



Illinois Environmental Protection Agency  
 Post Office Box 19276, Springfield, IL 62794-9276  
 Application for Operating Permit  
 -Instructions Attached-

Facility Name: SOUTH SANGAMON WATER COMMISSION (Sangamon County)  
 Facility Number: IL1670080

Address:  
 Chairman and Board of Trustees  
 South Sangamon Water Commission  
 P.O. Box 83  
 New Berlin, IL 62670

Permit Number: 0658-FY2010 Permit Type: Plant Improvement

Title of Project: "Contract C Water Treatment Plant and Contract E Procurement"

Firm: Donohue & Associates, Inc.

Date Issued: December 17, 2010 Date of Project Completion: FEBRUARY 23, 2012  
(mm/dd/yr) (mm/dd/yr)

(Check One) Partial \_\_\_\_\_ Final X (See Instructions for Partials)  
(i.e. A, B, C)

Certified Operator in Responsible Charge:

TIM HASARA A (217) 921-7233  
NAME (PLEASE PRINT) CLASSIFICATION TELEPHONE

Owner of the Completed Project: DEL McCORD  
116 E. MULBERRY CHATHAM IL  
STREET CITY STATE ZIPCODE

Signature: Del McCord Date: 2/22/2012  
(mm/dd/yr)  
 Title: DEL McCORD, COMMISSIONER : CHAIRMAN Telephone No: (217) 483-2451  
PRINT NAME AND TITLE

The Owner hereby certifies that the project named and described has been constructed in accordance with plans and specifications approved by the Illinois EPA, including specifications for bacteriological samples, and that bacteriological samples (if required) were taken under the supervision of a representative from the Public Water Supply. The owner also certifies that the project will be operated in accordance with the provisions of the Illinois Environmental Protection Act and the Rules and Regulations adopted by the Illinois Pollution Control Board pursuant to provisions of the Act.

\*\*\*\*\*FOR IEPA USE ONLY\*\*\*\*\*

This Operating Permit 0658-FY2010 is issued on MAR 06 2012 and is valid until revoked. This permit is valid only for the work completed under the Construction Permit of the same number.

**RECEIVED**

David C. Cook  
 David C. Cook, P.E.  
 Acting Manager, Permit Section  
 Division of Public Water Supplies

Verbal Approvals, contact 217.782.4697

FEB 29 2012

DIVISION OF PUBLIC WATER SUPPLIES  
 ENVIRONMENTAL PROTECTION AGENCY  
 STATE OF ILLINOIS

Note: For projects requiring disinfection, samples must be attached. Permit number is to be written on each sample sheet.

*Draft Response  
emailed to Michelle  
Dickson on 3/6/2012*

# South Sangamon Water Commission

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Mailing Address  
P.O. Box 83  
New Berlin, Illinois 62670  
(217) 483-2451

Treatment Plant  
9199 Buckhart Road  
Rochester, Illinois 62563  
(217) 498-2088

March 5, 2012

Illinois Environmental Protection Agency  
Bureau of Water, Division of Public Water Supplies  
Michelle Dickson, Permits Section  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

Dear Ms. Dickson:

Thank you for your assistance during our phone conversation this morning regarding Permit 0658-FY2010 titled "Contract C Water Treatment Plant and Contract E Procurement" for the South Sangamon Water Commission.

The purpose of this letter is to follow-up <sup>on</sup> our <sup>operating</sup> discussions regarding discrepancies that need corrected before the subject permit can be approved. As a matter of convenience, I have addressed the items we discussed in the same order as your March 2, 2012 letter.

- a. b. There is no location by which to obtain a sample of the Raw Water Main between the last hydrant and essentially the Detention Tank. However, any sample taken from the Detention Tank would indicate not only if there were any bacteriological issues at the vessel, but it would also indicate issues with the Raw Water Line near the plant as well. This being the case, samples from the Detention Tank satisfies the requirement for the Raw Water Main. For your convenience I have attached a copy of the Illinois Environmental Protection Agency (IEPA) Coliform Analysis Report for January 16 and 17, 2012 where the samples came back negative.

Please be aware as part of Permit 0201-FY2011 titled "Contract A and Well Fields", Coliform Analysis samples have also been taken to insure the Raw Water Main is free from bacteriological issues from the well field to the treatment plant. We believe this clears any discrepancy regarding these items and they are no longer an issue.

- c. d. e. Tonka Filters 1, 2, 3 & 4 and Plant Softeners 1, 2, 3, & 4 are the same vessels respectively. Once again, for your convenience, I have attached the IEPA Coliform Analysis Report for January 23, 24, 25, 27 and 30, 2012 where these samples came back negative for bacteriological issues. We believe this clears any discrepancy regarding these items and they are no longer an issue.

It is our belief this clears all the issues associated with this permit, please do not hesitate to contact me if I have overlooked an issue or if you are in need of further information regarding this or any issue. I can be reached by phone at (217) 381-2206 or by email at dan.held@sswc.us.

Thank you once again for all your assistance in this matter. It was been a pleasure working with you to move the permit process along as quickly as possible.

Sincerely,

A handwritten signature in blue ink that reads "D L Held".

Daniel L. Held, Operator  
South Sangamon Water Commission

Attachments

bcc: Honorable Del McCord  
Honorable William Pfeffer  
Honorable Craig Hall  
Tim Hasara

Prepared by Dan Held (823-2206)  
March 6, 2012

**ILLINOIS EPA COLIFORM ANALYSIS REPORT FORM**

Facility No.: IL 1670080 Facility Name: South Sangamon Water Comm

Date and Time Received in Laboratory: 01-16-12 11:45  
 Date and Time Analyzed: 1.16.12 13:30

Results Reported Electronically (circle one) Yes  No

**SAMPLES MUCH REACH LABORATORY WITHIN 30 HOURS AFTER SAMPLE COLLECTION**

1. Mail Report To:  
 Name: South Sangamon Water Comm,  
 Address: 9899 Buckhart Rd Rochester IL. 62563

2. Contact for Unsatisfactory Results:  
 \*DAY TIME PHONE OR CELL NUMBER PLEASE\*  
 Name: \_\_\_\_\_ Phone: ( 971-7233 )

3. Date Collected: 1-16-12

4. Sample Collector: Tim Hasara

5. Sample Purpose (check one):  
 Routine  Repeat  Replacement  
 Boil Order for Distribution Repair  
 Boil Order for Other Reasons: \_\_\_\_\_  
 Well, Tank or Other Repair/Maintenance (MF Method Only):  
 Notes: \_\_\_\_\_  
 Other \_\_\_\_\_  
 New Construction No. \_\_\_\_\_ FY \_\_\_\_\_ (MF Only)

