| Receiving Water(s) | 303(d) Segment?<br>(Y / N) | Included in TMDL?*<br>(Y / N) |
|--------------------|----------------------------|-------------------------------|
| Hollingers Creek   | N                          | N                             |
|                    |                            |                               |
|                    |                            |                               |

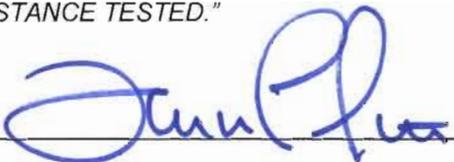
\*If a TMDL Compliance Schedule is requested the following should be attached as supporting documentation: (1) Justification for the proposed Compliance Schedule (e.g. time for design and installation of control equipment, etc.); (2) Monitoring results for the pollutant(s) of concern which have not previously been submitted to the Department (sample collection dates, analytical results (mass and concentration), methods utilized, MDL/ML, etc. should be reported as available); (3) Requested interim limitations, if applicable; (4) Date of final compliance with the TMDL limitations; and (5) Any other additional information available to support the requested compliance schedule.

**SECTION J – APPLICATION CERTIFICATION**

THE INFORMATION CONTAINED IN THIS FORM MUST BE CERTIFIED BY A RESPONSIBLE OFFICIAL AS DEFINED IN ADEM ADMINISTRATIVE RULE 335-6-6-.09 "SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS" (SEE BELOW).

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

"I FURTHER CERTIFY UNDER PENALTY OF LAW THAT THE RESULTS OF ANY ANALYSES REPORTED AS LESS THAN DETECTABLE IN THIS APPLICATION OR IN ATTACHMENTS THERETO WERE PERFORMED USING THE EPA APPROVED TEST METHOD HAVING THE LOWEST DETECTION LIMIT READILY ACHIEVABLE FOR THE SUBSTANCE TESTED."

SIGNATURE OF RESPONSIBLE OFFICIAL:  DATE SIGNED: 9-11-15

(TYPE OR PRINT)

NAME OF RESPONSIBLE OFFICIAL: Jason M. Padgett

OFFICIAL TITLE OF RESPONSIBLE OFFICIAL: General Manger / CEO

MAILING ADDRESS: 25 Hand Avenue , Bay Minette, AL 36507

AREA CODE & PHONE NUMBER: (251)-580-1626

**SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS**

**Responsible official** is defined as follows:

1. In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility
2. In the case of a partnership, by a general partner
3. In the case of a sole proprietorship, by the proprietor, or
4. In the case of a municipal, state, federal, or other public facility, by either a principal executive officer, or a ranking elected official.
5. In the case of a private or semi-public facility, the responsible official is either a principal executive officer or the owner of the corporation or other entity.

# Attachment 1 to Supplementary Form ADEM Form 311

## *Alternatives Analysis*

*Applicant/Project:* \_\_\_\_\_

All new or expanded discharges (except discharges eligible for coverage under general permits) covered by the NPDES permitting program are subject to the provisions of ADEM's antidegradation policy. Applicants for such discharges to Tier 2 waters are required to demonstrate "... that the proposed discharge is necessary for important economic or social development." As a part of this demonstration, the applicant must complete an evaluation of the discharge alternatives listed below, including a calculation of the total annualized project costs for each technically feasible alternative (using ADEM Form 312 for public-sector projects and ADEM Form 313 for private-sector projects). Alternatives with total annualized project costs that are less than 110% of the total annualized project costs for the Tier 2 discharge proposal are considered viable alternatives.

| Alternative   | Viable | Non-Viable | Comment |
|---|--------|------------|---------|
| 1 Land Application  |        |            |         |
| 2 Pretreatment/Discharge to POTW  |        |            |         |
| 3 Relocation of Discharge   |        |            |         |
| 4 Reuse/Recycle   |        |            |         |
| 5 Process/Treatment Alternatives  |        |            |         |
| 6 On-site/Sub-surface Disposal  |        |            |         |
| <i>(other project-specific alternatives considered by the applicant; attach additional sheets if necessary)</i> |        |            |         |
| 7   |        |            |         |
| 8   |        |            |         |
| 9   |        |            |         |

|  |  |
|--|--|
| <p><i>Pursuant to ADEM Administrative Code Rule 335-6-3-.04, I certify on behalf of the applicant that I have completed an evaluation of the discharge alternatives identified above, and reached the conclusions indicated.</i></p> | <p style="text-align: right;"><i>Signature:</i> _____<br/><span style="margin-left: 150px;"><i>(Professional Engineer)</i></span></p> <p style="text-align: right;"><i>Date:</i> _____</p> |
|--|--|

*(Supporting documentation to be attached, referenced, or otherwise handled as appropriate.)*

# Attachment 2 to Supplementary Form

## Calculation of Total Annualized Project Costs for Public-Sector Projects

### A. Capital Costs

Capital Cost of Project \$ \_\_\_\_\_

Other One-Time Costs of Project (Please List, if any):

\_\_\_\_\_ \$ \_\_\_\_\_

\_\_\_\_\_ \$ \_\_\_\_\_

\_\_\_\_\_ \$ \_\_\_\_\_

**Total Capital Costs (Sum column)** \$ \_\_\_\_\_ (1)

Portion of Capital Costs to be Paid for with Grant Monies \$ \_\_\_\_\_ (2)

Capital Costs to be Financed [Calculate: (1) – (2) ] \$ \_\_\_\_\_ (3)

Type of Financing (e.g., G.O. bond, revenue bond, bank loan) \_\_\_\_\_

Interest Rate for Financing (expressed as decimal) \_\_\_\_\_ (i)

Time Period of Financing (in years) \_\_\_\_\_ (n)

Annualization Factor =  $\frac{i}{(1+i)^n - 1} + i$  \_\_\_\_\_ (4)

**Annualized Capital Cost** [Calculate: (3) x (4) ] \_\_\_\_\_ (5)

### B. Operating and Maintenance Costs

Annual Costs of Operation and Maintenance (including but not limited to: monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement.) (Please list below.)

\_\_\_\_\_ \$ \_\_\_\_\_

\_\_\_\_\_ \$ \_\_\_\_\_

\_\_\_\_\_ \$ \_\_\_\_\_

\_\_\_\_\_ \$ \_\_\_\_\_

**Total Annual O & M Costs (Sum column)** \$ \_\_\_\_\_ (6)

### C. Total Annual Cost of Pollution Control Project

Total Annual Cost of Pollution Control Project [ (5) + (6) ] 

|              |
|--------------|
| \$ _____ (7) |
|--------------|

## Attachment 3 to Supplementary Form ADEM Form 313

### Calculation of Total Annualized Project Costs for Private-Sector Projects

|  |          |     |
|--|----------|-----|
| Capital Costs to be Financed (Supplied by applicant)   | \$       | (1) |
| Interest rate for Financing (Expressed as a decimal)   |          | (i) |
| Time Period of Financing (Assume 10 years <sup>*</sup> )   | 10 years | (n) |
| Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$  |          | (2) |
| Annualized Capital Cost [Calculate: (1) x (2) ]  | \$       | (3) |
| Annual Cost of Operation and Maintenance<br>(including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement) <sup>**</sup> | \$       | (4) |
| <b>Total Annual Cost of Pollution Control Project [ (3) + (4) ]</b>  | \$       | (5) |

<sup>\*</sup> While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

<sup>\*\*</sup> For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

## Attachment 4 to Supplementary Form

**NPDES PROGRAM  
PERMIT APPLICATION FORMS  
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

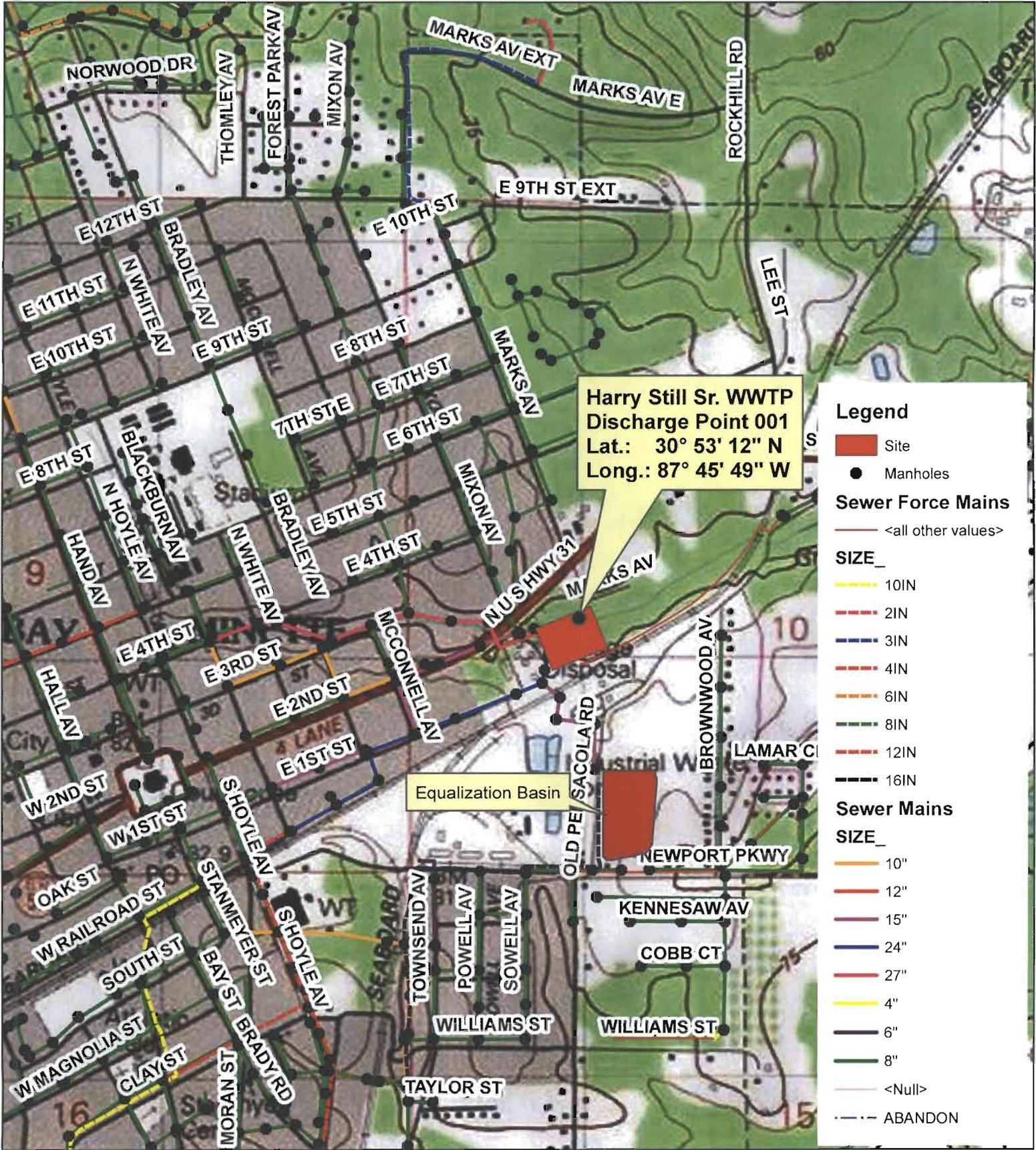
| <b>TYPE DISCHARGE</b>  | <b>ADEM FORMS</b>  | <b>EPA FORMS</b>  |
|--|--|---|
| New or existing once through non-contact cooling water and/or cooling tower blowdown, and/or sanitary wastewater (non-process wastewater only). Note: POTWs and privately owned domestic treatment works should use Form 2A. | Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal) | Forms 1 and 2E  |
| Existing discharges of process wastewater  | Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal) | Forms 1 and 2C  |
| New discharges of process wastewater   | Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal) | Forms 1 and 2D  |
| New or existing discharges composed entirely of stormwater meeting the EPA definition of stormwater associated with industrial activity  | Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal) | Forms 1 and 2F  |
| New or existing discharges composed of stormwater meeting the EPA definition of stormwater associated with industrial activity, and any other non-stormwater discharges.   | Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal) | Forms 1 and 2F and, as appropriate, Forms 2E, 2E, 2C, and/or 2D |
| New or existing Publicly-Owned Treatment Works (POTWs) and Privately-Owned Treatment Works composed of sanitary wastewater   | Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal) | Forms 1 and 2A  |
| New or existing land application of process wastewater. Form 2F is required for stormwater runoff from the land application site, if the site is not completely bermed to prevent runoff.                                    | Supplemental Information Form 187 – (Industrial)                         | Forms 1, 2F, and 2C or 2D, as appropriate                       |
| New or existing land application of sanitary wastewater. Form 2F is required for stormwater runoff from the land application site, if the site is not completely bermed to prevent runoff.                                   | Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal) | Forms 1, 2A, and 2F   |

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Testing requirements: Test procedures for all analyses shall conform to 40 CFR Part 136 or an alternate method specifically approved by the Department. If more than one method of analysis is approved, then the method having the lowest detection level shall be used.



# Harry Still Sr. WWTP Location Map

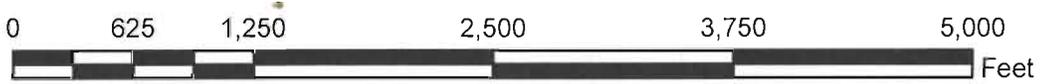


Harry Still Sr. WWTP  
Discharge Point 001  
Lat.: 30° 53' 12" N  
Long.: 87° 45' 49" W

Equalization Basin

### Legend

- Site
- Manholes
- Sewer Force Mains**
- <all other values>
- SIZE\_**
- 10IN
- 2IN
- 3IN
- 4IN
- 6IN
- 8IN
- 12IN
- 16IN
- Sewer Mains**
- SIZE\_**
- 10"
- 12"
- 15"
- 24"
- 27"
- 4"
- 6"
- 8"
- <Null>
- ABANDON





# NORTH BALDWIN UTILITIES

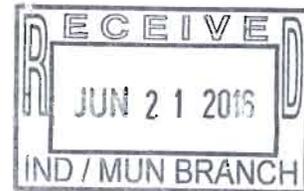
25 Hand Ave | Bay Minette, AL 36507  
251.937.0345 fax | 251.580.1626 phone  
www.northbaldwinutilities.com

PROVIDING QUALITY SERVICES SINCE 1945 - NATURAL GAS • WATER • WASTEWATER

June 21, 2016

Ms. Stephanie Ammons  
Alabama Department of Environmental Management  
Municipal Section  
Water Division  
P.O. Box 301463  
Montgomery, AL 36130-1463

Re: Renewal - NPDES Permit No. AL0049867  
Still WWTF  
North Baldwin Utilities



Dear Ms. Ammons:

During several recent telephone conversations between you and members of the North Baldwin Utilities (NBU) staff, discussions addressed the matter of Zinc levels possibly detected in sampling of the effluent from our Still WWTF. Zinc is not a limited constituent under our current NPDES Permit but is required to be periodically monitored. ADEM has mentioned in the discussions that addition of a discharge limit for Zinc is under consideration within the Department.

As the NBU wastewater system can be characterized as a conventional municipal system, presence of Zinc at a detectable level within the Still WWTF effluent would not be anticipated absent an identifiable source of Zinc within the collection system. NBU does have one industrial discharger assigned a State Indirect Discharge (SID) Permit incorporating Zinc as a limited constituent.

It is NBU's understanding that the Department's motivation for consideration of a Zinc limit imposition is catalyzed by two historical circumstances. One occurred over a period during the summer of 2013 culminating in Still WWTF effluent sampling results reported for August 2013 and the other for Still WWTF effluent sampling results reported for March 2016. Beyond these two circumstances, the Still WWTF effluent has been consistently characterized by our contract laboratory as having Zinc levels "Below Detectable Limit". NBU solicits your consideration of the following discussions pertinent to each of these historical events.

The March 2016 occurrence is considered by NBU to be a laboratory anomaly. Our contract lab routinely reports under a protocol wherein the detection limit for Zinc is 0.1 mg/l. Consistently the Still effluent sample analysis results for Zinc have been reported by the lab as being "Below Detection Limit". Such reporting asserts that the sample Zinc concentration is less than 0.1 mg/l. For the March 2016 sample our contract lab sub-contracted the Zinc analysis to a third-party lab.

This third-party lab employed a Zinc analysis protocol purported to have a significantly lower detection limit than 0.1 mg/l. The thus reported Zinc concentration of 0.025 mg/l displayed as a "hit" on the report but was, in fact, still below the historically accepted detection limit of 0.1 mg/l.

NBU offers that the March 2016 Still WWTF effluent Zinc concentration was below the historically accepted detection limit of 0.1 mg/l and does not constitute an actionable occurrence.

Events culminating in the August 2013 occurrence are more a testimony to diligent and cooperative actions by NBU and an industrial discharger than to justification for a new permit limitation imposition. DentalEZ Alabama, Inc. (DentalEZ) holds SID Permit No. IU 33-02-00055 for industrial waste discharge into the NBU sewer system for treatment at the Still WWTF. In late 2011 NBU and DentalEZ initiated discussions to accomplish improvements to the DentalEZ waste pre-treatment system with a focus to reduction in Zinc discharges into the NBU system.

Over the next eighteen months DentalEZ, with attentive encouragement from NBU, engaged consultants and specialty vendors to assist in addressing their challenges. Documentation of the various activities during this period is quite extensive and well maintained within NBU files. Should the Department wish to view or have copies of our subject files, NBU will be responsive to such request. During this period DentalEZ continued to experience difficulties achieving compliance with the Zinc limitations incorporated into their then current SID Permit.

DentalEZ evaluated several alternate treatment approaches to attain and maintain compliance with Zinc requirements experiencing varying degrees of success and reliability. While both parties, NBU and DentalEZ, endeavored to work cooperatively to resolve the challenges, some minor detours were encountered that had to be (and were) overcome. Not the least of which was the Department's issuance in July 2013 of a new SID Permit to DentalEZ without notice to NBU. Such occurrence caused a scramble among all parties to correct the permitting process to enable return of the focus to DentalEZ identifying a successful and reliable pre-treatment process.

Despite some process glitches over the summer of 2013 DentalEZ began finding success with their treatment protocols. However, the Still WWTF effluent samples did reflect minor elevation in Zinc levels for July 2013. These levels returned to "normal" (i.e. 'Below Detection Limit') for August 2013.

On September 25, 2013 DentalEZ experienced an undocumented discharge into the NBU system. In response to NBU challenge, DentalEZ adopted rigorous and corporately sanctioned protocols governing and mandating reporting of wastewater releases to NBU. Even with this inappropriate discharge, Still WWTF effluent Zinc levels remained "Below Detection Limit" for September 2013.

Since late summer of 2013, DentalEZ monthly DMR's submitted to ADEM and copied to NBU do not reflect a violation of permitted Zinc concentrations in discharges to the NBU system.

Since July 2013 Still WWTF effluent has not experienced a Zinc concentration above the historically reported detection limit of 0.1 mg/l.

Ms. Stephanie Ammons

June 21, 2016

Page 3 of 3

NBU and DentaleZ have worked diligently and cooperatively through numerous challenging circumstances to successfully resolve the Zinc pre-treatment issue. Operational experience - both with the DentaleZ discharge and the Still WWTF discharge - over the past almost three years is demonstrative of the reliability of the protocols developed and implemented. Imposition of a Zinc limitation to the Still WWTF Permit at this juncture does not appear warranted nor justifiable.

NBU respectfully requests that the Still WWTF NPDES Permit not be amended to include a Zinc limitation. NBU and the linked SID Permittee, DentaleZ, have demonstrated willingness, capability, and success in addressing the levels of Zinc in both the industrial discharge and the Still WWTF effluent. Inclusion of a Zinc effluent requirement in the Still WWTF NPDES Permit renewal at this juncture would appear punitive by resulting in additional monitoring expenses for both the POTW and the Industry with no benefit to the environment.

Your and the Department's time to consider our presentation is appreciated. NBU is available for and will be responsive to any questions or requests for additional information.

Sincerely,

**NORTH BALDWIN UTILITIES**



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Jason M. Padgett, General Manager/CEO

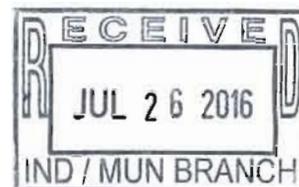


# NORTH BALDWIN UTILITIES

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www.northbaldwinutilities.com

PROVIDING QUALITY SERVICES SINCE 1945 - NATURAL GAS • WATER • WASTEWATER

July 21, 2016



Ms. Stephanie Ammons  
Alabama Department of Environmental Management  
Municipal Section  
Water Division  
P.O. Box 301463  
Montgomery, AL 36130-1463

Re: Renewal - NPDES Permit No. AL0049867  
Still WWTF  
North Baldwin Utilities

Dear Ms. Ammons:

Your continuing assistance to our discussion of the matter of inclusion of a Zinc limit in the renewed Permit for our Still WWTF is appreciated. North Baldwin Utilities (NBU) hereby offers additional information to support the Department's consideration of our request that no additional Zinc requirements be incorporated into the new Permit.

As addressed in NBU's letter of June 21, 2016, it is our understanding that the Department's motivation for consideration of a Zinc limit imposition is catalyzed by historical circumstances dating to August 2013.

NBU reaffirms it has only one known discharger of Zinc levels into our system – DentalEZ (SID IU330200055). DentalEZ has worked cooperatively with NBU over the past several years to reduce Zinc levels in its waste stream. Responding to NBU waste characteristics concerns in the early 2010's, DentalEZ began implementing improvements to its pre-treatment system in 2012 under the guidance of its engineering consultant. Reference attached letters from Volkert, Inc. (120306) and DentalEZ (120309). An update of the program's progress is presented in attached letters from Volkert, Inc. (120824) and DentalEZ (120827).

It should be noted that in both sets of above referenced letters DentalEZ acknowledges the sole prerogative of NBU to disallow its discharge should waste stream parameters be determined to be detrimental to NBU.

Through late 2012 and into 2013 the DentalEZ waste stream demonstrated improved compliance with SID Permit limitations. Identified operations staff issues culminated in DentalEZ adopting

Ms. Stephanie Ammons  
July 21, 2016  
Page 2 of 2

definitive waste discharge procedures on October 11, 2013 (copy attached). Since that time DentaleEZ has maintained compliance with its SID Permit.

Since October 2013, DentaleEZ monthly DMR's submitted to ADEM and copied to NBU do not reflect a violation of permitted Zinc concentrations in discharges to the NBU system.

Since October 2013, Still WWTF effluent has not experienced a Zinc concentration above the historically reported minimum detection limit of 0.1 mg/l.

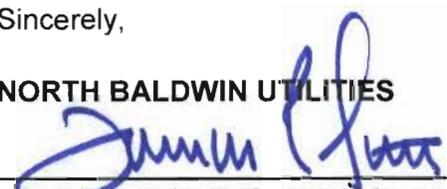
NBU considers October 11, 2013 to constitute a "completion" date of the DentaleEZ program to enhance both its pre-treatment processes and its wastewater operations procedures. Since this date no Zinc violations have occurred under either the DentaleEZ SID Permit or the Still NPDES Permit. Additionally, it is recognized in DentaleEZ-generated documents that NBU retains sole discretionary jurisdiction regards continuation of discharge under the SID as the best interests of NBU may dictate.

NBU respectfully restates its request that the Still WWTF NPDES Permit not be amended to reflect an enhanced Zinc limitation. NBU and the linked SID Permittee have demonstrated success in addressing Zinc compliance issues in both the industrial discharge and the Still WWTF effluent.

Your and the Department's time to consider our presentation is appreciated. NBU is available for and will be responsive to any questions or requests for additional information.

Sincerely,

**NORTH BALDWIN UTILITIES**



---

Jason M. Padgett, General Manager/CEO

Attachments (5)

- Volkert - 120306
- DentaleEZ - 120309
- Volkert - 120824
- DentaleEZ - 120827
- DentaleEZ 131011 Procedures

# VOLKERT

March 6, 2012

Mr. Mitchell Thompson  
DentalEZ© Alabama, Inc.  
2500 Highway 31, South  
Bay Minette, AL 36507

**Volkert, Inc.**  
3809 Moffett Road (36618)  
P.O. Box 7434  
Mobile, AL 36670-0434

Office 251.342.1070  
Fax 251.342.7962  
volkert@volkert.com

www.volkert.com

**SUBJECT: Wastewater Permit Renewal  
Technical Review Regarding Zinc & Lead Concerns**

Dear Mr. Thompson:

After meeting with North Baldwin Utilities representatives Larry Stejskal and Darren Slaughter on February 7, 2012, the following information is being provided regarding the current status of the DentalEZ NPDES permit renewal process. DentalEZ has submitted a renewal application for their NPDES permit to ADEM. A requirement of the application includes providing written correspondence from North Baldwin Utilities (NBU) confirming that wastewater flows from DentalEZ's Bay Minette facility can continue to be received at the NBU Wastewater Treatment Facility.

DentalEZ has recently made a change in operations that has increased effluent zinc levels and on occasion increased lead levels in their wastewater flows. While, according to NBU representatives, these increases to date do not appear to have had a negative impact on the NBU WWTF operations, DentalEZ in conjunction with Volkert, Inc. has been researching options to reduce the current levels of zinc and lead.

Due to the nature of the various potential methods being considered as part of the evaluation period that is currently underway, it is difficult to establish a definitive schedule for reducing the zinc and lead to acceptable levels. However, we are currently anticipating that the eight months ending on October 31, 2012, will provide an adequate timeframe to complete the evaluation, perform any necessary pilots/testing, and purchase and install any additional equipment necessary.

As discussed in our meeting, one option is for DentalEZ to dispose of process water with an outside supplier for proper disposal in lieu of discharging to NBU. It is anticipated that at the end of eight months either improvements will have been incorporated to reduce levels or the material will not be discharged to NBU unless previous arrangements have been approved for an extension of the eight months due to items such as equipment delivery. During this time frame, while a solution is being determined and implemented, it is our understanding that DentalEZ will operate under their current permit unless other arrangements with ADEM are made. Any arrangement with ADEM would, of course, include input from NBU at the appropriate time.

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Collinsville, Illinois • Baton Rouge, New Orleans, Slidell, Louisiana • Biloxi, Mississippi • Jefferson City, Missouri  
Raleigh, North Carolina • Columbia, South Carolina • Chattanooga, Tennessee • Alexandria, Virginia • Washington, D.C.





DentalEZ Alabama, Inc.  
2500 Highway 31 South  
Bay Minette, AL 36507  
251/937-6781  
fax 251/937-0461  
www.dentalez.com

Jason M. Padgett  
General Manager & CEO  
North Baldwin Utilities  
PO Box 1207  
Bay Minette, AL 36507

March 9, 2012

Re: Wastewater Permit Renewal/Technical Review Regarding Zinc & Lead Concerns

Dear Mr. Padgett:

In the follow-up to our meeting on February 7, 2012 with Larry Stejskal, and more recent communications, please let me know if the attached March 6, 2012 letter from Volkert, Inc. addresses the confirmation you are seeking from DentalEZ with respect to this matter. DentalEZ concurs with and adopts Volkert's approach and schedule, as presented in their March 6, 2012 letter.

I look forward to hearing from you, and of course, if you have any questions, please give me a call.

Very truly yours,



Ed Holland  
Vice President / General Manager  
DentalEZ GROUP

cc: Larry Stejskal

# VOLKERT

Volkert, Inc.

3809 Moffett Road (36618)  
P.O. Box 7434  
Mobile, AL 36670-0434

Office 251.342.1070  
Fax 251.342.7962  
volkert@volkert.com

www.volkert.com

August 24, 2012

Mr. Mitchell Thompson  
DentalEZ® Alabama, Inc.  
2500 Highway 31, South  
Bay Minette, AL 36507

**SUBJECT: Wastewater Permit Renewal  
Technical Review Regarding Zinc & Lead Concerns**

Dear Mr. Thompson:

As discussed in our August 14, 2012 meeting with North Baldwin Utilities representatives Larry Stejskal and Darren Slaughter, the following information is being provided regarding the current status of the DentalEZ actions for lowering the levels of zinc and lead in the DentalEZ discharged flows. As discussed, DentalEZ has recently made changes to the washing operations that have had a positive impact in lowering both zinc and lead levels. While the initial operational changes have provided reduced levels to within permit compliance limits, we have continued to research options for potentially reducing levels even further to better accommodate fluctuations in the effluent quality. Due to the low permit limits for these parameters and the range in permit limits from maximum to averages, at times it can be difficult to meet average permit limits even when maximum permit limits are met, as has recently occurred. Laboratory testing for modifications to the existing filtration system operations did not provide the positive results that were anticipated.

DentalEZ is meeting with local manufacturer representatives on August 24, 2012 to discuss the materials and procedures that are necessary to utilize sodium sulfide for precipitating out and further reducing the zinc and lead levels. We are optimistic that in combination with the previous changes to the cleaning operation this will provide the consistently low levels that are below permit limits. It is currently anticipated that this work will be completed by our initial target date of October 31, 2012.

Also, as discussed, the system manufactured by Separator Solutions indicates from initial laboratory data that with modifications to the standard system zinc and lead levels could also be lowered. This would be the next step if the addition of sodium sulfide results in unanticipated operational problems.

DentalEZ remains committed to resolving this issue and consistently producing effluent that is below permit limits. While it is still our understanding recent averages have not had a negative impact on NBU according to NBU representatives, another option remains for DentalEZ to dispose of process water with an outside supplier for proper disposal in lieu of discharging to

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Raleigh, North Carolina • Columbia, South Carolina • Chattanooga, Tennessee • Alexandria, Virginia • Washington, D.C.



NBU. As previously noted, if unanticipated operational problems arise with the addition of the sodium sulfide, this option could be discussed with NBU in lieu of continuing to discharge to NBU while the filter system modifications to the Separator Solutions system are being performed including controlled tests and balances of DentalEZ's water.

We appreciate NBU's continued understanding and cooperation with this current plan while also recognizing that some limited flexibility may become necessary due to unforeseen operational issues with the current plan. We will continue to keep NBU advised of the test results as this plan is implemented.

If any additional information is necessary, please contact us at your convenience.

Sincerely,



Melinda D. Immel, PE  
Assistant Vice President

/kvd



DentalEZ Alabama, Inc.  
2500 Highway 31 South  
Bay Minette, AL 36507  
251/937-6781  
fax 251/937-0461  
www.dentalez.com

**Jason M. Padgett**  
General Manager & CEO  
North Baldwin Utilities  
P.O. Box 1207  
Bay Minette, AL 36507

**August 27, 2012**

**Re: Wastewater Permit Renewal / Technical Review Regarding Zinc & Lead Concerns**

**Dear: Mr. Padgett**

In the follow-up to our meeting on August 14 2012 with Larry Stejskal, and more recent communications, please let me know if the attached August 24, 2012 letter from Volkert, Inc. addresses the confirmation you are seeking from DentalEZ with respect to this matter. DentalEZ concurs with and adopts Volkert's approach and schedule as it is presented in their August 24, 2012 letter.

We sincerely hope that NBU will not object to our permit and continue to work with us on this matter. I look forward to hearing from you, and of course, if you have any questions, please give me a call.

Very truly yours

**Ed Holland**  
Vice President / General Manager  
DentalEZ GROUP

cc: Larry Stejskal

**PRD/4000**

**Process for Waste Water Discharge to NBU**

| Revision History |          |                       |          |
|------------------|----------|-----------------------|----------|
| REV              | Date     | Description of Change | ECO #    |
| 0                | 10/11/13 | Original Release      | QPM 1239 |

**DentaleZ**  
**STANDARD OPERATING PROCEDURE**

REF: PRD/4000  
REV: 0

**1.0 PURPOSE**

1.1 This procedure describes the method to be used to safely release waste water.

**2.0 SCOPE**

2.1 These procedures pertain to waste water release by DentaleZ. All employees involved in facilities and paint should be familiar with these procedures.

**3.0 DEFINITIONS**

3.1

**4.0 RESPONSIBILITIES**

4.1 The facilities manager is responsible for training and up keep of procedure

**5.0 PROCEDURES**

5.1 Prior to discharge waste water is to be tested for Lead and Zinc levels to determine if levels are within our discharge permit limits of 2.61 mg/l max and 1.4 mg/l average for the month.

5.1.1 If it is not within limits, treat per procedure and retest.

5.1.2 If waste water can not be brought into discharge limits have an approved transport company haul to a waste disposal site for processing (at the current time Shoreline Environmental is the approved carrier)

5.1.3 Once acceptable lead and zinc test results are obtained and water is acceptable for discharge a supervisor or manager must sign testing log to approve the start of the discharge process.

5.2 The follow process must be done at the time of discharge to collect samples to be sent to the lab for testing.

5.2.1 Obtain sample kit from supervisor or manager – kit will contain all necessary bottles and paper work required.

5.2.2 Unlock waste water discharge valve

5.2.3 Open valve two turns (starts water discharge)

**DentalEZ**  
**STANDARD OPERATING PROCEDURE**

REF: PRD/4000  
REV: 0

- 5.2.4 Place 5 gal bucket or catchment container under sample drain and open valve.
- 5.2.5 Fill sample bottles with discharge water flowing to catchment container. Assure all lab paper work is filled out completely.
- 5.2.6 Securely close sample bottles and put samples in transport cooler and insert ice bag.
- 5.2.7 Return unused sample water to the tank.
- 5.3 Once sample is obtained open valve one more turn and allow water to continue discharge.
- 5.4 When sample is ready for transport to lab, a supervisor or manager must sign log that sample is being transported to lab. When carrier returns, Chain Of Custody documents are to be given to the supervisor to be put in Waste Water Discharge Binder.
- 5.4.1 When discharge is complete, close and lock valve
- 5.5 At this time discharge process is complete.

**6.0 REFERENCES**



Mitchell Thompson  
Machine Shop / Maintenance Manager



Ed Holland  
Vice President and General Manager  
DentalEZ Equipment



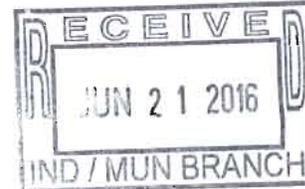
# NORTH BALDWIN UTILITIES

25 Hand Ave | Bay Minette, AL 36507  
251.937.0345 fax | 251.580.1626 phone  
www.northbaldwinutilities.com

PROVIDING QUALITY SERVICES SINCE 1945 - NATURAL GAS • WATER • WASTEWATER

June 21, 2016

Ms. Stephanie Ammons  
Alabama Department of Environmental Management  
Municipal Section  
Water Division  
P.O. Box 301463  
Montgomery, AL 36130-1463



Re: Renewal - NPDES Permit No. AL0049867  
Still WWTF  
North Baldwin Utilities

Dear Ms. Ammons:

North Baldwin Utilities (NBU) is in receipt of a copy of your June 9, 2016 (0829) email to Mr. David Stejskal, P.E. of CH2M Hill Engineers, Inc. (CH2M) and the therein referenced June 8, 2016 letter from CH2M to ADEM. As discussed during our June 20<sup>th</sup> telephone call, NBU desires to address the determination by the Department that the Still WWTF may not qualify for a "no exposure" exclusion under the cited subsection (g) of the CFR.

The June 8<sup>th</sup> CH2M letter accurately characterizes circumstances at the Still WWTF regards the potential for wastewater flows received at or being treated at the facility to access or enter the storm water system. NBU hereby affirms the statements in CH2M's letter.

NBU's understanding of the focus of your June 9<sup>th</sup> email and the intent of the cited CFR subsection (g) is to address storm water runoff resulting from rainfall impinging upon unprotected process areas, equipment, and/or materials that could become contaminated due to such contact. The citation section states that "'No exposure' means that all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff." Your email requires submittal of additional reporting forms "if there is no cover or shelter on all equipment...". The above references consistently focus concern toward runoff from rainfall after contacting process equipment/materials. The operative question appears to qualify for restatement somewhat as follows: Is there potential for rainfall to contact treatment system equipment/components/appurtenances and then access the storm water system?

NBU has reassessed the entirety of the Still WWTF site, process, and process train with focus to the potential fate of impingement rainfall. All equipment, materials, and/or process activities at Still occur, are sited, or can be characterized as being:

- a. Equipment, materials, or activities located under or within an appropriate rainfall excluding shelter

- b. Equipment installed upon, within, or over process tankage or channels such that any impingement rainfall drains into the process flow
- c. Equipment, materials, or activities sited within curbed areas channeled to drain all areas within the curbing into the process flow

The only exceptions to the above characterizations were identified as follows:

1. Grit Classifier and receiving Dumpster
2. Waste Sludge Transfer Area and Sludge Tanker Parking Area

While NBU maintains aggressive housekeeping within these two areas, strict conformance with the entirety of the cited CFR subsection (g) provisions is not realized.

NBU desires to petition ADEM to re-evaluate its indicated finding that the Still WWTF will not qualify for a "no exposure" conditional exclusion under CFR subsection (g). In order to be positioned to provide the certifications required, inclusive of those under (g), (4), (iv), in support of such petition, NBU is implementing a program to eliminate the two above identified non-conformance instances.

NBU is immediately initiating projects to address circumstances at both facility areas identified above. Following is a summary of intended actions. Please reference the enclosed Sketches (identified thereon as A through C) and enclosed annotated photographs (identified thereon as 1 through 5) to assist in visualizing the proposed actions.

#### Screenings/Grit Area

Please reference Sketch A and Photo 1. This area encompasses the screenings and grit compactor and receiving dumpster and the grit classifier and receiving dumpster. Note the existing curbing around the screenings area and the absence of same around the grit classifier area. As shown in Sketch A, drainage from the screenings curbed area flows back to the WWTF influent.

Please now reference Sketch B and Photos 2 – 5. The project will establish new curbing to encompass the grit classifier and dumpster area. Existing curbing will be cut (see "New Curb Cut") to connect the new curbed area to the existing drain.

Upon completion, the entirety of the screenings and grit area and associated equipment will be surrounded with a barrier curb. Any rainfall impinging upon any of the equipment or process area will be captured and routed to the WWTF influent.

#### Sludge Transfer Area

Please reference Sketches A and C. Currently transfer of waste sludge into the tanker occurs in a portion of the facility parking area as indicated on Sketch A. The Still WWTF has three decommissioned waste sludge drying beds fully plumbed to drain to the WWTF influent. Other appurtenances of the old drying beds (drainage media panels, sludge distribution piping, etc.) have been long ago removed.

Ms. Stephanie Ammons

June 21, 2016

Page 3 of 3

Sketch C presents the project to repurpose one of the drying beds to serve as the site for the relocated Sludge Transfer Area. A section of one of the drying bed walls will be modified to enable the tanker truck to access the old bed. This access will retain a barrier curb to ensure retention of any spillage or runoff within the bed. The existing bed drainage system will continue to route all liquids present within or rainfall impinging upon the bed footprint to the WWTF influent.

Upon completion of the above projects NBU purports that the Still WWTF will be in full conformance with the provisions of CFR subsection (g). NBU hereby commits to completion of both above projects no later than August 1, 2016.

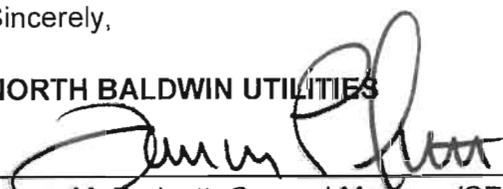
At such time, NBU will provide the certifications specified in CFR subsection (g) to accompany our petition for granting the Still WWTF a conditional exclusion for 'no exposure' as envisioned therein.

This work plan is respectfully submitted for consideration by the Department. Your comments are solicited as to the viability of this plan to enable ADEM's favorable ruling on our petition upon its completion.

We are available to provide any additional information required and welcome any questions that may arise. Your time review this matter is appreciated.

