



Illinois Environmental Protection Agency

Bureau of Water • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT

for NPDES Permit for Storm Water Discharges from Separate Storm Sewer Systems (MS4)

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report.

Report Period: From March, 2018 To March, 2019

Permit No. ILR40 0412

MS4 OPERATOR INFORMATION: (As it appears on the current permit)

Name: CITY OF O'FALLON Mailing Address 1: 255 SOUTH LINCOLN AVENUE
Mailing Address 2: County: St. Clair
City: O'FALLON State: IL Zip: 62269 Telephone: 618-624-4500 EXT 3
Contact Person: JEFF TAYLOR (JONATHAN NOLAN) Email Address:
(Person responsible for Annual Report)

Name(s) of governmental entity(ies) in which MS4 is located: (As it appears on the current permit)

ILLINOIS DEPARTMENT OF TRANSPORTATION ST. CLAIR COUNTY
O'FALLON TOWNSHIP

THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. Changes to best management practices (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

- | | |
|---|--|
| 1. Public Education and Outreach <input type="checkbox"/> | 4. Construction Site Runoff Control <input type="checkbox"/> |
| 2. Public Participation/Involvement <input type="checkbox"/> | 5. Post-Construction Runoff Control <input type="checkbox"/> |
| 3. Illicit Discharge Detection & Elimination <input type="checkbox"/> | 6. Pollution Prevention/Good Housekeeping <input type="checkbox"/> |

B. Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C. Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D. Attach a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule.)

E. Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F. Attach a list of construction projects that your entity has paid for during the reporting period.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Owner Signature:

Jonathan Nolan
Printed Name:

4/22/15
Date:

Engineering Project Manager
Title:

EMAIL COMPLETED FORM TO: epa.ms4annualinsp@illinois.gov

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form

ADMINISTRATIVE REVISIONS TO THE NOTICE OF INTENT

Revisions to the original Notice of Intent (NOI) are reflected below.

MS4 Operator Mailing Address: Yes ☐ No ☒

Persons Responsible: Yes ☐ No ☒

Name:

Title:

Telephone Number:

Area of Responsibility:

Introduction

In 2003, St. Clair County (County), Illinois and its communities created a Co-Permittee Group to join forces in complying with the National Pollutant Discharge Elimination System (NPDES) for Municipal Separate Storm Sewer Systems (MS4) Phase II requirements. As stated in the original 2003 Notice of Intent (NOI), the County and the Co-Permittee communities were to pool resources and work together to comply with the commitments made within the NOI for the benefit of all within the County.

The Co-Permittee Group was active during this reporting period. Significant progress was made sharing Best Management Practices (BMPs) for document retention, operation procedures, and maintenance activities.

Best Management Practice (BMP) Summary of 2018-2019 Activities

In 2003, each member of the Co-Permittee Group submitted a NOI in compliance with the first 5-year cycle. In 2008, a NOI was submitted in compliance with the next 5-year cycle, as written in the first MS4 permit. The 2009 NOI was submitted in compliance with additional requirements in the second MS4 permit. In 2013, a new NOI was submitted for the next 5-year cycle and was in place starting in March 2014. As stated in the 2003, 2008, 2009, and 2013 NOIs, each Co-Permittee Member identified certain activities to comply with the Phase II requirements. Below is an abbreviated summary of the BMPs that were written in the NOI for each of the minimum control measures.

March 2017-February 2018:

- 1) **A.1-** Stormwater brochures for businesses, homeowners, children, and green infrastructures were to be promoted and displayed by each community in a public place.
- 2) **A.4-** St. Clair County sponsored a booth at the County Fair and/or Earth Day and distributed the stormwater and green infrastructure brochures.
- 3) **A.5-** St. Clair County posted newsletters on the County Health Department website during school months. Co-Permittee Members distributed educational materials to schools in their communities. The amount of material distributed was to be tracked by the communities.
- 4) **B.3-** The Co-Permittee Group met three (3) times to review upcoming permit requirements, notice of intent, review stormwater management program, operations training, and to develop and submit the Annual Report.
- 5) **B.5-** Co-Permittee Members solicited and encouraged public assistance in monitoring the community's storm water system. Public inquiries and complaints were responded to and recorded.
- 6) **B.6-** St. Clair County continued to promote programs related to stormwater activities and recycling programs. The community tracked its participation.

- 7) **C.1-** Co-Permittee Members updated any new or revised storm sewers and performed stream observations at bridge inspections.
- 8) **C.5-** A survey of previously installed stencils was to be performed as well as replacing or placing any that needed inlet stencils.
- 9) **C.6-** Communication brochures were distributed to the community. Co-Permittee Members discussed any known illicit discharge ordinance compliance issues in the communities.
- 10) **C.9-** Co-Permittee Members developed brochures addressing specific storm water ordinance prohibited activities and distributed with educational brochures.
- 11) **D.1, E.2, E.4-** Community stormwater ordinances were to be updated, if needed, and require a SWPPP on site plans disturbing more than one acre.
- 12) **D.2, F.1-** The Co-Permittee held an Operations Training class. Topics included a review of the Best Management Practices, Good Housekeeping, and a review of public awareness BMPs.
- 13) **D.5-** St. Clair County continued to maintain a stormwater hotline number to address public concerns related to stormwater issues. County tracked and reported the number of calls.
- 14) **F.6-** Communities reviewed operating procedures and BMPs and modified if necessary.

The following pages highlight changes made to the BMPs from the NOI, BMP status, and activities planned for the next reporting year. Additional information is also provided from the County and each Community.

