

**ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**MONITORING REPORT FOR DECENTRALIZED WASTEWATER TREATMENT FACILITIES VIA DRIP IRRIGATION**  
**MONTHLY MONITORING REPORT**

**PERMITTEE NAME**

Waterford Estates at Hissom Ranch POA

**FACILITY NAME (IF DIFFERENT)**

Waterford Estates at Hissom Ranch POA

**PERMIT NO.**

4815-WR-1

**PERMITTEE ADDRESS**

3567 W New Hope Rd  
Rogers, AR 72756

**FACILITY ADDRESS**

2323 Bowen Blvd  
Fayetteville AR 72703

**AFIN NO.**

72-00974

**WASTEWATER EFFLUENT MONITORING PERIOD**

MM/DD/YYYY


8/1/2016

MM/DD/YYYY

8/31/2016

**TREATED WASTEWATER EFFLUENT SAMPLING**

| PARAMETER   | Limit     | Sample Measurement | UNITS          | Monitoring                    | Reporting                                |
|---|-----------|--------------------|----------------|-------------------------------|--|
| Flow, Monthly total                                   | REPORT    | 0.763488           | MG             | Total Flow per calendar month | Prior to the 15th of the following Month |
| Flow, daily maximun                                   | REPORT    | 0.029475           | MGD            | Daily                         |  |
| Carbonaceous Blochemical Oxygen Demand (CBOD5)        | 15        | < 2                | mg/l           | Grab Sample once per month    |  |
| Total Suspended Solids (TSS)                          | 15        | 3.3                | mg/l           |                               |  |
| Fecal Coliform Bacteria (FCB)                         | 2,000     | < 2                | colonies/100ml |                               |  |
| pH  | 6.0 - 9.0 | 7.1                | s.u.           |                               |  |
| Total Phosphorus (TP)                                 | REPORT    | 8.1                | mg/l           |                               |  |
| Total Kjeldahl Nitrogen (TKN)                         | REPORT    | No Report          | mg/l           | Grab sample once per quarter  |  |
| Ammonia Nitrogen (NH3-N)                              | REPORT    | No Report          | mg/l           |                               |  |
| Nitrate Nitrogen ( NO3-N) + Nitrite Nitrogen ( NO2-N) | REPORT    | No Report          | mg/l           |                               |  |
| Plant Available Nitrogen (PAN)                        | REPORT    | No Report          | mg/l           |                               |  |
| Loading Rate  | REPORT    | See Attached       | gpd/ft 2       | Daily                         |  |

|  |   |   |                                 |  |
|--|---|---|---------------------------------|--|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER<br><br><div style="text-align: center;">Kathy Bartlett</div> TYPED OR PRINTED | I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. | <div style="text-align: center;"> <br/> <b>SIGNATURE OF PRINCIPAL</b><br/> <b>EXECUTIVE OFFICER OR</b><br/> <b>AUTHORIZED AGENT</b> </div> | TELEPHONE<br><br>(479) 530-5926 | DATE<br><br>9/8/2016<br><br>MM/DD/YYYY |
| COMMENTS AND EXPLANATION OF VIOLATIONS ( <i>Reference all attachments here</i> )                                     |   |   |                                 |  |

| WATERFORD ESTATES LOADING RATES |          |
|---------------------------------|----------|
| Zone Identification             | GPD/sq 2 |
| Zone 1A                         | 2,446    |
| Zone 1B                         | 2,329    |
| Zone 2A                         | 2,329    |
| Zone 2B                         | 2,211    |
| Zone 3A                         | 2,329    |
| Zone 3B                         | 2,329    |
| Zone 4A                         | 2,329    |
| Zone 4B                         | 2,329    |
| Zone 5A                         | 2,579    |
| Zone 5B                         | 2,700    |
| Zone 6A                         | 2,579    |
| Zone 6B                         | 2,947    |

# Environmental Services Company, Inc.

Corporate Office  
13715 West Markham  
Little Rock, AR 72211  
Tel. (501)221-2565 Fax (501)221-1341

Northwest Arkansas Branch  
1107 Century Avenue  
Springdale, AR 72762  
Tel. (479)750-1170 Fax (479)750-1172

Control Number: 1608020135  
Customer Name : GREENFIELD CAP DEV-WATERFORD  
Customer/Permit No. : 1886 / 4815-WR-4  
Report Date : 08/29/16

Sample Date : 08/24/16  
Sample Time : 0830  
Sample Type : GRAB WATERFORD  
Sample From : DOSE TANK EFFLUENT

Collected By: JB  
Delivery By : JB  
Work Order :  
Purchase Order :

## Laboratory Analysis

| Analysis |      |     |                           |            |       |          | Quality Assurance |            |
|----------|------|-----|---------------------------|------------|-------|----------|-------------------|------------|
| Date     | Time | By  | Parameter                 | Result     | Notes | Quantity | Method            | Precision  |
|          |      |     |                           |            |       |          |                   | % RPD      |
|          |      |     |                           |            |       |          |                   | % Recovery |
| 08/24    | 0830 | JCB | pH                        | 7.1 S.U.   |       |          | SM 2000 4500-H+ B | 0.00       |
| 08/26    | 1300 | JCB | Phosphorous, Total (as P) | 8.1 mg/L   |       |          | EPA 365.3         | 101.2 *    |
| 08/25    | 1330 | AEU | Solids, Total Suspended   | 3.3 mg/L   |       |          | SM 1997 2540 D    | 0.00       |
| 08/24    | 1045 | JCB | Coliform, Fecal           | < 2 /100ml |       |          | SM 9222 D 1997    | 0.00       |
| 08/24    | 1400 | TSB | BOD, Carbonaceous         | < 2.0 mg/L |       |          | SM 2001 5210 B    | 0.41       |
|          |      |     |                           |            |       |          |                   | 98.4 *     |

\* QA data shown is from a different sample or standard on the same date.