Sincerely,

**NORTH BALDWIN UTILITIES**



---

Jason M. Padgett, General Manager/CEO

Enclosures:

Sketches - 3

Photographs - 5



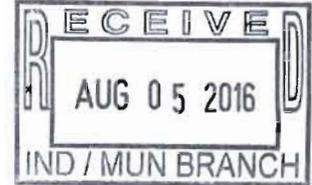
# NORTH BALDWIN UTILITIES

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251.937.0345 fax | 251.580.1626 phone  
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PROVIDING QUALITY SERVICES SINCE 1945 - NATURAL GAS • WATER • WASTEWATER

August 3, 2016

Ms. Stephanie Ammons  
Alabama Department of Environmental Management  
Municipal Section, Water Division  
P.O. Box 301463  
Montgomery, AL 36130-1463



Re: Renewal - NPDES Permit No. AL0049867  
Still WWTF (North Baldwin Utilities)

Dear Ms. Ammons:

By letter of June 21, 2016 North Baldwin Utilities (NBU) addressed the Department's position regards qualification of our Still WWTF for consideration of a "no exposure" exclusion under Subsection (g) of the CFR as cited in your June 9, 2016 (0829) email to Mr. David Stejskal, P.E. of CH2M Hill Engineers, Inc. (CH2M). The representations of that letter are re-affirmed.

As reported in our letter, NBU identified two (2) areas within the facility that could be considered as non-compliant with the provisions of Subsection (g). Two projects were committed for implementation to eliminate the non-conforming circumstances with completion thereof to be accomplished not later than August 1, 2016.

NBU hereby certifies that it has functionally completed both projects and purports that the Still WWTF is now in full compliance with the cited CFR Subsection (g) requirements.

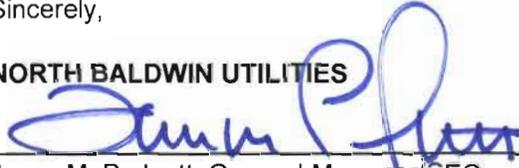
Enclosed herewith please find the requisite certifications specified in the cited CFR Subsection (g) in support of our petition for the Department to grant the Still WWTF a conditional exclusion for 'no exposure' as envisioned within said Subsection (g).

We respectfully request the Department's consideration of our petition and solicit the granting of a "no exposure" exclusion for the facility.

We are available to provide any additional information required and welcome any questions that may arise.

Sincerely,

**NORTH BALDWIN UTILITIES**

  
\_\_\_\_\_  
Jason M. Padgett, General Manager/CEO

Enclosure

NO EXPOSURE CERTIFICATION

--- Still WWTF ---

NPDES Permit No. AL0049867

(Page 2 of 2)

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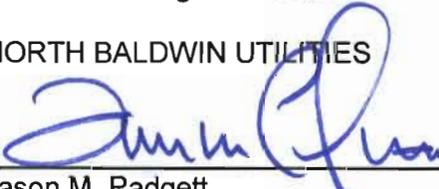
Inspections and Disclosures

North Baldwin Utilities shall allow the Director to inspect the facility to determine compliance with the "no exposure" conditions and shall allow the Director to make any "no exposure" inspection reports available to the public upon request.

Certification

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from NPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility identified in this document. I understand that I am obligated to submit a no exposure certification form once every five years to the NPDES permitting authority and, if requested, to the operator of the local MS4 into which this facility discharges (where applicable). I understand that I must allow the NPDES permitting authority, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under an NPDES permit for any point source discharge of storm water from the facility. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NORTH BALDWIN UTILITIES



Jason M. Padgett  
General Manager / CEO

Date

8-3-2016

NO EXPOSURE CERTIFICATION

--- Still WWTF ---

NPDES Permit No. AL0049867

(Page 1 of 2)

---

Discharger Information

North Baldwin Utilities  
25 Hand Avenue  
Bay Minette, AL 36507

Facility Information

Still WWTF  
1000 E. 1<sup>st</sup> St.  
Bay Minette (Baldwin County), AL  
Lat: 30 Deg 53' 12" N  
Long: 87 Deg 45' 51" W

None Of The Following Materials Or Activities Are, Or Will Be In The Foreseeable Future Exposed To Precipitation:

- A. Using, storing, or cleaning industrial machinery or equipment, and areas where residuals from using, storing, or cleaning industrial machinery or equipment remain and are exposed to storm water
- B. Materials or residuals on the ground or in storm water inlets from spills/leaks
- C. Materials or products from past industrial activity
- D. Material handling equipment (except adequately maintained vehicles)
- E. Materials or products during loading/unloading or transporting activities
- F. Materials or products stored outdoors
- G. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers
- H. Materials or products handled/stored on roads or railways owned or maintained by the discharger
- I. Waste material
- J. Application or disposal of process wastewater
- K. Particulate matter or visible deposits of residuals from roof stacks/vents not otherwise regulated under an air quality control permit and evident in the storm water outflow



4320 Midmost Drive Mobile, Alabama 36609  
Phone (251) 344-9106 Fax (251) 341-9492

Report To: North Baldwin Utilities  
25 Hand Avenue  
Bay Minette  
Attention: James Dean

AL 36507

Project: North Baldwin Utilities  
Project Number: LL Hg

Report Date: 3/16/2016 10:31:57AM

### ANALYTICAL REPORT

This report includes the results of analyses for sample(s) that were subcontracted to an approved laboratory. If you have any questions concerning this report, please feel free to call Susan Maynard at (251) 344-9106.

| Laboratory ID | SampleName | Date Sampled        | Matrix     |
|---------------|------------|---------------------|------------|
| 16B0372       | 01         | 2/18/2016 1:00:00PM | Wastewater |
| 16B0372       | Blank      | 2/18/2016 1:00:00PM | Wastewater |

*Susan Maynard*

Susan Maynard, Lab Director



*The test results in this report meet NELAP requirements for accredited parameters, unless otherwise noted, and relate only to the sample(s) received by this laboratory. This report must be reproduced in its entirety unless approved by the laboratory.*

*Results are reported on a "wet weight basis", unless otherwise noted.*



Sample Receipt / Integrity Checklist

Client NBY Date 02-18-16 Field Courier Client  
 Work Order 10B0372 Sample Custodian cg

Sample coolers and containers

Custody seals on coolers or shipping containers intact? ..... Yes        No        n/a ✓  
 Outside of coolers or shipping containers are free from damage? ..... Yes ✓ No        n/a         
 All expected paperwork received (COC & other client specific information)? ..... Yes ✓ No        n/a         
 Are sample containers intact? ..... Yes ✓ No        n/a         
 Are samples in proper containers? ..... Yes ✓ No        n/a         
 Is adequate sample volume present to perform the requested analyses? ..... Yes ✓ No        n/a         
 Are volatile samples free of headspace (bubbles less than 6 mm in diameter)? ..... Yes        No        n/a ✓

Thermal and Chemical Preservation

Samples received cooled? ..... Yes ✓ No        n/a         
 Type of cooling/temp? ..... Wet Ice ✓ Blue Ice        n/a        Temp. 4.3°C  
 Temperature blank present? ..... Yes        No ✓ n/a         
 If no cooling present, were samples received within 1 hour of collection? ..... Yes        No        n/a ✓  
 Is the correct chemical preservative used for all samples? ..... Yes        No        n/a ✓  
 Is the pH range correct for chemically preserved samples checked at login? ..... Yes        No        n/a ✓  
 List samples checked for chemical preservation at bench ..... O&G        Metals        VOCs        Other ✓

Chain of Custody

Is COC filled out completely? ..... Yes ✓ No        n/a         
 Is COC properly relinquished (signed and dated)? ..... Yes ✓ No        n/a         
 Are any samples missing on COC or from cooler? ..... Yes        No ✓ n/a         
 Do sample containers match COC? ..... Yes ✓ No        n/a       

Holding Times

Are samples received within hold time? ..... Yes        No        n/a        ✓  
 Were short hold time or rush samples taken to appropriate department? ..... Yes        No        n/a        ✓  
 If no, was responsible analyst and/or dept. manager notified? ..... Yes        No        n/a        ✓  
 Does work order meet EnviroChem sample acceptance criteria? ..... Yes        No        n/a        ✓

Note: Samples that do not meet acceptance criteria must be documented in the Sample Rejection Log

Field Comments \_\_\_\_\_

Login Comments \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Client Contacted \_\_\_\_\_ Contacted By \_\_\_\_\_ Date/Time \_\_\_\_\_

Client Instructions ..... Cancel Work order \_\_\_\_\_ Proceed with work order \_\_\_\_\_ (Data will be qualified)

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Pensacola  
3355 McLemore Drive  
Pensacola, FL 32514  
Tel: (850)474-1001

TestAmerica Job ID: 400-117870-1  
Client Project/Site: 16B0372

For:  
Envirochem Laboratories  
4320 Midmost Drive  
Mobile, Alabama 36609

Attn: Jenny Wheat



Authorized for release by:  
3/1/2016 3:44:50 PM

Mark Swafford, Project Manager I  
(850)474-1001  
[mark.swafford@testamericainc.com](mailto:mark.swafford@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://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.*

1

2

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9



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# Definitions/Glossary

Client: Envirochem Laboratories  
Project/Site: 16B0372

TestAmerica Job ID: 400-117870-1

## Glossary

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

# Sample Summary

Client: Envirochem Laboratories  
Project/Site: 16B0372

TestAmerica Job ID: 400-117870-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 400-117870-1  | 01               | Water  | 02/18/16 13:00 | 02/22/16 09:32 |
| 400-117870-2  | Blank            | Water  | 02/18/16 13:00 | 02/22/16 09:32 |

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# Client Sample Results

Client: Envirochem Laboratories  
Project/Site: 16B0372

TestAmerica Job ID: 400-117870-1

**Client Sample ID: 01**

**Date Collected: 02/18/16 13:00**

**Date Received: 02/22/16 09:32**

**Lab Sample ID: 400-117870-1**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | 0.0010 |           | 0.00050 | 0.00020 | ug/L |   | 02/23/16 13:30 | 03/01/16 11:33 | 1       |

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# Client Sample Results

Client: Envirochem Laboratories  
Project/Site: 16B0372

TestAmerica Job ID: 400-117870-1

**Client Sample ID: Blank**  
**Date Collected: 02/18/16 13:00**  
**Date Received: 02/22/16 09:32**

**Lab Sample ID: 400-117870-2**  
**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

| Analyte | Result   | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 |           | 0.00050 | 0.00020 | ug/L |   | 02/23/16 13:30 | 03/01/16 11:58 | 1       |

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# Lab Chronicle

Client: Envirochem Laboratories  
Project/Site: 16B0372

TestAmerica Job ID: 400-117870-1

**Client Sample ID: 01**

**Date Collected: 02/18/16 13:00**

**Date Received: 02/22/16 09:32**

**Lab Sample ID: 400-117870-1**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 1631E        |     |                 | 295621       | 02/23/16 13:30       | VLC     | TAL PEN |
| Total/NA  | Analysis   | 1631E        |     | 1               | 295729       | 03/01/16 11:33       | VLC     | TAL PEN |

**Client Sample ID: Blank**

**Date Collected: 02/18/16 13:00**

**Date Received: 02/22/16 09:32**

**Lab Sample ID: 400-117870-2**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 1631E        |     |                 | 295621       | 02/23/16 13:30       | VLC     | TAL PEN |
| Total/NA  | Analysis   | 1631E        |     | 1               | 295729       | 03/01/16 11:58       | VLC     | TAL PEN |

**Laboratory References:**

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

# Certification Summary

Client: Envirochem Laboratories  
Project/Site: 16B0372

TestAmerica Job ID: 400-117870-1

## Laboratory: TestAmerica Pensacola

The certifications listed below are applicable to this report.

| Authority | Program       | EPA Region | Certification ID | Expiration Date |
|-----------|---------------|------------|------------------|-----------------|
| Alabama   | State Program | 4          | 40150            | 01-31-16 *      |

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\* Certification renewal pending - certification considered valid.

# Method Summary

Client: Envirochem Laboratories  
Project/Site: 16B0372

TestAmerica Job ID: 400-117870-1

---

| Method | Method Description         | Protocol | Laboratory |
|--------|----------------------------|----------|------------|
| 1631E  | Mercury, Low Level (CVAFS) | EPA      | TAL PEN    |

---

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

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# Login Sample Receipt Checklist

Client: Envirochem Laboratories

Job Number: 400-117870-1

**Login Number: 117870**

**List Number: 1**

**Creator: Nou, Toum N**

**List Source: TestAmerica Pensacola**

| Question   | Answer | Comment       |
|--|--------|---------------|
| Radioactivity wasn't checked or is <=/ background as measured by a survey meter. | N/A    |               |
| The cooler's custody seal, if present, is intact.                                | True   |               |
| Sample custody seals, if present, are intact.                                    | N/A    |               |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |               |
| Samples were received on ice.  | False  |               |
| Cooler Temperature is acceptable.  | True   |               |
| Cooler Temperature is recorded.  | True   | 20.6°C # 5592 |
| COC is present.  | True   |               |
| COC is filled out in ink and legible.  | True   |               |
| COC is filled out with all pertinent information.                                | True   |               |
| Is the Field Sampler's name present on COC?                                      | True   |               |
| There are no discrepancies between the containers received and the COC.          | True   |               |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |               |
| Sample containers have legible labels.   | True   |               |
| Containers are not broken or leaking.  | True   |               |
| Sample collection date/times are provided.                                       | True   |               |
| Appropriate sample containers are used.  | True   |               |
| Sample bottles are completely filled.  | True   |               |
| Sample Preservation Verified.  | True   |               |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |               |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | True   |               |
| Multiphasic samples are not present.   | True   |               |
| Samples do not require splitting or compositing.                                 | True   |               |
| Residual Chlorine Checked.   | N/A    |               |



4320 Midmost Drive Mobile, Alabama 36609  
Phone (251) 344-9106 Fax (251) 341-9492

Report To: North Baldwin Utilities  
25 Hand Avenue  
Bay Minette  
Attention: James Dean

AL 36507

Project: North Baldwin Utilities  
Project Number: HSS WWTP LL Hg

Report Date: 3/16/2016 10:34:28AM

### ANALYTICAL REPORT

This report includes the results of analyses for sample(s) that were subcontracted to an approved laboratory. If you have any questions concerning this report, please feel free to call Susan Maynard at (251) 344-9106.

| Laboratory ID | SampleName | Date Sampled        | Matrix     |
|---------------|------------|---------------------|------------|
| 16B0474       | 01         | 2/25/2016 1:20:00PM | Wastewater |
| 16B0474       | Blank      | 2/25/2016 1:20:00PM | Wastewater |

*Susan Maynard*

Susan Maynard, Lab Director



*The test results in this report meet NELAP requirements for accredited parameters, unless otherwise noted, and relate only to the sample(s) received by this laboratory. This report must be reproduced in its entirety unless approved by the laboratory.*

*Results are reported on a "wet weight basis", unless otherwise noted.*

SERIAL NUMBER: 75716

# TestAmerica

ANALYSIS REQUEST AND  
CHAIN OF CUSTODY RECORD

TestAmerica Pensacola  
3355 McLemore Drive  
Pensacola, FL 32514

Phone: 850-474-1001  
Fax: 850-478-2671  
Website: www.testamericainc.com

THE LEADER IN ENVIRONMENTAL TESTING

Envirochem, Inc.

|           |                  |                                |
|-----------|------------------|--------------------------------|
| QUOTE NO. | BOTTLE ORDER NO. | ORDER - LOG-IN NO.<br><b>C</b> |
|-----------|------------------|--------------------------------|

|   |  |
|---|--|
| CLIENT<br><i>North Baldwin Utilities</i>      | ADDRESS<br><i>25 Hand Ave Bay Minette AL</i> |
| PROJECT NAME<br><i>HSS WWT</i>                | PROJECT NO.<br><i>16B0474.26</i>             |
| CLIENT PROJECT MANAGER<br><i>James W Dean</i> | PROJECT LOC. (STATE)<br><i>Alabama</i>       |

|   |   |
|---|---|
| SAMPLED BY<br><i>James W Dean</i>   | CONTRACT / P.O. NO.<br><i>NBU 16-388</i>          |
| CLIENT PHONE<br><i>251-580-1853</i>   | CLIENT E-MAIL OR FAX<br><i>jwheat@ecilabs.com</i> |
| TAT REQUESTED: RUSH NEEDS LAB PREAPPROVAL <input type="checkbox"/> NORMAL <input checked="" type="checkbox"/> 10 BUSINESS DAYS  |   |
| <input type="checkbox"/> 1 DAY <input type="checkbox"/> 2 DAYS <input type="checkbox"/> 3 DAYS <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 20 DAYS (Package) <input type="checkbox"/> OTHER: |   |
| SAMPLE DISPOSAL: <input type="checkbox"/> RETURN TO CLIENT <input type="checkbox"/> DISPOSAL BY LAB   |   |
| <input type="checkbox"/> SEE CONTRACT <input type="checkbox"/> OTHER:   |   |

| PRESERVATIVE    |                         |                    |                                |                         |                  |                            | MATRIX                      |        |                |                    |                             |                                 |
|-----------------|-------------------------|--------------------|--------------------------------|-------------------------|------------------|----------------------------|-----------------------------|--------|----------------|--------------------|-----------------------------|---------------------------------|
| No Preservative | HCl - Hydrochloric Acid | HNO3 - Nitric Acid | H2SO4 - Sulfuric Acid or H3PO4 | NaOH - Sodium Hydroxide | CH3OH - Methanol | NaH2SO4 - Sodium Bisulfate | Na2S2O3 - Sodium Trisulfate | Other: | Drinking Water | Aqueous GW, SW, WW | Soils, Semisolids, Sediment | NonAqueous (Oil, Solvent, etc.) |

|   |      |    |
|---|------|----|
| REQUESTED ANALYSIS                          | PAGE | OF |
|   |      |    |
| POSSIBLE HAZARD IDENTIFICATION              |      |    |
| <input type="checkbox"/> NON-HAZARD         |      |    |
| <input type="checkbox"/> FLAMMABLE          |      |    |
| <input type="checkbox"/> RADIOACTIVE        |      |    |
| <input type="checkbox"/> POISON B           |      |    |
| <input type="checkbox"/> UNKNOWN            |      |    |
| <input type="checkbox"/> OTHER:             |      |    |
| NO. OF COOLERS PER SHIPMENT:                |      |    |
| SPECIAL INSTRUCTIONS/ CONDITIONS OF RECEIPT |      |    |

| SAMPLE           |                | SAMPLE IDENTIFICATION | No Preservative | HCl - Hydrochloric Acid | HNO3 - Nitric Acid | H2SO4 - Sulfuric Acid or H3PO4 | NaOH - Sodium Hydroxide | CH3OH - Methanol | NaH2SO4 - Sodium Bisulfate | Na2S2O3 - Sodium Trisulfate | Other: | Drinking Water | Aqueous GW, SW, WW | Soils, Semisolids, Sediment | Air | NonAqueous (Oil, Solvent, etc.) | NUMBER OF CONTAINERS SUBMITTED |
|------------------|----------------|-----------------------|-----------------|-------------------------|--------------------|--------------------------------|-------------------------|------------------|----------------------------|-----------------------------|--------|----------------|--------------------|-----------------------------|-----|---------------------------------|--------------------------------|
| DATE             | TIME           |                       |                 |                         |                    |                                |                         |                  |                            |                             |        |                |                    |                             |     |                                 |                                |
| <i>2-25-2016</i> | <i>13:20pr</i> | <i>01</i>             |                 |                         |                    |                                |                         |                  |                            |                             |        |                |                    |                             |     |                                 |                                |
| <i>2-25-2016</i> | <i>13:20pr</i> | <i>Blank</i>          |                 |                         |                    |                                |                         |                  |                            |                             |        |                |                    |                             |     |                                 |                                |

|   |                          |                        |   |                          |                        |   |                          |                      |
|---|--------------------------|------------------------|---|--------------------------|------------------------|---|--------------------------|----------------------|
| RELINQUISHED BY: (SIGNATURE)<br><i>James W Dean</i> | DATE<br><i>2-25-2016</i> | TIME<br><i>13:30pr</i> | RELINQUISHED BY: (SIGNATURE)<br><i>James W Dean</i> | DATE<br><i>2-25-2016</i> | TIME<br><i>13:30pr</i> | RELINQUISHED BY: (SIGNATURE)<br><i>James W Dean</i> | DATE<br><i>2-25-2016</i> | TIME<br><i>14:30</i> |
| RECEIVED BY: (SIGNATURE)<br><i>James W Dean</i>     | DATE<br><i>2-25-2016</i> | TIME<br><i>13:30pr</i> | RECEIVED BY: (SIGNATURE)<br><i>James W Dean</i>     | DATE<br><i>2-25-2016</i> | TIME<br><i>13:30pr</i> | RECEIVED BY: (SIGNATURE)<br><i>James W Dean</i>     | DATE<br><i>2-25-2016</i> | TIME<br><i>14:30</i> |

|                             |      |      |   |                  |          |
|-----------------------------|------|------|---|------------------|----------|
| RECEIVED FOR LABORATORY BY: | DATE | TIME | CUSTODY INTACT?<br><input type="checkbox"/> YES <input type="checkbox"/> NO | CUSTODY SEAL NO. | REMARKS: |
|-----------------------------|------|------|---|------------------|----------|

LAB USE ONLY - SAMPLE NUMBER

Sample Receipt / Integrity Checklist

Client NBU Date 02.25.14 Field Courier Client  
 Work Order 10B0474 Sample Custodian sq

Sample coolers and containers

Custody seals on coolers or shipping containers intact? ..... Yes  No  n/a   
 Outside of coolers or shipping containers are free from damage? ..... Yes  No  n/a   
 All expected paperwork received (COC & other client specific information)? ..... Yes  No  n/a   
 Are sample containers intact? ..... Yes  No  n/a   
 Are samples in proper containers? ..... Yes  No  n/a   
 Is adequate sample volume present to perform the requested analyses? ..... Yes  No  n/a   
 Are volatile samples free of headspace (bubbles less than 6 mm in diameter)? ..... Yes  No  n/a

Thermal and Chemical Preservation

Samples received cooled? ..... Yes  No  n/a   
 Type of cooling/temp? ..... Wet Ice  Blue Ice  n/a  Temp. 19.2°C  
 Temperature blank present? ..... Yes  No  n/a   
 If no cooling present, were samples received within 1 hour of collection? ..... Yes  No  n/a   
 Is the correct chemical preservative used for all samples? ..... Yes  No  n/a   
 Is the pH range correct for chemically preserved samples checked at login? ..... Yes  No  n/a   
 List samples checked for chemical preservation at bench ..... O&G  Metals  VOCs  Other

Chain of Custody

Is COC filled out completely? ..... Yes  No  n/a   
 Is COC properly relinquished (signed and dated)? ..... Yes  No  n/a   
 Are any samples missing on COC or from cooler? ..... Yes  No  n/a   
 Do sample containers match COC? ..... Yes  No  n/a

Holding Times

Are samples received within hold time? ..... Yes  No  n/a   
 Were short hold time or rush samples taken to appropriate department? ..... Yes  No  n/a   
 If no, was responsible analyst and/or dept. manager notified? ..... Yes  No  n/a

Does work order meet EnviroChem sample acceptance criteria? ..... Yes  No  n/a   
 Note: Samples that do not meet acceptance criteria must be documented in the Sample Rejection Log

Field Comments

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Login Comments

\_\_\_\_\_  
 \_\_\_\_\_  
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 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Client Contacted \_\_\_\_\_ Contacted By \_\_\_\_\_ Date/Time \_\_\_\_\_

Client Instructions ..... Cancel Work order \_\_\_\_\_ Proceed with work order \_\_\_\_\_ (Data will be qualified)

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Pensacola  
3355 McLemore Drive  
Pensacola, FL 32514  
Tel: (850)474-1001

TestAmerica Job ID: 400-118182-1  
Client Project/Site: 16B0474

For:  
Envirochem Laboratories  
4320 Midmost Drive  
Mobile, Alabama 36609

Attn: Jenny Wheat



Authorized for release by:  
3/8/2016 4:11:19 PM

Mark Swafford, Project Manager I  
(850)474-1001  
[mark.swafford@testamericainc.com](mailto:mark.swafford@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://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: Envirochem Laboratories  
Project/Site: 16B0474

TestAmerica Job ID: 400-118182-1

## Glossary

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

# Sample Summary

Client: Envirochem Laboratories  
Project/Site: 16B0474

TestAmerica Job ID: 400-118182-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 400-118182-1  | 01               | Water  | 02/25/16 13:20 | 02/29/16 16:35 |
| 400-118182-2  | Blank            | Water  | 02/25/16 13:20 | 02/29/16 16:35 |

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# Client Sample Results

Client: Envirochem Laboratories  
Project/Site: 16B0474

TestAmerica Job ID: 400-118182-1

**Client Sample ID: 01**

**Date Collected: 02/25/16 13:20**

**Date Received: 02/29/16 16:35**

**Lab Sample ID: 400-118182-1**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

| Analyte | Result  | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|---------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | 0.00098 |           | 0.00050 | 0.00020 | ug/L |   | 03/02/16 11:00 | 03/08/16 13:34 | 1       |

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# Client Sample Results

Client: Envirochem Laboratories  
Project/Site: 16B0474

TestAmerica Job ID: 400-118182-1

**Client Sample ID: Blank**  
**Date Collected: 02/25/16 13:20**  
**Date Received: 02/29/16 16:35**

**Lab Sample ID: 400-118182-2**  
**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

| Analyte | Result   | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 |           | 0.00050 | 0.00020 | ug/L |   | 03/02/16 11:00 | 03/08/16 13:42 | 1       |

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# Lab Chronicle

Client: Envirochem Laboratories  
Project/Site: 16B0474

TestAmerica Job ID: 400-118182-1

**Client Sample ID: 01**

**Date Collected: 02/25/16 13:20**

**Date Received: 02/29/16 16:35**

**Lab Sample ID: 400-118182-1**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 1631E        |     |                 | 296551       | 03/02/16 11:00       | VLC     | TAL PEN |
| Total/NA  | Analysis   | 1631E        |     | 1               | 296665       | 03/08/16 13:34       | VLC     | TAL PEN |

**Client Sample ID: Blank**

**Date Collected: 02/25/16 13:20**

**Date Received: 02/29/16 16:35**

**Lab Sample ID: 400-118182-2**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 1631E        |     |                 | 296551       | 03/02/16 11:00       | VLC     | TAL PEN |
| Total/NA  | Analysis   | 1631E        |     | 1               | 296665       | 03/08/16 13:42       | VLC     | TAL PEN |

## Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

# Certification Summary

Client: Envirochem Laboratories  
Project/Site: 16B0474

TestAmerica Job ID: 400-118182-1

## Laboratory: TestAmerica Pensacola

The certifications listed below are applicable to this report.

| Authority | Program       | EPA Region | Certification ID | Expiration Date |
|-----------|---------------|------------|------------------|-----------------|
| Alabama   | State Program | 4          | 40150            | 01-31-16 *      |

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\* Certification renewal pending - certification considered valid.

# Method Summary

Client: Envirochem Laboratories  
Project/Site: 16B0474

TestAmerica Job ID: 400-118182-1

---

| Method | Method Description         | Protocol | Laboratory |
|--------|----------------------------|----------|------------|
| 1631E  | Mercury, Low Level (CVAFS) | EPA      | TAL PEN    |

---

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001



# Login Sample Receipt Checklist

Client: Envirochem Laboratories

Job Number: 400-118182-1

**Login Number: 118182**

**List Number: 1**

**Creator: Cai, Meiyun Y**

**List Source: TestAmerica Pensacola**

| Question   | Answer | Comment     |
|--|--------|-------------|
| Radioactivity wasn't checked or is <=/ background as measured by a survey meter. | True   |             |
| The cooler's custody seal, if present, is intact.                                | True   |             |
| Sample custody seals, if present, are intact.                                    | True   |             |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |             |
| Samples were received on ice.  | False  |             |
| Cooler Temperature is acceptable.  | True   |             |
| Cooler Temperature is recorded.  | True   | 22.2°C 5592 |
| COC is present.  | True   |             |
| COC is filled out in ink and legible.  | True   |             |
| COC is filled out with all pertinent information.                                | True   |             |
| Is the Field Sampler's name present on COC?                                      | True   |             |
| There are no discrepancies between the containers received and the COC.          | True   |             |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |             |
| Sample containers have legible labels.   | True   |             |
| Containers are not broken or leaking.  | True   |             |
| Sample collection date/times are provided.                                       | True   |             |
| Appropriate sample containers are used.  | True   |             |
| Sample bottles are completely filled.  | True   |             |
| Sample Preservation Verified.  | True   |             |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |             |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |             |
| Multiphasic samples are not present.   | True   |             |
| Samples do not require splitting or compositing.                                 | True   |             |
| Residual Chlorine Checked.   | N/A    |             |



4320 Midmost Drive Mobile, Alabama 36609  
Phone (251) 344-9106 Fax (251) 341-9492

Report To: North Baldwin Utilities  
25 Hand Avenue  
Bay Minette  
Attention: James Dean

AL 36507

Project: North Baldwin Utilities  
Project Number: [none]

Report Date: 3/23/2016 2:16:52PM

### ANALYTICAL REPORT

This report includes the results of analyses for sample(s) that were subcontracted to an approved laboratory. If you have any questions concerning this report, please feel free to call Susan Maynard at (251) 344-9106.

| Laboratory ID | SampleName | Date Sampled       | Matrix     |
|---------------|------------|--------------------|------------|
| 16C0156       | 01         | 3/8/2016 1:00:00PM | Wastewater |
| 16C0156       | Blank      | 3/8/2016 1:00:00PM | Wastewater |

*Susan Maynard*

Susan Maynard, Lab Director



*The test results in this report meet NELAP requirements for accredited parameters, unless otherwise noted, and relate only to the sample(s) received by this laboratory. This report must be reproduced in its entirety unless approved by the laboratory.*

*Results are reported on a "wet weight basis", unless otherwise noted.*



Sample Receipt / Integrity Checklist

Client NRV Date 03.08.16 Field Courier Christ  
 Work Order 1000154 Sample Custodian ag

Sample coolers and containers

Custody seals on coolers or shipping containers intact? ..... Yes        No        n/a ✓  
 Outside of coolers or shipping containers are free from damage? ..... Yes ✓ No        n/a         
 All expected paperwork received (COC & other client specific information)? ..... Yes ✓ No        n/a         
 Are sample containers intact? ..... Yes ✓ No        n/a         
 Are samples in proper containers? ..... Yes ✓ No        n/a         
 Is adequate sample volume present to perform the requested analyses? ..... Yes ✓ No        n/a         
 Are volatile samples free of headspace (bubbles less than 6 mm in diameter)? ..... Yes        No        n/a ✓

Thermal and Chemical Preservation

Samples received cooled? ..... Yes ✓ No        n/a         
 Type of cooling/temp? ..... Wet Ice ✓ Blue Ice        n/a        Temp. 22°C  
 Temperature blank present? ..... Yes        No ✓ n/a         
 If no cooling present, were samples received within 1 hour of collection? ..... Yes        No ✓ n/a ✓  
 Is the correct chemical preservative used for all samples? ..... Yes        No        n/a ✓  
 Is the pH range correct for chemically preserved samples checked at login? ..... Yes        No        n/a ✓  
 List samples checked for chemical preservation at bench ..... O&G        Metals        VOCs        Other       

Chain of Custody

Is COC filled out completely? ..... Yes ✓ No        n/a         
 Is COC properly relinquished (signed and dated)? ..... Yes ✓ No        n/a         
 Are any samples missing on COC or from cooler? ..... Yes ✓ No ✓ n/a         
 Do sample containers match COC? ..... Yes ✓ No        n/a       

Holding Times

Are samples received within hold time? ..... Yes ✓ No        n/a         
 Were short hold time or rush samples taken to appropriate department? ..... Yes ✓ No        n/a         
 If no, was responsible analyst and/or dept. manager notified? ..... Yes        No        n/a ✓

Does work order meet EnviroChem sample acceptance criteria? ..... Yes ✓ No        n/a         
 Note: Samples that do not meet acceptance criteria must be documented in the Sample Rejection Log

Field Comments \_\_\_\_\_

Login Comments \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Client Contacted \_\_\_\_\_ Contacted By \_\_\_\_\_ Date/Time \_\_\_\_\_

Client Instructions ..... Cancel Work order \_\_\_\_\_ Proceed with work order \_\_\_\_\_ (Data will be qualified)

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Pensacola  
3355 McLemore Drive  
Pensacola, FL 32514  
Tel: (850)474-1001

TestAmerica Job ID: 400-118525-1  
Client Project/Site: 16C0156

For:  
Envirochem Laboratories  
4320 Midmost Drive  
Mobile, Alabama 36609

Attn: Jenny Wheat



Authorized for release by:  
3/16/2016 4:42:22 PM

Mark Swafford, Project Manager I  
(850)474-1001  
[mark.swafford@testamericainc.com](mailto:mark.swafford@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://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: Envirochem Laboratories  
Project/Site: 16C0156

TestAmerica Job ID: 400-118525-1

## Glossary

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

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# Sample Summary

Client: Envirochem Laboratories  
Project/Site: 16C0156

TestAmerica Job ID: 400-118525-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 400-118525-1  | 01               | Water  | 03/08/16 13:00 | 03/09/16 08:10 |
| 400-118525-2  | BLANK            | Water  | 03/08/16 13:00 | 03/09/16 08:10 |

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# Client Sample Results

Client: Envirochem Laboratories  
Project/Site: 16C0156

TestAmerica Job ID: 400-118525-1

**Client Sample ID: 01**

**Date Collected: 03/08/16 13:00**

**Date Received: 03/09/16 08:10**

**Lab Sample ID: 400-118525-1**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

| Analyte | Result  | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|---------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | 0.00096 |           | 0.00050 | 0.00020 | ug/L |   | 03/10/16 11:30 | 03/16/16 13:55 | 1       |

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# Client Sample Results

Client: Envirochem Laboratories  
Project/Site: 16C0156

TestAmerica Job ID: 400-118525-1

**Client Sample ID: BLANK**  
**Date Collected: 03/08/16 13:00**  
**Date Received: 03/09/16 08:10**

**Lab Sample ID: 400-118525-2**  
**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

| Analyte | Result   | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 |           | 0.00050 | 0.00020 | ug/L |   | 03/10/16 11:30 | 03/16/16 14:21 | 1       |

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# Lab Chronicle

Client: Envirochem Laboratories  
Project/Site: 16C0156

TestAmerica Job ID: 400-118525-1

**Client Sample ID: 01**

**Date Collected: 03/08/16 13:00**

**Date Received: 03/09/16 08:10**

**Lab Sample ID: 400-118525-1**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 1631E        |     |                 | 297541       | 03/10/16 11:30       | VLC     | TAL PEN |
| Total/NA  | Analysis   | 1631E        |     | 1               | 297637       | 03/16/16 13:55       | VLC     | TAL PEN |

**Client Sample ID: BLANK**

**Date Collected: 03/08/16 13:00**

**Date Received: 03/09/16 08:10**

**Lab Sample ID: 400-118525-2**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 1631E        |     |                 | 297541       | 03/10/16 11:30       | VLC     | TAL PEN |
| Total/NA  | Analysis   | 1631E        |     | 1               | 297637       | 03/16/16 14:21       | VLC     | TAL PEN |

## Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

# Certification Summary

Client: Envirochem Laboratories  
Project/Site: 16C0156

TestAmerica Job ID: 400-118525-1

## Laboratory: TestAmerica Pensacola

The certifications listed below are applicable to this report.

| Authority | Program       | EPA Region | Certification ID | Expiration Date |
|-----------|---------------|------------|------------------|-----------------|
| Alabama   | State Program | 4          | 40150            | 01-31-16 *      |

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\* Certification renewal pending - certification considered valid.

# Method Summary

Client: Envirochem Laboratories  
Project/Site: 16C0156

TestAmerica Job ID: 400-118525-1

---

| Method | Method Description         | Protocol | Laboratory |
|--------|----------------------------|----------|------------|
| 1631E  | Mercury, Low Level (CVAFS) | EPA      | TAL PEN    |

---

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

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# Login Sample Receipt Checklist

Client: Envirochem Laboratories

Job Number: 400-118525-1

**Login Number: 118525**  
**List Number: 1**  
**Creator: Phan, Julia D**

**List Source: TestAmerica Pensacola**

| Question   | Answer | Comment                                 |
|--|--------|---|
| Radioactivity wasn't checked or is <=/ background as measured by a survey meter. | N/A    |   |
| The cooler's custody seal, if present, is intact.                                | True   |   |
| Sample custody seals, if present, are intact.                                    | N/A    |   |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |   |
| Samples were received on ice.  | True   |   |
| Cooler Temperature is acceptable.  | True   |   |
| Cooler Temperature is recorded.  | True   | 20.8°C # 5592                           |
| COC is present.  | True   |   |
| COC is filled out in ink and legible.  | True   |   |
| COC is filled out with all pertinent information.                                | False  | There is no analyses listed on the COC. |
| Is the Field Sampler's name present on COC?                                      | True   |   |
| There are no discrepancies between the containers received and the COC.          | True   |   |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |   |
| Sample containers have legible labels.   | True   |   |
| Containers are not broken or leaking.  | True   |   |
| Sample collection date/times are provided.                                       | True   |   |
| Appropriate sample containers are used.  | True   |   |
| Sample bottles are completely filled.  | True   |   |
| Sample Preservation Verified.  | True   |   |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |   |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |   |
| Multiphasic samples are not present.   | True   |   |
| Samples do not require splitting or compositing.                                 | True   |   |
| Residual Chlorine Checked.   | N/A    |   |





4320 Midmost Drive Mobile, Alabama 36609  
Phone (251) 344-9106 Fax (251) 341-9492

Report Date: 07/17/15 15:06

Report To: North Baldwin Utilities  
25 Hand Avenue  
Bay Minette, AL 36507  
Attention: James Dean

Project: NPDES-Permit Form 2A- Pollutant Scan  
Project Number: NPDES-Permit Form 2A- Pollutant Scan

### ANALYTICAL REPORT

This report includes the results of analyses for the samples listed below that were received by the laboratory on 06/30/15 12:40. If you have any questions concerning this report, please feel free to call Susan Maynard at (251) 344-9106.

| Sample ID            | Laboratory ID | Matrix     | Date Sampled   | Date Received  |
|----------------------|---------------|------------|----------------|----------------|
| Harry Still Effluent | 15F0481-01    | Wastewater | 06/30/15 10:00 | 06/30/15 12:40 |

Susan Maynard, Lab Director



*The test results in this report meet NELAP requirements for accredited parameters, unless otherwise noted, and relate only to the sample(s) received by this laboratory. This report must be reproduced in its entirety unless approved by the laboratory.*

*Results are reported on a "wet weight basis", unless otherwise noted.*

Report Date: 07/17/15 15:06

Sample Name: Harry Still Effluent

Sample Type: Grab

Sample Date: 06/30/15 10:00

Date Received: 06/30/15 12:40

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result      | Units | Reporting |         |                | Analyzed       | Method        | Batch   | Lab Number | Qualifier |
|---|-------------|-------|-----------|---------|----------------|----------------|---------------|---------|------------|-----------|
|   |             |       | Limit     | Analyst | Prepared       |                |               |         |            |           |
| <b><u>Metals by EPA 200 Series Methods</u></b>                  |             |       |           |         |                |                |               |         |            |           |
| Antimony  | < 0.0060    | mg/L  | 0.0060    | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| Arsenic   | < 0.010     | mg/L  | 0.010     | ENC     | 07/07/15 17:09 | 07/08/15 22:47 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| Beryllium   | < 0.002     | mg/L  | 0.002     | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| Cadmium   | < 0.005     | mg/L  | 0.005     | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| <b>Calcium</b>  | <b>34.3</b> | mg/L  | 0.5       | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 |           |
| Chromium  | < 0.05      | mg/L  | 0.05      | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| Copper  | < 0.01      | mg/L  | 0.01      | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| Lead  | < 0.005     | mg/L  | 0.005     | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| <b>Magnesium</b>  | <b>2.07</b> | mg/L  | 0.20      | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 |           |
| Nickel  | < 0.05      | mg/L  | 0.05      | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| Selenium  | < 0.02      | mg/L  | 0.02      | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| Silver  | < 0.01      | mg/L  | 0.01      | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| Thallium  | < 0.002     | mg/L  | 0.002     | ENC     | 07/07/15 17:09 | 07/07/15 20:55 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| Zinc  | < 0.10      | mg/L  | 0.10      | ENC     | 07/07/15 17:09 | 07/08/15 22:47 | EPA 200.8     | 5G07032 | 15F0481-01 | U         |
| <b><u>Metals by EPA 6000/7000 Series Methods</u></b>            |             |       |           |         |                |                |               |         |            |           |
| Mercury   | < 0.0005    | mg/L  | 0.0005    | ENC     | 07/08/15 14:28 | 07/08/15 16:18 | EPA 7470A     | 5G08015 | 15F0481-01 | U         |
| <b><u>Classical Chemistry Parameters</u></b>                    |             |       |           |         |                |                |               |         |            |           |
| Cyanide (Total)   | < 0.02      | mg/L  | 0.02      | SAB     | 07/01/15 11:30 | 07/07/15 15:50 | 10-204-00-1-X | 5G01008 | 15F0481-01 | U         |
| Oil & Grease  | < 2         | mg/L  | 2         | TGH     | 07/07/15 09:29 | 07/10/15 08:45 | EPA 1664      | 5G07005 | 15F0481-01 | U         |
| Phenol  | < 0.10      | mg/L  | 0.10      | SAB     | 07/08/15 10:00 | 07/08/15 15:39 | EPA 420.4     | 5G08007 | 15F0481-01 | U         |
| <b>Total Dissolved Solids</b>                                   | <b>234</b>  | mg/L  | 5         | NG      | 07/07/15 15:04 | 07/08/15 14:50 | SM 2540C      | 5G07007 | 15F0481-01 | Q1        |
| <b>Total Hardness</b>   | <b>94.2</b> | mg/L  | 0.5       | SAB     | 07/09/15 15:35 | 07/09/15 15:35 | SM 2340 B     | 5G09024 | 15F0481-01 |           |
| <b><u>Semivolatile Organic Compounds by EPA Method 8270</u></b> |             |       |           |         |                |                |               |         |            |           |
| 1,2,4-Trichlorobenzene  | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 1,2-Dichlorobenzene   | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 1,3-Dichlorobenzene   | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 1,4-Dichlorobenzene   | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 2,4,6-Trichlorophenol   | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 2,4-Dichlorophenol  | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 2,4-Dimethylphenol  | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 2,4-Dinitrophenol   | < 10        | ug/L  | 10        | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 2,4-Dinitrotoluene  | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 2,6-Dinitrotoluene  | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 2-Chloronaphthalene   | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 2-Chlorophenol  | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 2-Nitrophenol   | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 3,3'-Dichlorobenzidine  | < 10        | ug/L  | 10        | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |
| 4,6-Dinitro-o-cresol  | < 5         | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D     | 5G06004 | 15F0481-01 | U         |



The test results in this report meet NELAP requirements for accredited parameters, unless otherwise noted, and relate only to the sample(s) received by this laboratory. This report must be reproduced in its entirety unless approved by the laboratory.