It is to be noted that some BMPs will continue on to the next NOI, but some will be stopped and others added to fulfill the requirements of the permit. The 2014-2019 NOI can be found on the IEPA website.

City of O'Fallon FOIA Officer for the reporting year:

Name: MaryAnne Fair

Title: Deputy City Clerk

Telephone Number: (618) 624-4500 x 8715

COMMUNITY NAME: City of O'FallonPERMIT #: ILR400412

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2018 through February 2019

| A. Changes to Best Management- Were there any changes to the BMPs? | | | B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the minimum control measures. | | | C. Provide results of information collected and analyzed, including monitoring data. Information attached? | | | D. Summarize the stormwater activities you plan to undertake with an implementation schedule | | |
|---|-----|----|---|--|--|--|-----|----|--|--|--|
| Comment | YES | NO | | | | If attached information, describe. | YES | NO | Activity | Schedule | |
| BMP No. A.1 - Distributed Paper Materials- Informational Brochures | | | | | | | | | | | |
| Milestone For Reporting Year: Promote the availability of brochures to the residents. | | | | | | | | | | | |
| | | X | The City has brochures available to residents at the City Hall and on the City website. Educational topics include stormwater ordinances as well as the public storm water hotline number. | | | | | X | St. Clair County has brochures available to all county residents in the St. Clair County Health Department. | On-going through 2019-2020 permit year. | |
| BMP No. A.4- Community Event- Sponsor Annual Booth at St. Clair County Earth Day Festival | | | | | | | | | | | |
| Milestone For Reporting Year: St. Clair County sponsored a booth at the Earth Day Festival. | | | | | | | | | | | |
| | | X | St. Clair County set up a booth and distributed stormwater materials at the Health Department Earth Day Celebration In April 2018. One hundred (100) stormwater brochures were distributed. | | | | | X | St. Clair County is responsible for the booth and tracking the number of brochures handed out. | The 2019 Earth Day event will be in April. | |
| BMP No. A.5- Classroom Education Material | | | | | | | | | | | |
| Milestone For Reporting Year: Communities distributed educational materials and tracked the number of brochures and other materials handed out to the schools. | | | | | | | | | | | |
| | | X | St. Clair County posted educational newsletters on the Health Department's Website. Educational brochures were distributed at the St. Clair County booth during the 2018 Earth Day event. | | | Review of Classroom Education Materials- See page 11 | | X | The communities will inform local schools that the newsletters are available on the Health Department's Website. | On-going through 2019-2020 permit year. | |

COMMUNITY NAME: City of O'FallonPERMIT #: ILR400412

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2018 through February 2019

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|--|-----|---|---|--|-----|--|--|---|
| Comment | YES | NO | | If attached information, describe. | YES | NO | Activity | Schedule |
| BMP No. B-3- Stakeholder's Meeting- Coordinate Meetings and Annual Reports | | | | | | | | |
| Milestone For Reporting Year: Co-Permittee Group met three (3) times to complete training and to develop and submit the Annual Report. | | | | | | | | |
| | | X | Co-Permittee Meetings were held on Feb. 22nd, May 3rd, and October 25th, 2018. Annual reports were provided to communities in May 2018 and submitted to IEPA before June 1st, 2018. Meeting topics included: Annual Reporting, Urban Flood Awareness, BMPs and Operations Training. The City attended all meetings. | | | X | The City will continue to meet with the Co-Permittee Group to share BMPs and training opportunities. The Co-Permittee Group has planned three compliance/training activities for 2019. | On-going through 2019-2020 permit year. |
| BMP No. B-5- Volunteer Monitoring- Solicit and Encourage Public Assistance in Monitoring the Community's Stormwater System & Stormwater Hotline | | | | | | | | |
| Milestone For Reporting Year: Community will work to involve more public assistance in reporting stormwater issues. | | | | | | | | |
| | | X | The County updated brochures and websites with the contact information for the reporting of stormwater issues. Any calls or emails will be recorded and addressed. | | | X | The community will continue to respond to and record all public complaints of illicit discharge and/or dumping and storm water issues. | On-going through 2019-2020 permit year. |
| BMP No. B.6- Program Coordination- Participate in programs targeted at public awareness, including: Inlet Stenciling and Recycling | | | | | | | | |
| Milestone for Reporting Year: St. Clair County continued to promote programs related to stormwater activities. Communities tracked participation. | | | | | | | | |
| | | X | County will continue to promote programs related to stormwater activities and recycling. Multiple media outlets will be used to communicate with municipalities. | Review of Community Events - See page 11 | | X | County will continue to promote programs related to stormwater activities. Multiple media outlets will be used to communicate with municipalities. | On-going through 2019-2020 permit year. |