The Illinois Environmental Protection Agency is authorized to require information under ILLINOIS REVISED STATUTES, 1987, Chapter 111 1/2, Sec. 1019. Disclosure of this information is required. Failure to do so may result in a civil penalty up to \$10,000 and an additional civil penalty up to \$1,000 for each day the failure continues; a fine up to \$1,000 and imprisonment up to one year. This form has been approved by the Forms Management Center. Completed report must be maintained for a minimum of five years.

| Bot No. | Sample Site Number (SSN)<br><small>If no Site Number assigned, list address<br/>Must use site number for ROUTINE samples</small> | Sample Type<br><small>(R, F, or D)</small> | Time Collected | Tot Cl2 | Free Cl2 | 7. Col. Read | 8. Total Coli | 9. Fecal Coli | 10. E. Coli | 11. Laboratory Sample No. |
|---------|--|--|----------------|---------|----------|--------------|---------------|---------------|-------------|---------------------------|
| R       | Raw Water Main   | R  | 10 Am          |         |          | 44           | 44            |               |             | 12A0254 - 01A             |
| T       | Detention Tank   | R  | 10:20am        |         |          | 0            | 0             |               |             | - 02A                     |
|         | Detention Tank<br>0658 FY 2010   |  |                |         |          |              |               |               |             |                           |
|         | Raw Water Line<br>0785 FY 2010   |  |                |         |          |              |               |               |             |                           |

Laboratory Cert Number: 17592 Lab Name: Pravie Analytical

Method (circle one) Membrane Filter Multiple Tube Colilert Presence/Absence Colisure

Reported By (Analyst): Adam Peto Date: 1.17.12 11:35

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_

No. of Bottles Sent: \_\_\_\_\_ Date: \_\_\_\_\_

Reason for Replacement (circle one) Sample > 30 hours No Date/Time of Collection Other: \_\_\_\_\_















ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
1021 North Grand Avenue, East; Post Office Box 19276; Springfield, IL 62794-9276

Division of Public Water Supplies

Telephone 217/782-1724

**PUBLIC WATER SUPPLY CONSTRUCTION PERMIT**

SUBJECT: SOUTH SANGAMON WATER COMMISSION (Sangamon County-1670080)

Permit Issued to:  
Chairman and Board of Trustees  
South Sangamon Water Commission  
P.O. Box 83  
New Berlin, IL 62670

PERMIT NUMBER: 0658-FY2010

DATE ISSUED: December 23, 2010

PERMIT TYPE: Plant Improvement

The issuance of this permit is based on plans and specifications prepared by the engineers/architects indicated, and are identified as follows. This permit is issued for the construction and/or installation of the public water supply improvements described in this document, in accordance with the provisions of the "Environmental Protection Act", Title IV, Sections 14 through 17, and Title X, Sections 39 and 40, and is subject to the conditions printed on the last page of this permit and the ADDITIONAL CONDITIONS listed below.

FIRM: Donohue & Associates, Inc.  
NUMBER OF PLAN SHEETS: 172

TITLE OF PLANS: "Contract C Water Treatment Plant and Contract E Procurement"

PROPOSED IMPROVEMENTS:

\*\*\*The proposed project shall consist of an aerator, 188,000 gallon detention tank, a membrane filtration system, four (4) ion exchange vessels, a brine system, an aqua ammonia feed system, a fluoride feed system, a polyphosphate feed system, a sodium hypochloride feed system, 282,000 gallon clearwell, three (3) high service pumps, (each with a capacity of 1,150 gpm @ 263 ft TDH), three (3) low service pumps (each with a capacity of 1,500 gpm @ 117 ft TDH), a back-up generator, piping, controls and necessary appurtenances.

The aerator shall include a raw water header/lateral distribution system incorporating low head hollow cone pattern spray nozzles. There shall be ten (10) tiers of trays and two (2) blowers (each with a capacity of 10,800 cfm). Each Tier shall be 12 feet by 12 feet or 144 square feet with a total of 1440 square feet provided. The proposed membrane system, WesTech AltaFilter-UF120 S2, shall be a three skid system and shall be complete with a clean in place (CIP) system, piping, controls and necessary appurtenances. The CIP system shall be complete with an 800 gallon heated tank, two (2) feed pumps (capacity of 240 gpm), chlorine feed system, citric acid feed system, caustic feed system, neutralization system, sodium bisulfate feed, system, ammonium sulfate feed system, hydrofluosilicic acid feed system, piping, controls and necessary appurtenances. Each of the ion exchange vessels shall be 11 feet in diameter with a side shell height of 8 feet. Each unit shall have 12 inches of support gravel, three inches of torpedo sand supporting four feet of resin. The brine system shall have two (2) brine tanks, two (2) brine pumps, piping, controls and necessary appurtenances.

The aqua ammonia feed system shall be complete with two (2) chemical feed pumps (each with a capacity of 2 gph), anti-siphon valves, bulk storage tank (capacity of 6,300 gallons), day tank (capacity of 120 gallon), scale, feed lines, controls and necessary appurtenances. The fluoride feed system shall be complete with two (2) chemical feed pumps

(each with a capacity of 1 gph), anti-siphon valves, tankage, scale, feed lines, controls and necessary appurtenances. The polyphosphate feed system shall be complete with two (2) chemical feed pumps (each with a capacity of 2 gph), anti-siphon valves, tankage, scale, feed lines, controls and necessary appurtenances. The sodium hypochlorite feed system shall be complete with two (2) chemical feed pumps (each with a capacity of 8.4 gph), anti-siphon valves, bulk storage (capacity of 5,500 gallons), day tank (capacity of 175 gallons), scale, feed lines, controls and necessary appurtenances.\*\*\*

#### ADDITIONAL CONDITIONS:

1. The hatches on the brine storage tank must be framed at least four inches above the roof at the opening. They shall be fitted with a solid water tight cover which overlaps the framed opening and extends down around the frame and at least two inches. Shall be hinged on one side and shall have a locking device.
2. Only those chemicals used in the pretreatment process prior to the membranes during the pilot study are acceptable for use.
3. Any changes in chemicals used in the pretreatment process prior to the membrane units must have a certification from the membrane supplier that is acceptable to use and will not negatively impact the efficiency or agreed upon life of the membranes. A construction permit must be obtained from the Agency prior to any chemical feed changes.
4. The DPWS requires that an integrity test be performed at no longer an interval than every eight hours.