Results are reported on a "wet weight basis", unless otherwise noted.

Report Date: 07/17/15 15:06

Sample Name: Harry Still Effluent

Sample Type: Grab

Sample Date: 06/30/15 10:00

Date Received: 06/30/15 12:40

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result | Units | Reporting |         |                |                |           |         |            |           |
|---|--------|-------|-----------|---------|----------------|----------------|-----------|---------|------------|-----------|
|   |        |       | Limit     | Analyst | Prepared       | Analyzed       | Method    | Batch   | Lab Number | Qualifier |
| <b><u>Semivolatile Organic Compounds by EPA Method 8270</u></b> |        |       |           |         |                |                |           |         |            |           |
| 4-Bromophenyl phenyl ether                                      | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| 4-Chlorophenyl phenyl ether                                     | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| 4-Nitrophenol   | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Acenaphthene  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Acenaphthylene  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Anthracene  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Azobenzene<br>(1,2-diphenylhydrazine)                           | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Benzidine   | < 15   | ug/L  | 15        | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Benzo(a)anthracene  | < 1    | ug/L  | 1         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Benzo(a)pyrene  | < 0.2  | ug/L  | 0.2       | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Benzo(b)fluoranthene  | < 1    | ug/L  | 1         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Benzo(ghi)perylene  | < 0.5  | ug/L  | 0.5       | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Benzo(k)fluoranthene  | < 0.5  | ug/L  | 0.5       | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Benzyl butyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Bis(2-chloroethoxy)methane                                      | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Bis(2-chloroethyl)ether   | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Bis(2-chloroisopropyl) ether                                    | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Bis(2-ethylhexyl) phthalate                                     | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Chrysene  | < 1    | ug/L  | 1         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Dibenzo(a,h)anthracene  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Diethyl phthalate   | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Dimethyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Di-n-butyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Di-n-octyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Fluoranthene  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Fluorene  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Hexachlorobenzene   | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Hexachlorobutadiene   | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Hexachlorocyclopentadiene                                       | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Hexachloroethane  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Indeno (1,2,3-cd) pyrene  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Isophorone  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Naphthalene   | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Nitrobenzene  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| N-Nitrosodimethylamine  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| N-Nitrosodi-n-propylamine                                       | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| N-Nitrosodiphenylamine  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| p-Chloro-m-cresol   | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |
| Pentachlorophenol   | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004 | 15F0481-01 | U         |



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Results are reported on a "wet weight basis", unless otherwise noted.

Report Date: 07/17/15 15:06

Sample Name: Harry Still Effluent

Sample Type: Grab

Sample Date: 06/30/15 10:00

Date Received: 06/30/15 12:40

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result | Units | Reporting |         |                | Method         | Batch     | Lab Number | Qualifier  |          |
|---|--------|-------|-----------|---------|----------------|----------------|-----------|------------|------------|----------|
|   |        |       | Limit     | Analyst | Prepared       |                |           |            |            | Analyzed |
| <b><u>Semivolatile Organic Compounds by EPA Method 8270</u></b> |        |       |           |         |                |                |           |            |            |          |
| Phenanthrene  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004    | 15F0481-01 | U        |
| Phenol  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004    | 15F0481-01 | U        |
| Pyrene  | < 5    | ug/L  | 5         | JAB     | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004    | 15F0481-01 | U        |
| Surrogate: 2,4,6-Tribromophenol                                 | 83 %   |       | 21-121    |         | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004    |            |          |
| Surrogate: 2-Fluorobiphenyl                                     | 64 %   |       | 12-120    |         | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004    |            |          |
| Surrogate: 2-Fluorophenol                                       | 47 %   |       | 10-120    |         | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004    |            |          |
| Surrogate: Nitrobenzene-d5                                      | 77 %   |       | 12-128    |         | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004    |            |          |
| Surrogate: Phenol-d5  | 26 %   |       | 10-120    |         | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004    |            |          |
| Surrogate: p-Terphenyl-d14                                      | 82 %   |       | 11-158    |         | 07/06/15 10:59 | 07/09/15 18:59 | EPA 8270D | 5G06004    |            |          |
| <b><u>Volatile Organic Compounds by EPA Method 8260</u></b>     |        |       |           |         |                |                |           |            |            |          |
| 1,1,1,2-Tetrachloroethane                                       | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,1,1-Trichloroethane   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,1,2,2-Tetrachloroethane                                       | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,1,2-Trichloroethane   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,1-Dichloroethane  | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,1-Dichloroethene  | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,1-Dichloroethylene  | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,1-Dichloropropene   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,2,3-Trichlorobenzene  | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,2,3-Trichloropropane  | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,2,4-Trichlorobenzene  | < 10   | ug/L  | 10        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,2,4-Trimethylbenzene  | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,2-Dibromo-3-chloropropane                                     | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,2-Dibromoethane   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,2-Dichlorobenzene   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,2-Dichloroethane  | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,2-Dichloropropane   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,3,5-Trimethylbenzene  | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,3-Dichlorobenzene   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,3-Dichloropropane   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 1,4-Dichlorobenzene   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 2,2-Dichloropropane   | < 10   | ug/L  | 10        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 2-Butanone  | < 25   | ug/L  | 25        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 2-Chloroethyl vinyl ether                                       | < 25   | ug/L  | 25        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 2-Chlorotoluene   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 2-Hexanone  | < 25   | ug/L  | 25        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 4-Chlorotoluene   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 4-Isopropyltoluene  | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| 4-Methyl-2-pentanone  | < 25   | ug/L  | 25        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |
| Acetone   | < 25   | ug/L  | 25        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260  | 5G07008    | 15F0481-01 | U        |



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Results are reported on a "wet weight basis", unless otherwise noted.

Report Date: 07/17/15 15:06

Sample Name: Harry Still Effluent

Sample Type: Grab

Sample Date: 06/30/15 10:00

Date Received: 06/30/15 12:40

Sampled by: Client

Matrix: Wastewater

| Analyte  | Result   | Units | Reporting |         |                |                | Method   | Batch   | Lab Number | Qualifier |
|--|----------|-------|-----------|---------|----------------|----------------|----------|---------|------------|-----------|
|  |          |       | Limit     | Analyst | Prepared       | Analyzed       |          |         |            |           |
| <b>Volatile Organic Compounds by EPA Method 8260</b> |          |       |           |         |                |                |          |         |            |           |
| Acrolein   | < 50     | ug/L  | 50        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Acrylonitrile  | < 20     | ug/L  | 20        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Benzene  | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Bromobenzene   | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Bromochloromethane                                   | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Bromodichloromethane                                 | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Bromoform  | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Bromomethane   | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Carbon disulfide                                     | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Carbon Tetrachloride                                 | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Chlorobenzene  | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Chlorodibromomethane                                 | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Chloroethane   | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| <b>Chloroform</b>                                    | <b>5</b> | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 |           |
| Chloromethane  | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| cis-1,2-Dichloroethene                               | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| cis-1,3-Dichloropropene                              | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Dibromomethane                                       | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Dichlorobromomethane                                 | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Dichlorodifluoromethane                              | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Ethylbenzene   | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Hexachlorobutadiene                                  | < 10     | ug/L  | 10        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Iodomethane  | < 10     | ug/L  | 10        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Isopropylbenzene                                     | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| m,p-Xylene   | < 10     | ug/L  | 10        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Methyl Bromide                                       | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Methyl Chloride                                      | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Methyl t-Butyl Ether                                 | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Methylene Chloride                                   | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Naphthalene  | < 10     | ug/L  | 10        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| n-Butylbenzene                                       | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| n-Propylbenzene                                      | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| o-Xylene   | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| sec-Butylbenzene                                     | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Styrene  | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| tert-Butylbenzene                                    | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Tetrachloroethene                                    | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Tetrachloroethylene                                  | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Toluene  | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| trans-1,2-Dichloroethene                             | < 5      | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |



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Report Date: 07/17/15 15:06

Sample Name: Harry Still Effluent

Sample Type: Grab

Sample Date: 06/30/15 10:00

Date Received: 06/30/15 12:40

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result | Units | Reporting |         |                | Analyzed       | Method   | Batch   | Lab Number | Qualifier |
|---|--------|-------|-----------|---------|----------------|----------------|----------|---------|------------|-----------|
|   |        |       | Limit     | Analyst | Prepared       |                |          |         |            |           |
| <b><u>Volatile Organic Compounds by EPA Method 8260</u></b> |        |       |           |         |                |                |          |         |            |           |
| trans-1,2-Dichloroethylene                                  | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| trans-1,3-Dichloropropene                                   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| trans-1,4-Dichloro-2-butene                                 | < 10   | ug/L  | 10        | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Trichloroethene   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Trichloroethylene   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Trichlorofluoromethane                                      | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Vinyl acetate   | < 5    | ug/L  | 5         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Vinyl chloride  | < 2    | ug/L  | 2         | GEM     | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 | 15F0481-01 | U         |
| Surrogate: 4-Bromofluorobenzene                             | 96 %   |       | 70-130    |         | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 |            |           |
| Surrogate: Dibromofluoromethane                             | 98 %   |       | 60-140    |         | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 |            |           |
| Surrogate: Toluene-d8                                       | 99 %   |       | 70-130    |         | 07/02/15 17:00 | 07/03/15 00:26 | EPA 8260 | 5G07008 |            |           |



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## CASE NARRATIVE

The results presented in this report relate only to the sample(s) received on 06/30/15 12:40 for North Baldwin Utilities -

| <u>Laboratory ID</u> | <u>Sample Name</u>   |
|----------------------|----------------------|
| 15F0481-01           | Harry Still Effluent |

. If you have any questions concerning this report, please contact Susan Maynard at (251) 344-9106.

### Sample Receipt

Sample receipt information, including documentation of any deviation(s) from sample receiving quality control acceptance criteria, is provided on attachments to the report including the Sample Receipt Checklist, Chain of Custody, and/or Field Data Sheet.

### Comments

No additional comments.

### Explanation of qualified data in this report:

- U The compound was analyzed for but not detected.
- SPK L The % Recovery for this spiked analyte was below the established control limit.
- SPK H The % Recovery for this spiked analyte was above the established control limit.
- RPD The RPD for this duplicate exceeded the established control limit.
- Q1 At the time of receipt or request for analysis, the hold time had been exceeded.
- MS The RPD and/or % Recovery for this matrix spike cannot be accurately calculated due to matrix interference.



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**Metals by EPA 200 Series Methods - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G07032 - EPA 200.8**

**Blank (5G07032-BLK1)**

Prepared & Analyzed: 07/07/15

|           |        |      |    |  |  |  |  |  |  |   |
|-----------|--------|------|----|--|--|--|--|--|--|---|
| Silver    | 0.01   | mg/L | ND |  |  |  |  |  |  | U |
| Arsenic   | 0.010  | "    | ND |  |  |  |  |  |  | U |
| Beryllium | 0.001  | "    | ND |  |  |  |  |  |  | U |
| Calcium   | 0.5    | "    | ND |  |  |  |  |  |  | U |
| Cadmium   | 0.005  | "    | ND |  |  |  |  |  |  | U |
| Chromium  | 0.05   | "    | ND |  |  |  |  |  |  | U |
| Copper    | 0.01   | "    | ND |  |  |  |  |  |  | U |
| Magnesium | 0.10   | "    | ND |  |  |  |  |  |  | U |
| Nickel    | 0.05   | "    | ND |  |  |  |  |  |  | U |
| Lead      | 0.005  | "    | ND |  |  |  |  |  |  | U |
| Antimony  | 0.0060 | "    | ND |  |  |  |  |  |  | U |
| Selenium  | 0.02   | "    | ND |  |  |  |  |  |  | U |
| Thallium  | 0.002  | "    | ND |  |  |  |  |  |  | U |
| Zinc      | 0.10   | "    | ND |  |  |  |  |  |  | U |

**LCS (5G07032-BS1)**

Prepared & Analyzed: 07/07/15

|           |        |      |       |       |  |     |        |  |  |       |
|-----------|--------|------|-------|-------|--|-----|--------|--|--|-------|
| Silver    | 0.01   | mg/L | 0.10  | 0.100 |  | 98  | 85-115 |  |  |       |
| Arsenic   | 0.010  | "    | 0.101 | 0.100 |  | 101 | 85-115 |  |  |       |
| Beryllium | 0.001  | "    | 0.102 | 0.100 |  | 102 | 85-115 |  |  |       |
| Calcium   | 0.5    | "    | 5.2   | 5.00  |  | 105 | 85-115 |  |  |       |
| Cadmium   | 0.005  | "    | 0.106 | 0.100 |  | 106 | 85-115 |  |  |       |
| Chromium  | 0.05   | "    | 0.10  | 0.100 |  | 105 | 85-115 |  |  |       |
| Copper    | 0.01   | "    | 0.11  | 0.100 |  | 106 | 85-115 |  |  |       |
| Magnesium | 0.10   | "    | 5.31  | 5.00  |  | 106 | 85-115 |  |  |       |
| Nickel    | 0.05   | "    | 0.11  | 0.100 |  | 107 | 85-115 |  |  |       |
| Lead      | 0.005  | "    | 0.108 | 0.100 |  | 108 | 85-115 |  |  |       |
| Antimony  | 0.0060 | "    | 0.12  | 0.100 |  | 119 | 85-115 |  |  | SPK H |
| Selenium  | 0.02   | "    | 0.10  | 0.100 |  | 101 | 85-115 |  |  |       |
| Thallium  | 0.002  | "    | 0.11  | 0.100 |  | 108 | 85-115 |  |  |       |
| Zinc      | 0.10   | "    | 0.10  | 0.100 |  | 96  | 85-115 |  |  | U     |



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**Metals by EPA 200 Series Methods - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G07032 - EPA 200.8**

**LCS Dup (5G07032-BSD1)**

Prepared & Analyzed: 07/07/15

|           |        |      |       |       |  |     |        |      |    |       |
|-----------|--------|------|-------|-------|--|-----|--------|------|----|-------|
| Silver    | 0.01   | mg/L | 0.10  | 0.100 |  | 95  | 85-115 | 2    | 25 |       |
| Arsenic   | 0.010  | "    | 0.105 | 0.100 |  | 105 | 85-115 | 4    | 25 |       |
| Beryllium | 0.001  | "    | 0.102 | 0.100 |  | 102 | 85-115 | 0.1  | 25 |       |
| Calcium   | 0.5    | "    | 5.1   | 5.00  |  | 102 | 85-115 | 3    | 25 |       |
| Cadmium   | 0.005  | "    | 0.103 | 0.100 |  | 103 | 85-115 | 3    | 25 |       |
| Chromium  | 0.05   | "    | 0.10  | 0.100 |  | 104 | 85-115 | 0.5  | 25 |       |
| Copper    | 0.01   | "    | 0.11  | 0.100 |  | 106 | 85-115 | 0.3  | 25 |       |
| Magnesium | 0.10   | "    | 5.30  | 5.00  |  | 106 | 85-115 | 0.04 | 25 |       |
| Nickel    | 0.05   | "    | 0.11  | 0.100 |  | 107 | 85-115 | 0    | 25 |       |
| Lead      | 0.005  | "    | 0.104 | 0.100 |  | 104 | 85-115 | 3    | 25 |       |
| Antimony  | 0.0060 | "    | 0.12  | 0.100 |  | 120 | 85-115 | 0.8  | 25 | SPK H |
| Selenium  | 0.02   | "    | 0.10  | 0.100 |  | 98  | 85-115 | 3    | 25 |       |
| Thallium  | 0.002  | "    | 0.10  | 0.100 |  | 105 | 85-115 | 3    | 25 |       |
| Zinc      | 0.10   | "    | 0.09  | 0.100 |  | 95  | 85-115 | 0.9  | 25 | U     |

**Duplicate (5G07032-DUP1)**

Source: 15G0017-01

Prepared & Analyzed: 07/07/15

|           |        |      |        |  |        |  |  |     |    |   |
|-----------|--------|------|--------|--|--------|--|--|-----|----|---|
| Silver    | 0.01   | mg/L | ND     |  | ND     |  |  |     | 25 | U |
| Arsenic   | 0.010  | "    | 0.015  |  | 0.016  |  |  | 2   | 25 |   |
| Beryllium | 0.002  | "    | ND     |  | ND     |  |  |     | 25 | U |
| Calcium   | 0.5    | "    | 20.3   |  | 20.2   |  |  | 0.7 | 25 |   |
| Cadmium   | 0.005  | "    | ND     |  | ND     |  |  |     | 25 | U |
| Chromium  | 0.05   | "    | 0.005  |  | 0.005  |  |  | 0.4 | 25 | U |
| Copper    | 0.01   | "    | 0.0006 |  | 0.0005 |  |  | 14  | 25 | U |
| Magnesium | 0.20   | "    | 20.4   |  | 20.2   |  |  | 0.9 | 25 |   |
| Nickel    | 0.05   | "    | 0.04   |  | 0.04   |  |  | 0.9 | 25 | U |
| Lead      | 0.005  | "    | ND     |  | 0.0003 |  |  |     | 25 | U |
| Antimony  | 0.0060 | "    | 0.0009 |  | 0.0009 |  |  | 0   | 25 | U |
| Selenium  | 0.02   | "    | ND     |  | 0.001  |  |  |     | 25 | U |
| Thallium  | 0.002  | "    | ND     |  | ND     |  |  |     | 25 | U |
| Zinc      | 0.10   | "    | ND     |  | 0.003  |  |  |     | 25 | U |



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**Metals by EPA 200 Series Methods - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G07032 - EPA 200.8**

**Matrix Spike (5G07032-MS1)**

Source: 15G0017-01

Prepared & Analyzed: 07/07/15

|           |        |      |       |       |        |     |        |  |  |    |
|-----------|--------|------|-------|-------|--------|-----|--------|--|--|----|
| Silver    | 0.01   | mg/L | 0.18  | 0.200 | ND     | 88  | 70-130 |  |  |    |
| Arsenic   | 0.010  | "    | 0.278 | 0.200 | 0.016  | 131 | 70-130 |  |  | MS |
| Beryllium | 0.002  | "    | 0.194 | 0.200 | ND     | 97  | 70-130 |  |  |    |
| Calcium   | 0.5    | "    | 29.9  | 10.0  | 20.2   | 97  | 70-130 |  |  |    |
| Cadmium   | 0.005  | "    | 0.188 | 0.200 | ND     | 94  | 70-130 |  |  |    |
| Chromium  | 0.05   | "    | 0.20  | 0.200 | 0.005  | 95  | 70-130 |  |  |    |
| Copper    | 0.01   | "    | 0.18  | 0.200 | 0.0005 | 90  | 70-130 |  |  |    |
| Magnesium | 0.20   | "    | 29.8  | 10.0  | 20.2   | 96  | 70-130 |  |  |    |
| Nickel    | 0.05   | "    | 0.22  | 0.200 | 0.04   | 91  | 70-130 |  |  |    |
| Lead      | 0.005  | "    | 0.191 | 0.200 | 0.0003 | 96  | 70-130 |  |  |    |
| Antimony  | 0.0060 | "    | 0.23  | 0.200 | 0.0009 | 113 | 70-130 |  |  |    |
| Selenium  | 0.02   | "    | 0.22  | 0.200 | 0.001  | 111 | 70-130 |  |  |    |
| Thallium  | 0.002  | "    | 0.19  | 0.200 | ND     | 95  | 70-130 |  |  |    |
| Zinc      | 0.10   | "    | 0.17  | 0.200 | 0.003  | 84  | 70-130 |  |  |    |

**Matrix Spike Dup (5G07032-MSD1)**

Source: 15G0017-01

Prepared & Analyzed: 07/07/15

|           |        |      |       |       |        |     |        |     |    |  |
|-----------|--------|------|-------|-------|--------|-----|--------|-----|----|--|
| Silver    | 0.01   | mg/L | 0.17  | 0.200 | ND     | 87  | 70-130 | 0.8 | 25 |  |
| Arsenic   | 0.010  | "    | 0.271 | 0.200 | 0.016  | 128 | 70-130 | 3   | 25 |  |
| Beryllium | 0.002  | "    | 0.192 | 0.200 | ND     | 96  | 70-130 | 0.8 | 25 |  |
| Calcium   | 0.5    | "    | 29.6  | 10.0  | 20.2   | 95  | 70-130 | 0.9 | 25 |  |
| Cadmium   | 0.005  | "    | 0.186 | 0.200 | ND     | 93  | 70-130 | 1   | 25 |  |
| Chromium  | 0.05   | "    | 0.19  | 0.200 | 0.005  | 94  | 70-130 | 1   | 25 |  |
| Copper    | 0.01   | "    | 0.18  | 0.200 | 0.0005 | 89  | 70-130 | 0.9 | 25 |  |
| Magnesium | 0.20   | "    | 29.4  | 10.0  | 20.2   | 92  | 70-130 | 1   | 25 |  |
| Nickel    | 0.05   | "    | 0.22  | 0.200 | 0.04   | 90  | 70-130 | 0.8 | 25 |  |
| Lead      | 0.005  | "    | 0.188 | 0.200 | 0.0003 | 94  | 70-130 | 2   | 25 |  |
| Antimony  | 0.0060 | "    | 0.23  | 0.200 | 0.0009 | 117 | 70-130 | 4   | 25 |  |
| Selenium  | 0.02   | "    | 0.22  | 0.200 | 0.001  | 109 | 70-130 | 2   | 25 |  |
| Thallium  | 0.002  | "    | 0.19  | 0.200 | ND     | 94  | 70-130 | 2   | 25 |  |
| Zinc      | 0.10   | "    | 0.17  | 0.200 | 0.003  | 84  | 70-130 | 0.5 | 25 |  |



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**Metals by EPA 6000/7000 Series Methods - Quality Control**

| Analyte                                | RL     | Units | Result                        | Spike Level | Source Result                 | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|--|--------|-------|-------------------------------|-------------|-------------------------------|------|-------------|-----|-----------|-----------|
| <b>Batch 5G08015 - EPA 7470A</b>       |        |       |                               |             |                               |      |             |     |           |           |
| <b>Blank (5G08015-BLK1)</b>            |        |       | Prepared & Analyzed: 07/08/15 |             |                               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | ND                            |             |                               |      |             |     |           | U         |
| <b>LCS (5G08015-BS1)</b>               |        |       | Prepared & Analyzed: 07/08/15 |             |                               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | 0.008                         | 0.00750     |                               | 101  | 85-115      |     |           |           |
| <b>LCS Dup (5G08015-BSD1)</b>          |        |       | Prepared & Analyzed: 07/08/15 |             |                               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | 0.008                         | 0.00750     |                               | 102  | 85-115      | 0.7 | 25        |           |
| <b>Duplicate (5G08015-DUP1)</b>        |        |       | <b>Source: 15F0481-01</b>     |             | Prepared & Analyzed: 07/08/15 |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | ND                            |             | 0.00002                       |      |             |     | 25        | U         |
| <b>Matrix Spike (5G08015-MS1)</b>      |        |       | <b>Source: 15F0481-01</b>     |             | Prepared & Analyzed: 07/08/15 |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | 0.008                         | 0.00750     | 0.00002                       | 104  | 70-130      |     |           |           |
| <b>Matrix Spike Dup (5G08015-MSD1)</b> |        |       | <b>Source: 15F0481-01</b>     |             | Prepared & Analyzed: 07/08/15 |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | 0.008                         | 0.00750     | 0.00002                       | 105  | 70-130      | 0.2 | 25        |           |



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**Classical Chemistry Parameters - Quality Control**

| Analyte                                | RL   | Units | Result | Spike Level   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|--|------|-------|--------|---|---------------|------|-------------|-----|-----------|-----------|
| <b>Batch 5G01008 - 10-204-00-1-X</b>   |      |       |        |   |               |      |             |     |           |           |
| <b>Blank (5G01008-BLK1)</b>            |      |       |        | Prepared: 07/01/15 Analyzed: 07/07/15                           |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>LCS (5G01008-BS1)</b>               |      |       |        | Prepared: 07/01/15 Analyzed: 07/07/15                           |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.201  | 0.200   |               | 100  | 81.4-123    |     |           |           |
| <b>LCS Dup (5G01008-BSD1)</b>          |      |       |        | Prepared: 07/01/15 Analyzed: 07/07/15                           |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.173  | 0.200   |               | 86   | 81.4-123    | 15  | 25        |           |
| <b>Matrix Spike (5G01008-MS1)</b>      |      |       |        | <b>Source: 15F0481-01</b> Prepared: 07/01/15 Analyzed: 07/07/15 |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.163  | 0.200   | ND            | 82   | 70-130      |     |           |           |
| <b>Matrix Spike (5G01008-MS2)</b>      |      |       |        | <b>Source: 15F0484-11</b> Prepared: 07/01/15 Analyzed: 07/07/15 |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.165  | 0.200   | ND            | 82   | 70-130      |     |           |           |
| <b>Matrix Spike Dup (5G01008-MSD1)</b> |      |       |        | <b>Source: 15F0481-01</b> Prepared: 07/01/15 Analyzed: 07/07/15 |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.196  | 0.200   | ND            | 98   | 70-130      | 18  | 25        |           |
| <b>Matrix Spike Dup (5G01008-MSD2)</b> |      |       |        | <b>Source: 15F0484-11</b> Prepared: 07/01/15 Analyzed: 07/07/15 |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.210  | 0.200   | ND            | 105  | 70-130      | 24  | 25        |           |
| <b>Batch 5G07005 - EPA 1664</b>        |      |       |        |   |               |      |             |     |           |           |
| <b>Blank (5G07005-BLK1)</b>            |      |       |        | Prepared: 07/07/15 Analyzed: 07/10/15                           |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>LCS (5G07005-BS1)</b>               |      |       |        | Prepared: 07/07/15 Analyzed: 07/10/15                           |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | 3.40   | 40.0  |               | 8    | 78-114      |     |           | SPK L     |



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Results are reported on a "wet weight basis", unless otherwise noted.

**Classical Chemistry Parameters - Quality Control**

| Analyte                                | RL   | Units | Result | Spike Level   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|--|------|-------|--------|---|---------------|------|-------------|-----|-----------|-----------|
| <b>Batch 5G07005 - EPA 1664</b>        |      |       |        |   |               |      |             |     |           |           |
| <b>LCS Dup (5G07005-BSD1)</b>          |      |       |        | Prepared: 07/07/15 Analyzed: 07/10/15                           |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | 4.60   | 40.0  |               | 12   | 78-114      | 30  | 18        | SPK L     |
| <b>Duplicate (5G07005-DUP1)</b>        |      |       |        | <b>Source: 15G0016-06</b> Prepared: 07/07/15 Analyzed: 07/10/15 |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | 15.0   |   | 16.2          |      |             | 8   | 18        |           |
| <b>Batch 5G08007 - EPA 420.4</b>       |      |       |        |   |               |      |             |     |           |           |
| <b>Blank (5G08007-BLK1)</b>            |      |       |        | Prepared & Analyzed: 07/08/15                                   |               |      |             |     |           |           |
| Phenol                                 | 0.10 | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>LCS (5G08007-BS1)</b>               |      |       |        | Prepared & Analyzed: 07/08/15                                   |               |      |             |     |           |           |
| Phenol                                 | 0.10 | mg/L  | 0.165  | 0.150   |               | 110  | 85-115      |     |           |           |
| <b>LCS Dup (5G08007-BSD1)</b>          |      |       |        | Prepared & Analyzed: 07/08/15                                   |               |      |             |     |           |           |
| Phenol                                 | 0.10 | mg/L  | 0.150  | 0.150   |               | 100  | 85-115      | 10  | 10        |           |
| <b>Matrix Spike (5G08007-MS1)</b>      |      |       |        | <b>Source: 15F0481-01</b> Prepared & Analyzed: 07/08/15         |               |      |             |     |           |           |
| Phenol                                 | 0.10 | mg/L  | 0.100  | 0.150   | ND            | 67   | 85-115      |     |           | SPK L     |
| <b>Matrix Spike Dup (5G08007-MSD1)</b> |      |       |        | <b>Source: 15F0481-01</b> Prepared & Analyzed: 07/08/15         |               |      |             |     |           |           |
| Phenol                                 | 0.10 | mg/L  | 0.093  | 0.150   | ND            | 62   | 85-115      | 7   | 30        | SPK L, U  |
| <b>Batch 5G09024 - SM 2340 B</b>       |      |       |        |   |               |      |             |     |           |           |
| <b>Blank (5G09024-BLK1)</b>            |      |       |        | Prepared & Analyzed: 07/09/15                                   |               |      |             |     |           |           |
| Total Hardness                         | 0.5  | mg/L  | ND     |   |               |      |             |     |           | U         |



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Results are reported on a "wet weight basis", unless otherwise noted.

Report Date: 07/17/15 15:06

**Classical Chemistry Parameters - Quality Control**

| Analyte                         | RL | Units | Result                    | Spike Level                           | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------------------------------|----|-------|---------------------------|---------------------------------------|---------------|------|-------------|-----|-----------|-----------|
| <b>Batch 5G07007 - SM 2540C</b> |    |       |                           |                                       |               |      |             |     |           |           |
| <b>Blank (5G07007-BLK1)</b>     |    |       |                           |                                       |               |      |             |     |           |           |
|                                 |    |       |                           | Prepared: 07/07/15 Analyzed: 07/08/15 |               |      |             |     |           |           |
| Total Dissolved Solids          | 5  | mg/L  | ND                        |                                       |               |      |             |     |           | U         |
| <b>Duplicate (5G07007-DUP1)</b> |    |       |                           |                                       |               |      |             |     |           |           |
|                                 |    |       | <b>Source: 15F0481-01</b> |                                       |               |      |             |     |           |           |
|                                 |    |       |                           | Prepared: 07/07/15 Analyzed: 07/08/15 |               |      |             |     |           |           |
| Total Dissolved Solids          | 5  | mg/L  | 217                       |                                       | 234           |      |             | 8   | 5         | RPD       |
| <b>Reference (5G07007-SRM1)</b> |    |       |                           |                                       |               |      |             |     |           |           |
|                                 |    |       |                           | Prepared: 07/07/15 Analyzed: 07/08/15 |               |      |             |     |           |           |
| Total Dissolved Solids          |    | mg/L  | 140                       | 150                                   |               | 93   | 91.04-109   |     |           |           |



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Results are reported on a "wet weight basis", unless otherwise noted.



**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G06004 - EPA 8270D**

**Blank (5G06004-BLK1)**

Prepared: 07/06/15 Analyzed: 07/09/15

|                                    |    |      |    |  |  |  |  |  |  |   |
|------------------------------------|----|------|----|--|--|--|--|--|--|---|
| N-Nitrosodimethylamine             | 5  | ug/L | ND |  |  |  |  |  |  | U |
| Phenol                             | 5  | "    | ND |  |  |  |  |  |  | U |
| Bis(2-chloroethyl)ether            | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Chlorophenol                     | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,3-Dichlorobenzene                | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,4-Dichlorobenzene                | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,2-Dichlorobenzene                | 5  | "    | ND |  |  |  |  |  |  | U |
| Bis(2-chloroisopropyl) ether       | 5  | "    | ND |  |  |  |  |  |  | U |
| N-Nitrosodi-n-propylamine          | 5  | "    | ND |  |  |  |  |  |  | U |
| Hexachloroethane                   | 5  | "    | ND |  |  |  |  |  |  | U |
| Nitrobenzene                       | 5  | "    | ND |  |  |  |  |  |  | U |
| Isophorone                         | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Nitrophenol                      | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,4-Dimethylphenol                 | 5  | "    | ND |  |  |  |  |  |  | U |
| Bis(2-chloroethoxy)methane         | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,2,4-Trichlorobenzene             | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,4-Dichlorophenol                 | 5  | "    | ND |  |  |  |  |  |  | U |
| Naphthalene                        | 5  | "    | ND |  |  |  |  |  |  | U |
| Hexachlorobutadiene                | 5  | "    | ND |  |  |  |  |  |  | U |
| p-Chloro-m-cresol                  | 5  | "    | ND |  |  |  |  |  |  | U |
| Hexachlorocyclopentadiene          | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,4,6-Trichlorophenol              | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Chloronaphthalene                | 5  | "    | ND |  |  |  |  |  |  | U |
| Dimethyl phthalate                 | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,6-Dinitrotoluene                 | 5  | "    | ND |  |  |  |  |  |  | U |
| Acenaphthylene                     | 5  | "    | ND |  |  |  |  |  |  | U |
| Acenaphthene                       | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,4-Dinitrophenol                  | 10 | "    | ND |  |  |  |  |  |  | U |
| 2,4-Dinitrotoluene                 | 5  | "    | ND |  |  |  |  |  |  | U |
| 4-Nitrophenol                      | 5  | "    | ND |  |  |  |  |  |  | U |
| Diethyl phthalate                  | 5  | "    | ND |  |  |  |  |  |  | U |
| 4-Chlorophenyl phenyl ether        | 5  | "    | ND |  |  |  |  |  |  | U |
| Fluorene                           | 5  | "    | ND |  |  |  |  |  |  | U |
| 4,6-Dinitro-o-cresol               | 5  | "    | ND |  |  |  |  |  |  | U |
| N-Nitrosodiphenylamine             | 5  | "    | ND |  |  |  |  |  |  | U |
| Azobenzene (1,2-diphenylhydrazine) | 5  | "    | ND |  |  |  |  |  |  | U |
| 4-Bromophenyl phenyl ether         | 5  | "    | ND |  |  |  |  |  |  | U |
| Hexachlorobenzene                  | 5  | "    | ND |  |  |  |  |  |  | U |
| Pentachlorophenol                  | 5  | "    | ND |  |  |  |  |  |  | U |
| Phenanthrene                       | 5  | "    | ND |  |  |  |  |  |  | U |
| Anthracene                         | 5  | "    | ND |  |  |  |  |  |  | U |



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Results are reported on a "wet weight basis", unless otherwise noted.



**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G06004 - EPA 8270D**

**Blank (5G06004-BLK1)**

Prepared: 07/06/15 Analyzed: 07/09/15

|                             |     |      |    |  |  |  |  |  |  |   |
|-----------------------------|-----|------|----|--|--|--|--|--|--|---|
| Di-n-butyl phthalate        | 5   | ug/L | ND |  |  |  |  |  |  | U |
| Fluoranthene                | 5   | "    | ND |  |  |  |  |  |  | U |
| Benzidine                   | 15  | "    | ND |  |  |  |  |  |  | U |
| Pyrene                      | 5   | "    | ND |  |  |  |  |  |  | U |
| Benzyl butyl phthalate      | 5   | "    | ND |  |  |  |  |  |  | U |
| Bis(2-ethylhexyl) phthalate | 5   | "    | ND |  |  |  |  |  |  | U |
| Benzo(a)anthracene          | 1   | "    | ND |  |  |  |  |  |  | U |
| 3,3'-Dichlorobenzidine      | 10  | "    | ND |  |  |  |  |  |  | U |
| Chrysene                    | 1   | "    | ND |  |  |  |  |  |  | U |
| Di-n-octyl phthalate        | 5   | "    | ND |  |  |  |  |  |  | U |
| Benzo(b)fluoranthene        | 1   | "    | ND |  |  |  |  |  |  | U |
| Benzo(k)fluoranthene        | 0.5 | "    | ND |  |  |  |  |  |  | U |
| Benzo(a)pyrene              | 0.2 | "    | ND |  |  |  |  |  |  | U |
| Indeno (1,2,3-cd) pyrene    | 5   | "    | ND |  |  |  |  |  |  | U |
| Dibenzo(a,h)anthracene      | 5   | "    | ND |  |  |  |  |  |  | U |
| Benzo(ghi)perylene          | 0.5 | "    | ND |  |  |  |  |  |  | U |

|                                 |  |   |  |      |      |  |    |        |  |  |
|---------------------------------|--|---|--|------|------|--|----|--------|--|--|
| Surrogate: 2-Fluorophenol       |  | " |  | 36.8 | 100  |  | 37 | 10-120 |  |  |
| Surrogate: Phenol-d5            |  | " |  | 21.1 | 100  |  | 21 | 10-120 |  |  |
| Surrogate: Nitrobenzene-d5      |  | " |  | 28.6 | 50.5 |  | 57 | 12-128 |  |  |
| Surrogate: 2-Fluorobiphenyl     |  | " |  | 22.4 | 50.0 |  | 45 | 12-120 |  |  |
| Surrogate: 2,4,6-Tribromophenol |  | " |  | 70.4 | 100  |  | 70 | 21-121 |  |  |
| Surrogate: p-Terphenyl-d14      |  | " |  | 39.5 | 50.5 |  | 78 | 11-158 |  |  |

**LCS (5G06004-BS1)**

Prepared: 07/06/15 Analyzed: 07/09/15

|                                    |   |      |    |      |  |    |        |  |  |  |
|------------------------------------|---|------|----|------|--|----|--------|--|--|--|
| Phenol                             | 5 | ug/L | 14 | 50.0 |  | 28 | 14-120 |  |  |  |
| 2-Chlorophenol                     | 5 | "    | 32 | 50.0 |  | 65 | 18-120 |  |  |  |
| 1,4-Dichlorobenzene                | 5 | "    | 30 | 50.0 |  | 60 | 29-120 |  |  |  |
| N-Nitrosodi-n-propylamine          | 5 | "    | 30 | 50.0 |  | 60 | 26-120 |  |  |  |
| 1,2,4-Trichlorobenzene             | 5 | "    | 24 | 49.8 |  | 47 | 28-120 |  |  |  |
| Naphthalene                        | 5 | "    | 30 | 50.0 |  | 60 | 16-120 |  |  |  |
| p-Chloro-m-cresol                  | 5 | "    | 38 | 49.8 |  | 76 | 31-130 |  |  |  |
| Acenaphthylene                     | 5 | "    | 37 | 49.5 |  | 75 | 38-120 |  |  |  |
| Acenaphthene                       | 5 | "    | 40 | 50.0 |  | 80 | 33-120 |  |  |  |
| 2,4-Dinitrotoluene                 | 5 | "    | 42 | 50.0 |  | 84 | 48-120 |  |  |  |
| 4-Nitrophenol                      | 5 | "    | 19 | 50.0 |  | 38 | 10-120 |  |  |  |
| Fluorene                           | 5 | "    | 43 | 49.0 |  | 88 | 40-120 |  |  |  |
| Azobenzene (1,2-diphenylhydrazine) | 5 | "    | 44 | 50.0 |  | 89 | 34-120 |  |  |  |
| Pentachlorophenol                  | 5 | "    | 40 | 49.5 |  | 81 | 11-120 |  |  |  |
| Phenanthrene                       | 5 | "    | 46 | 49.8 |  | 92 | 43-120 |  |  |  |
| Anthracene                         | 5 | "    | 44 | 49.8 |  | 88 | 50-120 |  |  |  |
| Fluoranthene                       | 5 | "    | 45 | 50.0 |  | 89 | 50-120 |  |  |  |
| Pyrene                             | 5 | "    | 45 | 49.5 |  | 90 | 56-120 |  |  |  |



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Results are reported on a "wet weight basis", unless otherwise noted.