COMMUNITY NAME: City of O'FallonPERMIT #: ILR400412

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2018 through February 2019

| A. Changes to Best Management- Were there any changes to the BMPs? | | B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the minimum control measures. | | C. Provide results of information collected and analyzed, including monitoring data. Information attached? | | D. Summarize the stormwater activities you plan to undertake with an implementation schedule | | |
|--|-----|---|---|--|-----|--|--|---|
| Comment | YES | NO | | If attached information, describe. | YES | NO | Activity | Schedule |
| BMP No. B.7- Other Public Involvement - the community will provide a public meeting annually for public input into for the MS4 program | | | | | | | | |
| <u>Milestone for Reporting Year:</u> The communities will provide a public meeting annually for public input for the MS4 program. | | | | | | | | |
| | | X | The community held a public input meeting regarding the adequacy of the MS4 Program on March 25, 2019. Committee and attendees were presented information from the annual report and sampling that has been completed. No input was received. | Review of Other Public Involvement - See page 11 | X | | Community will continue to hold a public meeting to solicit public input regarding the adequacy of the MS4 program. | On-going through 2019-2020 permit year. |
| BMP No. C.1- Storm Sewer Map Preparation | | | | | | | | |
| <u>Milestone for Reporting Year:</u> Co-Permittee member communities reviewed outfall maps and conducted stream observations annually at bridge inspections. | | | | | | | | |
| | | X | Co-Permittee communities reviewed their outfall maps for completeness and updated them if necessary. O'Fallon currently has 95% of outfall locations and the municipal storm sewer system mapped. The storm sewer system map was updated in January 2019. | | | X | Communities will continue to update their storm system maps to include modifications to the system. | On-going through 2019-2020 permit year. |
| BMPs No. C.2, C.9- Regulatory Control Program- Ordinance language for Illicit discharge/public notification | | | | | | | | |
| <u>Milestone for Reporting Year:</u> Communication brochures were distributed to the community. | | | | | | | | |
| | | X | St. Clair County distributed ordinance brochures at the Earth Day event and has them available at the City Hall. The City updated storm water ordinances in 2005. | | | X | This BMP will not continue into the next NOI. | |
| BMP No. C.5- Inlet Stenciling | | | | | | | | |
| <u>Milestone for Reporting Year:</u> Survey condition of inlet stencils. | | | | | | | | |
| | | X | O'Fallon assessed the condition of the stencils. Currently 80% of the inlets are marked. The City plans to continue assessing and stenciling the remaining inlets. The Co-Permittee group is collaborating on an order for storm drain decals for 2019. | Review of Illicit Source Removal Procedures - See page 11 | X | | Communities will survey stencils previously installed, replace ones that need to be replaced, and assure all new inlets are installed with stencils. | On-going through 2019-2020 permit year. |

COMMUNITY NAME: City of O'FallonPERMIT #: ILR400412

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2018 through February 2019

| A. Changes to Best Management- Were there any changes to the BMPs? | | B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the minimum control measures. | | C. Provide results of information collected and analyzed, including monitoring data. Information attached? | | D. Summarize the stormwater activities you plan to undertake with an implementation schedule | | |
|--|-----|---|--|--|-----|--|--|---|
| Comment | YES | NO | | If attached information, describe. | YES | NO | Activity | Schedule |
| BMP No. C.6- Program Evaluation and Assessment | | | | | | | | |
| Milestone for Reporting Year: Perform illicit discharge detection and elimination in the Community's stormwater system. | | | | | | | | |
| | | X | Communities will perform stream observations during their annual bridge inspections and take appropriate action if any illicit discharge is found. | | | X | Communities will continue to perform stream observations and address illicit discharge per the community ordinance. | On-going through 2019-2020 permit year. |
| BMP No. C.9- Public Notification | | | | | | | | |
| Milestone for Reporting Year: Community will update ordinance brochure. | | | | | | | | |
| | | X | Brochures will be updated to address specific stormwater ordinance prohibited activities and distributed with brochures addressed in BMP A1. | | | X | Ordinance brochures will be updated and distributed to the community throughout years 2015-2019 | Brochure to be updated if needed in 2019-2020 reporting year. |
| BMPs No. D.1, E.2, and E.4- Site Plan and Pre-Construction Review Procedures | | | | | | | | |
| Milestone for Reporting Year: Update stormwater ordinance. | | | | | | | | |
| | | X | The stormwater ordinance was updated in 2005. | | | X | This BMP will not continue into the next NOI. | |
| BMP No. D.1- Regulatory Control Program | | | | | | | | |
| Milestone for Reporting Year: Require SWPPP on all site plans disturbing more than one acre of land inside the Community. | | | | | | | | |
| | | X | The community will require SWPPP on sites disturbing over 1 acre and enforce ordinance provisions. | | | X | The community will continue to require SWPPP on sites disturbing over 1 acre and verify the proper use of sediment and erosion control techniques. | On-going through 2019-2020 permit year. |

COMMUNITY NAME: City of O'FallonPERMIT #: ILR400412

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2018 through February 2019

| A. Changes to Best Management- Were there any changes to the BMPs? | | B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the minimum control measures. | | C. Provide results of information collected and analyzed, including monitoring data. Information attached? | | D. Summarize the stormwater activities you plan to undertake with an implementation schedule | | |
|---|-----|---|---|--|-----|--|--|---|
| Comment | YES | NO | | If attached information, describe. | YES | NO | Activity | Schedule |
| BMP No. D.2- Erosion and Sediment Control BMPs | | | | | | | | |
| <u>Milestone for Reporting Year:</u> Community will participate in BMP training during Annual Operations Training. | | | | | | | | |
| | | X | The community participated in BMP training during the Annual Operations Training on October 25, 2018. | | | X | Community will continue to participate in BMP training. | On-going through 2019-2020 permit year. |
| BMP No. D.5- Stormwater Hotline | | | | | | | | |
| <u>Milestone for Reporting Year:</u> County continued to maintain a stormwater hotline number to address public concerns related to stormwater issues. County tracked and reported the number of calls. | | | | | | | | |
| | | X | St. Clair County did not receive any hotline calls during the reporting period. Communities respond to complaints of residents for stormwater related issues. | | | X | County and Communities will respond to calls and emails for stormwater issues. | On-going through 2019-2020 permit year. |
| BMPs No. D.6 and E.5- Training for Construction Site Inspectors | | | | | | | | |
| <u>Milestone for Reporting Year:</u> Inspector training was provided this year. | | | | | | | | |
| | | X | | | | X | The last Construction Site Inspection training took place in April 2017. This BMP will not continue into the next NOI. | |
| BMP No. E.2- Regulatory Control Program | | | | | | | | |
| <u>Milestone for Reporting Year:</u> Enforce Stormwater Ordinance. | | | | | | | | |
| | | X | Communities will continue to enforce their stormwater ordinance and track changes made to the ordinance. | | | X | Communities will continue to enforce their stormwater ordinance. | On-going through 2019-2020 permit year. |