For Integrity Testing the Agency shall require:

1. The direct integrity test resolution must be such that, at a minimum, the test can respond to a breach of 3 um or less. The direct integrity test sensitivity in terms of log removal value (LRV) must be demonstrated to the Agency by testing on site and by calculation. The USEPA Membrane Filtration Guidance Manual (EPA 815-R-06-009) should be used as general guide with regard to complying with this general condition. The established sensitivity and the procedure used to establish it shall be submitted to the Agency and approved prior to South Sangamon being issued an Operating Permit. Though the direct integrity test based on a resolution of 3 um and its associated sensitivity the Agency recommends that if an integrity breach of any magnitude exists the unit should be taken out of service for diagnostic testing and repair.
2. An upper and lower control limit must be established within the sensitivity limits of the pressure decay test that shows the membrane unit capable of achieving the LRV. The control limit and the procedure used to establish it shall be submitted to the Agency and approved prior to South Sangamon being issued an Operating Permit.
3. The sensitivity and frequency of the pressure decay test must be demonstrated to the Illinois EPA for all of the membrane units prior to an operating permit being issued.
4. If the pressure decay test results exceed the control limit for any membrane unit, that unit must be removed from service.
5. Any unit taken out of service for exceeding pressure decay test (PDT) control limits cannot be returned to service until a corrective action is taken including repairs, if required. The unit shall not be placed back in service until the corrective actions including repairs are confirmed by subsequent direct integrity test within the control limit.
6. Any pressure decay test results exceeding the control limit, as well as the corrective action taken in response, must be reported to the Illinois EPA no later than 10 days after the end of the month.
7. The membrane used by South Sangamon Water Commission must undergo challenge testing to evaluate removal efficiency, and the results must be reported to the Agency. Challenge Testing must be conducted in accordance with the LT~~2~~ Enhanced Surface Water Rule and establish a quality control release valve (QCRV) for the PDT that demonstrates the removal capabilities of the membrane filtration module and that can be applied to all modules used. The Agency reserves the right to approve the method for determining

the QCRV.

For Indirect Integrity Testing the Agency shall require:

1. Continuous monitoring of the membrane filtrate quality shall be done through the use of turbidimeters and partical counters.
2. Monitoring must be conducted at a frequency of at least one reading every 15 minutes.
3. If the continuous indirect integrity monitoring results exceed the specified control limit for any membrane unit for a period greater than 15 minutes, direct integrity testing (pressure decay) must be immediately conducted on that unit.
4. The control limit for turbidity monitoring is 0.15 NTU.
5. The control limit for particle counters shall be established within 6 months of start of operation of the membranes, utilizing procedures recommended in the USEPA Membrane Filtration Guidance Manual or an alternative method approved by the Agency.

JHK:CLK: dsa

cc: Donohue & Associates, Inc.  
Springfield Region



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Jerry H. Kuhix, P.E.  
Manager Permit Section  
Division of Public Water Supplies





# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

PAT QUINN, GOVERNOR

JOHN J. KIM, INTERIM DIRECTOR

*Response*

March 2, 2012

*Letter from EPA asking for clarification on issues*

**Chairman and Board of Trustees  
South Sangamon Water Commission  
P.O. Box 83  
New Berlin, IL 62670**

## Re: OPERATING PERMIT DISCREPANCY NOTIFICATION

Facility Name: SOUTH SANGAMON WATER COMMISSION  
Facility ID: IL 1670080  
Permit Number: 0658-FY2010  
Project Title: "Contract C Water Treatment Plant and Contract E Procurement"

Director:

The Illinois Environmental Protection Agency (EPA) received your Operating Permit application and supporting documents on 29 Feb 2012. After review of the Operating Permit application, the Agency has identified discrepancies that need corrected before the application can be approved.

1. The following information is required to complete the Operating Permit application:

*Same location*

a. Sample site "Detention Tank" returned unsatisfactory results on 11 and 12 Jan 2012. The site has not been resampled. You are requested to resample the site twice consecutively, at least 24 hours apart with satisfactory results as measured by the Membrane Filter technique. Ensure the permit number is written on the report sheet and submit the resampled bacteriological reports to the Illinois EPA for review.

*wants Detention Tank re-samp*

b. Sample site "Raw Water Tank" returned satisfactory results on 17 Jan 2012. The site has not been resampled. All Plant Improvement projects must be sampled twice consecutively, at least 24 hours apart with satisfactory results as measured by the Membrane Filter technique. You are requested to resample the site once more with satisfactory results as measured by the Membrane Filter technique. Ensure the permit number is written on the report sheet and submit the resampled bacteriological reports to the Illinois EPA for review.

*Same location*

c. Sample site "Tonka Filter 1" returned satisfactory results on 23 Jan 2012. The site has not been resampled. All Plant Improvement projects must be sampled twice consecutively, at least 24 hours apart with satisfactory results as measured by the Membrane Filter technique. You are requested to resample the site once more with satisfactory results as measured by the Membrane Filter technique. Ensure the permit number is written on the report sheet and submit the resampled bacteriological reports to the Illinois EPA for review.

d. Sample site "Tonka Filter 2" returned unsatisfactory results on 23 Jan 2012. The site was only resampled once with satisfactory results on 24 Jan 2012. To meet the state requirement, two consecutive satisfactory samples taken at least 24 hours apart must be achieved after an unsatisfactory water sample. You are requested to resample the site once more with satisfactory results as measured by the Membrane Filter technique. Ensure the permit number is written on the report sheet and submit the resampled bacteriological report to the Illinois EPA for review.

e. Sample sites "Plant Softener #1" and "Plant Softener #2" returned satisfactory results on 24 Jan 2012. All Plant Improvement projects that touch finished water must be sampled twice consecutively, at least 24 hours apart with satisfactory results as measured by the Membrane Filter technique. You are requested to resample each site once more with satisfactory results as analyzed by the Membrane Filter technique. Ensure the permit number is written on the report sheet(s) and submit the resampled bacteriological report(s) to the Illinois EPA for review.



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397  
PAT QUINN, GOVERNOR JOHN J. KIM, INTERIM DIRECTOR

2. You may mail, scan, or fax the requisite items identified above to the Illinois EPA Permit Section to complete your Operating Permit Application.