**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G06004 - EPA 8270D**

**LCS (5G06004-BS1)**

Prepared: 07/06/15 Analyzed: 07/09/15

|  |     |      |             |             |  |           |               |  |  |  |
|--|-----|------|-------------|-------------|--|-----------|---------------|--|--|--|
| Benzo(a)anthracene                     | 1   | ug/L | 44          | 50.0        |  | 88        | 42-120        |  |  |  |
| Chrysene                               | 1   | "    | 44          | 49.5        |  | 90        | 33-134        |  |  |  |
| Benzo(b)fluoranthene                   | 1   | "    | 45          | 50.0        |  | 90        | 30-129        |  |  |  |
| Benzo(k)fluoranthene                   | 0.5 | "    | 46          | 49.5        |  | 93        | 23-143        |  |  |  |
| Benzo(a)pyrene                         | 0.2 | "    | 44          | 50.0        |  | 88        | 35-128        |  |  |  |
| Indeno (1,2,3-cd) pyrene               | 5   | "    | 48          | 49.5        |  | 98        | 13-160        |  |  |  |
| Dibenzo(a,h)anthracene                 | 5   | "    | 48          | 49.5        |  | 97        | 15-164        |  |  |  |
| Benzo(ghi)perylene                     | 0.5 | "    | 48          | 49.5        |  | 97        | 10-174        |  |  |  |
| <i>Surrogate: 2-Fluorophenol</i>       |     | "    | <i>40.8</i> | <i>100</i>  |  | <i>41</i> | <i>10-120</i> |  |  |  |
| <i>Surrogate: Phenol-d5</i>            |     | "    | <i>25.4</i> | <i>100</i>  |  | <i>25</i> | <i>10-120</i> |  |  |  |
| <i>Surrogate: Nitrobenzene-d5</i>      |     | "    | <i>33.4</i> | <i>50.5</i> |  | <i>66</i> | <i>12-128</i> |  |  |  |
| <i>Surrogate: 2-Fluorobiphenyl</i>     |     | "    | <i>30.2</i> | <i>50.0</i> |  | <i>60</i> | <i>12-120</i> |  |  |  |
| <i>Surrogate: 2,4,6-Tribromophenol</i> |     | "    | <i>89.1</i> | <i>100</i>  |  | <i>89</i> | <i>21-121</i> |  |  |  |
| <i>Surrogate: p-Terphenyl-d14</i>      |     | "    | <i>47.9</i> | <i>50.5</i> |  | <i>95</i> | <i>11-158</i> |  |  |  |

**LCS Dup (5G06004-BSD1)**

Prepared: 07/06/15 Analyzed: 07/09/15

|                                    |     |      |    |      |  |    |        |    |    |  |
|------------------------------------|-----|------|----|------|--|----|--------|----|----|--|
| Phenol                             | 5   | ug/L | 13 | 50.0 |  | 26 | 14-120 | 8  | 30 |  |
| 2-Chlorophenol                     | 5   | "    | 32 | 50.0 |  | 63 | 18-120 | 3  | 30 |  |
| 1,4-Dichlorobenzene                | 5   | "    | 28 | 50.0 |  | 56 | 29-120 | 8  | 30 |  |
| N-Nitrosodi-n-propylamine          | 5   | "    | 30 | 50.0 |  | 59 | 26-120 | 2  | 30 |  |
| 1,2,4-Trichlorobenzene             | 5   | "    | 23 | 49.8 |  | 46 | 28-120 | 3  | 30 |  |
| Naphthalene                        | 5   | "    | 28 | 50.0 |  | 56 | 16-120 | 7  | 30 |  |
| p-Chloro-m-cresol                  | 5   | "    | 31 | 49.8 |  | 63 | 31-130 | 19 | 30 |  |
| Acenaphthylene                     | 5   | "    | 31 | 49.5 |  | 63 | 38-120 | 16 | 30 |  |
| Acenaphthene                       | 5   | "    | 34 | 50.0 |  | 67 | 33-120 | 17 | 30 |  |
| 2,4-Dinitrotoluene                 | 5   | "    | 36 | 50.0 |  | 71 | 48-120 | 17 | 30 |  |
| 4-Nitrophenol                      | 5   | "    | 15 | 50.0 |  | 30 | 10-120 | 26 | 30 |  |
| Fluorene                           | 5   | "    | 35 | 49.0 |  | 72 | 40-120 | 20 | 30 |  |
| Azobenzene (1,2-diphenylhydrazine) | 5   | "    | 37 | 50.0 |  | 75 | 34-120 | 17 | 30 |  |
| Pentachlorophenol                  | 5   | "    | 32 | 49.5 |  | 64 | 11-120 | 22 | 30 |  |
| Phenanthrene                       | 5   | "    | 38 | 49.8 |  | 77 | 43-120 | 18 | 30 |  |
| Anthracene                         | 5   | "    | 37 | 49.8 |  | 75 | 50-120 | 17 | 30 |  |
| Fluoranthene                       | 5   | "    | 37 | 50.0 |  | 74 | 50-120 | 19 | 30 |  |
| Pyrene                             | 5   | "    | 37 | 49.5 |  | 74 | 56-120 | 20 | 30 |  |
| Benzo(a)anthracene                 | 1   | "    | 36 | 50.0 |  | 72 | 42-120 | 21 | 30 |  |
| Chrysene                           | 1   | "    | 37 | 49.5 |  | 75 | 33-134 | 17 | 30 |  |
| Benzo(b)fluoranthene               | 1   | "    | 38 | 50.0 |  | 76 | 30-129 | 17 | 30 |  |
| Benzo(k)fluoranthene               | 0.5 | "    | 38 | 49.5 |  | 77 | 23-143 | 19 | 30 |  |
| Benzo(a)pyrene                     | 0.2 | "    | 37 | 50.0 |  | 74 | 35-128 | 17 | 30 |  |
| Indeno (1,2,3-cd) pyrene           | 5   | "    | 41 | 49.5 |  | 83 | 13-160 | 17 | 30 |  |
| Dibenzo(a,h)anthracene             | 5   | "    | 41 | 49.5 |  | 82 | 15-164 | 16 | 30 |  |
| Benzo(ghi)perylene                 | 0.5 | "    | 41 | 49.5 |  | 83 | 10-174 | 16 | 30 |  |



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**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G06004 - EPA 8270D**

**LCS Dup (5G06004-BSD1)**

Prepared: 07/06/15 Analyzed: 07/09/15

|                                 |  |      |      |      |  |    |        |  |  |  |
|---------------------------------|--|------|------|------|--|----|--------|--|--|--|
| Surrogate: 2-Fluorophenol       |  | ug/L | 39.9 | 100  |  | 40 | 10-120 |  |  |  |
| Surrogate: Phenol-d5            |  | "    | 24.9 | 100  |  | 25 | 10-120 |  |  |  |
| Surrogate: Nitrobenzene-d5      |  | "    | 32.1 | 50.5 |  | 64 | 12-128 |  |  |  |
| Surrogate: 2-Fluorobiphenyl     |  | "    | 28.4 | 50.0 |  | 57 | 12-120 |  |  |  |
| Surrogate: 2,4,6-Tribromophenol |  | "    | 77.0 | 100  |  | 77 | 21-121 |  |  |  |
| Surrogate: p-Terphenyl-d14      |  | "    | 40.2 | 50.5 |  | 80 | 11-158 |  |  |  |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G07008 - EPA 8260**

**Blank (5G07008-BLK1)**

Prepared & Analyzed: 07/02/15

|                           |    |      |    |  |  |  |  |  |  |   |
|---------------------------|----|------|----|--|--|--|--|--|--|---|
| Dichlorodifluoromethane   | 5  | ug/L | ND |  |  |  |  |  |  | U |
| Chloromethane             | 5  | "    | ND |  |  |  |  |  |  | U |
| Vinyl chloride            | 2  | "    | ND |  |  |  |  |  |  | U |
| Bromomethane              | 5  | "    | ND |  |  |  |  |  |  | U |
| Chloroethane              | 5  | "    | ND |  |  |  |  |  |  | U |
| Trichlorofluoromethane    | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,1-Dichloroethene        | 5  | "    | ND |  |  |  |  |  |  | U |
| Carbon disulfide          | 5  | "    | ND |  |  |  |  |  |  | U |
| Iodomethane               | 10 | "    | ND |  |  |  |  |  |  | U |
| Methylene Chloride        | 5  | "    | ND |  |  |  |  |  |  | U |
| Acetone                   | 25 | "    | ND |  |  |  |  |  |  | U |
| trans-1,2-Dichloroethene  | 5  | "    | ND |  |  |  |  |  |  | U |
| Methyl t-Butyl Ether      | 5  | "    | ND |  |  |  |  |  |  | U |
| Acrolein                  | 50 | "    | ND |  |  |  |  |  |  | U |
| 1,1-Dichloroethane        | 5  | "    | ND |  |  |  |  |  |  | U |
| Acrylonitrile             | 20 | "    | ND |  |  |  |  |  |  | U |
| Vinyl acetate             | 5  | "    | ND |  |  |  |  |  |  | U |
| cis-1,2-Dichloroethene    | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,2-Dichloropropane       | 10 | "    | ND |  |  |  |  |  |  | U |
| Bromochloromethane        | 5  | "    | ND |  |  |  |  |  |  | U |
| Chloroform                | 5  | "    | ND |  |  |  |  |  |  | U |
| Carbon Tetrachloride      | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,1,1-Trichloroethane     | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Butanone                | 25 | "    | ND |  |  |  |  |  |  | U |
| 1,1-Dichloropropene       | 5  | "    | ND |  |  |  |  |  |  | U |
| Benzene                   | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,2-Dichloroethane        | 5  | "    | ND |  |  |  |  |  |  | U |
| Trichloroethene           | 5  | "    | ND |  |  |  |  |  |  | U |
| Dibromomethane            | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,2-Dichloropropane       | 5  | "    | ND |  |  |  |  |  |  | U |
| Bromodichloromethane      | 5  | "    | ND |  |  |  |  |  |  | U |
| Dichlorobromomethane      | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Chloroethyl vinyl ether | 25 | "    | ND |  |  |  |  |  |  | U |
| cis-1,3-Dichloropropene   | 5  | "    | ND |  |  |  |  |  |  | U |
| Toluene                   | 5  | "    | ND |  |  |  |  |  |  | U |
| Tetrachloroethene         | 5  | "    | ND |  |  |  |  |  |  | U |
| 4-Methyl-2-pentanone      | 25 | "    | ND |  |  |  |  |  |  | U |
| trans-1,3-Dichloropropene | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,1,2-Trichloroethane     | 5  | "    | ND |  |  |  |  |  |  | U |
| Chlorodibromomethane      | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,3-Dichloropropane       | 5  | "    | ND |  |  |  |  |  |  | U |



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Results are reported on a "wet weight basis", unless otherwise noted.



**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G07008 - EPA 8260**

**Blank (5G07008-BLK1)**

Prepared & Analyzed: 07/02/15

|                                 |    |      |      |      |  |    |        |  |  |   |
|---------------------------------|----|------|------|------|--|----|--------|--|--|---|
| 1,2-Dibromoethane               | 5  | ug/L | ND   |      |  |    |        |  |  | U |
| 2-Hexanone                      | 25 | "    | ND   |      |  |    |        |  |  | U |
| Chlorobenzene                   | 5  | "    | ND   |      |  |    |        |  |  | U |
| Ethylbenzene                    | 5  | "    | ND   |      |  |    |        |  |  | U |
| 1,1,1,2-Tetrachloroethane       | 5  | "    | ND   |      |  |    |        |  |  | U |
| m,p-Xylene                      | 10 | "    | ND   |      |  |    |        |  |  | U |
| o-Xylene                        | 5  | "    | ND   |      |  |    |        |  |  | U |
| Styrene                         | 5  | "    | ND   |      |  |    |        |  |  | U |
| Bromoform                       | 5  | "    | ND   |      |  |    |        |  |  | U |
| Isopropylbenzene                | 5  | "    | ND   |      |  |    |        |  |  | U |
| n-Propylbenzene                 | 5  | "    | ND   |      |  |    |        |  |  | U |
| Bromobenzene                    | 5  | "    | ND   |      |  |    |        |  |  | U |
| 1,1,1,2-Tetrachloroethane       | 5  | "    | ND   |      |  |    |        |  |  | U |
| 1,3,5-Trimethylbenzene          | 5  | "    | ND   |      |  |    |        |  |  | U |
| 2-Chlorotoluene                 | 5  | "    | ND   |      |  |    |        |  |  | U |
| 1,2,3-Trichloropropane          | 5  | "    | ND   |      |  |    |        |  |  | U |
| trans-1,4-Dichloro-2-butene     | 10 | "    | ND   |      |  |    |        |  |  | U |
| 4-Chlorotoluene                 | 5  | "    | ND   |      |  |    |        |  |  | U |
| tert-Butylbenzene               | 5  | "    | ND   |      |  |    |        |  |  | U |
| 1,2,4-Trimethylbenzene          | 5  | "    | ND   |      |  |    |        |  |  | U |
| sec-Butylbenzene                | 5  | "    | ND   |      |  |    |        |  |  | U |
| 4-Isopropyltoluene              | 5  | "    | ND   |      |  |    |        |  |  | U |
| 1,3-Dichlorobenzene             | 5  | "    | ND   |      |  |    |        |  |  | U |
| 1,4-Dichlorobenzene             | 5  | "    | ND   |      |  |    |        |  |  | U |
| n-Butylbenzene                  | 5  | "    | ND   |      |  |    |        |  |  | U |
| 1,2-Dichlorobenzene             | 5  | "    | ND   |      |  |    |        |  |  | U |
| 1,2-Dibromo-3-chloropropane     | 5  | "    | ND   |      |  |    |        |  |  | U |
| Hexachlorobutadiene             | 10 | "    | ND   |      |  |    |        |  |  | U |
| 1,2,4-Trichlorobenzene          | 10 | "    | ND   |      |  |    |        |  |  | U |
| Naphthalene                     | 10 | "    | ND   |      |  |    |        |  |  | U |
| 1,2,3-Trichlorobenzene          | 5  | "    | ND   |      |  |    |        |  |  | U |
| Surrogate: Dibromofluoromethane |    | "    | 49.3 | 50.0 |  | 99 | 60-140 |  |  |   |
| Surrogate: Toluene-d8           |    | "    | 49.3 | 50.0 |  | 99 | 70-130 |  |  |   |
| Surrogate: 4-Bromofluorobenzene |    | "    | 47.8 | 50.0 |  | 96 | 70-130 |  |  |   |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G07008 - EPA 8260**

**LCS (5G07008-BS1)**

Prepared & Analyzed: 07/02/15

|                           |    |      |     |      |  |     |        |  |  |  |
|---------------------------|----|------|-----|------|--|-----|--------|--|--|--|
| Dichlorodifluoromethane   | 5  | ug/L | 47  | 50.0 |  | 95  | 10-150 |  |  |  |
| Chloromethane             | 5  | "    | 49  | 50.0 |  | 98  | 42-150 |  |  |  |
| Vinyl chloride            | 2  | "    | 51  | 50.0 |  | 102 | 54-135 |  |  |  |
| Bromomethane              | 5  | "    | 31  | 50.0 |  | 62  | 32-150 |  |  |  |
| Chloroethane              | 5  | "    | 59  | 50.0 |  | 118 | 48-156 |  |  |  |
| Trichlorofluoromethane    | 5  | "    | 52  | 50.0 |  | 104 | 68-144 |  |  |  |
| 1,1-Dichloroethene        | 5  | "    | 52  | 50.0 |  | 105 | 44-145 |  |  |  |
| Carbon disulfide          | 5  | "    | 60  | 50.0 |  | 119 | 60-147 |  |  |  |
| Iodomethane               | 10 | "    | 33  | 50.0 |  | 66  | 33-150 |  |  |  |
| Methylene Chloride        | 5  | "    | 50  | 50.0 |  | 100 | 62-139 |  |  |  |
| Acetone                   | 25 | "    | 220 | 250  |  | 87  | 50-154 |  |  |  |
| trans-1,2-Dichloroethene  | 5  | "    | 51  | 50.0 |  | 103 | 73-132 |  |  |  |
| Methyl t-Butyl Ether      | 5  | "    | 47  | 50.0 |  | 95  | 62-135 |  |  |  |
| Acrolein                  | 50 | "    | 62  | 200  |  | 31  | 10-152 |  |  |  |
| 1,1-Dichloroethane        | 5  | "    | 52  | 50.0 |  | 105 | 76-133 |  |  |  |
| Acrylonitrile             | 20 | "    | 220 | 250  |  | 90  | 20-156 |  |  |  |
| Vinyl acetate             | 5  | "    | 45  | 50.0 |  | 91  | 70-151 |  |  |  |
| cis-1,2-Dichloroethene    | 5  | "    | 51  | 50.0 |  | 103 | 74-134 |  |  |  |
| 2,2-Dichloropropane       | 10 | "    | 48  | 50.0 |  | 96  | 59-143 |  |  |  |
| Bromochloromethane        | 5  | "    | 53  | 50.0 |  | 106 | 67-136 |  |  |  |
| Chloroform                | 5  | "    | 52  | 50.0 |  | 104 | 80-135 |  |  |  |
| Carbon Tetrachloride      | 5  | "    | 49  | 50.0 |  | 99  | 69-135 |  |  |  |
| 1,1,1-Trichloroethane     | 5  | "    | 49  | 50.0 |  | 99  | 80-132 |  |  |  |
| 2-Butanone                | 25 | "    | 220 | 250  |  | 89  | 46-143 |  |  |  |
| 1,1-Dichloropropene       | 5  | "    | 54  | 50.0 |  | 108 | 68-130 |  |  |  |
| Benzene                   | 5  | "    | 50  | 50.0 |  | 101 | 80-131 |  |  |  |
| 1,2-Dichloroethane        | 5  | "    | 53  | 50.0 |  | 107 | 75-131 |  |  |  |
| Trichloroethene           | 5  | "    | 51  | 50.0 |  | 102 | 70-130 |  |  |  |
| Dibromomethane            | 5  | "    | 51  | 50.0 |  | 101 | 61-140 |  |  |  |
| 1,2-Dichloropropane       | 5  | "    | 52  | 50.0 |  | 105 | 78-127 |  |  |  |
| Dichlorobromomethane      | 5  | "    | 53  | 50.0 |  | 105 | 69-132 |  |  |  |
| Bromodichloromethane      | 5  | "    | 53  | 50.0 |  | 105 | 69-132 |  |  |  |
| 2-Chloroethyl vinyl ether | 25 | "    | 40  | 50.0 |  | 81  | 10-132 |  |  |  |
| cis-1,3-Dichloropropene   | 5  | "    | 52  | 50.0 |  | 103 | 70-130 |  |  |  |
| Toluene                   | 5  | "    | 49  | 50.0 |  | 98  | 70-138 |  |  |  |
| Tetrachloroethene         | 5  | "    | 63  | 50.0 |  | 127 | 59-136 |  |  |  |
| 4-Methyl-2-pentanone      | 25 | "    | 210 | 250  |  | 84  | 56-137 |  |  |  |
| trans-1,3-Dichloropropene | 5  | "    | 54  | 50.0 |  | 107 | 55-131 |  |  |  |
| 1,1,2-Trichloroethane     | 5  | "    | 50  | 50.0 |  | 101 | 74-129 |  |  |  |
| Chlorodibromomethane      | 5  | "    | 51  | 50.0 |  | 102 | 69-125 |  |  |  |
| 1,3-Dichloropropane       | 5  | "    | 48  | 50.0 |  | 97  | 68-132 |  |  |  |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G07008 - EPA 8260**

**LCS (5G07008-BS1)**

Prepared & Analyzed: 07/02/15

|                                 |    |      |      |      |  |     |        |  |  |  |
|---------------------------------|----|------|------|------|--|-----|--------|--|--|--|
| 1,2-Dibromoethane               | 5  | ug/L | 48   | 50.0 |  | 97  | 66-131 |  |  |  |
| 2-Hexanone                      | 25 | "    | 210  | 250  |  | 83  | 40-147 |  |  |  |
| Chlorobenzene                   | 5  | "    | 50   | 50.0 |  | 100 | 80-129 |  |  |  |
| Ethylbenzene                    | 5  | "    | 50   | 50.0 |  | 100 | 78-131 |  |  |  |
| 1,1,1,2-Tetrachloroethane       | 5  | "    | 51   | 50.0 |  | 102 | 70-138 |  |  |  |
| m,p-Xylene                      | 10 | "    | 99   | 100  |  | 99  | 70-141 |  |  |  |
| o-Xylene                        | 5  | "    | 50   | 50.0 |  | 100 | 70-130 |  |  |  |
| Styrene                         | 5  | "    | 49   | 50.0 |  | 98  | 70-124 |  |  |  |
| Bromoform                       | 5  | "    | 48   | 50.0 |  | 95  | 60-138 |  |  |  |
| Isopropylbenzene                | 5  | "    | 49   | 50.0 |  | 99  | 73-130 |  |  |  |
| n-Propylbenzene                 | 5  | "    | 49   | 50.0 |  | 98  | 70-130 |  |  |  |
| Bromobenzene                    | 5  | "    | 48   | 50.0 |  | 96  | 70-130 |  |  |  |
| 1,1,2,2-Tetrachloroethane       | 5  | "    | 46   | 50.0 |  | 92  | 64-141 |  |  |  |
| 1,3,5-Trimethylbenzene          | 5  | "    | 47   | 50.0 |  | 93  | 70-130 |  |  |  |
| 2-Chlorotoluene                 | 5  | "    | 48   | 50.0 |  | 96  | 70-130 |  |  |  |
| 1,2,3-Trichloropropane          | 5  | "    | 45   | 50.0 |  | 91  | 70-130 |  |  |  |
| trans-1,4-Dichloro-2-butene     | 10 | "    | 40   | 50.0 |  | 80  | 52-149 |  |  |  |
| 4-Chlorotoluene                 | 5  | "    | 46   | 50.0 |  | 92  | 70-130 |  |  |  |
| tert-Butylbenzene               | 5  | "    | 47   | 50.0 |  | 94  | 69-128 |  |  |  |
| 1,2,4-Trimethylbenzene          | 5  | "    | 48   | 50.0 |  | 95  | 70-130 |  |  |  |
| sec-Butylbenzene                | 5  | "    | 47   | 50.0 |  | 95  | 70-130 |  |  |  |
| 4-Isopropyltoluene              | 5  | "    | 49   | 50.0 |  | 98  | 70-134 |  |  |  |
| 1,3-Dichlorobenzene             | 5  | "    | 48   | 50.0 |  | 95  | 70-130 |  |  |  |
| 1,4-Dichlorobenzene             | 5  | "    | 52   | 50.0 |  | 104 | 70-130 |  |  |  |
| n-Butylbenzene                  | 5  | "    | 52   | 50.0 |  | 105 | 70-140 |  |  |  |
| 1,2-Dichlorobenzene             | 5  | "    | 52   | 50.0 |  | 104 | 70-140 |  |  |  |
| 1,2-Dibromo-3-chloropropane     | 5  | "    | 47   | 50.0 |  | 95  | 70-140 |  |  |  |
| Hexachlorobutadiene             | 10 | "    | 61   | 50.0 |  | 121 | 70-140 |  |  |  |
| 1,2,4-Trichlorobenzene          | 10 | "    | 50   | 50.0 |  | 100 | 70-140 |  |  |  |
| Naphthalene                     | 10 | "    | 52   | 50.0 |  | 104 | 70-140 |  |  |  |
| 1,2,3-Trichlorobenzene          | 5  | "    | 52   | 50.0 |  | 104 | 70-140 |  |  |  |
| Surrogate: Dibromofluoromethane |    | "    | 49.9 | 50.0 |  | 100 | 60-140 |  |  |  |
| Surrogate: Toluene-d8           |    | "    | 49.8 | 50.0 |  | 100 | 70-130 |  |  |  |
| Surrogate: 4-Bromofluorobenzene |    | "    | 47.6 | 50.0 |  | 95  | 70-130 |  |  |  |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G07008 - EPA 8260**

**LCS Dup (5G07008-BSD1)**

Prepared & Analyzed: 07/02/15

|                           |    |      |     |      |  |     |        |     |    |  |
|---------------------------|----|------|-----|------|--|-----|--------|-----|----|--|
| Dichlorodifluoromethane   | 5  | ug/L | 42  | 50.0 |  | 84  | 10-150 | 11  | 30 |  |
| Chloromethane             | 5  | "    | 47  | 50.0 |  | 95  | 42-150 | 4   | 30 |  |
| Vinyl chloride            | 2  | "    | 51  | 50.0 |  | 101 | 54-135 | 1   | 30 |  |
| Bromomethane              | 5  | "    | 34  | 50.0 |  | 67  | 32-150 | 7   | 30 |  |
| Chloroethane              | 5  | "    | 56  | 50.0 |  | 112 | 48-156 | 5   | 30 |  |
| Trichlorofluoromethane    | 5  | "    | 50  | 50.0 |  | 101 | 68-144 | 3   | 30 |  |
| 1,1-Dichloroethene        | 5  | "    | 54  | 50.0 |  | 109 | 44-145 | 4   | 30 |  |
| Carbon disulfide          | 5  | "    | 62  | 50.0 |  | 124 | 60-147 | 4   | 30 |  |
| Iodomethane               | 10 | "    | 31  | 50.0 |  | 62  | 33-150 | 6   | 30 |  |
| Methylene Chloride        | 5  | "    | 50  | 50.0 |  | 100 | 62-139 | 0.2 | 30 |  |
| Acetone                   | 25 | "    | 210 | 250  |  | 83  | 50-154 | 5   | 30 |  |
| trans-1,2-Dichloroethene  | 5  | "    | 52  | 50.0 |  | 104 | 73-132 | 1   | 30 |  |
| Methyl t-Butyl Ether      | 5  | "    | 45  | 50.0 |  | 90  | 62-135 | 5   | 30 |  |
| Acrolein                  | 50 | "    | 57  | 200  |  | 28  | 10-152 | 9   | 30 |  |
| 1,1-Dichloroethane        | 5  | "    | 54  | 50.0 |  | 107 | 76-133 | 2   | 30 |  |
| Acrylonitrile             | 20 | "    | 210 | 250  |  | 85  | 20-156 | 5   | 30 |  |
| Vinyl acetate             | 5  | "    | 44  | 50.0 |  | 87  | 70-151 | 4   | 30 |  |
| cis-1,2-Dichloroethene    | 5  | "    | 51  | 50.0 |  | 103 | 74-134 | 0.1 | 30 |  |
| 2,2-Dichloropropane       | 10 | "    | 50  | 50.0 |  | 99  | 59-143 | 4   | 30 |  |
| Bromochloromethane        | 5  | "    | 52  | 50.0 |  | 103 | 67-136 | 3   | 30 |  |
| Chloroform                | 5  | "    | 51  | 50.0 |  | 102 | 80-135 | 1   | 30 |  |
| Carbon Tetrachloride      | 5  | "    | 52  | 50.0 |  | 103 | 69-135 | 4   | 30 |  |
| 1,1,1-Trichloroethane     | 5  | "    | 52  | 50.0 |  | 103 | 80-132 | 4   | 30 |  |
| 2-Butanone                | 25 | "    | 200 | 250  |  | 81  | 46-143 | 9   | 30 |  |
| 1,1-Dichloropropene       | 5  | "    | 56  | 50.0 |  | 112 | 68-130 | 4   | 30 |  |
| Benzene                   | 5  | "    | 51  | 50.0 |  | 102 | 80-131 | 1   | 30 |  |
| 1,2-Dichloroethane        | 5  | "    | 52  | 50.0 |  | 103 | 75-131 | 4   | 30 |  |
| Trichloroethene           | 5  | "    | 52  | 50.0 |  | 104 | 70-130 | 2   | 30 |  |
| Dibromomethane            | 5  | "    | 48  | 50.0 |  | 97  | 61-140 | 4   | 30 |  |
| 1,2-Dichloropropane       | 5  | "    | 52  | 50.0 |  | 104 | 78-127 | 0.9 | 30 |  |
| Dichlorobromomethane      | 5  | "    | 50  | 50.0 |  | 101 | 69-132 | 5   | 35 |  |
| Bromodichloromethane      | 5  | "    | 50  | 50.0 |  | 101 | 69-132 | 5   | 30 |  |
| 2-Chloroethyl vinyl ether | 25 | "    | 41  | 50.0 |  | 82  | 10-132 | 2   | 30 |  |
| cis-1,3-Dichloropropene   | 5  | "    | 51  | 50.0 |  | 101 | 70-130 | 2   | 30 |  |
| Toluene                   | 5  | "    | 50  | 50.0 |  | 99  | 70-138 | 1   | 30 |  |
| Tetrachloroethene         | 5  | "    | 65  | 50.0 |  | 129 | 59-136 | 2   | 30 |  |
| 4-Methyl-2-pentanone      | 25 | "    | 200 | 250  |  | 80  | 56-137 | 4   | 30 |  |
| trans-1,3-Dichloropropene | 5  | "    | 52  | 50.0 |  | 103 | 55-131 | 4   | 30 |  |
| 1,1,2-Trichloroethane     | 5  | "    | 49  | 50.0 |  | 99  | 74-129 | 2   | 30 |  |
| Chlorodibromomethane      | 5  | "    | 49  | 50.0 |  | 99  | 69-125 | 4   | 30 |  |
| 1,3-Dichloropropane       | 5  | "    | 47  | 50.0 |  | 94  | 68-132 | 3   | 30 |  |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G07008 - EPA 8260**

**LCS Dup (5G07008-BSD1)**

Prepared & Analyzed: 07/02/15

|                                 |    |      |      |      |  |     |        |      |    |  |
|---------------------------------|----|------|------|------|--|-----|--------|------|----|--|
| 1,2-Dibromoethane               | 5  | ug/L | 47   | 50.0 |  | 93  | 66-131 | 4    | 30 |  |
| 2-Hexanone                      | 25 | "    | 200  | 250  |  | 78  | 40-147 | 5    | 30 |  |
| Chlorobenzene                   | 5  | "    | 50   | 50.0 |  | 99  | 80-129 | 0.04 | 30 |  |
| Ethylbenzene                    | 5  | "    | 51   | 50.0 |  | 102 | 78-131 | 2    | 30 |  |
| 1,1,1,2-Tetrachloroethane       | 5  | "    | 52   | 50.0 |  | 104 | 70-138 | 1    | 30 |  |
| m,p-Xylene                      | 10 | "    | 100  | 100  |  | 101 | 70-141 | 2    | 30 |  |
| o-Xylene                        | 5  | "    | 52   | 50.0 |  | 103 | 70-130 | 3    | 30 |  |
| Styrene                         | 5  | "    | 50   | 50.0 |  | 99  | 70-124 | 1    | 30 |  |
| Bromoform                       | 5  | "    | 46   | 50.0 |  | 92  | 60-138 | 3    | 30 |  |
| Isopropylbenzene                | 5  | "    | 51   | 50.0 |  | 102 | 73-130 | 3    | 30 |  |
| n-Propylbenzene                 | 5  | "    | 51   | 50.0 |  | 103 | 70-130 | 4    | 30 |  |
| Bromobenzene                    | 5  | "    | 49   | 50.0 |  | 97  | 70-130 | 1    | 30 |  |
| 1,1,2,2-Tetrachloroethane       | 5  | "    | 44   | 50.0 |  | 88  | 64-141 | 5    | 30 |  |
| 1,3,5-Trimethylbenzene          | 5  | "    | 48   | 50.0 |  | 96  | 70-130 | 3    | 30 |  |
| 2-Chlorotoluene                 | 5  | "    | 49   | 50.0 |  | 98  | 70-130 | 2    | 30 |  |
| 1,2,3-Trichloropropane          | 5  | "    | 44   | 50.0 |  | 88  | 70-130 | 3    | 30 |  |
| trans-1,4-Dichloro-2-butene     | 10 | "    | 39   | 50.0 |  | 79  | 52-149 | 2    | 30 |  |
| 4-Chlorotoluene                 | 5  | "    | 48   | 50.0 |  | 96  | 70-130 | 4    | 30 |  |
| tert-Butylbenzene               | 5  | "    | 49   | 50.0 |  | 98  | 69-128 | 4    | 30 |  |
| 1,2,4-Trimethylbenzene          | 5  | "    | 49   | 50.0 |  | 98  | 70-130 | 3    | 30 |  |
| sec-Butylbenzene                | 5  | "    | 51   | 50.0 |  | 103 | 70-130 | 8    | 30 |  |
| 4-Isopropyltoluene              | 5  | "    | 51   | 50.0 |  | 102 | 70-134 | 4    | 30 |  |
| 1,3-Dichlorobenzene             | 5  | "    | 47   | 50.0 |  | 95  | 70-130 | 0.2  | 30 |  |
| 1,4-Dichlorobenzene             | 5  | "    | 51   | 50.0 |  | 102 | 70-130 | 1    | 30 |  |
| n-Butylbenzene                  | 5  | "    | 54   | 50.0 |  | 109 | 70-140 | 4    | 30 |  |
| 1,2-Dichlorobenzene             | 5  | "    | 52   | 50.0 |  | 103 | 70-140 | 0.3  | 30 |  |
| 1,2-Dibromo-3-chloropropane     | 5  | "    | 46   | 50.0 |  | 92  | 70-140 | 3    | 30 |  |
| Hexachlorobutadiene             | 10 | "    | 63   | 50.0 |  | 126 | 70-140 | 4    | 30 |  |
| 1,2,4-Trichlorobenzene          | 10 | "    | 51   | 50.0 |  | 102 | 70-140 | 1    | 30 |  |
| Naphthalene                     | 10 | "    | 53   | 50.0 |  | 105 | 70-140 | 2    | 30 |  |
| 1,2,3-Trichlorobenzene          | 5  | "    | 53   | 50.0 |  | 106 | 70-140 | 2    | 30 |  |
| Surrogate: Dibromofluoromethane |    | "    | 49.5 | 50.0 |  | 99  | 60-140 |      |    |  |
| Surrogate: Toluene-d8           |    | "    | 49.5 | 50.0 |  | 99  | 70-130 |      |    |  |
| Surrogate: 4-Bromofluorobenzene |    | "    | 48.8 | 50.0 |  | 98  | 70-130 |      |    |  |



The test results in this report meet NELAP requirements for accredited parameters, unless otherwise noted, and relate only to the sample(s) received by this laboratory. This report must be reproduced in its entirety unless approved by the laboratory.

Results are reported on a "wet weight basis", unless otherwise noted.





4320 Midmost Drive Mobile, Alabama 36609  
Phone (251) 344-9106 Fax (251) 341-9492

Report Date: 08/12/15 08:18

Report To: North Baldwin Utilities  
25 Hand Avenue  
Bay Minette, AL 36507  
Attention: James Dean

Project: NPDES-Permit Form 2A- Pollutant Scan  
Project Number: NPDES-Permit Form 2A- Pollutant Scan

### ANALYTICAL REPORT

This report includes the results of analyses for the samples listed below that were received by the laboratory on 07/09/15 13:56. If you have any questions concerning this report, please feel free to call Susan Maynard at (251) 344-9106.

| Sample ID | Laboratory ID | Matrix     | Date Sampled   | Date Received  |
|-----------|---------------|------------|----------------|----------------|
| Effluent  | 15G0162-01    | Wastewater | 07/09/15 10:30 | 07/09/15 13:56 |

Susan Maynard, Lab Director



*The test results in this report meet NELAP requirements for accredited parameters, unless otherwise noted, and relate only to the sample(s) received by this laboratory. This report must be reproduced in its entirety unless approved by the laboratory.*

*Results are reported on a "wet weight basis", unless otherwise noted.*

Report Date: 08/12/15 08:18

Sample Name: Effluent

Sample Type: Grab

Sample Date: 07/09/15 10:30

Date Received: 07/09/15 13:56

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result      | Units | Reporting |         |                | Method         | Batch         | Lab Number | Qualifier  |          |
|---|-------------|-------|-----------|---------|----------------|----------------|---------------|------------|------------|----------|
|   |             |       | Limit     | Analyst | Prepared       |                |               |            |            | Analyzed |
| <b><u>Metals by EPA 200 Series Methods</u></b>                  |             |       |           |         |                |                |               |            |            |          |
| Antimony  | < 0.0060    | mg/L  | 0.0060    | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| Arsenic   | < 0.010     | mg/L  | 0.010     | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| Beryllium   | < 0.005     | mg/L  | 0.005     | ENC     | 07/15/15 12:49 | 07/21/15 19:32 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| Cadmium   | < 0.005     | mg/L  | 0.005     | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| <b>Calcium</b>  | <b>41.5</b> | mg/L  | 0.5       | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 |          |
| Chromium  | < 0.05      | mg/L  | 0.05      | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| Copper  | < 0.01      | mg/L  | 0.01      | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| Lead  | < 0.005     | mg/L  | 0.005     | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| <b>Magnesium</b>  | <b>2.47</b> | mg/L  | 0.50      | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 |          |
| Nickel  | < 0.05      | mg/L  | 0.05      | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| Selenium  | < 0.02      | mg/L  | 0.02      | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| Silver  | < 0.01      | mg/L  | 0.01      | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| Thallium  | < 0.005     | mg/L  | 0.005     | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| Zinc  | < 0.10      | mg/L  | 0.10      | ENC     | 07/15/15 12:49 | 07/20/15 20:39 | EPA 200.8     | 5G15017    | 15G0162-01 | U        |
| <b><u>Metals by EPA 6000/7000 Series Methods</u></b>            |             |       |           |         |                |                |               |            |            |          |
| Mercury   | < 0.0005    | mg/L  | 0.0005    | ENC     | 07/14/15 17:18 | 07/15/15 17:39 | EPA 7470A     | 5G14030    | 15G0162-01 | U        |
| <b><u>Classical Chemistry Parameters</u></b>                    |             |       |           |         |                |                |               |            |            |          |
| Cyanide (Total)   | < 0.02      | mg/L  | 0.02      | SAB     | 07/15/15 12:00 | 07/16/15 10:49 | 10-204-00-1-X | 5G15027    | 15G0162-01 | U        |
| Oil & Grease  | < 2         | mg/L  | 2         | TGH     | 07/14/15 10:30 | 07/17/15 15:30 | EPA 1664      | 5G14004    | 15G0162-01 | U        |
| Phenol  | < 0.05      | mg/L  | 0.05      | SAB     | 07/16/15 10:00 | 07/17/15 13:14 | EPA 420.4     | 5G16016    | 15G0162-01 | U        |
| <b>Total Dissolved Solids</b>                                   | <b>266</b>  | mg/L  | 5         | NG      | 07/10/15 09:18 | 07/13/15 15:50 | SM 2540C      | 5G09014    | 15G0162-01 |          |
| <b>Total Hardness</b>   | <b>114</b>  | mg/L  | 0.5       | SAB     | 07/21/15 16:54 | 07/21/15 16:54 | SM 2340 B     | 5G21024    | 15G0162-01 |          |
| <b><u>Semivolatile Organic Compounds by EPA Method 8270</u></b> |             |       |           |         |                |                |               |            |            |          |
| 1,2,4-Trichlorobenzene  | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 1,2-Dichlorobenzene   | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 1,3-Dichlorobenzene   | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 1,4-Dichlorobenzene   | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 2,4,6-Trichlorophenol   | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 2,4-Dichlorophenol  | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 2,4-Dimethylphenol  | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 2,4-Dinitrophenol   | < 10        | ug/L  | 10        | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 2,4-Dinitrotoluene  | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 2,6-Dinitrotoluene  | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 2-Chloronaphthalene   | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 2-Chlorophenol  | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 2-Nitrophenol   | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 3,3'-Dichlorobenzidine  | < 10        | ug/L  | 10        | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |
| 4,6-Dinitro-o-cresol  | < 5         | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D     | 5G14003    | 15G0162-01 | U        |



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Results are reported on a "wet weight basis", unless otherwise noted.