COMMUNITY NAME: City of O'FallonPERMIT #: ILR400412

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2018 through February 2019

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|--|-----------|---|--|--|-----------|---|---|
| Comment | YES NO | | | If attached information, describe. | YES NO | Activity | Schedule |
| BMP No. E.4- Pre-Construction Review of BMP Designs | | | | | | | |
| Milestone for Reporting Year: Review post construction BMPs. | | | | | | | |
| | X | The community will require and review SWPPPs on site plans disturbing more than one (1) acre of land. | | | X | Communities will review the post construction BMPs on all sites that disturb more than one acre in land. | On-going through 2019-2020 permit year. |
| BMP No. F.1- Employee Training Program | | | | | | | |
| Milestone for Reporting Year: The Co-Permittee held an Operations Training class. | | | | | | | |
| | X | Training focused on a review of the Best Management Practices, Good Housekeeping, and the Storm Water Management Plan. The City attended operations training. Green infrastructure ideas and practices were discussed at other Co-Permittee meetings and in monthly newsletters distributed to community representatives. | | | X | The Co-Permittee Group will continue holding an Operations Training class as part of education requirements. | On-going through 2019-2020 permit year. |
| BMP No. F.6- Other Municipal Operations Controls- Standard Operating Procedures | | | | | | | |
| Milestone for Reporting Year: Communities reviewed operating procedures and BMPs and modified if necessary. | | | | | | | |
| | X | Stormwater operation procedures for the street department were reviewed. | | | X | Operation procedures are reviewed annually. Co-Permittee meetings will include reference to review and update requirements. | On-going through 2019-2020 permit year. |

COMMUNITY NAME: City of O'Fallon

PERMIT #: ILR400412

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2018 through February 2019

ADDITIONAL INFORMATION

| | |
|----------------|---|
| BMP A.5 | <p><u>Classroom Educational Materials</u></p> <p>The County has taken steps to educate school children on the severity of stormwater pollution. The St. Clair County Health Department issues a newsletter each month and it is posted on the St. Clair County Health Department's website. The newsletter consists of articles for students with a wide range of pollution topics, including stormwater. The newsletter also lists upcoming recycling events and schools that have won past recycling contests.</p> |
| BMP B.6 | <p><u>Community Events - Recycling Programs</u></p> <p>Throughout the year, St. Clair County sponsored community events that potentially could positively impact stormwater quality. These activities include telephone book recycling and an ongoing "Clean Sweep" program. Telephone book recycling was sponsored by Illinois American Water. The county website also has a brochure listing recycling sites for over 29 different materials.</p> <p>The City of O'Fallon contracts with a waste vendor, Waste Management, to provide year-round recycling, yard waste, and bulk pickup for its community members.</p> |
| BMP B.7 | <p><u>Other Public Involvement</u></p> <p>The City of O'Fallon held a public meeting to provide for public input regarding the adequacy of the MS4 program on March 25, 2019. The committee and public attendees were resented information from the annual report and storm water sampling that has been completed. No public input was received at that time. The monthly Public Works committee meeting regularly covers storm water topics and is open to citizens for comment. Additionally, the public is encouraged to assist in monitoring the community's storm water system by reporting illegal dumping and discharge or storm water issues either directly to the City or through the County.</p> |
| BMP C.5 | <p><u>Illicit Source Removal Procedures</u></p> <p>The St. Clair County Highway Department sponsors an Adopt-a-Highway Program throughout the County. By sponsoring this program, St. Clair County is eliminating a significant source of stormwater pollution by keeping trash out of streams and keeping road ditches clear of debris for storm events.</p> |

ADDITIONAL COMMUNITY ACTIVITIES

(Make additional copies of form, as necessary)

Community Name: **City of O'Fallon**

Permit #: **ILR400412**

List any additional community-sponsored activities performed between March 2018 and February 2019 not listed in *Notice of Intent (NOI)* submittal, but which addresses one of the six minimum control measures:

The City has a municipality website and posts educational brochures, annual reports, the NOI, the City SWPPP, and the storm water hotline number.

The City of O'Fallon swept 880 miles of streets during the reporting year.

The City participates in a year-round recycling program through Waste Management and seasonally collects Christmas trees.

Two 25-cubic-yard dumpsters were used by the Street Department for trash pulled from road ditches and waterways. The dumpsters were emptied weekly.

The City is a member of the Gateway Chapter of the Illinois APWA and attends bi-monthly meetings.

The City graded and cleaned 1.15 miles of ditches along various City streets utilizing straw mats and riprap as BMPs.

O'Fallon has cleaned 850 catch basins since March 2018.