3. **Failure to acknowledge receipt of this letter and inform the Illinois EPA that corrective action is being taken by 21 Mar 2012 may result in the denial of the Facility's Operating Permit Application.**

If you have any questions regarding the facility's Operating Permit Application, please contact Michelle Dickson at (217) 782-4697, via email at [Michelle.Dickson@Illinois.gov](mailto:Michelle.Dickson@Illinois.gov), or by fax at (217) 782-0075.

Sincerely,

A handwritten signature in black ink, appearing to read "David C. Cook".

David C. Cook, P.E.  
Acting Manager, Permit Section  
Division of Public Water Supplies

XC - files  
Mailed  
2/28/2012

# South Sangamon Water Commission

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P.O. Box 83

New Berlin, Illinois 62670

Treatment Plant Site

9199 Buckhart Road

Rochester, IL 62563

February 23, 2012

Illinois Environmental Protection Agency

Bureau of Water

1021 North Grand Avenue East

P.O. Box 19276

Springfield, IL 62794-9276

Re: Permit Number: 0658-FY2010

To Whom It May Concern:

Attached please find a Final Application for an Operating Permit for Contract C Water Treatment Plant & Contract E Procurement.

Also included is a Partial Operating Permit for Contract A, Well Field.

Sincerely,



Del McCord, Commissioner & Chairman

Attachment





**ILLINOIS EPA COLIFORM ANALYSIS REPORT FORM**

|  |  |
|--|--|
| Facility No.: <u>IL 1670080</u>  | Facility Name: <u>South Sangamon Water Comm.</u> |
| Date and Time Received in Laboratory: <u>Kurt Pette</u>  | <u>1/24/12</u> <u>11:00</u>                      |
| Date and Time Analyzed:  | <u>1/24/12</u> <u>14:10</u>                      |
| Results Reported Electronically (circle one) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  |

**SAMPLES MUCH REACH LABORATORY WITHIN 30 HOURS AFTER SAMPLE COLLECTION**

|  |  |
|--|--|
| <b>1. Mail Report To:</b><br>Name: <u>South Sangamon Water Comm.</u><br>Address: <u>9199 Buckhart Rd.</u><br><u>Rochester, IL.</u><br><u>62563</u> | <b>3. Date Collected:</b> <u>JANUARY 24, 2012</u><br><b>4. Sample Collector:</b><br><u>DANNY HELG (217) 415-3541</u><br><b>5. Sample Purpose (check one):</b><br><input type="checkbox"/> Routine <input type="checkbox"/> Repeat <input type="checkbox"/> Replacement<br>Orig. Lab Sample No.(s) _____<br><input type="checkbox"/> Boil Order for Distribution Repair<br><input type="checkbox"/> Boil Order for Other Reasons: _____<br><input type="checkbox"/> Well, Tank or Other Repair/Maintenance (MF Method Only):<br>Notes: _____<br><input type="checkbox"/> Other<br>New Construction No. <u>0658</u> <u>FY 2010</u> (MF Only) |
| <b>2. Contact for Unsatisfactory Results:</b><br>*DAY TIME PHONE OR CELL NUMBER PLEASE*<br>Name: <u>TIM HASARA</u> Phone: <u>(217) 971-7233</u>    |  |

The Illinois Environmental Protection Agency is authorized to require information under ILLINOIS REVISED STATUTES, 1987, Chapter 111 1/2, Sec. 1019. Disclosure of this information is required. Failure to do so may result in a civil penalty up to \$10,000 and an additional civil penalty up to \$1,000 for each day the failure continues; a fine up to \$1,000 and imprisonment up to one year. This form has been approved by the Forms Management Center. Completed report must be maintained for a minimum of five years.

**6. Sample Information:**

| Bot No.   | Sample Site Number (SSN)<br><small>If no Site Number assigned, list address<br/>Must use site number for ROUTINE samples</small> | Sample Type<br><small>(R, F, or D)</small> | Time Collected  | Tot Cl2  | Free Cl2 | 7. Col. Read | 8. Total Coli | 9. Fecal Coli | 10. E Coli | 11. Laboratory Sample No. |
|-----------|--|--|-----------------|----------|----------|--------------|---------------|---------------|------------|---------------------------|
| <u>S1</u> | <u>PLANT SOFTENER #1</u>   |  | <u>9:40 AM</u>  | <u>-</u> | <u>-</u> | <u>0</u>     | <u>N</u>      |               |            | <u>12A0420-01</u>         |
| <u>S2</u> | <u>PLANT SOFTENER #2</u>   |  | <u>9:30 AM</u>  | <u>-</u> | <u>-</u> | <u>0</u>     | <u>N</u>      |               |            | <u>-02</u>                |
| <u>S3</u> | <u>PLANT SOFTENER #3</u>   |  | <u>10:00 AM</u> | <u>-</u> | <u>-</u> | <u>0</u>     | <u>N</u>      |               |            | <u>-03</u>                |
| <u>S4</u> | <u>PLANT SOFTENER #4</u>   |  | <u>10:05 AM</u> | <u>-</u> | <u>-</u> | <u>0</u>     | <u>N</u>      |               |            | <u>-04</u>                |
|           |  |  |                 |          |          |              |               |               |            |                           |
|           |  |  |                 |          |          |              |               |               |            |                           |
|           |  |  |                 |          |          |              |               |               |            |                           |
|           |  |  |                 |          |          |              |               |               |            |                           |
|           |  |  |                 |          |          |              |               |               |            |                           |
|           |  |  |                 |          |          |              |               |               |            |                           |
|           |  |  |                 |          |          |              |               |               |            |                           |
|           |  |  |                 |          |          |              |               |               |            |                           |
|           |  |  |                 |          |          |              |               |               |            |                           |
|           |  |  |                 |          |          |              |               |               |            |                           |

|   |                                     |
|---|-------------------------------------|
| Laboratory Cert Number: <u>17542</u>  | Lab Name: <u>Prairie Analytical</u> |
| Method (circle one) <u>Membrane Filter</u> Multiple Tube Colilert Presence/Absence Colisure             |                                     |
| Reported By (Analyst): <u>[Signature]</u>   | Date: <u>1.25.12</u>                |
| Person Notified:  | Date:                               |
| No. of Bottles Sent:  | Date:                               |
| Reason for Replacement (circle one) <u>Sample &gt; 30 hours</u> No Date/Time of Collection Other: _____ |                                     |

Plant

15.1c'



**ILLINOIS EPA COLIFORM ANALYSIS REPORT FORM**

|                                      |  |
|--------------------------------------|--|
| Facility No.: <u>IL 1670080</u>      | Facility Name: <u>South Sangamon Water Comm.</u> |
| Date and Time Received in Laboratory | <u>01-25-12 2:58pm</u>                           |
| Date and Time Analyzed               | <u>1.25.12 16:05</u>                             |