Sample Name: Effluent

Sample Type: Grab

Sample Date: 07/09/15 10:30

Date Received: 07/09/15 13:56

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result | Units | Reporting |         |                |                | Method    | Batch   | Lab Number | Qualifier |
|---|--------|-------|-----------|---------|----------------|----------------|-----------|---------|------------|-----------|
|   |        |       | Limit     | Analyst | Prepared       | Analyzed       |           |         |            |           |
| <b><u>Semivolatile Organic Compounds by EPA Method 8270</u></b> |        |       |           |         |                |                |           |         |            |           |
| 4-Bromophenyl phenyl ether                                      | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| 4-Chlorophenyl phenyl ether                                     | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| 4-Nitrophenol   | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Acenaphthene  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Acenaphthylene  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Anthracene  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Azobenzene<br>(1,2-diphenylhydrazine)                           | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Benzidine   | < 15   | ug/L  | 15        | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Benzo(a)anthracene  | < 1    | ug/L  | 1         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Benzo(a)pyrene  | < 0.2  | ug/L  | 0.2       | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Benzo(b)fluoranthene  | < 1    | ug/L  | 1         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Benzo(ghi)perylene  | < 0.5  | ug/L  | 0.5       | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Benzo(k)fluoranthene  | < 0.5  | ug/L  | 0.5       | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Benzyl butyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Bis(2-chloroethoxy)methane                                      | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Bis(2-chloroethyl)ether   | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Bis(2-chloroisopropyl) ether                                    | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Bis(2-ethylhexyl) phthalate                                     | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Chrysene  | < 1    | ug/L  | 1         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Dibenzo(a,h)anthracene  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Diethyl phthalate   | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Dimethyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Di-n-butyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Di-n-octyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Fluoranthene  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Fluorene  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Hexachlorobenzene   | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Hexachlorobutadiene   | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Hexachlorocyclopentadiene                                       | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Hexachloroethane  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Indeno (1,2,3-cd) pyrene  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Isophorone  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Naphthalene   | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Nitrobenzene  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| N-Nitrosodimethylamine  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| N-Nitrosodi-n-propylamine                                       | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| N-Nitrosodiphenylamine  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| p-Chloro-m-cresol   | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Pentachlorophenol   | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |



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Results are reported on a "wet weight basis", unless otherwise noted.

Report Date: 08/12/15 08:18

Sample Name: Effluent

Sample Type: Grab

Sample Date: 07/09/15 10:30

Date Received: 07/09/15 13:56

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result | Units | Reporting |         |                |                | Method    | Batch   | Lab Number | Qualifier |
|---|--------|-------|-----------|---------|----------------|----------------|-----------|---------|------------|-----------|
|   |        |       | Limit     | Analyst | Prepared       | Analyzed       |           |         |            |           |
| <b><u>Semivolatile Organic Compounds by EPA Method 8270</u></b> |        |       |           |         |                |                |           |         |            |           |
| Phenanthrene  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Phenol  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Pyrene  | < 5    | ug/L  | 5         | JAB     | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 | 15G0162-01 | U         |
| Surrogate: 2,4,6-Tribromophenol                                 | 79 %   |       | 21-121    |         | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 |            |           |
| Surrogate: 2-Fluorobiphenyl                                     | 60 %   |       | 12-120    |         | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 |            |           |
| Surrogate: 2-Fluorophenol                                       | 37 %   |       | 10-120    |         | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 |            |           |
| Surrogate: Nitrobenzene-d5                                      | 54 %   |       | 12-128    |         | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 |            |           |
| Surrogate: Phenol-d5  | 22 %   |       | 10-120    |         | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 |            |           |
| Surrogate: p-Terphenyl-d14                                      | 82 %   |       | 11-158    |         | 07/14/15 09:56 | 07/30/15 18:23 | EPA 8270D | 5G14003 |            |           |
| <b><u>Volatile Organic Compounds by EPA Method 8260</u></b>     |        |       |           |         |                |                |           |         |            |           |
| 1,1,1,2-Tetrachloroethane                                       | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,1,1-Trichloroethane   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,1,2,2-Tetrachloroethane                                       | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,1,2-Trichloroethane   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,1-Dichloroethane  | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,1-Dichloroethene  | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,1-Dichloroethylene  | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,1-Dichloropropene   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,2,3-Trichlorobenzene  | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,2,3-Trichloropropane  | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,2,4-Trichlorobenzene  | < 10   | ug/L  | 10        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,2,4-Trimethylbenzene  | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,2-Dibromo-3-chloropropane                                     | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,2-Dibromoethane   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,2-Dichlorobenzene   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,2-Dichloroethane  | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,2-Dichloropropane   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,3,5-Trimethylbenzene  | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,3-Dichlorobenzene   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,3-Dichloropropane   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 1,4-Dichlorobenzene   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 2,2-Dichloropropane   | < 10   | ug/L  | 10        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 2-Butanone  | < 25   | ug/L  | 25        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 2-Chloroethyl vinyl ether                                       | < 25   | ug/L  | 25        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 2-Chlorotoluene   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 2-Hexanone  | < 25   | ug/L  | 25        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 4-Chlorotoluene   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 4-Isopropyltoluene  | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| 4-Methyl-2-pentanone  | < 25   | ug/L  | 25        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |
| Acetone   | < 25   | ug/L  | 25        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260  | 5G13014 | 15G0162-01 | U         |



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Results are reported on a "wet weight basis", unless otherwise noted.

Report Date: 08/12/15 08:18

Sample Name: Effluent

Sample Type: Grab

Sample Date: 07/09/15 10:30

Date Received: 07/09/15 13:56

Sampled by: Client

Matrix: Wastewater

| Analyte  | Result    | Units | Reporting |         |                |                | Method   | Batch   | Lab Number | Qualifier |
|--|-----------|-------|-----------|---------|----------------|----------------|----------|---------|------------|-----------|
|  |           |       | Limit     | Analyst | Prepared       | Analyzed       |          |         |            |           |
| <b>Volatile Organic Compounds by EPA Method 8260</b> |           |       |           |         |                |                |          |         |            |           |
| Acrolein   | < 50      | ug/L  | 50        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Acrylonitrile  | < 20      | ug/L  | 20        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Benzene  | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Bromobenzene   | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Bromochloromethane                                   | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Bromodichloromethane                                 | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Bromoform  | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Bromomethane   | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Carbon disulfide                                     | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Carbon Tetrachloride                                 | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Chlorobenzene  | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Chlorodibromomethane                                 | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Chloroethane   | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| <b>Chloroform</b>                                    | <b>19</b> | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 |           |
| Chloromethane  | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| cis-1,2-Dichloroethene                               | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| cis-1,3-Dichloropropene                              | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Dibromomethane                                       | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Dichlorobromomethane                                 | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Dichlorodifluoromethane                              | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Ethylbenzene   | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Hexachlorobutadiene                                  | < 10      | ug/L  | 10        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Iodomethane  | < 10      | ug/L  | 10        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Isopropylbenzene                                     | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| m,p-Xylene   | < 10      | ug/L  | 10        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Methyl Bromide                                       | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Methyl Chloride                                      | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Methyl t-Butyl Ether                                 | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Methylene Chloride                                   | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Naphthalene  | < 10      | ug/L  | 10        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| n-Butylbenzene                                       | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| n-Propylbenzene                                      | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| o-Xylene   | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| sec-Butylbenzene                                     | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Styrene  | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| tert-Butylbenzene                                    | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Tetrachloroethene                                    | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Tetrachloroethylene                                  | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Toluene  | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| trans-1,2-Dichloroethene                             | < 5       | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |



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Results are reported on a "wet weight basis", unless otherwise noted.

Report Date: 08/12/15 08:18

Sample Name: Effluent

Sample Type: Grab

Sample Date: 07/09/15 10:30

Date Received: 07/09/15 13:56

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result | Units | Reporting |         |                | Analyzed       | Method   | Batch   | Lab Number | Qualifier |
|---|--------|-------|-----------|---------|----------------|----------------|----------|---------|------------|-----------|
|   |        |       | Limit     | Analyst | Prepared       |                |          |         |            |           |
| <b><u>Volatile Organic Compounds by EPA Method 8260</u></b> |        |       |           |         |                |                |          |         |            |           |
| trans-1,2-Dichloroethylene                                  | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| trans-1,3-Dichloropropene                                   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| trans-1,4-Dichloro-2-butene                                 | < 10   | ug/L  | 10        | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Trichloroethene   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Trichloroethylene   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Trichlorofluoromethane                                      | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Vinyl acetate   | < 5    | ug/L  | 5         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Vinyl chloride  | < 2    | ug/L  | 2         | GEM     | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 | 15G0162-01 | U         |
| Surrogate: 4-Bromofluorobenzene                             | 96 %   |       | 70-130    |         | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 |            |           |
| Surrogate: Dibromofluoromethane                             | 101 %  |       | 60-140    |         | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 |            |           |
| Surrogate: Toluene-d8                                       | 101 %  |       | 70-130    |         | 07/13/15 12:00 | 07/13/15 16:30 | EPA 8260 | 5G13014 |            |           |



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Results are reported on a "wet weight basis", unless otherwise noted.

## CASE NARRATIVE

The results presented in this report relate only to the sample(s) received on 07/09/15 13:56 for North Baldwin Utilities -

| <u>Laboratory ID</u> | <u>Sample Name</u> |
|----------------------|--------------------|
| 15G0162-01           | Effluent           |

. If you have any questions concerning this report, please contact Susan Maynard at (251) 344-9106.

### Sample Receipt

Sample receipt information, including documentation of any deviation(s) from sample receiving quality control acceptance criteria, is provided on attachments to the report including the Sample Receipt Checklist, Chain of Custody, and/or Field Data Sheet.

### Comments

No additional comments.

### Explanation of qualified data in this report:

- U The compound was analyzed for but not detected.
- SPK L The % Recovery for this spiked analyte was below the established control limit.
- SPK H The % Recovery for this spiked analyte was above the established control limit.
- RPD The RPD for this duplicate exceeded the established control limit.
- MS The RPD and/or % Recovery for this matrix spike cannot be accurately calculated due to matrix interference.



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*Results are reported on a "wet weight basis", unless otherwise noted.*

**Metals by EPA 200 Series Methods - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G15017 - EPA 200.8**

**Blank (5G15017-BLK1)**

Prepared: 07/15/15 Analyzed: 07/20/15

|           |        |      |    |  |  |  |  |  |  |   |
|-----------|--------|------|----|--|--|--|--|--|--|---|
| Silver    | 0.01   | mg/L | ND |  |  |  |  |  |  | U |
| Arsenic   | 0.010  | "    | ND |  |  |  |  |  |  | U |
| Beryllium | 0.001  | "    | ND |  |  |  |  |  |  | U |
| Calcium   | 0.5    | "    | ND |  |  |  |  |  |  | U |
| Cadmium   | 0.005  | "    | ND |  |  |  |  |  |  | U |
| Chromium  | 0.001  | "    | ND |  |  |  |  |  |  | U |
| Copper    | 0.01   | "    | ND |  |  |  |  |  |  | U |
| Magnesium | 0.10   | "    | ND |  |  |  |  |  |  | U |
| Nickel    | 0.001  | "    | ND |  |  |  |  |  |  | U |
| Lead      | 0.005  | "    | ND |  |  |  |  |  |  | U |
| Antimony  | 0.0060 | "    | ND |  |  |  |  |  |  | U |
| Selenium  | 0.02   | "    | ND |  |  |  |  |  |  | U |
| Thallium  | 0.002  | "    | ND |  |  |  |  |  |  | U |
| Zinc      | 0.10   | "    | ND |  |  |  |  |  |  | U |

**LCS (5G15017-BS1)**

Prepared: 07/15/15 Analyzed: 07/20/15

|           |        |      |       |       |  |     |        |
|-----------|--------|------|-------|-------|--|-----|--------|
| Silver    | 0.01   | mg/L | 0.09  | 0.100 |  | 92  | 85-115 |
| Arsenic   | 0.010  | "    | 0.102 | 0.100 |  | 102 | 85-115 |
| Beryllium | 0.001  | "    | 0.110 | 0.100 |  | 110 | 85-115 |
| Calcium   | 0.5    | "    | 5.1   | 5.00  |  | 103 | 85-115 |
| Cadmium   | 0.005  | "    | 0.104 | 0.100 |  | 104 | 85-115 |
| Chromium  | 0.001  | "    | 0.10  | 0.100 |  | 103 | 85-115 |
| Copper    | 0.01   | "    | 0.10  | 0.100 |  | 103 | 85-115 |
| Magnesium | 0.10   | "    | 5.25  | 5.00  |  | 105 | 85-115 |
| Nickel    | 0.001  | "    | 0.10  | 0.100 |  | 105 | 85-115 |
| Lead      | 0.005  | "    | 0.103 | 0.100 |  | 103 | 85-115 |
| Antimony  | 0.0060 | "    | 0.10  | 0.100 |  | 104 | 85-115 |
| Selenium  | 0.02   | "    | 0.10  | 0.100 |  | 102 | 85-115 |
| Thallium  | 0.002  | "    | 0.10  | 0.100 |  | 103 | 85-115 |
| Zinc      | 0.10   | "    | 0.11  | 0.100 |  | 106 | 85-115 |



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Results are reported on a "wet weight basis", unless otherwise noted.



**Metals by EPA 200 Series Methods - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G15017 - EPA 200.8**

**LCS Dup (5G15017-BSD1)**

Prepared: 07/15/15 Analyzed: 07/20/15

|           |        |      |       |       |  |     |        |     |    |  |
|-----------|--------|------|-------|-------|--|-----|--------|-----|----|--|
| Silver    | 0.01   | mg/L | 0.09  | 0.100 |  | 93  | 85-115 | 0.5 | 25 |  |
| Arsenic   | 0.010  | "    | 0.099 | 0.100 |  | 99  | 85-115 | 2   | 25 |  |
| Beryllium | 0.001  | "    | 0.108 | 0.100 |  | 108 | 85-115 | 2   | 25 |  |
| Calcium   | 0.5    | "    | 5.0   | 5.00  |  | 100 | 85-115 | 2   | 25 |  |
| Cadmium   | 0.005  | "    | 0.103 | 0.100 |  | 103 | 85-115 | 2   | 25 |  |
| Chromium  | 0.001  | "    | 0.10  | 0.100 |  | 102 | 85-115 | 2   | 25 |  |
| Copper    | 0.01   | "    | 0.10  | 0.100 |  | 102 | 85-115 | 1   | 25 |  |
| Magnesium | 0.10   | "    | 5.16  | 5.00  |  | 103 | 85-115 | 2   | 25 |  |
| Nickel    | 0.001  | "    | 0.10  | 0.100 |  | 103 | 85-115 | 2   | 25 |  |
| Lead      | 0.005  | "    | 0.101 | 0.100 |  | 101 | 85-115 | 2   | 25 |  |
| Antimony  | 0.0060 | "    | 0.10  | 0.100 |  | 102 | 85-115 | 1   | 25 |  |
| Selenium  | 0.02   | "    | 0.10  | 0.100 |  | 99  | 85-115 | 3   | 25 |  |
| Thallium  | 0.002  | "    | 0.10  | 0.100 |  | 101 | 85-115 | 2   | 25 |  |
| Zinc      | 0.10   | "    | 0.10  | 0.100 |  | 105 | 85-115 | 0.9 | 25 |  |

**Duplicate (5G15017-DUP1)**

Source: 15G0098-01

Prepared: 07/15/15 Analyzed: 07/20/15

|           |        |      |         |  |        |  |  |     |    |        |
|-----------|--------|------|---------|--|--------|--|--|-----|----|--------|
| Silver    | 0.01   | mg/L | ND      |  | ND     |  |  |     | 25 | U      |
| Arsenic   | 0.010  | "    | 0.0007  |  | 0.0004 |  |  | 67  | 25 | RPD, U |
| Beryllium | 0.002  | "    | ND      |  | ND     |  |  |     | 25 | U      |
| Calcium   | 0.5    | "    | 1.4     |  | 1.3    |  |  | 5   | 25 |        |
| Cadmium   | 0.005  | "    | 0.00006 |  | ND     |  |  |     | 25 | U      |
| Chromium  | 0.002  | "    | ND      |  | 0.0002 |  |  |     | 25 | U      |
| Copper    | 0.01   | "    | 0.06    |  | 0.06   |  |  | 0.2 | 25 |        |
| Magnesium | 0.20   | "    | ND      |  | 0.05   |  |  |     | 25 | U      |
| Nickel    | 0.002  | "    | ND      |  | 0.0002 |  |  |     | 25 | U      |
| Lead      | 0.005  | "    | 0.003   |  | 0.002  |  |  | 11  | 25 | U      |
| Antimony  | 0.0060 | "    | 0.0001  |  | ND     |  |  |     | 25 | U      |
| Selenium  | 0.02   | "    | 0.002   |  | 0.002  |  |  | 16  | 25 | U      |
| Thallium  | 0.002  | "    | ND      |  | ND     |  |  |     | 25 | U      |
| Zinc      | 0.10   | "    | 0.002   |  | 0.002  |  |  | 24  | 25 | U      |



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Results are reported on a "wet weight basis", unless otherwise noted.

**Metals by EPA 200 Series Methods - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G15017 - EPA 200.8**

**Matrix Spike (5G15017-MS1)**

Source: 15G0098-01

Prepared: 07/15/15

Analyzed: 07/20/15

|           |        |      |       |       |        |     |        |  |  |  |
|-----------|--------|------|-------|-------|--------|-----|--------|--|--|--|
| Silver    | 0.01   | mg/L | 0.17  | 0.200 | ND     | 86  | 70-130 |  |  |  |
| Arsenic   | 0.010  | "    | 0.213 | 0.200 | 0.0004 | 106 | 70-130 |  |  |  |
| Beryllium | 0.002  | "    | 0.207 | 0.200 | ND     | 103 | 70-130 |  |  |  |
| Calcium   | 0.5    | "    | 11.1  | 10.0  | 1.3    | 98  | 70-130 |  |  |  |
| Cadmium   | 0.005  | "    | 0.192 | 0.200 | ND     | 96  | 70-130 |  |  |  |
| Chromium  | 0.002  | "    | 0.20  | 0.200 | 0.0002 | 100 | 70-130 |  |  |  |
| Copper    | 0.01   | "    | 0.25  | 0.200 | 0.06   | 96  | 70-130 |  |  |  |
| Magnesium | 0.20   | "    | 9.83  | 10.0  | 0.05   | 98  | 70-130 |  |  |  |
| Nickel    | 0.002  | "    | 0.20  | 0.200 | 0.0002 | 98  | 70-130 |  |  |  |
| Lead      | 0.005  | "    | 0.194 | 0.200 | 0.002  | 96  | 70-130 |  |  |  |
| Antimony  | 0.0060 | "    | 0.20  | 0.200 | ND     | 100 | 70-130 |  |  |  |
| Selenium  | 0.02   | "    | 0.20  | 0.200 | 0.002  | 101 | 70-130 |  |  |  |
| Thallium  | 0.002  | "    | 0.19  | 0.200 | ND     | 95  | 70-130 |  |  |  |
| Zinc      | 0.10   | "    | 0.19  | 0.200 | 0.002  | 96  | 70-130 |  |  |  |

**Matrix Spike Dup (5G15017-MSD1)**

Source: 15G0098-01

Prepared: 07/15/15

Analyzed: 07/20/15

|           |        |      |       |       |        |     |        |     |    |  |
|-----------|--------|------|-------|-------|--------|-----|--------|-----|----|--|
| Silver    | 0.01   | mg/L | 0.17  | 0.200 | ND     | 87  | 70-130 | 0.8 | 25 |  |
| Arsenic   | 0.010  | "    | 0.214 | 0.200 | 0.0004 | 107 | 70-130 | 0.8 | 25 |  |
| Beryllium | 0.002  | "    | 0.203 | 0.200 | ND     | 101 | 70-130 | 2   | 25 |  |
| Calcium   | 0.5    | "    | 11.3  | 10.0  | 1.3    | 99  | 70-130 | 1   | 25 |  |
| Cadmium   | 0.005  | "    | 0.195 | 0.200 | ND     | 98  | 70-130 | 2   | 25 |  |
| Chromium  | 0.002  | "    | 0.20  | 0.200 | 0.0002 | 99  | 70-130 | 0.2 | 25 |  |
| Copper    | 0.01   | "    | 0.25  | 0.200 | 0.06   | 97  | 70-130 | 0.8 | 25 |  |
| Magnesium | 0.20   | "    | 9.94  | 10.0  | 0.05   | 99  | 70-130 | 1   | 25 |  |
| Nickel    | 0.002  | "    | 0.20  | 0.200 | 0.0002 | 99  | 70-130 | 0.5 | 25 |  |
| Lead      | 0.005  | "    | 0.196 | 0.200 | 0.002  | 97  | 70-130 | 1   | 25 |  |
| Antimony  | 0.0060 | "    | 0.20  | 0.200 | ND     | 102 | 70-130 | 2   | 25 |  |
| Selenium  | 0.02   | "    | 0.20  | 0.200 | 0.002  | 101 | 70-130 | 0   | 25 |  |
| Thallium  | 0.002  | "    | 0.19  | 0.200 | ND     | 96  | 70-130 | 2   | 25 |  |
| Zinc      | 0.10   | "    | 0.20  | 0.200 | 0.002  | 97  | 70-130 | 1   | 25 |  |



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**Metals by EPA 6000/7000 Series Methods - Quality Control**

| Analyte                                | RL     | Units | Result | Spike Level   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|--|--------|-------|--------|---|---------------|------|-------------|-----|-----------|-----------|
| <b>Batch 5G14030 - EPA 7470A</b>       |        |       |        |   |               |      |             |     |           |           |
| <b>Blank (5G14030-BLK1)</b>            |        |       |        | Prepared: 07/14/15 Analyzed: 07/15/15                           |               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>LCS (5G14030-BS1)</b>               |        |       |        | Prepared: 07/14/15 Analyzed: 07/15/15                           |               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | 0.007  | 0.00750   |               | 96   | 85-115      |     |           |           |
| <b>LCS Dup (5G14030-BSD1)</b>          |        |       |        | Prepared: 07/14/15 Analyzed: 07/15/15                           |               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | 0.008  | 0.00750   |               | 102  | 85-115      | 6   | 25        |           |
| <b>Duplicate (5G14030-DUP1)</b>        |        |       |        | <b>Source: 15G0153-01</b> Prepared: 07/14/15 Analyzed: 07/15/15 |               |      |             |     |           |           |
| Mercury                                | 0.002  | mg/L  | ND     |   | ND            |      |             |     | 25        | U         |
| <b>Matrix Spike (5G14030-MS1)</b>      |        |       |        | <b>Source: 15G0153-01</b> Prepared: 07/14/15 Analyzed: 07/15/15 |               |      |             |     |           |           |
| Mercury                                | 0.002  | mg/L  | 0.031  | 0.0300  | ND            | 104  | 70-130      |     |           |           |
| <b>Matrix Spike Dup (5G14030-MSD1)</b> |        |       |        | <b>Source: 15G0153-01</b> Prepared: 07/14/15 Analyzed: 07/15/15 |               |      |             |     |           |           |
| Mercury                                | 0.002  | mg/L  | 0.031  | 0.0300  | ND            | 104  | 70-130      | 0.3 | 25        |           |



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**Classical Chemistry Parameters - Quality Control**

| Analyte                                | RL   | Units | Result | Spike Level   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|--|------|-------|--------|---|---------------|------|-------------|-----|-----------|-----------|
| <b>Batch 5G15027 - 10-204-00-1-X</b>   |      |       |        |   |               |      |             |     |           |           |
| <b>Blank (5G15027-BLK1)</b>            |      |       |        | Prepared: 07/15/15 Analyzed: 07/16/15                           |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>LCS (5G15027-BS1)</b>               |      |       |        | Prepared: 07/15/15 Analyzed: 07/16/15                           |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.252  | 0.200   |               | 126  | 81.4-123    |     |           | SPK H     |
| <b>LCS Dup (5G15027-BSD1)</b>          |      |       |        | Prepared: 07/15/15 Analyzed: 07/16/15                           |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.196  | 0.200   |               | 98   | 81.4-123    | 25  | 25        |           |
| <b>Matrix Spike (5G15027-MS1)</b>      |      |       |        | <b>Source: 15G0126-03</b> Prepared: 07/15/15 Analyzed: 07/16/15 |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.189  | 0.200   | ND            | 94   | 70-130      |     |           |           |
| <b>Matrix Spike Dup (5G15027-MSD1)</b> |      |       |        | <b>Source: 15G0126-03</b> Prepared: 07/15/15 Analyzed: 07/16/15 |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.197  | 0.200   | ND            | 98   | 70-130      | 4   | 25        |           |
| <b>Batch 5G14004 - EPA 1664</b>        |      |       |        |   |               |      |             |     |           |           |
| <b>Blank (5G14004-BLK1)</b>            |      |       |        | Prepared: 07/14/15 Analyzed: 07/17/15                           |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>LCS (5G14004-BS1)</b>               |      |       |        | Prepared: 07/14/15 Analyzed: 07/17/15                           |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | 33.1   | 40.0  |               | 83   | 78-114      |     |           |           |
| <b>LCS Dup (5G14004-BSD1)</b>          |      |       |        | Prepared: 07/14/15 Analyzed: 07/17/15                           |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | 36.6   | 40.0  |               | 92   | 78-114      | 10  | 18        |           |
| <b>Matrix Spike (5G14004-MS1)</b>      |      |       |        | <b>Source: 15G0120-02</b> Prepared: 07/14/15 Analyzed: 07/17/15 |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | 30.5   | 40.0  | 0.90          | 74   | 78-114      |     |           | SPK L     |



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**Classical Chemistry Parameters - Quality Control**

| Analyte                                | RL   | Units | Result | Spike Level   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier    |
|--|------|-------|--------|---|---------------|------|-------------|-----|-----------|--------------|
| <b>Batch 5G16016 - EPA 420.4</b>       |      |       |        |   |               |      |             |     |           |              |
| <b>Blank (5G16016-BLK1)</b>            |      |       |        | Prepared: 07/16/15 Analyzed: 07/17/15                           |               |      |             |     |           |              |
| Phenol                                 | 0.05 | mg/L  | ND     |   |               |      |             |     |           | U            |
| <b>LCS (5G16016-BS1)</b>               |      |       |        | Prepared: 07/16/15 Analyzed: 07/17/15                           |               |      |             |     |           |              |
| Phenol                                 | 0.05 | mg/L  | 0.146  | 0.150   |               | 97   | 85-115      |     |           |              |
| <b>LCS Dup (5G16016-BSD1)</b>          |      |       |        | Prepared: 07/16/15 Analyzed: 07/17/15                           |               |      |             |     |           |              |
| Phenol                                 | 0.05 | mg/L  | 0.141  | 0.150   |               | 94   | 85-115      | 3   | 10        |              |
| <b>Matrix Spike (5G16016-MS1)</b>      |      |       |        | <b>Source: 15G0162-01</b> Prepared: 07/16/15 Analyzed: 07/17/15 |               |      |             |     |           |              |
| Phenol                                 | 0.05 | mg/L  | 0.023  | 0.150   | ND            | 15   | 85-115      |     |           | MS, SPK L, U |
| <b>Matrix Spike Dup (5G16016-MSD1)</b> |      |       |        | <b>Source: 15G0162-01</b> Prepared: 07/16/15 Analyzed: 07/17/15 |               |      |             |     |           |              |
| Phenol                                 | 0.05 | mg/L  | 0.025  | 0.150   | ND            | 17   | 85-115      | 8   | 30        | MS, SPK L, U |
| <b>Batch 5G21024 - SM 2340 B</b>       |      |       |        |   |               |      |             |     |           |              |
| <b>Blank (5G21024-BLK1)</b>            |      |       |        | Prepared & Analyzed: 07/21/15                                   |               |      |             |     |           |              |
| Total Hardness                         | 0.5  | mg/L  | ND     |   |               |      |             |     |           | U            |
| <b>Batch 5G09014 - SM 2540C</b>        |      |       |        |   |               |      |             |     |           |              |
| <b>Blank (5G09014-BLK1)</b>            |      |       |        | Prepared: 07/10/15 Analyzed: 07/13/15                           |               |      |             |     |           |              |
| Total Dissolved Solids                 | 5    | mg/L  | ND     |   |               |      |             |     |           | U            |
| <b>Duplicate (5G09014-DUP1)</b>        |      |       |        | <b>Source: 15G0101-01</b> Prepared: 07/10/15 Analyzed: 07/13/15 |               |      |             |     |           |              |
| Total Dissolved Solids                 | 5    | mg/L  | 133    |   | 115           |      |             | 15  | 5         | RPD          |



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4320 Midmost Drive Mobile, Alabama 36609  
 Phone (251) 344-9106 Fax (251) 341-9492

Report Date: 08/12/15 08:18

**Classical Chemistry Parameters - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G09014 - SM 2540C**

**Reference (5G09014-SRM1)**

Prepared: 07/10/15 Analyzed: 07/13/15

|                        |  |      |     |     |  |    |           |  |  |       |
|------------------------|--|------|-----|-----|--|----|-----------|--|--|-------|
| Total Dissolved Solids |  | mg/L | 124 | 149 |  | 83 | 91.06-109 |  |  | SPK L |
|------------------------|--|------|-----|-----|--|----|-----------|--|--|-------|



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**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G14003 - EPA 8270D**

**Blank (5G14003-BLK1)**

Prepared: 07/14/15 Analyzed: 07/15/15

|                                    |    |      |    |  |  |  |  |  |  |   |
|------------------------------------|----|------|----|--|--|--|--|--|--|---|
| N-Nitrosodimethylamine             | 5  | ug/L | ND |  |  |  |  |  |  | U |
| Phenol                             | 5  | "    | ND |  |  |  |  |  |  | U |
| Bis(2-chloroethyl)ether            | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Chlorophenol                     | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,3-Dichlorobenzene                | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,4-Dichlorobenzene                | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,2-Dichlorobenzene                | 5  | "    | ND |  |  |  |  |  |  | U |
| Bis(2-chloroisopropyl) ether       | 5  | "    | ND |  |  |  |  |  |  | U |
| N-Nitrosodi-n-propylamine          | 5  | "    | ND |  |  |  |  |  |  | U |
| Hexachloroethane                   | 5  | "    | ND |  |  |  |  |  |  | U |
| Nitrobenzene                       | 5  | "    | ND |  |  |  |  |  |  | U |
| Isophorone                         | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Nitrophenol                      | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,4-Dimethylphenol                 | 5  | "    | ND |  |  |  |  |  |  | U |
| Bis(2-chloroethoxy)methane         | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,2,4-Trichlorobenzene             | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,4-Dichlorophenol                 | 5  | "    | ND |  |  |  |  |  |  | U |
| Naphthalene                        | 5  | "    | ND |  |  |  |  |  |  | U |
| Hexachlorobutadiene                | 5  | "    | ND |  |  |  |  |  |  | U |
| p-Chloro-m-cresol                  | 5  | "    | ND |  |  |  |  |  |  | U |
| Hexachlorocyclopentadiene          | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,4,6-Trichlorophenol              | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Chloronaphthalene                | 5  | "    | ND |  |  |  |  |  |  | U |
| Dimethyl phthalate                 | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,6-Dinitrotoluene                 | 5  | "    | ND |  |  |  |  |  |  | U |
| Acenaphthylene                     | 5  | "    | ND |  |  |  |  |  |  | U |
| Acenaphthene                       | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,4-Dinitrophenol                  | 10 | "    | ND |  |  |  |  |  |  | U |
| 2,4-Dinitrotoluene                 | 5  | "    | ND |  |  |  |  |  |  | U |
| 4-Nitrophenol                      | 5  | "    | ND |  |  |  |  |  |  | U |
| Diethyl phthalate                  | 5  | "    | ND |  |  |  |  |  |  | U |
| 4-Chlorophenyl phenyl ether        | 5  | "    | ND |  |  |  |  |  |  | U |
| Fluorene                           | 5  | "    | ND |  |  |  |  |  |  | U |
| 4,6-Dinitro-o-cresol               | 5  | "    | ND |  |  |  |  |  |  | U |
| N-Nitrosodiphenylamine             | 5  | "    | ND |  |  |  |  |  |  | U |
| Azobenzene (1,2-diphenylhydrazine) | 5  | "    | ND |  |  |  |  |  |  | U |
| 4-Bromophenyl phenyl ether         | 5  | "    | ND |  |  |  |  |  |  | U |
| Hexachlorobenzene                  | 5  | "    | ND |  |  |  |  |  |  | U |
| Pentachlorophenol                  | 5  | "    | ND |  |  |  |  |  |  | U |
| Phenanthrene                       | 5  | "    | ND |  |  |  |  |  |  | U |
| Anthracene                         | 5  | "    | ND |  |  |  |  |  |  | U |



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**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G14003 - EPA 8270D**

**Blank (5G14003-BLK1)**

Prepared: 07/14/15 Analyzed: 07/15/15

|                             |     |      |    |  |  |  |  |  |  |   |
|-----------------------------|-----|------|----|--|--|--|--|--|--|---|
| Di-n-butyl phthalate        | 5   | ug/L | ND |  |  |  |  |  |  | U |
| Fluoranthene                | 5   | "    | ND |  |  |  |  |  |  | U |
| Benzidine                   | 15  | "    | ND |  |  |  |  |  |  | U |
| Pyrene                      | 5   | "    | ND |  |  |  |  |  |  | U |
| Benzyl butyl phthalate      | 5   | "    | ND |  |  |  |  |  |  | U |
| Bis(2-ethylhexyl) phthalate | 5   | "    | ND |  |  |  |  |  |  | U |
| Benzo(a)anthracene          | 1   | "    | ND |  |  |  |  |  |  | U |
| 3,3'-Dichlorobenzidine      | 10  | "    | ND |  |  |  |  |  |  | U |
| Chrysene                    | 1   | "    | ND |  |  |  |  |  |  | U |
| Di-n-octyl phthalate        | 5   | "    | ND |  |  |  |  |  |  | U |
| Benzo(b)fluoranthene        | 1   | "    | ND |  |  |  |  |  |  | U |
| Benzo(k)fluoranthene        | 0.5 | "    | ND |  |  |  |  |  |  | U |
| Benzo(a)pyrene              | 0.2 | "    | ND |  |  |  |  |  |  | U |
| Indeno (1,2,3-cd) pyrene    | 5   | "    | ND |  |  |  |  |  |  | U |
| Dibenzo(a,h)anthracene      | 5   | "    | ND |  |  |  |  |  |  | U |
| Benzo(ghi)perylene          | 0.5 | "    | ND |  |  |  |  |  |  | U |

|                                 |  |   |  |      |      |  |    |        |  |  |
|---------------------------------|--|---|--|------|------|--|----|--------|--|--|
| Surrogate: 2-Fluorophenol       |  | " |  | 50.0 | 100  |  | 50 | 10-120 |  |  |
| Surrogate: Phenol-d5            |  | " |  | 29.6 | 100  |  | 30 | 10-120 |  |  |
| Surrogate: Nitrobenzene-d5      |  | " |  | 38.3 | 50.5 |  | 76 | 12-128 |  |  |
| Surrogate: 2-Fluorobiphenyl     |  | " |  | 28.6 | 50.0 |  | 57 | 12-120 |  |  |
| Surrogate: 2,4,6-Tribromophenol |  | " |  | 64.2 | 100  |  | 64 | 21-121 |  |  |
| Surrogate: p-Terphenyl-d14      |  | " |  | 40.7 | 50.5 |  | 81 | 11-158 |  |  |

**LCS (5G14003-BS1)**

Prepared: 07/14/15 Analyzed: 07/15/15

|                                    |   |      |    |      |  |    |        |  |  |   |
|------------------------------------|---|------|----|------|--|----|--------|--|--|---|
| Phenol                             | 5 | ug/L | 19 | 50.0 |  | 37 | 14-120 |  |  |   |
| 2-Chlorophenol                     | 5 | "    | 42 | 50.0 |  | 85 | 18-120 |  |  |   |
| 1,4-Dichlorobenzene                | 5 | "    | 39 | 50.0 |  | 77 | 29-120 |  |  |   |
| N-Nitrosodi-n-propylamine          | 5 | "    | 40 | 50.0 |  | 79 | 26-120 |  |  |   |
| 1,2,4-Trichlorobenzene             | 5 | "    | 34 | 49.8 |  | 69 | 28-120 |  |  |   |
| Naphthalene                        | 5 | "    | 36 | 50.0 |  | 71 | 16-120 |  |  |   |
| p-Chloro-m-cresol                  | 5 | "    | 42 | 49.8 |  | 85 | 31-130 |  |  |   |
| Acenaphthylene                     | 5 | "    | 41 | 49.5 |  | 82 | 38-120 |  |  |   |
| Acenaphthene                       | 5 | "    | 40 | 50.0 |  | 81 | 33-120 |  |  |   |
| 2,4-Dinitrotoluene                 | 5 | "    | 41 | 50.0 |  | 82 | 48-120 |  |  |   |
| 4-Nitrophenol                      | 5 | "    | ND | 50.0 |  |    | 10-120 |  |  | U |
| Fluorene                           | 5 | "    | 40 | 49.0 |  | 81 | 40-120 |  |  |   |
| Azobenzene (1,2-diphenylhydrazine) | 5 | "    | 46 | 50.0 |  | 91 | 34-120 |  |  |   |
| Pentachlorophenol                  | 5 | "    | 46 | 49.5 |  | 92 | 11-120 |  |  |   |
| Phenanthrene                       | 5 | "    | 43 | 49.8 |  | 86 | 43-120 |  |  |   |
| Anthracene                         | 5 | "    | 42 | 49.8 |  | 85 | 50-120 |  |  |   |
| Fluoranthene                       | 5 | "    | 41 | 50.0 |  | 81 | 50-120 |  |  |   |
| Pyrene                             | 5 | "    | 41 | 49.5 |  | 83 | 56-120 |  |  |   |



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Results are reported on a "wet weight basis", unless otherwise noted.