Circle which minimum control measure addressed:

① Public Education and Outreach

4. Construction Site Runoff Control

② Public Participation/Involvement

5. Post-Construction Runoff Control

③ Illicit Discharge Detection & Elimination

⑥ Pollution Prevention/Good Housekeeping

C. Information Collected and Analyzed during 2018-2019 Reporting Year

The NPDES permit effective March 1, 2016, requires MS4 permittees serving populations over 25,000 persons to conduct quarterly laboratory testing of storm water discharge. St. Clair County, the City of O'Fallon, O'Fallon Township, Fairview Heights, and Caseyville Township banded together to share sampling costs and data. The partnership began storm water sampling during the first quarter of 2017. The samples were taken to a local accredited laboratory and tested for Fecal Coliform, Oil & Grease, Total Nitrogen, Total Phosphorous, Total Suspended Solids, and Chlorides. The laboratory returned a reporting package that contains laboratory results and chain of custody forms in addition to standard report contents.

The partnership identified two locations for sampling each quarter within 48 hours of a ¼ inch or greater rainfall event in a 24-hour period. If a sample cannot be taken during the quarter, an explanation will be provided. The storm water monitoring program will help evaluate the effectiveness of BMPs implemented to reduce pollutant loadings and water quality impacts. When trends in the data are identified, BMPs can be adjusted accordingly.

The laboratory reporting forms and the information collected are attached. Sampling outfall locations for the upcoming reporting year will be:

- Ogles Creek at Old Collinsville Rd (northeast side of creek) – ID Upstream
Approximate coordinates 89° 57' 58.19" W 38° 35' 49.50" N
- Ogles Creek at Scott Troy Rd (northeast side of creek) – ID Downstream
Approximate coordinates 89° 52' 28.29" W 38° 38' 59.50" N

E. Reliance on Government Entities for Permit Obligations

Co-Permittee cooperation with County

F. List of Construction Projects during 2018-2019 Reporting Year

City of O'Fallon had no public construction projects during the reporting year:

March 01, 2018

Jennifer Gerwitz
RJN Group
2000 South 8th St.
St. Louis, MO 63104
TEL: (314) 588-9764
FAX:



RE: NPDES/15-3069 SCC

WorkOrder: 18021191

Dear Jennifer Gerwitz:

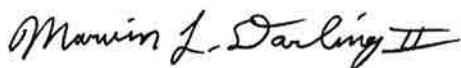
TEKLAB, INC received 2 samples on 2/20/2018 11:30:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

A handwritten signature in cursive script that reads "Marvin L. Darling II".

Marvin L. Darling
Project Manager
(618)344-1004 ex 41
mdarling@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18021191

Client Project: NPDES/15-3069 SCC

Report Date: 01-Mar-18

This reporting package includes the following:

| | |
|----------------------|----------|
| Cover Letter | 1 |
| Report Contents | 2 |
| Definitions | 3 |
| Case Narrative | 4 |
| Accreditations | 5 |
| Laboratory Results | 6 |
| Receiving Check List | 8 |
| Chain of Custody | Appended |

Client: RJN Group

Work Order: 18021191

Client Project: NPDES/15-3069 SCC

Report Date: 01-Mar-18

Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

| | |
|-------|--|
| CCV | Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration. |
| DF | Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors. |
| DNI | Did not ignite |
| DUP | Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot. |
| ICV | Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated. |
| IDPH | IL Dept. of Public Health |
| LCS | Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request). |
| LCSD | Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request). |
| MBLK | Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses. |
| MDL | Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. |
| MS | Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request). |
| MSD | Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request). |
| MW | Molecular weight |
| ND | Not Detected at the Reporting Limit |
| NELAP | NELAP Accredited |
| PQL | Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request). |
| RL | The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL. |
| RPD | Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request). |
| SPK | The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes. |
| Surr | Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples. |
| TIC | Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET" |
| TNTC | Too numerous to count (> 200 CFU) |

Qualifiers

| | |
|--|--|
| # - Unknown hydrocarbon | B - Analyte detected in associated Method Blank |
| E - Value above quantitation range | H - Holding times exceeded |
| I - Associated internal standard was outside method criteria | M - Manual Integration used to determine area response |
| ND - Not Detected at the Reporting Limit | R - RPD outside accepted recovery limits |
| S - Spike Recovery outside recovery limits | T - TIC(Tentatively identified compound) |
| X - Value exceeds Maximum Contaminant Level | |



Case Narrative

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18021191

Client Project: NPDES/15-3069 SCC

Report Date: 01-Mar-18

Cooler Receipt Temp: 15.82 °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234 7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18021191

Client Project: NPDES/15-3069 SCC

Report Date: 01-Mar-18

| State | Dept | Cert # | NELAP | Exp Date | Lab |
|-----------|------|-----------------|-------|------------|--------------|
| Illinois | IEPA | 100226 | NELAP | 1/31/2019 | Collinsville |
| Kansas | KDHE | E-10374 | NELAP | 4/30/2018 | Collinsville |
| Louisiana | LDEQ | 166493 | NELAP | 6/30/2018 | Collinsville |
| Louisiana | LDEQ | 166578 | NELAP | 6/30/2018 | Collinsville |
| Texas | TCEQ | T104704515-12-1 | NELAP | 7/31/2018 | Collinsville |
| Arkansas | ADEQ | 88-0966 | | 3/14/2018 | Collinsville |
| Illinois | IDPH | 17584 | | 5/31/2019 | Collinsville |
| Indiana | ISDH | C-IL-06 | | 1/31/2019 | Collinsville |
| Kentucky | KDEP | 98006 | | 12/31/2018 | Collinsville |
| Kentucky | UST | 0073 | | 1/31/2019 | Collinsville |
| Louisiana | LDPH | LA170027 | | 12/31/2018 | Collinsville |
| Missouri | MDNR | 930 | | 1/31/2019 | Collinsville |
| Missouri | MDNR | 00930 | | 5/31/2019 | Collinsville |
| Oklahoma | ODEQ | 9978 | | 8/31/2018 | Collinsville |
| Tennessee | TDEC | 04905 | | 1/31/2019 | Collinsville |