Results Reported Electronically (circle one) Yes  No

**SAMPLES MUCH REACH LABORATORY WITHIN 30 HOURS AFTER SAMPLE COLLECTION**

|  |   |
|--|---|
| 1. Mail Report To:<br>Name: <u>South Sangamon Water Comm.</u><br>Address: <u>9199 Buckhart Rd.</u><br><u>Rochester, IL</u><br><u>62563</u> | 3. Date Collected: <u>JANUARY 25, 2012</u><br>4. Sample Collector:<br><u>DAN HELG</u>   |
| 2. Contact for Unsatisfactory Results:<br>*DAY TIME PHONE OR CELL NUMBER PLEASE*<br>Name: <u>TEW HASARA</u> Phone: <u>(217) 971-7233</u>   | 5. Sample Purpose (check one):<br><input type="checkbox"/> Routine <input type="checkbox"/> Repeat <input type="checkbox"/> Replacement<br>Orig. Lab Sample No.(s) _____<br><input type="checkbox"/> Boil Order for Distribution Repair<br><input type="checkbox"/> Boil Order for Other Reasons: _____<br><input type="checkbox"/> Well, Tank or Other Repair/Maintenance (MF Method Only):<br>Notes: _____<br><input type="checkbox"/> Other<br>New Construction No. <u>0658</u> <u>FY 2010</u> (MF Only) |

The Illinois Environmental Protection Agency is authorized to require information under ILLINOIS REVISED STATUTES, 1963, Chapter 111-1/2, Sec. 1619. Disclosure of this information is required. Failure to do so may result in a civil penalty up to \$10,000 and an additional civil penalty up to \$1,000 for each day the failure continues, a fine up to \$1,000 and imprisonment up to one year. This form has been approved by the Forms Management Center. Completed report must be maintained for a minimum of five years.

| 6. Sample Information: |  |  |                |          |          |              |               |               |             |                           |  |
|------------------------|--|--|----------------|----------|----------|--------------|---------------|---------------|-------------|---------------------------|--|
| Bot No.                | Sample Site Number (SSN)<br><small>If no Site Number assigned, list address<br/>Must use site number for ROUTINE samples</small> | Sample Type<br><small>(R, F, or D)</small> | Time Collected | Tot Cl:  | Free Cl: | 7. Col. Read | 8. Total Coli | 9. Fecal Coli | 10. E. Coli | 11. Laboratory Sample No. |  |
| <u>73</u>              | <u>SOFTENER #3</u>   | <u>-</u>                                   | <u>1:25 pm</u> | <u>-</u> | <u>-</u> | <u>0</u>     | <u>N</u>      |               |             | <u>12A0459-01</u>         |  |
| <u>74</u>              | <u>SOFTENER #4</u>   | <u>-</u>                                   | <u>1:25 pm</u> | <u>-</u> | <u>-</u> | <u>6</u>     | <u>P</u>      |               |             | <u>02</u>                 |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |
|                        |  |  |                |          |          |              |               |               |             |                           |  |

|   |                                     |
|---|-------------------------------------|
| Laboratory Cert Number: <u>17597</u>  | Lab Name: <u>Practic Analytical</u> |
| Method (circle one) <u>Membrane Filter</u> <u>Multiple Tube</u> <u>Colifert</u> <u>Presence/Absence</u> <u>Colisure</u> | Date: <u>1.26.12</u>                |
| Reported By (Analyst): <u>[Signature]</u>   | Date: _____                         |
| Person Notified: _____  | Date: _____                         |
| No. of Bottles Sent: _____  | Date: _____                         |
| Reason for Replacement (circle one) <u>Sample &gt;30 hours</u> <u>No Date/Time of Collection</u> <u>Other: _____</u>    |                                     |

Plant











# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

PAT QUINN, GOVERNOR

JOHN J. KIM, DIRECTOR

217/782-1724

February 19, 2013

Chairman, South Sangamon Water Commission  
Post Office Box 83  
New Berlin, Illinois 62670

Re: SOUTH SANGAMON WATER COMMISSION (Sangamon County - - 1670080)  
Contract "C" Water Treatment Plant - High Service Pump Modifications/Permit No.  
0185-FY2013  
'As-Built' Operating Permit

Ladies and Gentlemen:

The Illinois Environmental Protection Agency (Agency) is in receipt of the plans and specifications, prepared by Donahue & Associates, Inc., for the installation of two (2) additional high service pumps (each with a capacity of 600 gpm @ 127 ft TDH) and modifications to the three (3) permitted high service pumps (each with a capacity of 1,150 gpm @ 360 ft TDH). This documentation has been received by this office and has been reviewed for compliance to minimum design and construction requirements for Illinois public water supplies.

Based on the "as-built" information submitted, it appears that the improvements made to your public water supply conform to minimum requirements for public water supply construction. Section 15 of the environmental Protection Act states "Owners of public water supplies, their authorized representative, or legal custodians, shall submit plans and specifications to the Agency and obtain written approval before construction of any proposed public water supply installations, changes, or additions is started." Therefore, in the future the plan data for any changes of additions to the supply must be submitted and approved prior to the start of construction.

This letter may be considered an operating permit for the improvements to the public water supply described above. If you have any questions or require further assistance please contact Christopher Kohrmann of my staff at [Christopher.Kohrmann@illinois.gov](mailto:Christopher.Kohrmann@illinois.gov) or at 217/782-1724.

Sincerely,

David C. Cook, P.E.  
Acting Manager, Permit Section  
Division of Public Water Supplies

DCC:CLK

CC: Donahue & Associates, Inc.