**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G14003 - EPA 8270D**

**LCS (5G14003-BS1)**

Prepared: 07/14/15 Analyzed: 07/15/15

|  |     |      |      |      |  |    |        |  |  |  |
|--|-----|------|------|------|--|----|--------|--|--|--|
| Benzo(a)anthracene                     | 1   | ug/L | 44   | 50.0 |  | 88 | 42-120 |  |  |  |
| Chrysene                               | 1   | "    | 42   | 49.5 |  | 86 | 33-134 |  |  |  |
| Benzo(b)fluoranthene                   | 1   | "    | 44   | 50.0 |  | 88 | 30-129 |  |  |  |
| Benzo(k)fluoranthene                   | 0.5 | "    | 40   | 49.5 |  | 81 | 23-143 |  |  |  |
| Benzo(a)pyrene                         | 0.2 | "    | 39   | 50.0 |  | 79 | 35-128 |  |  |  |
| Indeno (1,2,3-cd) pyrene               | 5   | "    | 33   | 49.5 |  | 66 | 13-160 |  |  |  |
| Dibenzo(a,h)anthracene                 | 5   | "    | 33   | 49.5 |  | 66 | 15-164 |  |  |  |
| Benzo(ghi)perylene                     | 0.5 | "    | 31   | 49.5 |  | 62 | 10-174 |  |  |  |
| <i>Surrogate: 2-Fluorophenol</i>       |     | "    | 56.9 | 100  |  | 57 | 10-120 |  |  |  |
| <i>Surrogate: Phenol-d5</i>            |     | "    | 35.7 | 100  |  | 36 | 10-120 |  |  |  |
| <i>Surrogate: Nitrobenzene-d5</i>      |     | "    | 44.1 | 50.5 |  | 87 | 12-128 |  |  |  |
| <i>Surrogate: 2-Fluorobiphenyl</i>     |     | "    | 37.1 | 50.0 |  | 74 | 12-120 |  |  |  |
| <i>Surrogate: 2,4,6-Tribromophenol</i> |     | "    | 82.6 | 100  |  | 83 | 21-121 |  |  |  |
| <i>Surrogate: p-Terphenyl-d14</i>      |     | "    | 41.8 | 50.5 |  | 83 | 11-158 |  |  |  |

**LCS Dup (5G14003-BSD1)**

Prepared: 07/14/15 Analyzed: 07/15/15

|                                    |     |      |    |      |  |    |        |      |    |  |
|------------------------------------|-----|------|----|------|--|----|--------|------|----|--|
| Phenol                             | 5   | ug/L | 15 | 50.0 |  | 30 | 14-120 | 21   | 30 |  |
| 2-Chlorophenol                     | 5   | "    | 35 | 50.0 |  | 70 | 18-120 | 19   | 30 |  |
| 1,4-Dichlorobenzene                | 5   | "    | 32 | 50.0 |  | 64 | 29-120 | 18   | 30 |  |
| N-Nitrosodi-n-propylamine          | 5   | "    | 33 | 50.0 |  | 67 | 26-120 | 17   | 30 |  |
| 1,2,4-Trichlorobenzene             | 5   | "    | 28 | 49.8 |  | 57 | 28-120 | 20   | 30 |  |
| Naphthalene                        | 5   | "    | 30 | 50.0 |  | 59 | 16-120 | 19   | 30 |  |
| p-Chloro-m-cresol                  | 5   | "    | 36 | 49.8 |  | 72 | 31-130 | 17   | 30 |  |
| Acenaphthylene                     | 5   | "    | 35 | 49.5 |  | 70 | 38-120 | 15   | 30 |  |
| Acenaphthene                       | 5   | "    | 35 | 50.0 |  | 70 | 33-120 | 15   | 30 |  |
| 2,4-Dinitrotoluene                 | 5   | "    | 39 | 50.0 |  | 79 | 48-120 | 4    | 30 |  |
| 4-Nitrophenol                      | 5   | "    | 21 | 50.0 |  | 42 | 10-120 | 200  | 30 |  |
| Fluorene                           | 5   | "    | 36 | 49.0 |  | 74 | 40-120 | 9    | 30 |  |
| Azobenzene (1,2-diphenylhydrazine) | 5   | "    | 42 | 50.0 |  | 85 | 34-120 | 7    | 30 |  |
| Pentachlorophenol                  | 5   | "    | 44 | 49.5 |  | 90 | 11-120 | 3    | 30 |  |
| Phenanthrene                       | 5   | "    | 41 | 49.8 |  | 82 | 43-120 | 5    | 30 |  |
| Anthracene                         | 5   | "    | 41 | 49.8 |  | 82 | 50-120 | 4    | 30 |  |
| Fluoranthene                       | 5   | "    | 40 | 50.0 |  | 80 | 50-120 | 2    | 30 |  |
| Pyrene                             | 5   | "    | 39 | 49.5 |  | 79 | 56-120 | 4    | 30 |  |
| Benzo(a)anthracene                 | 1   | "    | 43 | 50.0 |  | 86 | 42-120 | 2    | 30 |  |
| Chrysene                           | 1   | "    | 41 | 49.5 |  | 83 | 33-134 | 3    | 30 |  |
| Benzo(b)fluoranthene               | 1   | "    | 41 | 50.0 |  | 82 | 30-129 | 6    | 30 |  |
| Benzo(k)fluoranthene               | 0.5 | "    | 40 | 49.5 |  | 82 | 23-143 | 0.9  | 30 |  |
| Benzo(a)pyrene                     | 0.2 | "    | 38 | 50.0 |  | 76 | 35-128 | 3    | 30 |  |
| Indeno (1,2,3-cd) pyrene           | 5   | "    | 32 | 49.5 |  | 65 | 13-160 | 0.9  | 30 |  |
| Dibenzo(a,h)anthracene             | 5   | "    | 33 | 49.5 |  | 66 | 15-164 | 0.06 | 30 |  |
| Benzo(ghi)perylene                 | 0.5 | "    | 30 | 49.5 |  | 61 | 10-174 | 0.6  | 30 |  |



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Results are reported on a "wet weight basis", unless otherwise noted.

**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G14003 - EPA 8270D**

**LCS Dup (5G14003-BSD1)**

Prepared: 07/14/15 Analyzed: 07/15/15

|                                 |  |      |      |      |  |    |        |  |  |  |
|---------------------------------|--|------|------|------|--|----|--------|--|--|--|
| Surrogate: 2-Fluorophenol       |  | ug/L | 44.9 | 100  |  | 45 | 10-120 |  |  |  |
| Surrogate: Phenol-d5            |  | "    | 28.2 | 100  |  | 28 | 10-120 |  |  |  |
| Surrogate: Nitrobenzene-d5      |  | "    | 35.8 | 50.5 |  | 71 | 12-128 |  |  |  |
| Surrogate: 2-Fluorobiphenyl     |  | "    | 30.9 | 50.0 |  | 62 | 12-120 |  |  |  |
| Surrogate: 2,4,6-Tribromophenol |  | "    | 77.2 | 100  |  | 77 | 21-121 |  |  |  |
| Surrogate: p-Terphenyl-d14      |  | "    | 39.8 | 50.5 |  | 79 | 11-158 |  |  |  |



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Results are reported on a "wet weight basis", unless otherwise noted.

**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G13014 - EPA 8260**

**Blank (5G13014-BLK1)**

Prepared & Analyzed: 07/13/15

|                            |    |      |    |  |  |  |  |  |  |   |
|----------------------------|----|------|----|--|--|--|--|--|--|---|
| Dichlorodifluoromethane    | 5  | ug/L | ND |  |  |  |  |  |  | U |
| Chloromethane              | 5  | "    | ND |  |  |  |  |  |  | U |
| Methyl Chloride            | 5  | "    | ND |  |  |  |  |  |  | U |
| Vinyl chloride             | 2  | "    | ND |  |  |  |  |  |  | U |
| Bromomethane               | 5  | "    | ND |  |  |  |  |  |  | U |
| Chloroethane               | 5  | "    | ND |  |  |  |  |  |  | U |
| Trichlorofluoromethane     | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,1-Dichloroethene         | 5  | "    | ND |  |  |  |  |  |  | U |
| Carbon disulfide           | 5  | "    | ND |  |  |  |  |  |  | U |
| Iodomethane                | 10 | "    | ND |  |  |  |  |  |  | U |
| Methylene Chloride         | 5  | "    | ND |  |  |  |  |  |  | U |
| Acetone                    | 25 | "    | ND |  |  |  |  |  |  | U |
| trans-1,2-Dichloroethylene | 5  | "    | ND |  |  |  |  |  |  | U |
| trans-1,2-Dichloroethene   | 5  | "    | ND |  |  |  |  |  |  | U |
| Methyl t-Butyl Ether       | 5  | "    | ND |  |  |  |  |  |  | U |
| Acrolein                   | 50 | "    | ND |  |  |  |  |  |  | U |
| 1,1-Dichloroethane         | 5  | "    | ND |  |  |  |  |  |  | U |
| Acrylonitrile              | 20 | "    | ND |  |  |  |  |  |  | U |
| Vinyl acetate              | 5  | "    | ND |  |  |  |  |  |  | U |
| cis-1,2-Dichloroethene     | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,2-Dichloropropane        | 10 | "    | ND |  |  |  |  |  |  | U |
| Bromochloromethane         | 5  | "    | ND |  |  |  |  |  |  | U |
| Chloroform                 | 5  | "    | ND |  |  |  |  |  |  | U |
| Carbon Tetrachloride       | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,1,1-Trichloroethane      | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Butanone                 | 25 | "    | ND |  |  |  |  |  |  | U |
| 1,1-Dichloropropene        | 5  | "    | ND |  |  |  |  |  |  | U |
| Benzene                    | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,2-Dichloroethane         | 5  | "    | ND |  |  |  |  |  |  | U |
| Trichloroethene            | 5  | "    | ND |  |  |  |  |  |  | U |
| Dibromomethane             | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,2-Dichloropropane        | 5  | "    | ND |  |  |  |  |  |  | U |
| Dichlorobromomethane       | 5  | "    | ND |  |  |  |  |  |  | U |
| Bromodichloromethane       | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Chloroethyl vinyl ether  | 25 | "    | ND |  |  |  |  |  |  | U |
| cis-1,3-Dichloropropene    | 5  | "    | ND |  |  |  |  |  |  | U |
| Toluene                    | 5  | "    | ND |  |  |  |  |  |  | U |
| Tetrachloroethene          | 5  | "    | ND |  |  |  |  |  |  | U |
| 4-Methyl-2-pentanone       | 25 | "    | ND |  |  |  |  |  |  | U |
| trans-1,3-Dichloropropene  | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,1,2-Trichloroethane      | 5  | "    | ND |  |  |  |  |  |  | U |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G13014 - EPA 8260**

**Blank (5G13014-BLK1)**

Prepared & Analyzed: 07/13/15

|                                 |    |      |    |      |      |  |     |        |  |   |
|---------------------------------|----|------|----|------|------|--|-----|--------|--|---|
| Chlorodibromomethane            | 5  | ug/L | ND |      |      |  |     |        |  | U |
| 1,3-Dichloropropane             | 5  | "    | ND |      |      |  |     |        |  | U |
| 1,2-Dibromoethane               | 5  | "    | ND |      |      |  |     |        |  | U |
| 2-Hexanone                      | 25 | "    | ND |      |      |  |     |        |  | U |
| Chlorobenzene                   | 5  | "    | ND |      |      |  |     |        |  | U |
| Ethylbenzene                    | 5  | "    | ND |      |      |  |     |        |  | U |
| 1,1,1,2-Tetrachloroethane       | 5  | "    | ND |      |      |  |     |        |  | U |
| m,p-Xylene                      | 10 | "    | ND |      |      |  |     |        |  | U |
| o-Xylene                        | 5  | "    | ND |      |      |  |     |        |  | U |
| Styrene                         | 5  | "    | ND |      |      |  |     |        |  | U |
| Bromoform                       | 5  | "    | ND |      |      |  |     |        |  | U |
| Isopropylbenzene                | 5  | "    | ND |      |      |  |     |        |  | U |
| n-Propylbenzene                 | 5  | "    | ND |      |      |  |     |        |  | U |
| Bromobenzene                    | 5  | "    | ND |      |      |  |     |        |  | U |
| 1,1,2,2-Tetrachloroethane       | 5  | "    | ND |      |      |  |     |        |  | U |
| 1,3,5-Trimethylbenzene          | 5  | "    | ND |      |      |  |     |        |  | U |
| 2-Chlorotoluene                 | 5  | "    | ND |      |      |  |     |        |  | U |
| 1,2,3-Trichloropropane          | 5  | "    | ND |      |      |  |     |        |  | U |
| trans-1,4-Dichloro-2-butene     | 10 | "    | ND |      |      |  |     |        |  | U |
| 4-Chlorotoluene                 | 5  | "    | ND |      |      |  |     |        |  | U |
| tert-Butylbenzene               | 5  | "    | ND |      |      |  |     |        |  | U |
| 1,2,4-Trimethylbenzene          | 5  | "    | ND |      |      |  |     |        |  | U |
| sec-Butylbenzene                | 5  | "    | ND |      |      |  |     |        |  | U |
| 4-Isopropyltoluene              | 5  | "    | ND |      |      |  |     |        |  | U |
| 1,3-Dichlorobenzene             | 5  | "    | ND |      |      |  |     |        |  | U |
| 1,4-Dichlorobenzene             | 5  | "    | ND |      |      |  |     |        |  | U |
| n-Butylbenzene                  | 5  | "    | ND |      |      |  |     |        |  | U |
| 1,2-Dichlorobenzene             | 5  | "    | ND |      |      |  |     |        |  | U |
| 1,2-Dibromo-3-chloropropane     | 5  | "    | ND |      |      |  |     |        |  | U |
| Hexachlorobutadiene             | 10 | "    | ND |      |      |  |     |        |  | U |
| 1,2,4-Trichlorobenzene          | 10 | "    | ND |      |      |  |     |        |  | U |
| Naphthalene                     | 10 | "    | ND |      |      |  |     |        |  | U |
| 1,2,3-Trichlorobenzene          | 5  | "    | ND |      |      |  |     |        |  | U |
| Surrogate: Dibromofluoromethane |    | "    |    | 50.7 | 50.0 |  | 101 | 60-140 |  |   |
| Surrogate: Toluene-d8           |    | "    |    | 50.4 | 50.0 |  | 101 | 70-130 |  |   |
| Surrogate: 4-Bromofluorobenzene |    | "    |    | 47.4 | 50.0 |  | 95  | 70-130 |  |   |



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Results are reported on a "wet weight basis", unless otherwise noted.

**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G13014 - EPA 8260**

**LCS (5G13014-BS1)**

Prepared & Analyzed: 07/13/15

|                           |    |      |     |      |  |     |        |  |  |       |
|---------------------------|----|------|-----|------|--|-----|--------|--|--|-------|
| Dichlorodifluoromethane   | 5  | ug/L | 78  | 50.0 |  | 156 | 10-150 |  |  | SPK H |
| Chloromethane             | 5  | "    | 67  | 50.0 |  | 135 | 42-150 |  |  |       |
| Methyl Chloride           | 5  | "    | 67  | 50.0 |  | 135 | 42-173 |  |  |       |
| Vinyl chloride            | 2  | "    | 66  | 50.0 |  | 132 | 54-135 |  |  |       |
| Bromomethane              | 5  | "    | 52  | 50.0 |  | 104 | 32-150 |  |  |       |
| Chloroethane              | 5  | "    | 66  | 50.0 |  | 132 | 48-156 |  |  |       |
| Trichlorofluoromethane    | 5  | "    | 57  | 50.0 |  | 114 | 68-144 |  |  |       |
| 1,1-Dichloroethene        | 5  | "    | 50  | 50.0 |  | 101 | 44-145 |  |  |       |
| Carbon disulfide          | 5  | "    | 55  | 50.0 |  | 110 | 60-147 |  |  |       |
| Iodomethane               | 10 | "    | 43  | 50.0 |  | 85  | 33-150 |  |  |       |
| Methylene Chloride        | 5  | "    | 52  | 50.0 |  | 104 | 62-139 |  |  |       |
| Acetone                   | 25 | "    | 230 | 250  |  | 94  | 50-154 |  |  |       |
| trans-1,2-Dichloroethene  | 5  | "    | 53  | 50.0 |  | 106 | 73-132 |  |  |       |
| Methyl t-Butyl Ether      | 5  | "    | 48  | 50.0 |  | 96  | 62-135 |  |  |       |
| Acrolein                  | 50 | "    | 64  | 200  |  | 32  | 10-152 |  |  |       |
| 1,1-Dichloroethane        | 5  | "    | 54  | 50.0 |  | 108 | 76-133 |  |  |       |
| Acrylonitrile             | 20 | "    | 240 | 250  |  | 95  | 20-156 |  |  |       |
| Vinyl acetate             | 5  | "    | 50  | 50.0 |  | 101 | 70-151 |  |  |       |
| cis-1,2-Dichloroethene    | 5  | "    | 53  | 50.0 |  | 105 | 74-134 |  |  |       |
| 2,2-Dichloropropane       | 10 | "    | 52  | 50.0 |  | 105 | 59-143 |  |  |       |
| Bromochloromethane        | 5  | "    | 54  | 50.0 |  | 107 | 67-136 |  |  |       |
| Chloroform                | 5  | "    | 53  | 50.0 |  | 105 | 80-135 |  |  |       |
| Carbon Tetrachloride      | 5  | "    | 51  | 50.0 |  | 102 | 69-135 |  |  |       |
| 1,1,1-Trichloroethane     | 5  | "    | 51  | 50.0 |  | 102 | 80-132 |  |  |       |
| 2-Butanone                | 25 | "    | 240 | 250  |  | 97  | 46-143 |  |  |       |
| 1,1-Dichloropropene       | 5  | "    | 57  | 50.0 |  | 113 | 68-130 |  |  |       |
| Benzene                   | 5  | "    | 52  | 50.0 |  | 103 | 80-131 |  |  |       |
| 1,2-Dichloroethane        | 5  | "    | 52  | 50.0 |  | 104 | 75-131 |  |  |       |
| Trichloroethene           | 5  | "    | 54  | 50.0 |  | 108 | 70-130 |  |  |       |
| Dibromomethane            | 5  | "    | 52  | 50.0 |  | 103 | 61-140 |  |  |       |
| 1,2-Dichloropropane       | 5  | "    | 52  | 50.0 |  | 104 | 78-127 |  |  |       |
| Bromodichloromethane      | 5  | "    | 52  | 50.0 |  | 104 | 69-132 |  |  |       |
| Dichlorobromomethane      | 5  | "    | 52  | 50.0 |  | 104 | 69-132 |  |  |       |
| 2-Chloroethyl vinyl ether | 25 | "    | 45  | 50.0 |  | 89  | 10-132 |  |  |       |
| cis-1,3-Dichloropropene   | 5  | "    | 52  | 50.0 |  | 104 | 70-130 |  |  |       |
| Toluene                   | 5  | "    | 52  | 50.0 |  | 103 | 70-138 |  |  |       |
| Tetrachloroethene         | 5  | "    | 54  | 50.0 |  | 107 | 59-136 |  |  |       |
| 4-Methyl-2-pentanone      | 25 | "    | 230 | 250  |  | 91  | 56-137 |  |  |       |
| trans-1,3-Dichloropropene | 5  | "    | 54  | 50.0 |  | 109 | 55-131 |  |  |       |
| 1,1,2-Trichloroethane     | 5  | "    | 52  | 50.0 |  | 103 | 74-129 |  |  |       |
| Chlorodibromomethane      | 5  | "    | 52  | 50.0 |  | 105 | 69-125 |  |  |       |



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Results are reported on a "wet weight basis", unless otherwise noted.

**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G13014 - EPA 8260**

**LCS (5G13014-BS1)**

Prepared & Analyzed: 07/13/15

|                             |    |      |     |      |  |     |        |  |  |  |
|-----------------------------|----|------|-----|------|--|-----|--------|--|--|--|
| 1,3-Dichloropropane         | 5  | ug/L | 49  | 50.0 |  | 99  | 68-132 |  |  |  |
| 1,2-Dibromoethane           | 5  | "    | 51  | 50.0 |  | 102 | 66-131 |  |  |  |
| 2-Hexanone                  | 25 | "    | 220 | 250  |  | 89  | 40-147 |  |  |  |
| Chlorobenzene               | 5  | "    | 50  | 50.0 |  | 100 | 80-129 |  |  |  |
| Ethylbenzene                | 5  | "    | 50  | 50.0 |  | 100 | 78-131 |  |  |  |
| 1,1,1,2-Tetrachloroethane   | 5  | "    | 51  | 50.0 |  | 102 | 70-138 |  |  |  |
| m,p-Xylene                  | 10 | "    | 100 | 100  |  | 100 | 70-141 |  |  |  |
| o-Xylene                    | 5  | "    | 50  | 50.0 |  | 101 | 70-130 |  |  |  |
| Styrene                     | 5  | "    | 49  | 50.0 |  | 97  | 70-124 |  |  |  |
| Bromoform                   | 5  | "    | 48  | 50.0 |  | 95  | 60-138 |  |  |  |
| Isopropylbenzene            | 5  | "    | 51  | 50.0 |  | 102 | 73-130 |  |  |  |
| n-Propylbenzene             | 5  | "    | 51  | 50.0 |  | 102 | 70-130 |  |  |  |
| Bromobenzene                | 5  | "    | 49  | 50.0 |  | 97  | 70-130 |  |  |  |
| 1,1,1,2-Tetrachloroethane   | 5  | "    | 48  | 50.0 |  | 95  | 64-141 |  |  |  |
| 1,3,5-Trimethylbenzene      | 5  | "    | 48  | 50.0 |  | 96  | 70-130 |  |  |  |
| 2-Chlorotoluene             | 5  | "    | 48  | 50.0 |  | 96  | 70-130 |  |  |  |
| 1,2,3-Trichloropropane      | 5  | "    | 47  | 50.0 |  | 94  | 70-130 |  |  |  |
| trans-1,4-Dichloro-2-butene | 10 | "    | 42  | 50.0 |  | 84  | 52-149 |  |  |  |
| 4-Chlorotoluene             | 5  | "    | 46  | 50.0 |  | 92  | 70-130 |  |  |  |
| tert-Butylbenzene           | 5  | "    | 50  | 50.0 |  | 100 | 69-128 |  |  |  |
| 1,2,4-Trimethylbenzene      | 5  | "    | 49  | 50.0 |  | 98  | 70-130 |  |  |  |
| sec-Butylbenzene            | 5  | "    | 52  | 50.0 |  | 104 | 70-130 |  |  |  |
| 4-Isopropyltoluene          | 5  | "    | 52  | 50.0 |  | 103 | 70-134 |  |  |  |
| 1,3-Dichlorobenzene         | 5  | "    | 48  | 50.0 |  | 97  | 70-130 |  |  |  |
| 1,4-Dichlorobenzene         | 5  | "    | 50  | 50.0 |  | 100 | 70-130 |  |  |  |
| n-Butylbenzene              | 5  | "    | 53  | 50.0 |  | 107 | 70-140 |  |  |  |
| 1,2-Dichlorobenzene         | 5  | "    | 50  | 50.0 |  | 101 | 70-140 |  |  |  |
| 1,2-Dibromo-3-chloropropane | 5  | "    | 47  | 50.0 |  | 94  | 70-140 |  |  |  |
| Hexachlorobutadiene         | 10 | "    | 61  | 50.0 |  | 122 | 70-140 |  |  |  |
| 1,2,4-Trichlorobenzene      | 10 | "    | 53  | 50.0 |  | 105 | 70-140 |  |  |  |
| Naphthalene                 | 10 | "    | 55  | 50.0 |  | 110 | 70-140 |  |  |  |
| 1,2,3-Trichlorobenzene      | 5  | "    | 55  | 50.0 |  | 110 | 70-140 |  |  |  |

|                                 |  |   |      |      |  |     |        |  |  |  |
|---------------------------------|--|---|------|------|--|-----|--------|--|--|--|
| Surrogate: Dibromofluoromethane |  | " | 51.2 | 50.0 |  | 102 | 60-140 |  |  |  |
| Surrogate: Toluene-d8           |  | " | 50.8 | 50.0 |  | 102 | 70-130 |  |  |  |
| Surrogate: 4-Bromofluorobenzene |  | " | 48.0 | 50.0 |  | 96  | 70-130 |  |  |  |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G13014 - EPA 8260**

**LCS Dup (5G13014-BSD1)**

Prepared & Analyzed: 07/13/15

|                           |    |      |     |      |  |     |        |      |    |       |
|---------------------------|----|------|-----|------|--|-----|--------|------|----|-------|
| Dichlorodifluoromethane   | 5  | ug/L | 76  | 50.0 |  | 151 | 10-150 | 3    | 30 | SPK H |
| Methyl Chloride           | 5  | "    | 67  | 50.0 |  | 133 | 42-173 | 0.9  | 30 |       |
| Chloromethane             | 5  | "    | 67  | 50.0 |  | 133 | 42-150 | 0.9  | 30 |       |
| Vinyl chloride            | 2  | "    | 67  | 50.0 |  | 135 | 54-135 | 2    | 30 |       |
| Bromomethane              | 5  | "    | 53  | 50.0 |  | 106 | 32-150 | 3    | 30 |       |
| Chloroethane              | 5  | "    | 69  | 50.0 |  | 139 | 48-156 | 5    | 30 |       |
| Trichlorofluoromethane    | 5  | "    | 60  | 50.0 |  | 120 | 68-144 | 6    | 30 |       |
| 1,1-Dichloroethene        | 5  | "    | 50  | 50.0 |  | 100 | 44-145 | 0.2  | 30 |       |
| Carbon disulfide          | 5  | "    | 54  | 50.0 |  | 108 | 60-147 | 2    | 30 |       |
| Iodomethane               | 10 | "    | 43  | 50.0 |  | 87  | 33-150 | 2    | 30 |       |
| Methylene Chloride        | 5  | "    | 52  | 50.0 |  | 104 | 62-139 | 0.5  | 30 |       |
| Acetone                   | 25 | "    | 250 | 250  |  | 99  | 50-154 | 6    | 30 |       |
| trans-1,2-Dichloroethene  | 5  | "    | 52  | 50.0 |  | 104 | 73-132 | 2    | 30 |       |
| Methyl t-Butyl Ether      | 5  | "    | 48  | 50.0 |  | 96  | 62-135 | 0.2  | 30 |       |
| Acrolein                  | 50 | "    | 64  | 200  |  | 32  | 10-152 | 0.02 | 30 |       |
| 1,1-Dichloroethane        | 5  | "    | 53  | 50.0 |  | 107 | 76-133 | 1    | 30 |       |
| Acrylonitrile             | 20 | "    | 240 | 250  |  | 97  | 20-156 | 2    | 30 |       |
| Vinyl acetate             | 5  | "    | 50  | 50.0 |  | 101 | 70-151 | 0.1  | 30 |       |
| cis-1,2-Dichloroethene    | 5  | "    | 52  | 50.0 |  | 103 | 74-134 | 2    | 30 |       |
| 2,2-Dichloropropane       | 10 | "    | 51  | 50.0 |  | 102 | 59-143 | 3    | 30 |       |
| Bromochloromethane        | 5  | "    | 52  | 50.0 |  | 104 | 67-136 | 3    | 30 |       |
| Chloroform                | 5  | "    | 53  | 50.0 |  | 106 | 80-135 | 0.5  | 30 |       |
| Carbon Tetrachloride      | 5  | "    | 50  | 50.0 |  | 101 | 69-135 | 1    | 30 |       |
| 1,1,1-Trichloroethane     | 5  | "    | 51  | 50.0 |  | 102 | 80-132 | 0.02 | 30 |       |
| 2-Butanone                | 25 | "    | 240 | 250  |  | 97  | 46-143 | 0    | 30 |       |
| 1,1-Dichloropropene       | 5  | "    | 55  | 50.0 |  | 110 | 68-130 | 3    | 30 |       |
| Benzene                   | 5  | "    | 51  | 50.0 |  | 102 | 80-131 | 0.7  | 30 |       |
| 1,2-Dichloroethane        | 5  | "    | 52  | 50.0 |  | 105 | 75-131 | 0.9  | 30 |       |
| Trichloroethene           | 5  | "    | 54  | 50.0 |  | 108 | 70-130 | 0.5  | 30 |       |
| Dibromomethane            | 5  | "    | 51  | 50.0 |  | 103 | 61-140 | 0.5  | 30 |       |
| 1,2-Dichloropropane       | 5  | "    | 53  | 50.0 |  | 107 | 78-127 | 2    | 30 |       |
| Dichlorobromomethane      | 5  | "    | 52  | 50.0 |  | 104 | 69-132 | 0.3  | 35 |       |
| Bromodichloromethane      | 5  | "    | 52  | 50.0 |  | 104 | 69-132 | 0.3  | 30 |       |
| 2-Chloroethyl vinyl ether | 25 | "    | 45  | 50.0 |  | 90  | 10-132 | 1    | 30 |       |
| cis-1,3-Dichloropropene   | 5  | "    | 53  | 50.0 |  | 106 | 70-130 | 2    | 30 |       |
| Toluene                   | 5  | "    | 51  | 50.0 |  | 102 | 70-138 | 1    | 30 |       |
| Tetrachloroethene         | 5  | "    | 54  | 50.0 |  | 109 | 59-136 | 2    | 30 |       |
| 4-Methyl-2-pentanone      | 25 | "    | 230 | 250  |  | 94  | 56-137 | 3    | 30 |       |
| trans-1,3-Dichloropropene | 5  | "    | 54  | 50.0 |  | 109 | 55-131 | 0.3  | 30 |       |
| 1,1,2-Trichloroethane     | 5  | "    | 52  | 50.0 |  | 104 | 74-129 | 0.7  | 30 |       |
| Chlorodibromomethane      | 5  | "    | 52  | 50.0 |  | 104 | 69-125 | 1    | 30 |       |



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Results are reported on a "wet weight basis", unless otherwise noted.

**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5G13014 - EPA 8260**

**LCS Dup (5G13014-BSD1)**

Prepared & Analyzed: 07/13/15

|                             |    |      |     |      |     |        |      |    |  |
|-----------------------------|----|------|-----|------|-----|--------|------|----|--|
| 1,3-Dichloropropane         | 5  | ug/L | 49  | 50.0 | 99  | 68-132 | 0.06 | 30 |  |
| 1,2-Dibromoethane           | 5  | "    | 50  | 50.0 | 100 | 66-131 | 2    | 30 |  |
| 2-Hexanone                  | 25 | "    | 230 | 250  | 92  | 40-147 | 2    | 30 |  |
| Chlorobenzene               | 5  | "    | 49  | 50.0 | 98  | 80-129 | 2    | 30 |  |
| Ethylbenzene                | 5  | "    | 49  | 50.0 | 98  | 78-131 | 2    | 30 |  |
| 1,1,1,2-Tetrachloroethane   | 5  | "    | 50  | 50.0 | 99  | 70-138 | 3    | 30 |  |
| m,p-Xylene                  | 10 | "    | 98  | 100  | 98  | 70-141 | 2    | 30 |  |
| o-Xylene                    | 5  | "    | 50  | 50.0 | 99  | 70-130 | 2    | 30 |  |
| Styrene                     | 5  | "    | 47  | 50.0 | 95  | 70-124 | 3    | 30 |  |
| Bromoform                   | 5  | "    | 48  | 50.0 | 96  | 60-138 | 1    | 30 |  |
| Isopropylbenzene            | 5  | "    | 49  | 50.0 | 98  | 73-130 | 3    | 30 |  |
| n-Propylbenzene             | 5  | "    | 50  | 50.0 | 100 | 70-130 | 2    | 30 |  |
| Bromobenzene                | 5  | "    | 47  | 50.0 | 94  | 70-130 | 3    | 30 |  |
| 1,1,1,2-Tetrachloroethane   | 5  | "    | 48  | 50.0 | 96  | 64-141 | 0.5  | 30 |  |
| 1,3,5-Trimethylbenzene      | 5  | "    | 47  | 50.0 | 93  | 70-130 | 3    | 30 |  |
| 2-Chlorotoluene             | 5  | "    | 47  | 50.0 | 94  | 70-130 | 3    | 30 |  |
| 1,2,3-Trichloropropane      | 5  | "    | 47  | 50.0 | 93  | 70-130 | 1    | 30 |  |
| trans-1,4-Dichloro-2-butene | 10 | "    | 41  | 50.0 | 83  | 52-149 | 2    | 30 |  |
| 4-Chlorotoluene             | 5  | "    | 46  | 50.0 | 92  | 70-130 | 0.04 | 30 |  |
| tert-Butylbenzene           | 5  | "    | 50  | 50.0 | 100 | 69-128 | 0.7  | 30 |  |
| 1,2,4-Trimethylbenzene      | 5  | "    | 48  | 50.0 | 96  | 70-130 | 2    | 30 |  |
| sec-Butylbenzene            | 5  | "    | 49  | 50.0 | 99  | 70-130 | 5    | 30 |  |
| 4-Isopropyltoluene          | 5  | "    | 51  | 50.0 | 102 | 70-134 | 1    | 30 |  |
| 1,3-Dichlorobenzene         | 5  | "    | 48  | 50.0 | 95  | 70-130 | 1    | 30 |  |
| 1,4-Dichlorobenzene         | 5  | "    | 49  | 50.0 | 99  | 70-130 | 1    | 30 |  |
| n-Butylbenzene              | 5  | "    | 52  | 50.0 | 104 | 70-140 | 2    | 30 |  |
| 1,2-Dichlorobenzene         | 5  | "    | 50  | 50.0 | 100 | 70-140 | 0.7  | 30 |  |
| 1,2-Dibromo-3-chloropropane | 5  | "    | 48  | 50.0 | 95  | 70-140 | 1    | 30 |  |
| Hexachlorobutadiene         | 10 | "    | 63  | 50.0 | 125 | 70-140 | 3    | 30 |  |
| 1,2,4-Trichlorobenzene      | 10 | "    | 51  | 50.0 | 102 | 70-140 | 2    | 30 |  |
| Naphthalene                 | 10 | "    | 54  | 50.0 | 108 | 70-140 | 2    | 30 |  |
| 1,2,3-Trichlorobenzene      | 5  | "    | 53  | 50.0 | 105 | 70-140 | 4    | 30 |  |

Surrogate: Dibromofluoromethane

" 51.1 50.0 102 60-140

Surrogate: Toluene-d8

" 50.8 50.0 102 70-130

Surrogate: 4-Bromofluorobenzene

" 47.4 50.0 95 70-130



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4320 Midmost Drive Mobile, Alabama 36609  
Phone (251) 344-9106 Fax (251) 341-9492

Report Date: 08/14/15 11:15

Report To: North Baldwin Utilities  
25 Hand Avenue  
Bay Minette, AL 36507  
Attention: James Dean

Project: NPDES-Permit Form 2A- Pollutant Scan  
Project Number: NPDES-Permit Form 2A- Pollutant Scan

**ANALYTICAL REPORT**

This report includes the results of analyses for the samples listed below that were received by the laboratory on 07/28/15 09:29. If you have any questions concerning this report, please feel free to call Susan Maynard at (251) 344-9106.

| Sample ID | Laboratory ID | Matrix     | Date Sampled   | Date Received  |
|-----------|---------------|------------|----------------|----------------|
| Effluent  | 15G0452-01    | Wastewater | 07/28/15 08:25 | 07/28/15 09:29 |

*Susan Maynard*

Susan Maynard, Lab Director



*The test results in this report meet NELAP requirements for accredited parameters, unless otherwise noted, and relate only to the sample(s) received by this laboratory. This report must be reproduced in its entirety unless approved by the laboratory.*

*Results are reported on a "wet weight basis", unless otherwise noted.*

Report Date: 08/14/15 11:15

Sample Name: Effluent

Sample Type: Grab

Sample Date: 07/28/15 08:25

Date Received: 07/28/15 09:29

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result      | Units | Reporting |         |                | Analyzed       | Method        | Batch   | Lab Number | Qualifier |
|---|-------------|-------|-----------|---------|----------------|----------------|---------------|---------|------------|-----------|
|   |             |       | Limit     | Analyst | Prepared       |                |               |         |            |           |
| <b><u>Metals by EPA 200 Series Methods</u></b>                  |             |       |           |         |                |                |               |         |            |           |
| Antimony  | < 0.0060    | mg/L  | 0.0060    | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 | U         |
| Arsenic   | < 0.010     | mg/L  | 0.010     | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 | U         |
| Beryllium   | < 0.002     | mg/L  | 0.002     | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 | U         |
| Cadmium   | < 0.005     | mg/L  | 0.005     | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 | U         |
| <b>Calcium</b>  | <b>38.9</b> | mg/L  | 0.5       | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 |           |
| Chromium  | < 0.05      | mg/L  | 0.05      | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 | U         |
| Copper  | < 0.01      | mg/L  | 0.01      | ENC     | 08/04/15 13:22 | 08/10/15 23:28 | EPA 200.8     | 5H04008 | 15G0452-01 | U         |
| Lead  | < 0.005     | mg/L  | 0.005     | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 | U         |
| <b>Magnesium</b>  | <b>2.52</b> | mg/L  | 0.20      | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 |           |
| Nickel  | < 0.05      | mg/L  | 0.05      | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 | U         |
| Selenium  | < 0.02      | mg/L  | 0.02      | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 | U         |
| Silver  | < 0.01      | mg/L  | 0.01      | ENC     | 08/03/15 11:21 | 08/03/15 19:13 | EPA 200.8     | 5H03009 | 15G0452-01 | U         |
| Thallium  | < 0.002     | mg/L  | 0.002     | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 | U         |
| Zinc  | < 0.10      | mg/L  | 0.10      | ENC     | 08/04/15 13:22 | 08/04/15 14:10 | EPA 200.8     | 5H04008 | 15G0452-01 | U         |
| <b><u>Metals by EPA 6000/7000 Series Methods</u></b>            |             |       |           |         |                |                |               |         |            |           |
| Mercury   | < 0.0005    | mg/L  | 0.0005    | ENC     | 08/06/15 17:12 | 08/10/15 15:55 | EPA 7470A     | 5H06041 | 15G0452-01 | U         |
| <b><u>Classical Chemistry Parameters</u></b>                    |             |       |           |         |                |                |               |         |            |           |
| Cyanide (Total)   | < 0.02      | mg/L  | 0.02      | SAB     | 07/29/15 11:30 | 07/29/15 15:55 | 10-204-00-1-X | 5G29012 | 15G0452-01 | U         |
| <b>Oil &amp; Grease</b>   | <b>3</b>    | mg/L  | 2         | TGH     | 07/31/15 09:00 | 08/03/15 16:00 | EPA 1664      | 5G30025 | 15G0452-01 |           |
| Phenol  | < 0.05      | mg/L  | 0.05      | SAB     | 08/13/15 14:45 | 08/14/15 08:46 | EPA 420.4     | 5H03008 | 15G0452-01 | U         |
| <b>Total Dissolved Solids</b>                                   | <b>327</b>  | mg/L  | 5         | NG      | 07/28/15 13:40 | 07/29/15 11:51 | SM 2540C      | 5G28005 | 15G0452-01 |           |
| <b>Total Hardness</b>   | <b>108</b>  | mg/L  | 0.5       | SAB     | 08/10/15 09:53 | 08/10/15 09:53 | SM 2340 B     | 5H10004 | 15G0452-01 |           |
| <b><u>Semivolatile Organic Compounds by EPA Method 8270</u></b> |             |       |           |         |                |                |               |         |            |           |
| 1,2,4-Trichlorobenzene  | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 1,2-Dichlorobenzene   | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 1,3-Dichlorobenzene   | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 1,4-Dichlorobenzene   | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 2,4,6-Trichlorophenol   | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 2,4-Dichlorophenol  | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 2,4-Dimethylphenol  | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 2,4-Dinitrotoluene  | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 2,6-Dinitrotoluene  | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 2-Chloronaphthalene   | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 2-Chlorophenol  | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 2-Nitrophenol   | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 3,3'-Dichlorobenzidine  | < 10        | ug/L  | 10        | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 4-Bromophenyl phenyl ether                                      | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |
| 4-Chlorophenyl phenyl ether                                     | < 5         | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D     | 5H03027 | 15G0452-01 | U         |



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Results are reported on a "wet weight basis", unless otherwise noted.