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18021191

Client Project: NPDES/15-3069 SCC

Report Date: 01-Mar-18

Lab ID: 18021191-001

Client Sample ID: Upstream

Matrix: AQUEOUS

Collection Date: 02/20/2018 10:30

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---------------|-------|------|--------|-----------|-----|------------------|---------|
| STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER | | | | | | | | |
| Fecal Coliform | * | 100 | | 3100 | CFU/100ml | 100 | 02/20/2018 13:16 | R243764 |
| EPA 1664A | | | | | | | | |
| Hexane Extractable Material | NELAP | 6 | | < 6 | mg/L | 1 | 02/21/2018 13:40 | R243818 |
| EPA 600 351.2 R2.0, 353.2 R2.0 | | | | | | | | |
| Nitrogen, Total | * | 0.05 | | 1.14 | mg/L | 1 | 02/28/2018 0:00 | R244064 |
| EPA 600 365.4 (TOTAL) | | | | | | | | |
| Phosphorus, Total (as P) | NELAP | 0.050 | | 0.222 | mg/L | 1 | 02/28/2018 10:21 | 139469 |
| STANDARD METHODS 2540 D 1997 | | | | | | | | |
| Total Suspended Solids | NELAP | 6 | | 123 | mg/L | 1 | 02/22/2018 13:16 | R243843 |
| STANDARD METHODS 4500-CL E (TOTAL) 1997 | | | | | | | | |
| Chloride | NELAP | 10 | | 86 | mg/L | 2 | 02/26/2018 15:21 | R244103 |



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group
Client Project: NPDES/15-3069 SCC
Lab ID: 18021191-002
Matrix: AQUEOUS

Work Order: 18021191
Report Date: 01-Mar-18
Client Sample ID: Downstream
Collection Date: 02/20/2018 10:58

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---------------|-------|------|--------|-----------|-----|------------------|---------|
| STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER | | | | | | | | |
| Fecal Coliform | * | 100 | | 1300 | CFU/100ml | 100 | 02/20/2018 13:18 | R243764 |
| EPA 1664A | | | | | | | | |
| Hexane Extractable Material | NELAP | 6 | | < 6 | mg/L | 1 | 02/21/2018 13:40 | R243818 |
| EPA 600 351.2 R2.0, 353.2 R2.0 | | | | | | | | |
| Nitrogen, Total | * | 0.05 | | 2.18 | mg/L | 1 | 02/28/2018 0:00 | R244064 |
| EPA 600 365.4 (TOTAL) | | | | | | | | |
| Phosphorus, Total (as P) | NELAP | 0.050 | | 0.286 | mg/L | 1 | 02/28/2018 10:23 | 139469 |
| STANDARD METHODS 2540 D 1997 | | | | | | | | |
| Total Suspended Solids | NELAP | 6 | | 42 | mg/L | 1 | 02/22/2018 13:16 | R243843 |
| STANDARD METHODS 4500-CL E (TOTAL) 1997 | | | | | | | | |
| Chloride | NELAP | 25 | | 105 | mg/L | 5 | 02/27/2018 13:11 | R244077 |



Receiving Check List

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18021191

Client Project: NPDES/15-3069 SCC

Report Date: 01-Mar-18

Carrier: Employee

Received By: KF

Completed by:

On:

20-Feb-18

Amber M. Dilallo

Reviewed by:

On:

20-Feb-18

Elizabeth A. Hurley

Elizabeth A. Hurley

Pages to follow: Chain of custody

1

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 15.82

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water - at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

Work order # 18021191

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

| | | | | | | |
|---------------------------|----------------------|------------------------|---|---|---------------------------------|-----------------|
| Client: | RJN Group | Samples on: | <input checked="" type="checkbox"/> ICE | <input type="checkbox"/> BLUE ICE | <input type="checkbox"/> NO ICE | 15.82 °C |
| Address: | 2000 South 8th St. | Preserved in: | <input type="checkbox"/> LAB | <input checked="" type="checkbox"/> FIELD | FOR LAB USE ONLY | |
| City / State / Zip | St. Louis, MO 63104 | Lab Notes: | <i>None</i> | | | |
| Contact: | Jennifer Gervitz | | | | | |
| E-Mail: | jgervitz@rjnmail.com | | | | | |
| | | Client Comments | | | | |

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No

Are these samples known to be hazardous? ☐ Yes ☒ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

rainfall 0.40 in

[illegible]

| Relinquished By | Date/Time | Received By | Date/Time |
|-----------------|------------------|-------------|----------------|
| Sanjay Vijayan | 02/20/18 / 11:30 | Kleek | 2/20/18 / 1130 |
| | | | |
| | | | |
| | | | |

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 41389



21/02/2020

May 15, 2018

Jennifer Gerwitz
RJN Group
2000 South 8th St.
St. Louis, MO 63104
TEL: (314) 588-9764
FAX:



RE: NPDES/15-3069

WorkOrder: 18050329

Dear Jennifer Gerwitz:

TEKLAB, INC received 2 samples on 5/4/2018 9:50:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Marvin L. Darling
Project Manager
(618)344-1004 ex 41
mdarling@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18050329

Client Project: NPDES/15-3069

Report Date: 15-May-18

This reporting package includes the following:

| | |
|----------------------|----------|
| Cover Letter | 1 |
| Report Contents | 2 |
| Definitions | 3 |
| Case Narrative | 4 |
| Accreditations | 5 |
| Laboratory Results | 6 |
| Receiving Check List | 8 |
| Chain of Custody | Appended |