LABORATORY RESULTS

Client: South Sangamon Water Commission  
 Project: New Well Requirements  
 Client Sample ID: Well 2  
 Collection Date: 8/7/12 9:00

Lab Order: 12H0137  
 Lab ID: 12H0137-01  
 Matrix: Water

| Analyses                                   | Result      | Limit   | Qual | Units | DF     | Date Prepared | Date Analyzed | Method       | Analyst |
|--|-------------|---------|------|-------|--------|---------------|---------------|--------------|---------|
| <b>Environmental Inc.</b>                  |             |         |      |       |        |               |               |              |         |
| <b>Combined Radium</b>                     |             |         |      |       |        |               |               |              |         |
| Combined Radium                            | 2.1         | 0.6     |      | pCi/L | 1      | 8/9/12 0:00   | 10/8/12 0:00  | Combined Ra  | SUB     |
| <b>Radium 226 Method 903.1</b>             |             |         |      |       |        |               |               |              |         |
| Radium 226                                 | 0.3 +/- 0.2 | 0.2     |      | pCi/L | 1      | 8/9/12 0:00   | 10/8/12 0:00  | Radium 226 M | SUB     |
| <b>Radium 228 Method Ra-05</b>             |             |         |      |       |        |               |               |              |         |
| Radium 228                                 | 1.8 +/- 0.9 | 0.9     |      | pCi/L | 1      | 8/9/12 0:00   | 10/8/12 0:00  | Radium 228 M | SUB     |
| <b>Volatile Organic Compounds by GC-MS</b> |             |         |      |       |        |               |               |              |         |
| *Benzene                                   | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *Carbon tetrachloride                      | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *Chlorobenzene                             | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *1,2-Dichlorobenzene                       | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *1,4-Dichlorobenzene                       | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *1,2-Dichloroethane                        | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *1,1-Dichloroethene                        | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *cis-1,2-Dichloroethene                    | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *trans-1,2-Dichloroethene                  | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *1,2-Dichloropropane                       | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *Ethylbenzene                              | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *Methyl tert-butyl ether                   | U           | 1.00    |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *Methylene chloride                        | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *Styrene                                   | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *Tetrachloroethene                         | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *Toluene                                   | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *1,2,4-Trichlorobenzene                    | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *1,1,1-Trichloroethane                     | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *1,1,2-Trichloroethane                     | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *Trichloroethene                           | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *Vinyl chloride                            | U           | 0.500   |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| *Xylenes (total)                           | U           | 1.50    |      | µg/L  | 1      | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| Surrogate: 4-Bromofluorobenzene            |             | 104 %   |      |       | 80-120 | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| Surrogate: 1,2-Dichlorobenzene-d4          |             | 94 %    |      |       | 62-118 | 8/15/12 17:09 | 8/16/12 4:41  | EPA 524.2    | JKA     |
| <b>Metals by ICP-MS</b>                    |             |         |      |       |        |               |               |              |         |
| *Antimony                                  | U           | 0.00500 |      | mg/L  | 1      | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8    | JHN     |
| *Arsenic                                   | U           | 0.00500 |      | mg/L  | 1      | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8    | JHN     |
| *Barium                                    | 0.0663      | 0.00500 |      | mg/L  | 1      | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8    | JHN     |
| *Beryllium                                 | U           | 0.00400 |      | mg/L  | 1      | 8/9/12 9:24   | 8/15/12 20:29 | EPA 200.8    | JTC     |
| *Boron                                     | 0.0206      | 0.0100  |      | mg/L  | 1      | 8/9/12 9:24   | 8/15/12 20:29 | EPA 200.8    | JTC     |
| *Cadmium                                   | U           | 0.00100 |      | mg/L  | 1      | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8    | JHN     |
| *Chromium                                  | U           | 0.00500 |      | mg/L  | 1      | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8    | JHN     |
| *Cobalt                                    | U           | 0.00500 |      | mg/L  | 1      | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8    | JHN     |
| *Copper                                    | U           | 0.00500 |      | mg/L  | 1      | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8    | JHN     |
| *Iron                                      | 2.14        | 0.100   |      | mg/L  | 1      | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8    | JHN     |
| *Lead                                      | U           | 0.00500 |      | mg/L  | 1      | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8    | JHN     |

**LABORATORY RESULTS**

**Client:** South Sangamon Water Commission  
**Project:** New Well Requirements  
**Client Sample ID:** Well 2  
**Collection Date:** 8/7/12 9:00

**Lab Order:** 12H0137  
**Lab ID:** 12H0137-01  
**Matrix:** Water

| Analyses                                 | Result     | Limit      | Qual | Units      | DF | Date Prepared | Date Analyzed | Method     | Analyst |
|--|------------|------------|------|------------|----|---------------|---------------|------------|---------|
| *Manganese                               | 0.181      | 0.00500    |      | mg/L       | 1  | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8  | JHN     |
| *Mercury                                 | U          | 0.000200   |      | mg/L       | 1  | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8  | JHN     |
| *Nickel                                  | U          | 0.00500    |      | mg/L       | 1  | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8  | JHN     |
| *Selenium                                | U          | 0.00500    |      | mg/L       | 1  | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8  | JHN     |
| *Silver                                  | U          | 0.00500    |      | mg/L       | 1  | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8  | JHN     |
| *Thallium                                | U          | 0.00200    |      | mg/L       | 1  | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8  | JHN     |
| *Zinc                                    | U          | 0.0100     |      | mg/L       | 1  | 8/9/12 9:24   | 8/15/12 11:49 | EPA 200.8  | JHN     |
| <b>Anions by Ion Chromatography</b>      |            |            |      |            |    |               |               |            |         |
| *Chloride                                | 49.4       | 5.00       |      | mg/L       | 10 | 8/8/12 11:00  | 8/8/12 12:57  | EPA 300.0  | JHN     |
| *Fluoride                                | 0.138      | 0.0500     |      | mg/L       | 1  | 8/8/12 11:00  | 8/8/12 13:15  | EPA 300.0  | JHN     |
| *Nitrate (as N)                          | 0.479      | 0.0500     |      | mg/L       | 1  | 8/8/12 11:00  | 8/8/12 13:15  | EPA 300.0  | JHN     |
| *Nitrite (as N)                          | U          | 0.0500     |      | mg/L       | 1  | 8/8/12 11:00  | 8/8/12 13:15  | EPA 300.0  | JHN     |
| *Sulfate                                 | 62.6       | 3.00       |      | mg/L       | 10 | 8/8/12 11:00  | 8/8/12 12:57  | EPA 300.0  | JHN     |
| <b>Conventional Chemistry Parameters</b> |            |            |      |            |    |               |               |            |         |
| *Cyanide                                 | 0.00627    | 0.00500    |      | mg/L       | 1  | 8/9/12 9:35   | 8/10/12 11:07 | SM 4500-CN | AJD     |
| *Phenolics                               | U          | 0.00500    |      | mg/L       | 1  | 8/15/12 9:42  | 8/15/12 15:15 | EPA 420.1  | RSR     |
| *Total Dissolved Solids                  | 328        | 100        |      | mg/L       | 1  | 8/10/12 12:47 | 8/13/12 8:41  | EPA 160.1  | CCD     |
| <b>Summit</b>                            |            |            |      |            |    |               |               |            |         |
| Org. Chem.                               | See Report | See Report |      | See Report | 1  | 8/13/12 0:00  | 8/13/12 0:00  | See Report | SUB     |

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**LABORATORY RESULTS**

**Client:** South Sangamon Water Commission  
**Project:** New Well Requirements

**Lab Order:** 12H0137

---

**Notes and Definitions**

- S Spike recovery outside acceptance limits.
- R RPD outside acceptance limits.
- E Result above quantitation range.
- \* NELAC certified compound.
- U Analyte not detected (i.e. less than RL or MDL).