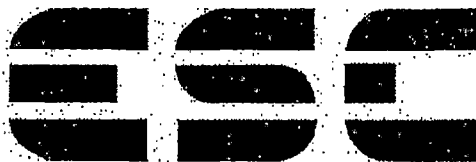
All equipment used is checked and/or calibrated daily. All NPDES testing is conducted in accordance with 40 CFR Part 136. A minimum of 10% spiked and duplicate samples is run on each parameter where applicable for Quality Assurance purposes. Quality Assurance Plan on file with Arkansas Department of Environmental Quality. Analysis time indicates the time of the start of the analytical batch in which the specific sample was included.

Signature

*Richard Brown*

Environmental Services Co., Inc.

Environmental Services Company, Inc.  
Northwest Arkansas  
1107 Century Street  
Springdale, Arkansas 72762  
website: [www.esclabs.com](http://www.esclabs.com)



Corporate Office, Little Rock, Arkansas  
501-221-2565

Carlsbad, New Mexico  
575-887-1ESC

Phone: 479-750-1170 Fax: 479-750-1172

## CHAIN OF CUSTODY

| Client Information                            |               |                   |       |   |        | Project Information                |        |  |      |                              | Requested Parameters  |        |       |    |  |  |  |  |  |  |  |
|---|---------------|-------------------|-------|---|--------|------------------------------------|--------|--|------|------------------------------|---|--------|-------|----|--|--|--|--|--|--|--|
| Company Name: Waterford Estates               |               |                   |       |   |        | Permit/Project #:                  |        |  |      |                              | pH(23)<br>F. Coliform(43)<br>CBOD(70), TSS(28), PAN(99.99)<br>NH3(15.A), Phos(25)<br>TKN(16.A), N+N(91) |        |       |    |  |  |  |  |  |  |  |
| Address: 1695 Electric Avenue                 |               |                   |       |   |        | Purchase Order #:                  |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| Springdale AR 72764                           |               |                   |       |   |        |                                    |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| Telephone: (479)751-8868                      |               |                   |       |   |        | Sampler Name(s): John Byrd         |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| FAX: (479)757-7650                            |               |                   |       |   |        | and Signature(s): <i>John Byrd</i> |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| ESC Client Number: 1886                       |               |                   |       |   |        |                                    |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| Sample Identification                         |               | Sample Collection |       |   |        | Sample Containers                  |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| Identification                                | ESC Control # | Date              | Time  | Type  | Matrix | Type                               | Volume | Preservative   | #    |                              |   |        |       |    |  |  |  |  |  |  |  |
| Dose Tank/Effluent                            | 1608020135    | 8/24/16           | 8:30  | Grab  | Water  | Teflon                             | 150 ml | none   | 1    | x                            |   |        |       |    |  |  |  |  |  |  |  |
| Waterford Estates                             |               |                   |       | Grab  | Water  | whirlpak                           | 300 ml | none/ice   | 1    | x                            |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       | Grab  | Water  | Plastic                            | 1 qt   | none/ice   | 1    |                              | x   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       | Grab  | Water  | Plastic                            | 8 oz   | H <sub>2</sub> SO <sub>4</sub> , pH <2                                       | 1    |                              |   | x      | x     |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        |                                    |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        |                                    |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        |                                    |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        |                                    |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        |                                    |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        |                                    |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        |                                    |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        |                                    |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        |                                    |        |  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| Relinquished By: (Signature and Printed Name) |               | Date              | Time  | Received By: (Signature and Printed Name)         |        | Date                               | Time   | Custody Seals:   |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| <i>John Byrd</i> John Byrd                    |               | 8/24/16           | 10:05 |   |        |                                    |        | Used? <input checked="" type="checkbox"/> Intact? <input type="checkbox"/>   |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| Relinquished By: (Signature and Printed Name) |               | Date              | Time  | Received By: (Signature and Printed Name)         |        | Date                               | Time   | Turnaround:  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        |                                    |        | Regular <input checked="" type="checkbox"/> Special <input type="checkbox"/> |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| Relinquished By: (Signature and Printed Name) |               | Date              | Time  | Received for Lab By: (Signature and Printed Name) |        | Date                               | Time   | Were samples properly preserved:   |      |                              |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       | <i>Richard Brown</i> RICHARD BROWN                |        | 8/24/16                            | 10:05  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>          |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| Comments:                                     |               |                   |       |   |        | FLOW DATA                          |        | Field Test   | Time | Analyst                      | Result  | Result | Units |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        | Analyst:                           |        | pH:  | 0830 | JCB                          | 7.06  | 7.04   |       |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        | Time:                              |        | Temp.:   |      |                              | 38.0  | 27.5   | °C    | °F |  |  |  |  |  |  |  |
|   |               |                   |       |   |        | Reading:                           |        | DO:  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
|   |               |                   |       |   |        | Units:                             |        | Debris:  |      |                              |   |        |       |    |  |  |  |  |  |  |  |
| Cool all samples to 6 degrees C.              |               |                   |       |   |        | Chlorinated? Yes No                |        |  |      | This Document is Page 1 of 1 |   |        |       |    |  |  |  |  |  |  |  |