Client: RJN Group

Work Order: 18050329

Client Project: NPDES/15-3069

Report Date: 15-May-18

Abbr Definition

- * Analytes on report marked with an asterisk are not NELAP accredited
- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
- DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
- DNI Did not ignite
- DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count (> 200 CFU)

Qualifiers

- | | |
|--|--|
| # - Unknown hydrocarbon | B - Analyte detected in associated Method Blank |
| C - RL shown is a Client Requested Quantitation Limit | E - Value above quantitation range |
| H - Holding times exceeded | I - Associated internal standard was outside method criteria |
| M - Manual Integration used to determine area response | ND - Not Detected at the Reporting Limit |
| R - RPD outside accepted recovery limits | S - Spike Recovery outside recovery limits |
| T - TIC(Tentatively identified compound) | X - Value exceeds Maximum Contaminant Level |



Case Narrative

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18050329

Client Project: NPDES/15-3069

Report Date: 15-May-18

Cooler Receipt Temp: 10.22 °C

Per Jennifer Gerwitz, proceed with Fecal Coliform with the weekend surcharge (Friday receipt). EAH 5/4/18

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18050329

Client Project: NPDES/15-3069

Report Date: 15-May-18

| State | Dept | Cert # | NELAP | Exp Date | Lab |
|-----------|------|-----------------|-------|------------|--------------|
| Illinois | IEPA | 100226 | NELAP | 1/31/2019 | Collinsville |
| Kansas | KDHE | E-10374 | NELAP | 4/30/2019 | Collinsville |
| Louisiana | LDEQ | 166493 | NELAP | 6/30/2018 | Collinsville |
| Louisiana | LDEQ | 166578 | NELAP | 6/30/2018 | Collinsville |
| Texas | TCEQ | T104704515-12-1 | NELAP | 7/31/2018 | Collinsville |
| Arkansas | ADEQ | 88-0966 | | 3/14/2019 | Collinsville |
| Illinois | IDPH | 17584 | | 5/31/2019 | Collinsville |
| Indiana | ISDH | C-IL-06 | | 1/31/2019 | Collinsville |
| Kentucky | KDEP | 98006 | | 12/31/2018 | Collinsville |
| Kentucky | UST | 0073 | | 1/31/2019 | Collinsville |
| Louisiana | LDPH | LA170027 | | 12/31/2018 | Collinsville |
| Missouri | MDNR | 930 | | 1/31/2019 | Collinsville |
| Missouri | MDNR | 00930 | | 5/31/2019 | Collinsville |
| Oklahoma | ODEQ | 9978 | | 8/31/2018 | Collinsville |
| Tennessee | TDEC | 04905 | | 1/31/2019 | Collinsville |



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18050329

Client Project: NPDES/15-3069

Report Date: 15-May-18

Lab ID: 18050329-001

Client Sample ID: Upstream

Matrix: AQUEOUS

Collection Date: 05/04/2018 8:58

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---------------|-------|------|---------|-----------|----|------------------|---------|
| STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER | | | | | | | | |
| Fecal Coliform | * | 10 | | 570 | CFU/100ml | 10 | 05/04/2018 13:05 | R246753 |
| EPA 1664A | | | | | | | | |
| Hexane Extractable Material | NELAP | 6 | | < 6 | mg/L | 1 | 05/09/2018 11:33 | R246916 |
| EPA 600 351.2 R2.0, 353.2 R2.0 | | | | | | | | |
| Nitrogen, Total | * | 1.05 | | < 1.05 | mg/L | 1 | 05/10/2018 0:00 | R246921 |
| EPA 600 365.4 (TOTAL) | | | | | | | | |
| Phosphorus, Total (as P) | NELAP | 0.100 | | < 0.100 | mg/L | 1 | 05/09/2018 11:21 | 141666 |
| STANDARD METHODS 2540 D 1997 | | | | | | | | |
| Total Suspended Solids | NELAP | 6 | | < 6 | mg/L | 1 | 05/04/2018 14:37 | R246759 |
| STANDARD METHODS 4500-CL E (TOTAL) 1997 | | | | | | | | |
| Chloride | NELAP | 25 | | 130 | mg/L | 5 | 05/11/2018 12:45 | R247091 |



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18050329

Client Project: NPDES/15-3069

Report Date: 15-May-18

Lab ID: 18050329-002

Client Sample ID: Downstream

Matrix: AQUEOUS

Collection Date: 05/04/2018 9:26

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---------------|-------|------|--------|-----------|-----|------------------|---------|
| STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER | | | | | | | | |
| Fecal Coliform | * | 100 | | 500 | CFU/100ml | 100 | 05/04/2018 13:05 | R246753 |
| EPA 1664A | | | | | | | | |
| Hexane Extractable Material | NELAP | 6 | | < 6 | mg/L | 1 | 05/09/2018 11:33 | R246916 |
| EPA 600 351.2 R2.0, 353.2 R2.0 | | | | | | | | |
| Nitrogen, Total | * | 1.05 | | 2.59 | mg/L | 1 | 05/10/2018 0:00 | R246921 |
| EPA 600 365.4 (TOTAL) | | | | | | | | |
| Phosphorus, Total (as P) | NELAP | 0.100 | | 0.189 | mg/L | 1 | 05/09/2018 11:23 | 141666 |
| STANDARD METHODS 2540 D 1997 | | | | | | | | |
| Total Suspended Solids | NELAP | 6 | | 15 | mg/L | 1 | 05/04/2018 14:37 | R246759 |
| STANDARD METHODS 4500-CL E (TOTAL) 1997 | | | | | | | | |
| Chloride | NELAP | 5 | | 43 | mg/L | 1 | 05/11/2018 12:47 | R247091 |