## Attachment 1 - NEW WELL GROUNDWATER QUALITY SAMPLING PARAMETERS

### Inorganic Chemical Constituents

|           |              |                              |
|-----------|--------------|------------------------------|
| Antimony  | Copper       | Radium-226                   |
| Arsenic   | Cyanide      | Radium-226                   |
| Barium    | Fluoride     | Selenium                     |
| Beryllium | Iron         | Silver                       |
| Boron     | Lead         | Sulfate                      |
| Cadmium   | Manganese    | Thallium                     |
| Chloride  | Mercury      | Total Dissolved Solids (TDS) |
| Chromium  | Nickel       | Zinc                         |
| Cobalt    | Nitrate as N |                              |

### Organic Chemical Constituents

|                                       |   |
|---------------------------------------|---|
| Alachlor*                             | ortho-Dichlorobenzene                                       |
| Aldicarb                              | para-Dichlorobenzene  |
| Aldrin                                | Dibromochloropropane*                                       |
| Atrazine                              | 1,2-Dichloroethane*   |
| Benzene*                              | 1,2-Dichloropropane   |
| Benzo(a)pyrene*                       | 1,1-Dichloroethylene  |
| Carbofuran                            | cis-1,2-Dichloroethylene                                    |
| Carbon Tetrachloride*                 | trans-1,2-Dichloroethylene                                  |
| Chlordane*                            | Methoxychlor  |
| Chlorobenzene                         | Methyl Tertiary-Butyl Ether                                 |
| Dalapon                               | Monochlorobenzene   |
| Dichloromethane*                      | Oxamyl (Vydate)   |
| DDT                                   | Pentachlorophenol*  |
| Di (2-Ethylhexyl) Adipate             | Phenols   |
| Dieldrin                              | Picloram  |
| Di(2-ethylhexyl)phthalate*            | Polychlorinated Biphenyls (PCBs) (as decachloro- biphenyl)* |
| Dinoseb                               | Simazine  |
| Diquat                                | Styrene   |
| Endothal                              | 2,4,5-TP (Silvex)   |
| Endrin                                | Tetrachloroethylene*  |
| Ethylbenzene                          | Toluene   |
| Ethylene Dibromide*                   | Toxaphene*  |
| Hepachlor*                            | 1,1,1-Trichloroethane                                       |
| Hepachlor Epoxide*                    | 1,1,2-Trichloroethane                                       |
| Hexachlorobenzene                     | 1,2,4-Trichlorobenzene                                      |
| Hexachlorocyclopentadiene             | Trichloroethylene*  |
| Lindane (Gamma-Hexachlorocyclohexane) | Vinyl Chloride*   |
| 2,4-D                                 | Xylenes (total)   |

\*Denotes a carcinogen

List includes constituents listed in Section 620.410 Class 1: Potable Resource Groundwater and nine constituents required by Drinking Water Compliance Assurance noted above in Bold.

# Summit

ENVIRONMENTAL TECHNOLOGIES, INC.

Analytical Laboratories

August 27, 2012

Safe Drinking Water Program Laboratory Reporting Form

Client: Prairie Analytical Systems, Inc  
 Address: 1210 Capital Airport Drive  
 Springfield, IL 62707

Date Collected: 8/7/2012  
 Date Received: 8/9/2012  
 Project #: 12H0137  
 Client ID #: 12H0137-01  
 Laboratory ID #: 1218635-01  
 Matrix: Drinking Water

| Parameter                 | MCL    | Units | Results | Qualifier | Method   | PQL      | MDL     | Date of Analysis    | Extraction Date | Analyst |
|---------------------------|--------|-------|---------|-----------|----------|----------|---------|---------------------|-----------------|---------|
| Endrin                    | 0.002  | mg/L  | ND      | U         | EPA508   | 0.000022 | 0.00002 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Lindane                   | 0.0002 | mg/L  | ND      | U         | EPA508   | 0.000044 | 0.00002 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Methoxychlor              | 0.04   | mg/L  | ND      | U         | EPA508   | 0.000022 | 0.00002 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Toxaphene                 | 0.003  | mg/L  | ND      | U         | EPA508   | 0.00022  | 0.0007  | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Dieldrin                  | 0.2    | mg/L  | ND      | U         | EPA515.1 | 0.00022  | 0.0007  | 08/24/2012 06:02 PM | 8/13/2012       | JRT     |
| Endosulfan                | 0.1    | mg/L  | ND      | U         | EPA549.2 | 0.01     | 0.0002  | 08/13/2012 07:25 PM | 8/9/2012        | KMG     |
| Di(2-ethylhexyl)adipate   | 0.2    | mg/L  | ND      | U         | EPA548.1 | 0.005    | 0.002   | 08/13/2012 04:57 PM | 8/10/2012       | JRT     |
| Oxamyl                    | 0.4    | mg/L  | ND      | U         | EPA525.2 | 0.0013   | 0.0004  | 08/12/2012 09:14 AM | 8/10/2012       | JRT     |
| Simazine                  | 0.004  | mg/L  | ND      | U         | EPA531.2 | 0.0044   | 0.0006  | 08/16/2012 01:26 AM | NA              | KMG     |
| Di(2-ethylhexyl)phthalate | 0.006  | mg/L  | ND      | U         | EPA525.2 | 0.00015  | 0.0002  | 08/12/2012 09:14 AM | 8/10/2012       | JRT     |
| Picloram                  | 0.5    | mg/L  | ND      | U         | EPA525.2 | 0.003    | 0.001   | 08/12/2012 09:14 AM | 8/10/2012       | JRT     |
| Dinoseb                   | 0.007  | mg/L  | ND      | U         | EPA515.1 | 0.00022  | 0.0001  | 08/24/2012 06:02 PM | 8/13/2012       | JRT     |
| Hexachlorocyclopentadiene | 0.05   | mg/L  | ND      | U         | EPA515.1 | 0.00044  | 0.0003  | 08/24/2012 06:02 PM | 8/13/2012       | JRT     |
| Carbofuran                | 0.04   | mg/L  | ND      | U         | EPA525.2 | 0.00022  | 0.0002  | 08/12/2012 09:14 AM | 8/10/2012       | JRT     |
| Alachlor                  | 0.003  | mg/L  | ND      | U         | EPA531.2 | 0.003    | 0.0007  | 08/16/2012 01:26 AM | NA              | KMG     |
| Heptachlor                | 0.0002 | mg/L  | ND      | U         | EPA525.2 | 0.00022  | 0.0002  | 08/21/2012 09:14 AM | 8/10/2012       | JRT     |
| Heptachlor Epoxide        | 0.0002 | mg/L  | ND      | U         | EPA525.2 | 0.00044  | 0.0002  | 08/21/2012 09:14 AM | 8/10/2012       | JRT     |
| 2,4-D                     | 0.07   | mg/L  | ND      | U         | EPA508   | 0.000044 | 0.00005 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
|                           |        |       | ND      | U         | EPA515.1 | 0.00022  | 0.0001  | 08/24/2012 06:02 PM | 8/13/2012       | JRT     |