Report Date: 08/14/15 11:15

Sample Name: Effluent

Sample Type: Grab

Sample Date: 07/28/15 08:25

Date Received: 07/28/15 09:29

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result | Units | Reporting |         |                |                |           |         |            |           |
|---|--------|-------|-----------|---------|----------------|----------------|-----------|---------|------------|-----------|
|   |        |       | Limit     | Analyst | Prepared       | Analyzed       | Method    | Batch   | Lab Number | Qualifier |
| <b><u>Semivolatile Organic Compounds by EPA Method 8270</u></b> |        |       |           |         |                |                |           |         |            |           |
| 4-Nitrophenol   | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Acenaphthene  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Acenaphthylene  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Anthracene  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Azobenzene  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| (1,2-diphenylhydrazine)   |        |       |           |         |                |                |           |         |            |           |
| Benzo(a)anthracene  | < 1    | ug/L  | 1         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Benzo(a)pyrene  | < 0.2  | ug/L  | 0.2       | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Benzo(b)fluoranthene  | < 1    | ug/L  | 1         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Benzo(ghi)perylene  | < 0.5  | ug/L  | 0.5       | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Benzo(k)fluoranthene  | < 0.5  | ug/L  | 0.5       | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Benzyl butyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Bis(2-chloroethoxy)methane                                      | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Bis(2-chloroethyl)ether   | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Bis(2-chloroisopropyl) ether                                    | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Bis(2-ethylhexyl) phthalate                                     | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Chrysene  | < 1    | ug/L  | 1         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Dibenzo(a,h)anthracene  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Diethyl phthalate   | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Dimethyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Di-n-butyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Di-n-octyl phthalate  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Fluoranthene  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Fluorene  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Hexachlorobenzene   | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Hexachlorobutadiene   | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Hexachloroethane  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Indeno (1,2,3-cd) pyrene  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Isophorone  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Naphthalene   | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Nitrobenzene  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| N-Nitrosodimethylamine  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| N-Nitrosodi-n-propylamine                                       | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| N-Nitrosodiphenylamine  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| p-Chloro-m-cresol   | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Pentachlorophenol   | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Phenanthrene  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Phenol  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Pyrene  | < 5    | ug/L  | 5         | JAB     | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 | 15G0452-01 | U         |
| Surrogate: 2,4,6-Tribromophenol                                 | 57 %   |       | 21-121    |         | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 |            |           |



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Results are reported on a "wet weight basis", unless otherwise noted.

Report Date: 08/14/15 11:15

Sample Name: Effluent

Sample Type: Grab

Sample Date: 07/28/15 08:25

Date Received: 07/28/15 09:29

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result | Units | Reporting |         |                |                | Method    | Batch   | Lab Number | Qualifier |
|---|--------|-------|-----------|---------|----------------|----------------|-----------|---------|------------|-----------|
|   |        |       | Limit     | Analyst | Prepared       | Analyzed       |           |         |            |           |
| <b><u>Semivolatile Organic Compounds by EPA Method 8270</u></b> |        |       |           |         |                |                |           |         |            |           |
| Surrogate: 2-Fluorobiphenyl                                     | 49 %   |       | 12-120    |         | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 |            |           |
| Surrogate: 2-Fluorophenol                                       | 23 %   |       | 10-120    |         | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 |            |           |
| Surrogate: Nitrobenzene-d5                                      | 40 %   |       | 12-128    |         | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 |            |           |
| Surrogate: Phenol-d5  | 17 %   |       | 10-120    |         | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 |            |           |
| Surrogate: p-Terphenyl-d14                                      | 76 %   |       | 11-158    |         | 07/31/15 08:00 | 08/04/15 22:29 | EPA 8270D | 5H03027 |            |           |
| <b><u>Volatile Organic Compounds by EPA Method 8260</u></b>     |        |       |           |         |                |                |           |         |            |           |
| 1,1,1,2-Tetrachloroethane                                       | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,1,1-Trichloroethane   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,1,2,2-Tetrachloroethane                                       | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,1,2-Trichloroethane   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,1-Dichloroethane  | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,1-Dichloroethene  | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,1-Dichloroethylene  | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,1-Dichloropropene   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,2,3-Trichlorobenzene  | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,2,3-Trichloropropane  | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,2,4-Trichlorobenzene  | < 10   | ug/L  | 10        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,2,4-Trimethylbenzene  | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,2-Dibromo-3-chloropropane                                     | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,2-Dibromoethane   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,2-Dichlorobenzene   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,2-Dichloroethane  | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,2-Dichloropropane   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,3,5-Trimethylbenzene  | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,3-Dichlorobenzene   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,3-Dichloropropane   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 1,4-Dichlorobenzene   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 2,2-Dichloropropane   | < 10   | ug/L  | 10        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 2-Butanone  | < 25   | ug/L  | 25        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 2-Chloroethyl vinyl ether                                       | < 25   | ug/L  | 25        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 2-Chlorotoluene   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 2-Hexanone  | < 25   | ug/L  | 25        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 4-Chlorotoluene   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 4-Isopropyltoluene  | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| 4-Methyl-2-pentanone  | < 25   | ug/L  | 25        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| Acetone   | < 25   | ug/L  | 25        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| Acrolein  | < 50   | ug/L  | 50        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| Acrylonitrile   | < 20   | ug/L  | 20        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| Benzene   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |
| Bromobenzene  | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260  | 5H05002 | 15G0452-01 | U         |



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Results are reported on a "wet weight basis", unless otherwise noted.

Report Date: 08/14/15 11:15

Sample Name: Effluent

Sample Type: Grab

Sample Date: 07/28/15 08:25

Date Received: 07/28/15 09:29

Sampled by: Client

Matrix: Wastewater

| Analyte  | Result    | Units | Reporting |         |                |                | Method   | Batch   | Lab Number | Qualifier |
|--|-----------|-------|-----------|---------|----------------|----------------|----------|---------|------------|-----------|
|  |           |       | Limit     | Analyst | Prepared       | Analyzed       |          |         |            |           |
| <b>Reporting</b>                                     |           |       |           |         |                |                |          |         |            |           |
| <b>Volatile Organic Compounds by EPA Method 8260</b> |           |       |           |         |                |                |          |         |            |           |
| Bromochloromethane                                   | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Bromodichloromethane                                 | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Bromoform  | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Bromomethane   | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Carbon disulfide                                     | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Carbon Tetrachloride                                 | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Chlorobenzene  | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Chlorodibromomethane                                 | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Chloroethane   | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| <b>Chloroform</b>                                    | <b>23</b> | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 |           |
| Chloromethane  | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| cis-1,2-Dichloroethene                               | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| cis-1,3-Dichloropropene                              | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Dibromomethane                                       | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Dichlorobromomethane                                 | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Dichlorodifluoromethane                              | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Ethylbenzene   | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Hexachlorobutadiene                                  | < 10      | ug/L  | 10        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Iodomethane  | < 10      | ug/L  | 10        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Isopropylbenzene                                     | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| m,p-Xylene   | < 10      | ug/L  | 10        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Methyl Bromide                                       | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Methyl Chloride                                      | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Methyl t-Butyl Ether                                 | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Methylene Chloride                                   | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Naphthalene  | < 10      | ug/L  | 10        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| n-Butylbenzene                                       | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| n-Propylbenzene                                      | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| o-Xylene   | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| sec-Butylbenzene                                     | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Styrene  | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| tert-Butylbenzene                                    | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Tetrachloroethene                                    | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Tetrachloroethylene                                  | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Toluene  | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| trans-1,2-Dichloroethene                             | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| trans-1,2-Dichloroethylene                           | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| trans-1,3-Dichloropropene                            | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| trans-1,4-Dichloro-2-butene                          | < 10      | ug/L  | 10        | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Trichloroethene                                      | < 5       | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |



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Results are reported on a "wet weight basis", unless otherwise noted.

Report Date: 08/14/15 11:15

Sample Name: Effluent

Sample Type: Grab

Sample Date: 07/28/15 08:25

Date Received: 07/28/15 09:29

Sampled by: Client

Matrix: Wastewater

| Analyte   | Result | Units | Reporting |         |                | Analyzed       | Method   | Batch   | Lab Number | Qualifier |
|---|--------|-------|-----------|---------|----------------|----------------|----------|---------|------------|-----------|
|   |        |       | Limit     | Analyst | Prepared       |                |          |         |            |           |
| <b><u>Volatile Organic Compounds by EPA Method 8260</u></b> |        |       |           |         |                |                |          |         |            |           |
| Trichloroethylene   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Trichlorofluoromethane                                      | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Vinyl acetate   | < 5    | ug/L  | 5         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Vinyl chloride  | < 2    | ug/L  | 2         | GEM     | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 | 15G0452-01 | U         |
| Surrogate: 4-Bromofluorobenzene                             | 92 %   |       | 70-130    |         | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 |            |           |
| Surrogate: Dibromofluoromethane                             | 107 %  |       | 60-140    |         | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 |            |           |
| Surrogate: Toluene-d8                                       | 97 %   |       | 70-130    |         | 08/03/15 15:30 | 08/03/15 20:48 | EPA 8260 | 5H05002 |            |           |



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Results are reported on a "wet weight basis", unless otherwise noted.

## CASE NARRATIVE

The results presented in this report relate only to the sample(s) received on 07/28/15 09:29 for North Baldwin Utilities -

| <u>Laboratory ID</u> | <u>Sample Name</u> |
|----------------------|--------------------|
| 15G0452-01           | Effluent           |

. If you have any questions concerning this report, please contact Susan Maynard at (251) 344-9106.

### Sample Receipt

Sample receipt information, including documentation of any deviation(s) from sample receiving quality control acceptance criteria, is provided on attachments to the report including the Sample Receipt Checklist, Chain of Custody, and/or Field Data Sheet.

### Comments

No additional comments.

### Explanation of qualified data in this report:

- U The compound was analyzed for but not detected.
- SPK H The % Recovery for this spiked analyte was above the established control limit.
- RPD The RPD for this duplicate exceeded the established control limit.
- MS The RPD and/or % Recovery for this matrix spike cannot be accurately calculated due to matrix interference.



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*Results are reported on a "wet weight basis", unless otherwise noted.*

**Metals by EPA 200 Series Methods - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H03009 - EPA 200.8**

|  |      |      |   |       |    |     |        |     |    |   |
|--|------|------|---|-------|----|-----|--------|-----|----|---|
| <b>Blank (5H03009-BLK1)</b>            |      |      | Prepared & Analyzed: 08/03/15                           |       |    |     |        |     |    |   |
| Silver                                 | 0.01 | mg/L | ND  |       |    |     |        |     |    | U |
| <b>LCS (5H03009-BS1)</b>               |      |      | Prepared & Analyzed: 08/03/15                           |       |    |     |        |     |    |   |
| Silver                                 | 0.01 | mg/L | 0.10  | 0.100 |    | 100 | 85-115 |     |    |   |
| <b>LCS Dup (5H03009-BSD1)</b>          |      |      | Prepared & Analyzed: 08/03/15                           |       |    |     |        |     |    |   |
| Silver                                 | 0.01 | mg/L | 0.10  | 0.100 |    | 100 | 85-115 | 0.6 | 25 |   |
| <b>Duplicate (5H03009-DUP1)</b>        |      |      | <b>Source: 15G0498-01</b> Prepared & Analyzed: 08/03/15 |       |    |     |        |     |    |   |
| Silver                                 | 0.02 | mg/L | ND  |       | ND |     |        |     | 25 | U |
| <b>Matrix Spike (5H03009-MS1)</b>      |      |      | <b>Source: 15G0498-01</b> Prepared & Analyzed: 08/03/15 |       |    |     |        |     |    |   |
| Silver                                 | 0.02 | mg/L | 4.85  | 5.00  | ND | 97  | 70-130 |     |    |   |
| <b>Matrix Spike Dup (5H03009-MSD1)</b> |      |      | <b>Source: 15G0498-01</b> Prepared & Analyzed: 08/03/15 |       |    |     |        |     |    |   |
| Silver                                 | 0.02 | mg/L | 4.92  | 5.00  | ND | 98  | 70-130 | 1   | 25 |   |

**Batch 5H04008 - EPA 200.8**

|                             |        |      |                               |  |  |  |  |  |  |   |
|-----------------------------|--------|------|-------------------------------|--|--|--|--|--|--|---|
| <b>Blank (5H04008-BLK1)</b> |        |      | Prepared & Analyzed: 08/04/15 |  |  |  |  |  |  |   |
| Arsenic                     | 0.001  | mg/L | ND                            |  |  |  |  |  |  | U |
| Beryllium                   | 0.001  | "    | ND                            |  |  |  |  |  |  | U |
| Calcium                     | 0.5    | "    | ND                            |  |  |  |  |  |  | U |
| Cadmium                     | 0.0001 | "    | ND                            |  |  |  |  |  |  | U |
| Chromium                    | 0.001  | "    | ND                            |  |  |  |  |  |  | U |
| Copper                      | 0.01   | "    | ND                            |  |  |  |  |  |  | U |
| Magnesium                   | 0.10   | "    | ND                            |  |  |  |  |  |  | U |
| Nickel                      | 0.001  | "    | ND                            |  |  |  |  |  |  | U |
| Lead                        | 0.001  | "    | ND                            |  |  |  |  |  |  | U |
| Antimony                    | 0.0060 | "    | ND                            |  |  |  |  |  |  | U |
| Selenium                    | 0.02   | "    | ND                            |  |  |  |  |  |  | U |
| Thallium                    | 0.002  | "    | ND                            |  |  |  |  |  |  | U |
| Zinc                        | 0.01   | "    | ND                            |  |  |  |  |  |  | U |



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**Metals by EPA 200 Series Methods - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H04008 - EPA 200.8**

**LCS (5H04008-BS1)**

Prepared & Analyzed: 08/04/15

|           |        |      |       |       |  |     |        |  |  |  |
|-----------|--------|------|-------|-------|--|-----|--------|--|--|--|
| Arsenic   | 0.001  | mg/L | 0.096 | 0.100 |  | 96  | 85-115 |  |  |  |
| Beryllium | 0.001  | "    | 0.094 | 0.100 |  | 94  | 85-115 |  |  |  |
| Calcium   | 0.5    | "    | 4.8   | 5.00  |  | 96  | 85-115 |  |  |  |
| Cadmium   | 0.0001 | "    | 0.096 | 0.100 |  | 96  | 85-115 |  |  |  |
| Chromium  | 0.001  | "    | 0.09  | 0.100 |  | 94  | 85-115 |  |  |  |
| Copper    | 0.01   | "    | 0.10  | 0.100 |  | 105 | 85-115 |  |  |  |
| Magnesium | 0.10   | "    | 4.97  | 5.00  |  | 99  | 85-115 |  |  |  |
| Nickel    | 0.001  | "    | 0.09  | 0.100 |  | 94  | 85-115 |  |  |  |
| Lead      | 0.001  | "    | 0.099 | 0.100 |  | 99  | 85-115 |  |  |  |
| Antimony  | 0.0060 | "    | 0.09  | 0.100 |  | 91  | 85-115 |  |  |  |
| Selenium  | 0.02   | "    | 0.10  | 0.100 |  | 97  | 85-115 |  |  |  |
| Thallium  | 0.002  | "    | 0.10  | 0.100 |  | 99  | 85-115 |  |  |  |
| Zinc      | 0.01   | "    | 0.09  | 0.100 |  | 94  | 85-115 |  |  |  |

**LCS Dup (5H04008-BSD1)**

Prepared & Analyzed: 08/04/15

|           |        |      |       |       |  |     |        |      |    |  |
|-----------|--------|------|-------|-------|--|-----|--------|------|----|--|
| Arsenic   | 0.001  | mg/L | 0.094 | 0.100 |  | 94  | 85-115 | 2    | 25 |  |
| Beryllium | 0.001  | "    | 0.094 | 0.100 |  | 94  | 85-115 | 0.05 | 25 |  |
| Calcium   | 0.5    | "    | 4.7   | 5.00  |  | 95  | 85-115 | 1    | 25 |  |
| Cadmium   | 0.0001 | "    | 0.095 | 0.100 |  | 95  | 85-115 | 1    | 25 |  |
| Chromium  | 0.001  | "    | 0.09  | 0.100 |  | 92  | 85-115 | 2    | 25 |  |
| Copper    | 0.01   | "    | 0.11  | 0.100 |  | 105 | 85-115 | 0.6  | 25 |  |
| Magnesium | 0.10   | "    | 4.93  | 5.00  |  | 99  | 85-115 | 0.8  | 25 |  |
| Nickel    | 0.001  | "    | 0.09  | 0.100 |  | 92  | 85-115 | 2    | 25 |  |
| Lead      | 0.001  | "    | 0.098 | 0.100 |  | 98  | 85-115 | 2    | 25 |  |
| Antimony  | 0.0060 | "    | 0.10  | 0.100 |  | 100 | 85-115 | 9    | 25 |  |
| Selenium  | 0.02   | "    | 0.09  | 0.100 |  | 93  | 85-115 | 4    | 25 |  |
| Thallium  | 0.002  | "    | 0.10  | 0.100 |  | 98  | 85-115 | 1    | 25 |  |
| Zinc      | 0.01   | "    | 0.09  | 0.100 |  | 93  | 85-115 | 2    | 25 |  |



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**Metals by EPA 200 Series Methods - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H04008 - EPA 200.8**

| <b>Duplicate (5H04008-DUP1)</b> |        | <b>Source: 15G0518-02</b> |       | <b>Prepared &amp; Analyzed: 08/04/15</b> |       |  |  |    |    |     |
|---------------------------------|--------|---------------------------|-------|--|-------|--|--|----|----|-----|
| Arsenic                         | 0.050  | mg/L                      | 0.052 |  | 0.046 |  |  | 13 | 25 |     |
| Beryllium                       | 0.050  | "                         | ND    |  | ND    |  |  |    | 25 | U   |
| Calcium                         | 5.0    | "                         | 510   |  | 497   |  |  | 3  | 25 |     |
| Cadmium                         | 0.005  | "                         | 0.026 |  | 0.027 |  |  | 2  | 25 |     |
| Chromium                        | 0.05   | "                         | 0.009 |  | 0.01  |  |  | 15 | 25 | U   |
| Copper                          | 0.05   | "                         | 0.05  |  | 0.05  |  |  | 17 | 25 |     |
| Magnesium                       | 5.00   | "                         | 29.4  |  | 28.5  |  |  | 3  | 25 |     |
| Nickel                          | 0.05   | "                         | 0.25  |  | 0.25  |  |  | 1  | 25 |     |
| Lead                            | 0.050  | "                         | ND    |  | ND    |  |  |    | 25 | U   |
| Antimony                        | 0.0500 | "                         | 0.06  |  | 0.07  |  |  | 27 | 25 | RPD |
| Selenium                        | 0.05   | "                         | ND    |  | 0.02  |  |  |    | 25 | U   |
| Thallium                        | 0.05   | "                         | ND    |  | 0.004 |  |  |    | 25 | U   |
| Zinc                            | 0.50   | "                         | 0.12  |  | ND    |  |  |    | 25 | U   |

| <b>Matrix Spike (5H04008-MS1)</b> |        | <b>Source: 15G0518-02</b> |      | <b>Prepared &amp; Analyzed: 08/04/15</b> |       |     |        |  |  |  |
|-----------------------------------|--------|---------------------------|------|--|-------|-----|--------|--|--|--|
| Arsenic                           | 0.050  | mg/L                      | 5.02 | 5.00                                     | 0.046 | 99  | 70-130 |  |  |  |
| Beryllium                         | 0.050  | "                         | 4.61 | 5.00                                     | ND    | 92  | 70-130 |  |  |  |
| Calcium                           | 5.0    | "                         | 752  | 250                                      | 497   | 102 | 70-130 |  |  |  |
| Cadmium                           | 0.005  | "                         | 4.75 | 5.00                                     | 0.027 | 95  | 70-130 |  |  |  |
| Chromium                          | 0.05   | "                         | 4.47 | 5.00                                     | 0.01  | 89  | 70-130 |  |  |  |
| Copper                            | 0.05   | "                         | 5.84 | 5.00                                     | 0.05  | 116 | 70-130 |  |  |  |
| Magnesium                         | 5.00   | "                         | 271  | 250                                      | 28.5  | 97  | 70-130 |  |  |  |
| Nickel                            | 0.05   | "                         | 4.59 | 5.00                                     | 0.25  | 87  | 70-130 |  |  |  |
| Lead                              | 0.050  | "                         | 4.92 | 5.00                                     | ND    | 98  | 70-130 |  |  |  |
| Antimony                          | 0.0500 | "                         | 5.20 | 5.00                                     | 0.07  | 103 | 70-130 |  |  |  |
| Selenium                          | 0.05   | "                         | 4.81 | 5.00                                     | 0.02  | 96  | 70-130 |  |  |  |
| Thallium                          | 0.05   | "                         | 4.84 | 5.00                                     | 0.004 | 97  | 70-130 |  |  |  |
| Zinc                              | 0.50   | "                         | 4.48 | 5.00                                     | ND    | 90  | 70-130 |  |  |  |



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**Metals by EPA 200 Series Methods - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H04008 - EPA 200.8**

**Matrix Spike Dup (5H04008-MSD1)**

**Source: 15G0518-02**

Prepared & Analyzed: 08/04/15

|           |        |      |      |      |       |     |        |      |    |  |
|-----------|--------|------|------|------|-------|-----|--------|------|----|--|
| Arsenic   | 0.050  | mg/L | 4.98 | 5.00 | 0.046 | 99  | 70-130 | 0.9  | 25 |  |
| Beryllium | 0.050  | "    | 4.51 | 5.00 | ND    | 90  | 70-130 | 2    | 25 |  |
| Calcium   | 5.0    | "    | 745  | 250  | 497   | 99  | 70-130 | 1    | 25 |  |
| Cadmium   | 0.005  | "    | 4.67 | 5.00 | 0.027 | 93  | 70-130 | 2    | 25 |  |
| Chromium  | 0.05   | "    | 4.47 | 5.00 | 0.01  | 89  | 70-130 | 0.09 | 25 |  |
| Copper    | 0.05   | "    | 5.36 | 5.00 | 0.05  | 106 | 70-130 | 8    | 25 |  |
| Magnesium | 5.00   | "    | 271  | 250  | 28.5  | 97  | 70-130 | 0.02 | 25 |  |
| Nickel    | 0.05   | "    | 4.58 | 5.00 | 0.25  | 87  | 70-130 | 0.3  | 25 |  |
| Lead      | 0.050  | "    | 4.81 | 5.00 | ND    | 96  | 70-130 | 2    | 25 |  |
| Antimony  | 0.0500 | "    | 4.95 | 5.00 | 0.07  | 98  | 70-130 | 5    | 25 |  |
| Selenium  | 0.05   | "    | 4.84 | 5.00 | 0.02  | 96  | 70-130 | 0.5  | 25 |  |
| Thallium  | 0.05   | "    | 4.79 | 5.00 | 0.004 | 96  | 70-130 | 1    | 25 |  |
| Zinc      | 0.50   | "    | 4.49 | 5.00 | ND    | 90  | 70-130 | 0.1  | 25 |  |



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**Metals by EPA 6000/7000 Series Methods - Quality Control**

| Analyte                                | RL     | Units | Result | Spike Level   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|--|--------|-------|--------|---|---------------|------|-------------|-----|-----------|-----------|
| <b>Batch 5H06041 - EPA 7470A</b>       |        |       |        |   |               |      |             |     |           |           |
| <b>Blank (5H06041-BLK1)</b>            |        |       |        | Prepared: 08/06/15 Analyzed: 08/10/15                           |               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>LCS (5H06041-BS1)</b>               |        |       |        | Prepared: 08/06/15 Analyzed: 08/10/15                           |               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | 0.008  | 0.00750   |               | 110  | 85-115      |     |           |           |
| <b>LCS Dup (5H06041-BSD1)</b>          |        |       |        | Prepared: 08/06/15 Analyzed: 08/10/15                           |               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | 0.009  | 0.00750   |               | 114  | 85-115      | 3   | 25        |           |
| <b>Duplicate (5H06041-DUP1)</b>        |        |       |        | <b>Source: 15H0060-01</b> Prepared: 08/06/15 Analyzed: 08/10/15 |               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | ND     |   | ND            |      |             |     | 25        | U         |
| <b>Matrix Spike (5H06041-MS1)</b>      |        |       |        | <b>Source: 15H0060-01</b> Prepared: 08/06/15 Analyzed: 08/10/15 |               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | 0.008  | 0.00750   | ND            | 111  | 70-130      |     |           |           |
| <b>Matrix Spike Dup (5H06041-MSD1)</b> |        |       |        | <b>Source: 15H0060-01</b> Prepared: 08/06/15 Analyzed: 08/10/15 |               |      |             |     |           |           |
| Mercury                                | 0.0005 | mg/L  | 0.008  | 0.00750   | ND            | 111  | 70-130      | 0.2 | 25        |           |



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**Classical Chemistry Parameters - Quality Control**

| Analyte                                | RL   | Units | Result | Spike Level   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|--|------|-------|--------|---|---------------|------|-------------|-----|-----------|-----------|
| <b>Batch 5G29012 - 10-204-00-1-X</b>   |      |       |        |   |               |      |             |     |           |           |
| <b>Blank (5G29012-BLK1)</b>            |      |       |        | Prepared & Analyzed: 07/29/15                                   |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>LCS (5G29012-BS1)</b>               |      |       |        | Prepared & Analyzed: 07/29/15                                   |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.225  | 0.200   |               | 112  | 81.4-123    |     |           |           |
| <b>LCS Dup (5G29012-BSD1)</b>          |      |       |        | Prepared & Analyzed: 07/29/15                                   |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.213  | 0.200   |               | 106  | 81.4-123    | 5   | 25        |           |
| <b>Matrix Spike (5G29012-MS1)</b>      |      |       |        | <b>Source: 15G0375-02RE1</b> Prepared & Analyzed: 07/29/15      |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.209  | 0.200   | ND            | 104  | 70-130      |     |           |           |
| <b>Matrix Spike Dup (5G29012-MSD1)</b> |      |       |        | <b>Source: 15G0375-02RE1</b> Prepared & Analyzed: 07/29/15      |               |      |             |     |           |           |
| Cyanide (Total)                        | 0.02 | mg/L  | 0.219  | 0.200   | ND            | 110  | 70-130      | 5   | 25        |           |
| <b>Batch 5G30025 - EPA 1664</b>        |      |       |        |   |               |      |             |     |           |           |
| <b>Blank (5G30025-BLK1)</b>            |      |       |        | Prepared: 07/31/15 Analyzed: 08/03/15                           |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>LCS (5G30025-BS1)</b>               |      |       |        | Prepared: 07/31/15 Analyzed: 08/03/15                           |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | 34.3   | 40.0  |               | 86   | 78-114      |     |           |           |
| <b>LCS Dup (5G30025-BSD1)</b>          |      |       |        | Prepared: 07/31/15 Analyzed: 08/03/15                           |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | 35.6   | 40.0  |               | 89   | 78-114      | 4   | 18        |           |
| <b>Matrix Spike (5G30025-MS1)</b>      |      |       |        | <b>Source: 15G0492-02</b> Prepared: 07/31/15 Analyzed: 08/03/15 |               |      |             |     |           |           |
| Oil & Grease                           | 2    | mg/L  | 41.2   | 40.0  | 1.35          | 100  | 78-114      |     |           |           |



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Report Date: 08/14/15 11:15

**Classical Chemistry Parameters - Quality Control**

| Analyte                           | RL   | Units | Result | Spike Level   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|-----------------------------------|------|-------|--------|---|---------------|------|-------------|-----|-----------|-----------|
| <b>Batch 5H03008 - EPA 420.4</b>  |      |       |        |   |               |      |             |     |           |           |
| <b>Blank (5H03008-BLK1)</b>       |      |       |        | Prepared: 08/13/15 Analyzed: 08/14/15                           |               |      |             |     |           |           |
| Phenol                            | 0.05 | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>LCS (5H03008-BS1)</b>          |      |       |        | Prepared: 08/13/15 Analyzed: 08/14/15                           |               |      |             |     |           |           |
| Phenol                            | 0.05 | mg/L  | 0.151  | 0.150   |               | 101  | 85-115      |     |           |           |
| <b>LCS Dup (5H03008-BSD1)</b>     |      |       |        | Prepared: 08/13/15 Analyzed: 08/14/15                           |               |      |             |     |           |           |
| Phenol                            | 0.05 | mg/L  | 0.145  | 0.150   |               | 97   | 85-115      | 4   | 10        |           |
| <b>Matrix Spike (5H03008-MS1)</b> |      |       |        | <b>Source: 15G0452-01</b> Prepared: 08/13/15 Analyzed: 08/14/15 |               |      |             |     |           |           |
| Phenol                            | 0.05 | mg/L  | 0.276  | 0.150   | ND            | 184  | 85-115      |     |           | SPK H     |
| <b>Batch 5H10004 - SM 2340 B</b>  |      |       |        |   |               |      |             |     |           |           |
| <b>Blank (5H10004-BLK1)</b>       |      |       |        | Prepared & Analyzed: 08/10/15                                   |               |      |             |     |           |           |
| Total Hardness                    | 0.5  | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>Batch 5G28005 - SM 2540C</b>   |      |       |        |   |               |      |             |     |           |           |
| <b>Blank (5G28005-BLK1)</b>       |      |       |        | Prepared: 07/28/15 Analyzed: 07/29/15                           |               |      |             |     |           |           |
| Total Dissolved Solids            | 5    | mg/L  | ND     |   |               |      |             |     |           | U         |
| <b>LCS (5G28005-BS1)</b>          |      |       |        | Prepared: 07/28/15 Analyzed: 07/29/15                           |               |      |             |     |           |           |
| Total Dissolved Solids            |      | mg/L  | 150    | 149   |               | 101  | 85-115      |     |           |           |
| <b>Duplicate (5G28005-DUP1)</b>   |      |       |        | <b>Source: 15G0452-01</b> Prepared: 07/28/15 Analyzed: 07/29/15 |               |      |             |     |           |           |
| Total Dissolved Solids            | 5    | mg/L  | 335    |   | 327           |      |             | 2   | 5         |           |



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**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H03027 - EPA 8270D**

**Blank (5H03027-BLK1)**

Prepared: 07/31/15 Analyzed: 08/04/15

|                                    |   |      |    |  |  |  |  |  |  |   |
|------------------------------------|---|------|----|--|--|--|--|--|--|---|
| N-Nitrosodimethylamine             | 5 | ug/L | ND |  |  |  |  |  |  | U |
| Phenol                             | 5 | "    | ND |  |  |  |  |  |  | U |
| Bis(2-chloroethyl)ether            | 5 | "    | ND |  |  |  |  |  |  | U |
| 2-Chlorophenol                     | 5 | "    | ND |  |  |  |  |  |  | U |
| 1,3-Dichlorobenzene                | 5 | "    | ND |  |  |  |  |  |  | U |
| 1,4-Dichlorobenzene                | 5 | "    | ND |  |  |  |  |  |  | U |
| 1,2-Dichlorobenzene                | 5 | "    | ND |  |  |  |  |  |  | U |
| Bis(2-chloroisopropyl) ether       | 5 | "    | ND |  |  |  |  |  |  | U |
| N-Nitrosodi-n-propylamine          | 5 | "    | ND |  |  |  |  |  |  | U |
| Hexachloroethane                   | 5 | "    | ND |  |  |  |  |  |  | U |
| Nitrobenzene                       | 5 | "    | ND |  |  |  |  |  |  | U |
| Isophorone                         | 5 | "    | ND |  |  |  |  |  |  | U |
| 2-Nitrophenol                      | 5 | "    | ND |  |  |  |  |  |  | U |
| 2,4-Dimethylphenol                 | 5 | "    | ND |  |  |  |  |  |  | U |
| Bis(2-chloroethoxy)methane         | 5 | "    | ND |  |  |  |  |  |  | U |
| 1,2,4-Trichlorobenzene             | 5 | "    | ND |  |  |  |  |  |  | U |
| 2,4-Dichlorophenol                 | 5 | "    | ND |  |  |  |  |  |  | U |
| Naphthalene                        | 5 | "    | ND |  |  |  |  |  |  | U |
| Hexachlorobutadiene                | 5 | "    | ND |  |  |  |  |  |  | U |
| p-Chloro-m-cresol                  | 5 | "    | ND |  |  |  |  |  |  | U |
| 2,4,6-Trichlorophenol              | 5 | "    | ND |  |  |  |  |  |  | U |
| 2-Chloronaphthalene                | 5 | "    | ND |  |  |  |  |  |  | U |
| Dimethyl phthalate                 | 5 | "    | ND |  |  |  |  |  |  | U |
| 2,6-Dinitrotoluene                 | 5 | "    | ND |  |  |  |  |  |  | U |
| Acenaphthylene                     | 5 | "    | ND |  |  |  |  |  |  | U |
| Acenaphthene                       | 5 | "    | ND |  |  |  |  |  |  | U |
| 2,4-Dinitrotoluene                 | 5 | "    | ND |  |  |  |  |  |  | U |
| 4-Nitrophenol                      | 5 | "    | ND |  |  |  |  |  |  | U |
| Diethyl phthalate                  | 5 | "    | ND |  |  |  |  |  |  | U |
| 4-Chlorophenyl phenyl ether        | 5 | "    | ND |  |  |  |  |  |  | U |
| Fluorene                           | 5 | "    | ND |  |  |  |  |  |  | U |
| N-Nitrosodiphenylamine             | 5 | "    | ND |  |  |  |  |  |  | U |
| Azobenzene (1,2-diphenylhydrazine) | 5 | "    | ND |  |  |  |  |  |  | U |
| 4-Bromophenyl phenyl ether         | 5 | "    | ND |  |  |  |  |  |  | U |
| Hexachlorobenzene                  | 5 | "    | ND |  |  |  |  |  |  | U |
| Pentachlorophenol                  | 5 | "    | ND |  |  |  |  |  |  | U |
| Phenanthrene                       | 5 | "    | ND |  |  |  |  |  |  | U |
| Anthracene                         | 5 | "    | ND |  |  |  |  |  |  | U |
| Di-n-butyl phthalate               | 5 | "    | ND |  |  |  |  |  |  | U |
| Fluoranthene                       | 5 | "    | ND |  |  |  |  |  |  | U |
| Pyrene                             | 5 | "    | ND |  |  |  |  |  |  | U |



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**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H03027 - EPA 8270D**

**Blank (5H03027-BLK1)**

Prepared: 07/31/15 Analyzed: 08/04/15

|  |     |      |    |      |      |    |        |  |  |   |
|--|-----|------|----|------|------|----|--------|--|--|---|
| Benzyl butyl phthalate                 | 5   | ug/L | ND |      |      |    |        |  |  | U |
| Bis(2-ethylhexyl) phthalate            | 5   | "    | ND |      |      |    |        |  |  | U |
| Benzo(a)anthracene                     | 1   | "    | ND |      |      |    |        |  |  | U |
| 3,3'-Dichlorobenzidine                 | 10  | "    | ND |      |      |    |        |  |  | U |
| Chrysene                               | 1   | "    | ND |      |      |    |        |  |  | U |
| Di-n-octyl phthalate                   | 5   | "    | ND |      |      |    |        |  |  | U |
| Benzo(b)fluoranthene                   | 1   | "    | ND |      |      |    |        |  |  | U |
| Benzo(k)fluoranthene                   | 0.5 | "    | ND |      |      |    |        |  |  | U |
| Benzo(a)pyrene                         | 0.2 | "    | ND |      |      |    |        |  |  | U |
| Indeno (1,2,3-cd) pyrene               | 5   | "    | ND |      |      |    |        |  |  | U |
| Dibenzo(a,h)anthracene                 | 5   | "    | ND |      |      |    |        |  |  | U |
| Benzo(ghi)perylene                     | 0.5 | "    | ND |      |      |    |        |  |  | U |
| <i>Surrogate: 2-Fluorophenol</i>       |     | "    |    | 37.3 | 100  | 37 | 10-120 |  |  |   |
| <i>Surrogate: Phenol-d5</i>            |     | "    |    | 23.4 | 100  | 23 | 10-120 |  |  |   |
| <i>Surrogate: Nitrobenzene-d5</i>      |     | "    |    | 27.8 | 50.5 | 55 | 12-128 |  |  |   |
| <i>Surrogate: 2-Fluorobiphenyl</i>     |     | "    |    | 26.6 | 50.0 | 53 | 12-120 |  |  |   |
| <i>Surrogate: 2,4,6-Tribromophenol</i> |     | "    |    | 58.2 | 100  | 58 | 21-121 |  |  |   |
| <i>Surrogate: p-Terphenyl-d14</i>      |     | "    |    | 39.5 | 50.5 | 78 | 11-158 |  |  |   |

**LCS (5H03027-BS1)**

Prepared: 07/31/15 Analyzed: 08/04/15

|                                    |     |      |    |      |  |    |        |  |  |  |
|------------------------------------|-----|------|----|------|--|----|--------|--|--|--|
| Phenol                             | 5   | ug/L | 14 | 50.0 |  | 29 | 14-120 |  |  |  |
| 2-Chlorophenol                     | 5   | "    | 28 | 50.0 |  | 55 | 18-120 |  |  |  |
| 1,4-Dichlorobenzene                | 5   | "    | 23 | 50.0 |  | 47 | 29-120 |  |  |  |
| N-Nitrosodi-n-propylamine          | 5   | "    | 25 | 50.0 |  | 50 | 26-120 |  |  |  |
| 1,2,4-Trichlorobenzene             | 5   | "    | 25 | 49.8 |  | 51 | 28-120 |  |  |  |
| Naphthalene                        | 5   | "    | 28 | 50.0 |  | 55 | 16-120 |  |  |  |
| p-Chloro-m-cresol                  | 5   | "    | 30 | 49.8 |  | 59 | 31-130 |  |  |  |
| Acenaphthylene                     | 5   | "    | 30 | 49.5 |  | 61 | 38-120 |  |  |  |
| Acenaphthene                       | 5   | "    | 30 | 50.0 |  | 60 | 33-120 |  |  |  |
| 2,4-Dinitrotoluene                 | 5   | "    | 33 | 50.0 |  | 67 | 48-120 |  |  |  |
| 4-Nitrophenol                      | 5   | "    | 12 | 50.0 |  | 25 | 10-120 |  |  |  |
| Fluorene                           | 5   | "    | 31 | 49.0 |  | 62 | 40-120 |  |  |  |
| Azobenzene (1,2-diphenylhydrazine) | 5   | "    | 32 | 50.0 |  | 63 | 34-120 |  |  |  |
| Pentachlorophenol                  | 5   | "    | 22 | 49.5 |  | 44 | 11-120 |  |  |  |
| Phenanthrene                       | 5   | "    | 32 | 49.8 |  | 64 | 43-120 |  |  |  |
| Anthracene                         | 5   | "    | 32 | 49.8 |  | 64 | 50-120 |  |  |  |
| Fluoranthene                       | 5   | "    | 32 | 50.0 |  | 63 | 50-120 |  |  |  |
| Pyrene                             | 5   | "    | 30 | 49.5 |  | 60 | 56-120 |  |  |  |
| Benzo(a)anthracene                 | 1   | "    | 35 | 50.0 |  | 71 | 42-120 |  |  |  |
| Chrysene                           | 1   | "    | 31 | 49.5 |  | 62 | 33-134 |  |  |  |
| Benzo(b)fluoranthene               | 1   | "    | 32 | 50.0 |  | 63 | 30-129 |  |  |  |
| Benzo(k)fluoranthene               | 0.5 | "    | 33 | 49.5 |  | 67 | 23-143 |  |  |  |