"Analytical Integrity"  
 3316 Win Street Cuyahoga Falls, Ohio 44223

Phone: 330-253-8214  
 Web Site: www.settek.com

NEIAP Certified  
 Fax: 330-253-4459

# Summit

ENVIRONMENTAL TECHNOLOGIES, INC.

Analytical Laboratories

August 27, 2012

## Safe Drinking Water Program Laboratory Reporting Form

Client: Peabody Analytical Systems, Inc  
 Address: 1210 Capital Airport Drive  
 Springfield, IL 62707

Date Collected: 8/7/2012  
 Date Received: 8/9/2012  
 Project #: 12H0137  
 Client ID #: 12H0137-01  
 Laboratory ID #: 1218635-01  
 Matrix: Drinking Water

| Parameter                   | MCL     | Units | Results | Qualifier | Method   | PQL      | MDL     | Date of Analysis    | Extraction Date | Analyst |
|-----------------------------|---------|-------|---------|-----------|----------|----------|---------|---------------------|-----------------|---------|
| 2,4,5-TP (Sivex)            | 0.05    | mg/L  | ND      | U         | EPA515.1 | 0.00044  | 0.0005  | 08/24/2012 06:02 PM | 8/13/2012       | JRT     |
| Hexachlorobenzene           | 0.001   | mg/L  | ND      | U         | EPA525.2 | 0.00022  | 0.0001  | 08/21/2012 09:14 AM | 8/10/2012       | JRT     |
| Benzo(a)pyrene              | 0.002   | mg/L  | ND      | U         | EPA535.2 | 0.0001   | 0.0001  | 08/23/2012 09:14 AM | 8/10/2012       | JRT     |
| Fluoranthene                | 0.001   | mg/L  | ND      | U         | EPA515.1 | 0.000088 | 0.00008 | 08/24/2012 08:02 PM | 8/13/2012       | JRT     |
| Anthracene                  | 0.0005  | mg/L  | ND      | U         | EPA508   | 0.0002   | 0.00008 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Acridine                    | 0.0005  | mg/L  | ND      | U         | EPA508   | 0.0001   | 0.00003 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Acridol                     | 0.0005  | mg/L  | ND      | U         | EPA508   | 0.0001   | 0.00005 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Acridol-1248                | 0.0005  | mg/L  | ND      | U         | EPA508   | 0.0001   | 0.00007 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Acridol-1016                | 0.0005  | mg/L  | ND      | U         | EPA508   | 0.0001   | 0.00003 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Acridol-1254                | 0.0005  | mg/L  | ND      | U         | EPA508   | 0.0001   | 0.00005 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Acridol-1250                | 0.0005  | mg/L  | ND      | U         | EPA508   | 0.0001   | 0.00002 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| PCBS                        | 0.0005  | mg/L  | ND      | U         | EPA508   | 0.0001   | 0.00002 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| 1,2-Dibromo-3-chloropropane | 0.0002  | mg/L  | ND      | U         | EPA504.1 | 0.00004  | 0.00003 | 08/14/2012 01:53 AM | 8/13/2012       | JRT     |
| Ethylene Dibromide          | 0.00005 | mg/L  | ND      | U         | EPA504.1 | 0.00002  | 0.00001 | 08/14/2012 01:53 AM | 8/13/2012       | JRT     |
| Chloroform                  | 0.002   | mg/L  | ND      | U         | EPA508   | 0.00044  | 0.00003 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Aldrin                      | NA      | mg/L  | ND      | U         | EPA531.2 | 0.0009   | 0.0006  | 08/16/2012 01:26 AM | NA              | KMG     |
| Dieldrin                    | NA      | mg/L  | ND      | U         | EPA508   | 0.000044 | 0.00002 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| Aldrin                      | NA      | mg/L  | ND      | U         | EPA508   | 0.000044 | 0.00002 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |
| 1,4-DCP                     | NA      | mg/L  | ND      | U         | EPA508   | 0.000044 | 0.00001 | 08/11/2012 03:46 AM | 8/10/2012       | JRT     |

Analytical Integrity

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Wednesday, October 10, 2012

Dan Held  
South Sangamon Water Commission  
P.O. Box 83  
New Berlin, IL 62670  
TEL: (217) 298-2088  
FAX: NA

RE: New Well Requirements

PAS WO: 12H0137

Prairie Analytical Systems, Inc. received 1 sample(s) on 8/7/2012 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

This report shall not be reproduced, except in full, without the prior written consent of Prairie Analytical Systems, Inc.

If you have any questions, please feel free to contact me at (217) 753-1148.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael D. Brophy".

Michael D. Brophy  
Project Manager

**Certifications:** NELAP/NELAC - IL #100323

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|                               |   |                             |   |                |   |                    |
|-------------------------------|---|-----------------------------|---|----------------|---|--------------------|
| 1210 Capital Airport Drive    | * | Springfield, IL 62707       | * | 1.217.753.1148 | * | 1.217.753.1152 Fax |
| 9114 Virginia Road Suite #112 | * | Lake in the Hills, IL 60156 | * | 1.847.651.2604 | * | 1.847.458.0538 Fax |

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**LABORATORY RESULTS**

**Client:** South Sangamon Water Commission

**Project:** New Well Requirements

**Lab Order:** 12H0137

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**Case Narrative**

See attached report for organic chemical constituents analytical results.