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**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H03027 - EPA 8270D**

**LCS (5H03027-BS1)**

Prepared: 07/31/15 Analyzed: 08/04/15

|                                 |     |      |      |      |  |    |        |  |  |  |
|---------------------------------|-----|------|------|------|--|----|--------|--|--|--|
| Benzo(a)pyrene                  | 0.2 | ug/L | 30   | 50.0 |  | 61 | 35-128 |  |  |  |
| Indeno (1,2,3-cd) pyrene        | 5   | "    | 27   | 49.5 |  | 55 | 13-160 |  |  |  |
| Dibenzo(a,h)anthracene          | 5   | "    | 27   | 49.5 |  | 54 | 15-164 |  |  |  |
| Benzo(ghi)perylene              | 0.5 | "    | 24   | 49.5 |  | 48 | 10-174 |  |  |  |
| Surrogate: 2-Fluorophenol       |     | "    | 40.6 | 100  |  | 41 | 10-120 |  |  |  |
| Surrogate: Phenol-d5            |     | "    | 24.6 | 100  |  | 25 | 10-120 |  |  |  |
| Surrogate: Nitrobenzene-d5      |     | "    | 30.4 | 50.5 |  | 60 | 12-128 |  |  |  |
| Surrogate: 2-Fluorobiphenyl     |     | "    | 29.7 | 50.0 |  | 59 | 12-120 |  |  |  |
| Surrogate: 2,4,6-Tribromophenol |     | "    | 60.2 | 100  |  | 60 | 21-121 |  |  |  |
| Surrogate: p-Terphenyl-d14      |     | "    | 36.7 | 50.5 |  | 73 | 11-158 |  |  |  |

**LCS Dup (5H03027-BSD1)**

Prepared: 07/31/15 Analyzed: 08/04/15

|                                    |     |      |      |      |  |    |        |   |    |  |
|------------------------------------|-----|------|------|------|--|----|--------|---|----|--|
| Phenol                             | 5   | ug/L | 14   | 50.0 |  | 29 | 14-120 | 0 | 30 |  |
| 2-Chlorophenol                     | 5   | "    | 28   | 50.0 |  | 55 | 18-120 | 0 | 30 |  |
| 1,4-Dichlorobenzene                | 5   | "    | 23   | 50.0 |  | 47 | 29-120 | 0 | 30 |  |
| N-Nitrosodi-n-propylamine          | 5   | "    | 25   | 50.0 |  | 50 | 26-120 | 0 | 30 |  |
| 1,2,4-Trichlorobenzene             | 5   | "    | 25   | 49.8 |  | 51 | 28-120 | 0 | 30 |  |
| Naphthalene                        | 5   | "    | 28   | 50.0 |  | 55 | 16-120 | 0 | 30 |  |
| p-Chloro-m-cresol                  | 5   | "    | 30   | 49.8 |  | 59 | 31-130 | 0 | 30 |  |
| Acenaphthylene                     | 5   | "    | 30   | 49.5 |  | 61 | 38-120 | 0 | 30 |  |
| Acenaphthene                       | 5   | "    | 30   | 50.0 |  | 60 | 33-120 | 0 | 30 |  |
| 2,4-Dinitrotoluene                 | 5   | "    | 33   | 50.0 |  | 67 | 48-120 | 0 | 30 |  |
| 4-Nitrophenol                      | 5   | "    | 12   | 50.0 |  | 25 | 10-120 | 0 | 30 |  |
| Fluorene                           | 5   | "    | 31   | 49.0 |  | 62 | 40-120 | 0 | 30 |  |
| Azobenzene (1,2-diphenylhydrazine) | 5   | "    | 32   | 50.0 |  | 63 | 34-120 | 0 | 30 |  |
| Pentachlorophenol                  | 5   | "    | 22   | 49.5 |  | 44 | 11-120 | 0 | 30 |  |
| Phenanthrene                       | 5   | "    | 32   | 49.8 |  | 64 | 43-120 | 0 | 30 |  |
| Anthracene                         | 5   | "    | 32   | 49.8 |  | 64 | 50-120 | 0 | 30 |  |
| Fluoranthene                       | 5   | "    | 32   | 50.0 |  | 63 | 50-120 | 0 | 30 |  |
| Pyrene                             | 5   | "    | 30   | 49.5 |  | 60 | 56-120 | 0 | 30 |  |
| Benzo(a)anthracene                 | 1   | "    | 35   | 50.0 |  | 71 | 42-120 | 0 | 30 |  |
| Chrysene                           | 1   | "    | 31   | 49.5 |  | 62 | 33-134 | 0 | 30 |  |
| Benzo(b)fluoranthene               | 1   | "    | 32   | 50.0 |  | 63 | 30-129 | 0 | 30 |  |
| Benzo(k)fluoranthene               | 0.5 | "    | 33   | 49.5 |  | 67 | 23-143 | 0 | 30 |  |
| Benzo(a)pyrene                     | 0.2 | "    | 30   | 50.0 |  | 61 | 35-128 | 0 | 30 |  |
| Indeno (1,2,3-cd) pyrene           | 5   | "    | 27   | 49.5 |  | 55 | 13-160 | 0 | 30 |  |
| Dibenzo(a,h)anthracene             | 5   | "    | 27   | 49.5 |  | 54 | 15-164 | 0 | 30 |  |
| Benzo(ghi)perylene                 | 0.5 | "    | 24   | 49.5 |  | 48 | 10-174 | 0 | 30 |  |
| Surrogate: 2-Fluorophenol          |     | "    | 40.6 | 100  |  | 41 | 10-120 |   |    |  |
| Surrogate: Phenol-d5               |     | "    | 24.6 | 100  |  | 25 | 10-120 |   |    |  |
| Surrogate: Nitrobenzene-d5         |     | "    | 30.4 | 50.5 |  | 60 | 12-128 |   |    |  |



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Results are reported on a "wet weight basis", unless otherwise noted.

**Semivolatile Organic Compounds by EPA Method 8270 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H03027 - EPA 8270D**

**LCS Dup (5H03027-BSD1)**

Prepared: 07/31/15 Analyzed: 08/04/15

|                                 |  |      |      |      |  |    |        |  |  |  |
|---------------------------------|--|------|------|------|--|----|--------|--|--|--|
| Surrogate: 2-Fluorobiphenyl     |  | ug/L | 29.7 | 50.0 |  | 59 | 12-120 |  |  |  |
| Surrogate: 2,4,6-Tribromophenol |  | "    | 60.2 | 100  |  | 60 | 21-121 |  |  |  |
| Surrogate: p-Terphenyl-d14      |  | "    | 36.7 | 50.5 |  | 73 | 11-158 |  |  |  |

**Matrix Spike (5H03027-MS1)**

Source: 15G0379-01

Prepared: 07/31/15 Analyzed: 08/04/15

|                                    |    |      |      |     |    |    |        |  |  |    |
|------------------------------------|----|------|------|-----|----|----|--------|--|--|----|
| Phenol                             | 25 | ug/L | 78   | 250 | ND | 31 | 13-120 |  |  |    |
| 2-Chlorophenol                     | 25 | "    | 171  | 250 | ND | 68 | 19-120 |  |  |    |
| 1,4-Dichlorobenzene                | 25 | "    | 132  | 250 | ND | 53 | 27-120 |  |  |    |
| N-Nitrosodi-n-propylamine          | 25 | "    | 112  | 250 | ND | 45 | 43-120 |  |  |    |
| 1,2,4-Trichlorobenzene             | 25 | "    | 131  | 249 | ND | 53 | 59-120 |  |  | MS |
| Naphthalene                        | 25 | "    | 144  | 250 | ND | 58 | 21-120 |  |  |    |
| p-Chloro-m-cresol                  | 25 | "    | 179  | 249 | ND | 72 | 27-123 |  |  |    |
| Acenaphthylene                     | 25 | "    | 175  | 248 | ND | 71 | 40-120 |  |  |    |
| Acenaphthene                       | 25 | "    | 169  | 250 | ND | 68 | 30-123 |  |  |    |
| 2,4-Dinitrotoluene                 | 25 | "    | 195  | 250 | ND | 78 | 46-120 |  |  |    |
| 4-Nitrophenol                      | 25 | "    | 96   | 250 | ND | 39 | 10-120 |  |  |    |
| Fluorene                           | 25 | "    | 170  | 245 | ND | 69 | 34-122 |  |  |    |
| Azobenzene (1,2-diphenylhydrazine) | 25 | "    | 187  | 250 | ND | 75 | 49-120 |  |  |    |
| Pentachlorophenol                  | 25 | "    | 130  | 248 | ND | 52 | 10-133 |  |  |    |
| Phenanthrene                       | 25 | "    | 177  | 249 | ND | 71 | 39-120 |  |  |    |
| Anthracene                         | 25 | "    | 171  | 249 | ND | 69 | 48-120 |  |  |    |
| Fluoranthene                       | 25 | "    | 175  | 250 | ND | 70 | 47-120 |  |  |    |
| Pyrene                             | 25 | "    | 166  | 248 | ND | 67 | 50-120 |  |  |    |
| Benzo(a)anthracene                 | 5  | "    | 170  | 250 | ND | 68 | 39-120 |  |  |    |
| Chrysene                           | 5  | "    | 195  | 248 | ND | 79 | 40-124 |  |  |    |
| Benzo(b)fluoranthene               | 5  | "    | 191  | 250 | ND | 77 | 18-122 |  |  |    |
| Benzo(k)fluoranthene               | 2  | "    | 203  | 248 | ND | 82 | 17-121 |  |  |    |
| Benzo(a)pyrene                     | 1  | "    | 190  | 250 | ND | 76 | 32-120 |  |  |    |
| Indeno (1,2,3-cd) pyrene           | 25 | "    | 147  | 248 | ND | 59 | 10-186 |  |  |    |
| Dibenzo(a,h)anthracene             | 25 | "    | 147  | 248 | ND | 59 | 10-167 |  |  |    |
| Benzo(ghi)perylene                 | 2  | "    | 128  | 248 | ND | 52 | 10-173 |  |  |    |
| Surrogate: 2-Fluorophenol          |    | "    | 127  | 300 |    | 42 | 10-120 |  |  |    |
| Surrogate: Phenol-d5               |    | "    | 82.1 | 300 |    | 27 | 10-120 |  |  |    |
| Surrogate: Nitrobenzene-d5         |    | "    | 80.6 | 152 |    | 53 | 12-128 |  |  |    |
| Surrogate: 2-Fluorobiphenyl        |    | "    | 96.8 | 150 |    | 65 | 12-120 |  |  |    |
| Surrogate: 2,4,6-Tribromophenol    |    | "    | 187  | 300 |    | 62 | 21-121 |  |  |    |
| Surrogate: p-Terphenyl-d14         |    | "    | 132  | 152 |    | 87 | 11-158 |  |  |    |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H05002 - EPA 8260**

**Blank (5H05002-BLK1)**

Prepared & Analyzed: 08/03/15

|                            |    |      |    |  |  |  |  |  |  |   |
|----------------------------|----|------|----|--|--|--|--|--|--|---|
| Dichlorodifluoromethane    | 5  | ug/L | ND |  |  |  |  |  |  | U |
| Methyl Chloride            | 5  | "    | ND |  |  |  |  |  |  | U |
| Chloromethane              | 5  | "    | ND |  |  |  |  |  |  | U |
| Vinyl chloride             | 2  | "    | ND |  |  |  |  |  |  | U |
| Methyl Bromide             | 5  | "    | ND |  |  |  |  |  |  | U |
| Bromomethane               | 5  | "    | ND |  |  |  |  |  |  | U |
| Chloroethane               | 5  | "    | ND |  |  |  |  |  |  | U |
| Trichlorofluoromethane     | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,1-Dichloroethylene       | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,1-Dichloroethene         | 5  | "    | ND |  |  |  |  |  |  | U |
| Carbon disulfide           | 5  | "    | ND |  |  |  |  |  |  | U |
| Iodomethane                | 10 | "    | ND |  |  |  |  |  |  | U |
| Methylene Chloride         | 5  | "    | ND |  |  |  |  |  |  | U |
| Acetone                    | 25 | "    | ND |  |  |  |  |  |  | U |
| trans-1,2-Dichloroethylene | 5  | "    | ND |  |  |  |  |  |  | U |
| trans-1,2-Dichloroethene   | 5  | "    | ND |  |  |  |  |  |  | U |
| Methyl t-Butyl Ether       | 5  | "    | ND |  |  |  |  |  |  | U |
| Acrolein                   | 50 | "    | ND |  |  |  |  |  |  | U |
| 1,1-Dichloroethane         | 5  | "    | ND |  |  |  |  |  |  | U |
| Acrylonitrile              | 20 | "    | ND |  |  |  |  |  |  | U |
| Vinyl acetate              | 5  | "    | ND |  |  |  |  |  |  | U |
| cis-1,2-Dichloroethene     | 5  | "    | ND |  |  |  |  |  |  | U |
| 2,2-Dichloropropane        | 10 | "    | ND |  |  |  |  |  |  | U |
| Bromochloromethane         | 5  | "    | ND |  |  |  |  |  |  | U |
| Chloroform                 | 5  | "    | ND |  |  |  |  |  |  | U |
| Carbon Tetrachloride       | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,1,1-Trichloroethane      | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Butanone                 | 25 | "    | ND |  |  |  |  |  |  | U |
| 1,1-Dichloropropene        | 5  | "    | ND |  |  |  |  |  |  | U |
| Benzene                    | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,2-Dichloroethane         | 5  | "    | ND |  |  |  |  |  |  | U |
| Trichloroethene            | 5  | "    | ND |  |  |  |  |  |  | U |
| Trichloroethylene          | 5  | "    | ND |  |  |  |  |  |  | U |
| Dibromomethane             | 5  | "    | ND |  |  |  |  |  |  | U |
| 1,2-Dichloropropane        | 5  | "    | ND |  |  |  |  |  |  | U |
| Dichlorobromomethane       | 5  | "    | ND |  |  |  |  |  |  | U |
| Bromodichloromethane       | 5  | "    | ND |  |  |  |  |  |  | U |
| 2-Chloroethyl vinyl ether  | 25 | "    | ND |  |  |  |  |  |  | U |
| cis-1,3-Dichloropropene    | 5  | "    | ND |  |  |  |  |  |  | U |
| Toluene                    | 5  | "    | ND |  |  |  |  |  |  | U |
| Tetrachloroethene          | 5  | "    | ND |  |  |  |  |  |  | U |



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Report Date: 08/14/15 11:15

**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H05002 - EPA 8260**

**Blank (5H05002-BLK1)**

Prepared & Analyzed: 08/03/15

|                                 |    |      |      |      |  |     |        |  |  |   |
|---------------------------------|----|------|------|------|--|-----|--------|--|--|---|
| Tetrachloroethylene             | 5  | ug/L | ND   |      |  |     |        |  |  | U |
| 4-Methyl-2-pentanone            | 25 | "    | ND   |      |  |     |        |  |  | U |
| trans-1,3-Dichloropropene       | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,1,2-Trichloroethane           | 5  | "    | ND   |      |  |     |        |  |  | U |
| Chlorodibromomethane            | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,3-Dichloropropane             | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,2-Dibromoethane               | 5  | "    | ND   |      |  |     |        |  |  | U |
| 2-Hexanone                      | 25 | "    | ND   |      |  |     |        |  |  | U |
| Chlorobenzene                   | 5  | "    | ND   |      |  |     |        |  |  | U |
| Ethylbenzene                    | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,1,1,2-Tetrachloroethane       | 5  | "    | ND   |      |  |     |        |  |  | U |
| m,p-Xylene                      | 10 | "    | ND   |      |  |     |        |  |  | U |
| o-Xylene                        | 5  | "    | ND   |      |  |     |        |  |  | U |
| Styrene                         | 5  | "    | ND   |      |  |     |        |  |  | U |
| Bromoform                       | 5  | "    | ND   |      |  |     |        |  |  | U |
| Isopropylbenzene                | 5  | "    | ND   |      |  |     |        |  |  | U |
| n-Propylbenzene                 | 5  | "    | ND   |      |  |     |        |  |  | U |
| Bromobenzene                    | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,1,2,2-Tetrachloroethane       | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,3,5-Trimethylbenzene          | 5  | "    | ND   |      |  |     |        |  |  | U |
| 2-Chlorotoluene                 | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,2,3-Trichloropropane          | 5  | "    | ND   |      |  |     |        |  |  | U |
| trans-1,4-Dichloro-2-butene     | 10 | "    | ND   |      |  |     |        |  |  | U |
| 4-Chlorotoluene                 | 5  | "    | ND   |      |  |     |        |  |  | U |
| tert-Butylbenzene               | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,2,4-Trimethylbenzene          | 5  | "    | ND   |      |  |     |        |  |  | U |
| sec-Butylbenzene                | 5  | "    | ND   |      |  |     |        |  |  | U |
| 4-Isopropyltoluene              | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,3-Dichlorobenzene             | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,4-Dichlorobenzene             | 5  | "    | ND   |      |  |     |        |  |  | U |
| n-Butylbenzene                  | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,2-Dichlorobenzene             | 5  | "    | ND   |      |  |     |        |  |  | U |
| 1,2-Dibromo-3-chloropropane     | 5  | "    | ND   |      |  |     |        |  |  | U |
| Hexachlorobutadiene             | 10 | "    | ND   |      |  |     |        |  |  | U |
| 1,2,4-Trichlorobenzene          | 10 | "    | ND   |      |  |     |        |  |  | U |
| Naphthalene                     | 10 | "    | ND   |      |  |     |        |  |  | U |
| 1,2,3-Trichlorobenzene          | 5  | "    | ND   |      |  |     |        |  |  | U |
| Surrogate: Dibromofluoromethane |    | "    | 51.9 | 50.0 |  | 104 | 60-140 |  |  |   |
| Surrogate: Toluene-d8           |    | "    | 48.7 | 50.0 |  | 97  | 70-130 |  |  |   |
| Surrogate: 4-Bromofluorobenzene |    | "    | 45.6 | 50.0 |  | 91  | 70-130 |  |  |   |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H05002 - EPA 8260**

**LCS (5H05002-BS1)**

Prepared & Analyzed: 08/03/15

|                            |    |      |     |      |  |     |        |  |  |       |
|----------------------------|----|------|-----|------|--|-----|--------|--|--|-------|
| Dichlorodifluoromethane    | 5  | ug/L | 110 | 50.0 |  | 225 | 10-150 |  |  | SPK H |
| Methyl Chloride            | 5  | "    | 68  | 50.0 |  | 136 | 42-173 |  |  |       |
| Chloromethane              | 5  | "    | 68  | 50.0 |  | 136 | 42-150 |  |  |       |
| Vinyl chloride             | 2  | "    | 68  | 50.0 |  | 137 | 54-135 |  |  | SPK H |
| Bromomethane               | 5  | "    | 40  | 50.0 |  | 80  | 32-150 |  |  |       |
| Methyl Bromide             | 5  | "    | 40  |      |  |     | 32-178 |  |  |       |
| Chloroethane               | 5  | "    | 79  | 50.0 |  | 158 | 48-156 |  |  | SPK H |
| Trichlorofluoromethane     | 5  | "    | 71  | 50.0 |  | 142 | 68-144 |  |  |       |
| 1,1-Dichloroethylene       | 5  | "    | 60  |      |  |     | 44-145 |  |  |       |
| 1,1-Dichloroethene         | 5  | "    | 60  | 50.0 |  | 121 | 44-145 |  |  |       |
| Carbon disulfide           | 5  | "    | 65  | 50.0 |  | 130 | 60-147 |  |  |       |
| Iodomethane                | 10 | "    | 32  | 50.0 |  | 65  | 33-150 |  |  |       |
| Methylene Chloride         | 5  | "    | 55  | 50.0 |  | 109 | 62-139 |  |  |       |
| Acetone                    | 25 | "    | 280 | 250  |  | 112 | 50-154 |  |  |       |
| trans-1,2-Dichloroethene   | 5  | "    | 53  | 50.0 |  | 106 | 73-132 |  |  |       |
| trans-1,2-Dichloroethylene | 5  | "    | 53  |      |  |     | 73-132 |  |  |       |
| Methyl t-Butyl Ether       | 5  | "    | 53  | 50.0 |  | 106 | 62-135 |  |  |       |
| Acrolein                   | 50 | "    | 57  | 200  |  | 29  | 10-152 |  |  |       |
| 1,1-Dichloroethane         | 5  | "    | 53  | 50.0 |  | 106 | 76-133 |  |  |       |
| Acrylonitrile              | 20 | "    | 240 | 250  |  | 96  | 20-156 |  |  |       |
| Vinyl acetate              | 5  | "    | 52  | 50.0 |  | 104 | 70-151 |  |  |       |
| cis-1,2-Dichloroethene     | 5  | "    | 48  | 50.0 |  | 97  | 74-134 |  |  |       |
| 2,2-Dichloropropane        | 10 | "    | 56  | 50.0 |  | 111 | 59-143 |  |  |       |
| Bromochloromethane         | 5  | "    | 46  | 50.0 |  | 93  | 67-136 |  |  |       |
| Chloroform                 | 5  | "    | 48  | 50.0 |  | 96  | 80-135 |  |  |       |
| Carbon Tetrachloride       | 5  | "    | 53  | 50.0 |  | 105 | 69-135 |  |  |       |
| 1,1,1-Trichloroethane      | 5  | "    | 53  | 50.0 |  | 106 | 80-132 |  |  |       |
| 2-Butanone                 | 25 | "    | 230 | 250  |  | 93  | 46-143 |  |  |       |
| 1,1-Dichloropropene        | 5  | "    | 49  | 50.0 |  | 99  | 68-130 |  |  |       |
| Benzene                    | 5  | "    | 49  | 50.0 |  | 98  | 80-131 |  |  |       |
| 1,2-Dichloroethane         | 5  | "    | 51  | 50.0 |  | 102 | 75-131 |  |  |       |
| Trichloroethylene          | 5  | "    | 50  | 50.0 |  | 100 | 80-122 |  |  |       |
| Trichloroethene            | 5  | "    | 50  | 50.0 |  | 100 | 70-130 |  |  |       |
| Dibromomethane             | 5  | "    | 51  | 50.0 |  | 102 | 61-140 |  |  |       |
| 1,2-Dichloropropane        | 5  | "    | 50  | 50.0 |  | 101 | 78-127 |  |  |       |
| Dichlorobromomethane       | 5  | "    | 50  | 50.0 |  | 101 | 69-132 |  |  |       |
| Bromodichloromethane       | 5  | "    | 50  | 50.0 |  | 101 | 69-132 |  |  |       |
| 2-Chloroethyl vinyl ether  | 25 | "    | 46  | 50.0 |  | 91  | 10-132 |  |  |       |
| cis-1,3-Dichloropropene    | 5  | "    | 50  | 50.0 |  | 99  | 70-130 |  |  |       |
| Toluene                    | 5  | "    | 48  | 50.0 |  | 97  | 70-138 |  |  |       |
| Tetrachloroethylene        | 5  | "    | 49  | 50.0 |  | 98  | 59-136 |  |  |       |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H05002 - EPA 8260**

**LCS (5H05002-BS1)**

Prepared & Analyzed: 08/03/15

|                                 |    |      |      |      |  |     |        |  |  |       |
|---------------------------------|----|------|------|------|--|-----|--------|--|--|-------|
| Tetrachloroethene               | 5  | ug/L | 49   | 50.0 |  | 98  | 59-136 |  |  |       |
| 4-Methyl-2-pentanone            | 25 | "    | 250  | 250  |  | 98  | 56-137 |  |  |       |
| trans-1,3-Dichloropropene       | 5  | "    | 51   | 50.0 |  | 102 | 55-131 |  |  |       |
| 1,1,2-Trichloroethane           | 5  | "    | 51   | 50.0 |  | 102 | 74-129 |  |  |       |
| Chlorodibromomethane            | 5  | "    | 47   | 50.0 |  | 93  | 69-125 |  |  |       |
| 1,3-Dichloropropane             | 5  | "    | 45   | 50.0 |  | 90  | 68-132 |  |  |       |
| 1,2-Dibromoethane               | 5  | "    | 48   | 50.0 |  | 96  | 66-131 |  |  |       |
| 2-Hexanone                      | 25 | "    | 260  | 250  |  | 103 | 40-147 |  |  |       |
| Chlorobenzene                   | 5  | "    | 48   | 50.0 |  | 96  | 80-129 |  |  |       |
| Ethylbenzene                    | 5  | "    | 48   | 50.0 |  | 96  | 78-131 |  |  |       |
| 1,1,1,2-Tetrachloroethane       | 5  | "    | 50   | 50.0 |  | 100 | 70-138 |  |  |       |
| m,p-Xylene                      | 10 | "    | 98   | 100  |  | 98  | 70-141 |  |  |       |
| o-Xylene                        | 5  | "    | 49   | 50.0 |  | 98  | 70-130 |  |  |       |
| Styrene                         | 5  | "    | 46   | 50.0 |  | 92  | 70-124 |  |  |       |
| Bromoform                       | 5  | "    | 45   | 50.0 |  | 90  | 60-138 |  |  |       |
| Isopropylbenzene                | 5  | "    | 49   | 50.0 |  | 98  | 73-130 |  |  |       |
| n-Propylbenzene                 | 5  | "    | 51   | 50.0 |  | 101 | 70-130 |  |  |       |
| Bromobenzene                    | 5  | "    | 46   | 50.0 |  | 93  | 70-130 |  |  |       |
| 1,1,2,2-Tetrachloroethane       | 5  | "    | 51   | 50.0 |  | 102 | 64-141 |  |  |       |
| 1,3,5-Trimethylbenzene          | 5  | "    | 48   | 50.0 |  | 97  | 70-130 |  |  |       |
| 2-Chlorotoluene                 | 5  | "    | 50   | 50.0 |  | 100 | 70-130 |  |  |       |
| 1,2,3-Trichloropropane          | 5  | "    | 52   | 50.0 |  | 104 | 70-130 |  |  |       |
| trans-1,4-Dichloro-2-butene     | 10 | "    | 52   | 50.0 |  | 104 | 52-149 |  |  |       |
| 4-Chlorotoluene                 | 5  | "    | 48   | 50.0 |  | 97  | 70-130 |  |  |       |
| tert-Butylbenzene               | 5  | "    | 56   | 50.0 |  | 112 | 69-128 |  |  |       |
| 1,2,4-Trimethylbenzene          | 5  | "    | 50   | 50.0 |  | 100 | 70-130 |  |  |       |
| sec-Butylbenzene                | 5  | "    | 53   | 50.0 |  | 105 | 70-130 |  |  |       |
| 4-Isopropyltoluene              | 5  | "    | 51   | 50.0 |  | 103 | 70-134 |  |  |       |
| 1,3-Dichlorobenzene             | 5  | "    | 49   | 50.0 |  | 99  | 70-130 |  |  |       |
| 1,4-Dichlorobenzene             | 5  | "    | 49   | 50.0 |  | 98  | 70-130 |  |  |       |
| n-Butylbenzene                  | 5  | "    | 58   | 50.0 |  | 115 | 70-140 |  |  |       |
| 1,2-Dichlorobenzene             | 5  | "    | 51   | 50.0 |  | 103 | 70-140 |  |  |       |
| 1,2-Dibromo-3-chloropropane     | 5  | "    | 60   | 50.0 |  | 120 | 70-140 |  |  |       |
| Hexachlorobutadiene             | 10 | "    | 83   | 50.0 |  | 166 | 70-140 |  |  | SPK H |
| 1,2,4-Trichlorobenzene          | 10 | "    | 62   | 50.0 |  | 124 | 70-140 |  |  |       |
| Naphthalene                     | 10 | "    | 61   | 50.0 |  | 123 | 70-140 |  |  |       |
| 1,2,3-Trichlorobenzene          | 5  | "    | 68   | 50.0 |  | 136 | 70-140 |  |  |       |
| Surrogate: Dibromofluoromethane |    | "    | 50.3 | 50.0 |  | 101 | 60-140 |  |  |       |
| Surrogate: Toluene-d8           |    | "    | 49.6 | 50.0 |  | 99  | 70-130 |  |  |       |
| Surrogate: 4-Bromofluorobenzene |    | "    | 49.2 | 50.0 |  | 98  | 70-130 |  |  |       |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H05002 - EPA 8260**

**LCS Dup (5H05002-BSD1)**

Prepared & Analyzed: 08/03/15

|                            |    |      |     |      |  |     |        |      |    |       |
|----------------------------|----|------|-----|------|--|-----|--------|------|----|-------|
| Dichlorodifluoromethane    | 5  | ug/L | 120 | 50.0 |  | 247 | 10-150 | 9    | 30 | SPK H |
| Methyl Chloride            | 5  | "    | 71  | 50.0 |  | 141 | 42-173 | 3    | 30 |       |
| Chloromethane              | 5  | "    | 71  | 50.0 |  | 141 | 42-150 | 3    | 30 |       |
| Vinyl chloride             | 2  | "    | 74  | 50.0 |  | 147 | 54-135 | 7    | 30 | SPK H |
| Methyl Bromide             | 5  | "    | 46  |      |  |     | 32-178 | 14   | 30 |       |
| Bromomethane               | 5  | "    | 46  | 50.0 |  | 92  | 32-150 | 14   | 30 |       |
| Chloroethane               | 5  | "    | 83  | 50.0 |  | 165 | 48-156 | 4    | 30 | SPK H |
| Trichlorofluoromethane     | 5  | "    | 73  | 50.0 |  | 146 | 68-144 | 3    | 30 | SPK H |
| 1,1-Dichloroethylene       | 5  | "    | 59  |      |  |     | 44-145 | 2    | 30 |       |
| 1,1-Dichloroethene         | 5  | "    | 59  | 50.0 |  | 118 | 44-145 | 2    | 30 |       |
| Carbon disulfide           | 5  | "    | 65  | 50.0 |  | 130 | 60-147 | 0.4  | 30 |       |
| Iodomethane                | 10 | "    | 36  | 50.0 |  | 71  | 33-150 | 10   | 30 |       |
| Methylene Chloride         | 5  | "    | 59  | 50.0 |  | 117 | 62-139 | 7    | 30 |       |
| Acetone                    | 25 | "    | 290 | 250  |  | 116 | 50-154 | 3    | 30 |       |
| trans-1,2-Dichloroethene   | 5  | "    | 54  | 50.0 |  | 108 | 73-132 | 2    | 30 |       |
| trans-1,2-Dichloroethylene | 5  | "    | 54  |      |  |     | 73-132 | 2    | 30 |       |
| Methyl t-Butyl Ether       | 5  | "    | 55  | 50.0 |  | 110 | 62-135 | 4    | 30 |       |
| Acrolein                   | 50 | "    | 58  | 200  |  | 29  | 10-152 | 2    | 30 |       |
| 1,1-Dichloroethane         | 5  | "    | 55  | 50.0 |  | 110 | 76-133 | 3    | 30 |       |
| Acrylonitrile              | 20 | "    | 250 | 250  |  | 100 | 20-156 | 3    | 30 |       |
| Vinyl acetate              | 5  | "    | 55  | 50.0 |  | 110 | 70-151 | 5    | 30 |       |
| cis-1,2-Dichloroethene     | 5  | "    | 51  | 50.0 |  | 102 | 74-134 | 5    | 30 |       |
| 2,2-Dichloropropane        | 10 | "    | 56  | 50.0 |  | 112 | 59-143 | 0.4  | 30 |       |
| Bromochloromethane         | 5  | "    | 51  | 50.0 |  | 102 | 67-136 | 10   | 30 |       |
| Chloroform                 | 5  | "    | 51  | 50.0 |  | 101 | 80-135 | 5    | 30 |       |
| Carbon Tetrachloride       | 5  | "    | 53  | 50.0 |  | 105 | 69-135 | 0.04 | 30 |       |
| 1,1,1-Trichloroethane      | 5  | "    | 52  | 50.0 |  | 103 | 80-132 | 2    | 30 |       |
| 2-Butanone                 | 25 | "    | 260 | 250  |  | 103 | 46-143 | 11   | 30 |       |
| 1,1-Dichloropropene        | 5  | "    | 51  | 50.0 |  | 102 | 68-130 | 4    | 30 |       |
| Benzene                    | 5  | "    | 49  | 50.0 |  | 98  | 80-131 | 0.3  | 30 |       |
| 1,2-Dichloroethane         | 5  | "    | 54  | 50.0 |  | 108 | 75-131 | 6    | 30 |       |
| Trichloroethene            | 5  | "    | 48  | 50.0 |  | 96  | 70-130 | 3    | 30 |       |
| Trichloroethylene          | 5  | "    | 48  | 50.0 |  | 96  | 80-122 | 3    | 30 |       |
| Dibromomethane             | 5  | "    | 55  | 50.0 |  | 109 | 61-140 | 7    | 30 |       |
| 1,2-Dichloropropane        | 5  | "    | 54  | 50.0 |  | 107 | 78-127 | 6    | 30 |       |
| Bromodichloromethane       | 5  | "    | 52  | 50.0 |  | 104 | 69-132 | 3    | 30 |       |
| Dichlorobromomethane       | 5  | "    | 52  | 50.0 |  | 104 | 69-132 | 3    | 35 |       |
| 2-Chloroethyl vinyl ether  | 25 | "    | 48  | 50.0 |  | 95  | 10-132 | 4    | 30 |       |
| cis-1,3-Dichloropropene    | 5  | "    | 53  | 50.0 |  | 106 | 70-130 | 6    | 30 |       |
| Toluene                    | 5  | "    | 49  | 50.0 |  | 99  | 70-138 | 2    | 30 |       |
| Tetrachloroethene          | 5  | "    | 51  | 50.0 |  | 102 | 59-136 | 4    | 30 |       |



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**Volatile Organic Compounds by EPA Method 8260 - Quality Control**

| Analyte | RL | Units | Result | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|
|---------|----|-------|--------|-------------|---------------|------|-------------|-----|-----------|-----------|

**Batch 5H05002 - EPA 8260**

**LCS Dup (5H05002-BSD1)**

Prepared & Analyzed: 08/03/15

|                                 |    |      |      |      |  |     |        |      |    |       |
|---------------------------------|----|------|------|------|--|-----|--------|------|----|-------|
| Tetrachloroethylene             | 5  | ug/L | 51   | 50.0 |  | 102 | 59-136 | 4    | 30 |       |
| 4-Methyl-2-pentanone            | 25 | "    | 240  | 250  |  | 97  | 56-137 | 0.8  | 30 |       |
| trans-1,3-Dichloropropene       | 5  | "    | 53   | 50.0 |  | 107 | 55-131 | 4    | 30 |       |
| 1,1,2-Trichloroethane           | 5  | "    | 51   | 50.0 |  | 102 | 74-129 | 0.4  | 30 |       |
| Chlorodibromomethane            | 5  | "    | 48   | 50.0 |  | 96  | 69-125 | 3    | 30 |       |
| 1,3-Dichloropropane             | 5  | "    | 48   | 50.0 |  | 97  | 68-132 | 7    | 30 |       |
| 1,2-Dibromoethane               | 5  | "    | 49   | 50.0 |  | 98  | 66-131 | 2    | 30 |       |
| 2-Hexanone                      | 25 | "    | 260  | 250  |  | 105 | 40-147 | 1    | 30 |       |
| Chlorobenzene                   | 5  | "    | 48   | 50.0 |  | 97  | 80-129 | 0.8  | 30 |       |
| Ethylbenzene                    | 5  | "    | 48   | 50.0 |  | 96  | 78-131 | 0.4  | 30 |       |
| 1,1,1,2-Tetrachloroethane       | 5  | "    | 50   | 50.0 |  | 100 | 70-138 | 0.3  | 30 |       |
| m,p-Xylene                      | 10 | "    | 98   | 100  |  | 98  | 70-141 | 0.5  | 30 |       |
| o-Xylene                        | 5  | "    | 50   | 50.0 |  | 100 | 70-130 | 3    | 30 |       |
| Styrene                         | 5  | "    | 48   | 50.0 |  | 97  | 70-124 | 5    | 30 |       |
| Bromoform                       | 5  | "    | 46   | 50.0 |  | 92  | 60-138 | 3    | 30 |       |
| Isopropylbenzene                | 5  | "    | 48   | 50.0 |  | 96  | 73-130 | 1    | 30 |       |
| n-Propylbenzene                 | 5  | "    | 50   | 50.0 |  | 100 | 70-130 | 1    | 30 |       |
| Bromobenzene                    | 5  | "    | 47   | 50.0 |  | 94  | 70-130 | 2    | 30 |       |
| 1,1,2,2-Tetrachloroethane       | 5  | "    | 51   | 50.0 |  | 102 | 64-141 | 0.06 | 30 |       |
| 1,3,5-Trimethylbenzene          | 5  | "    | 49   | 50.0 |  | 98  | 70-130 | 0.7  | 30 |       |
| 2-Chlorotoluene                 | 5  | "    | 49   | 50.0 |  | 98  | 70-130 | 2    | 30 |       |
| 1,2,3-Trichloropropane          | 5  | "    | 51   | 50.0 |  | 102 | 70-130 | 2    | 30 |       |
| trans-1,4-Dichloro-2-butene     | 10 | "    | 51   | 50.0 |  | 101 | 52-149 | 3    | 30 |       |
| 4-Chlorotoluene                 | 5  | "    | 50   | 50.0 |  | 99  | 70-130 | 3    | 30 |       |
| tert-Butylbenzene               | 5  | "    | 56   | 50.0 |  | 111 | 69-128 | 0.1  | 30 |       |
| 1,2,4-Trimethylbenzene          | 5  | "    | 51   | 50.0 |  | 102 | 70-130 | 2    | 30 |       |
| sec-Butylbenzene                | 5  | "    | 52   | 50.0 |  | 103 | 70-130 | 2    | 30 |       |
| 4-Isopropyltoluene              | 5  | "    | 51   | 50.0 |  | 102 | 70-134 | 0.6  | 30 |       |
| 1,3-Dichlorobenzene             | 5  | "    | 49   | 50.0 |  | 98  | 70-130 | 1    | 30 |       |
| 1,4-Dichlorobenzene             | 5  | "    | 49   | 50.0 |  | 99  | 70-130 | 0.4  | 30 |       |
| n-Butylbenzene                  | 5  | "    | 56   | 50.0 |  | 112 | 70-140 | 3    | 30 |       |
| 1,2-Dichlorobenzene             | 5  | "    | 51   | 50.0 |  | 102 | 70-140 | 0.8  | 30 |       |
| 1,2-Dibromo-3-chloropropane     | 5  | "    | 57   | 50.0 |  | 113 | 70-140 | 6    | 30 |       |
| Hexachlorobutadiene             | 10 | "    | 82   | 50.0 |  | 165 | 70-140 | 0.7  | 30 | SPK H |
| 1,2,4-Trichlorobenzene          | 10 | "    | 61   | 50.0 |  | 122 | 70-140 | 2    | 30 |       |
| Naphthalene                     | 10 | "    | 61   | 50.0 |  | 122 | 70-140 | 0.3  | 30 |       |
| 1,2,3-Trichlorobenzene          | 5  | "    | 70   | 50.0 |  | 140 | 70-140 | 3    | 30 |       |
| Surrogate: Dibromofluoromethane |    | "    | 53.0 | 50.0 |  | 106 | 60-140 |      |    |       |
| Surrogate: Toluene-d8           |    | "    | 50.2 | 50.0 |  | 100 | 70-130 |      |    |       |
| Surrogate: 4-Bromofluorobenzene |    | "    | 49.8 | 50.0 |  | 100 | 70-130 |      |    |       |



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