Receiving Check List

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18050329

Client Project: NPDES/15-3069

Report Date: 15-May-18

Carrier: Kevin Madden

Received By: AMD

Completed by:

Elizabeth A. Hurley

Reviewed by:

Marvin L. Darling II

On:

04-May-18

Elizabeth A. Hurley

On:

04-May-18

Marvin L. Darling

Pages to follow: Chain of custody

1

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 10.22

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water - at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

pg. 18050327 of 18050327 Work order #

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

| | |
|---------------------------|----------------------|
| Client: | RJN Group |
| Address: | 2000 South 8th St. |
| City / State / Zip | St. Louis, MO 63104 |
| Contact: | Jennifer Gerwitz |
| E-Mail: | jgerwitz@rjnmail.com |
| Phone: | (314) 588-9764 |
| Fax: | |

Samples on: ☒ ICE ☐ BLUE ICE ☐ NO ICE 10.00 °C
Preserved in: ☒ LAB ☐ FIELD FOR LAB USE ONLY
Lab Notes: 5/14/18
Box Kevin Madden, Carol Fecal Analysis
Client Comments: 5/14/18

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No

Are these samples known to be hazardous? ☐ Yes ☒ No

Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. ☐ Yes ☒ No

[illegible]

| Relinquished By | Date/Time | Received By | Date/Time |
|-----------------|----------------|------------------|-------------|
| Kevin Madden | 9:50 AM 5/4/18 | | |
| Anthony Vitale | 9:50 AM 5/4/18 | Emilio Rodriguez | 5/4/18 9:50 |
| | | | |
| | | | |

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.tektalabinc.com for terms and conditions.

BottleOrder: 42821



21/1/20

August 03, 2018

Jennifer Gerwitz
RJN Group
2000 South 8th St.
St. Louis, MO 63104
TEL: (314) 588-9764
FAX:



RE: NPDES/15-3069

WorkOrder: 18071801

Dear Jennifer Gerwitz:

TEKLAB, INC received 2 samples on 7/30/2018 2:28:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

A handwritten signature in cursive script that reads "Marvin L. Darling II".

Marvin L. Darling
Project Manager
(618)344-1004 ex 41
mdarling@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18071801

Client Project: NPDES/15-3069

Report Date: 03-Aug-18

This reporting package includes the following:

| | |
|----------------------|----------|
| Cover Letter | 1 |
| Report Contents | 2 |
| Definitions | 3 |
| Case Narrative | 4 |
| Accreditations | 5 |
| Laboratory Results | 6 |
| Receiving Check List | 8 |
| Chain of Custody | Appended |

Client: RJN Group

Work Order: 18071801

Client Project: NPDES/15-3069

Report Date: 03-Aug-18

Abbr Definition

- * Analytes on report marked with an asterisk are not NELAP accredited
- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
- DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
- DNI Did not ignite
- DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count (> 200 CFU)

Qualifiers

- | | |
|--|--|
| # - Unknown hydrocarbon | B - Analyte detected in associated Method Blank |
| C - RL shown is a Client Requested Quantitation Limit | E - Value above quantitation range |
| H - Holding times exceeded | I - Associated internal standard was outside method criteria |
| M - Manual Integration used to determine area response | ND - Not Detected at the Reporting Limit |
| R - RPD outside accepted recovery limits | S - Spike Recovery outside recovery limits |
| T - TIC(Tentatively identified compound) | X - Value exceeds Maximum Contaminant Level |



Case Narrative

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18071801

Client Project: NPDES/15-3069

Report Date: 03-Aug-18

Cooler Receipt Temp: 14.82 °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18071801

Client Project: NPDES/15-3069

Report Date: 03-Aug-18

| State | Dept | Cert # | NELAP | Exp Date | Lab |
|-----------|------|----------|-------|------------|--------------|
| Illinois | IEPA | 100226 | NELAP | 1/31/2019 | Collinsville |
| Kansas | KDHE | E-10374 | NELAP | 4/30/2019 | Collinsville |
| Louisiana | LDEQ | 166493 | NELAP | 6/30/2019 | Collinsville |
| Louisiana | LDEQ | 166578 | NELAP | 6/30/2019 | Collinsville |
| Arkansas | ADEQ | 88-0966 | | 3/14/2019 | Collinsville |
| Illinois | IDPH | 17584 | | 5/31/2019 | Collinsville |
| Indiana | ISDH | C-IL-06 | | 1/31/2019 | Collinsville |
| Kentucky | KDEP | 98006 | | 12/31/2018 | Collinsville |
| Kentucky | UST | 0073 | | 1/31/2019 | Collinsville |
| Louisiana | LDPH | LA170027 | | 12/31/2018 | Collinsville |
| Missouri | MDNR | 930 | | 1/31/2019 | Collinsville |
| Missouri | MDNR | 00930 | | 5/31/2019 | Collinsville |
| Oklahoma | ODEQ | 9978 | | 8/31/2018 | Collinsville |
| Tennessee | TDEC | 04905 | | 1/31/2019 | Collinsville |



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18071801

Client Project: NPDES/15-3069

Report Date: 03-Aug-18

Lab ID: 18071801-001

Client Sample ID: Upstream

Matrix: AQUEOUS

Collection Date: 07/30/2018 13:38

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|--|---------------|-------|------|------------------|-----------|-----|------------------|---------|
| STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER | | | | | | | | |
| Fecal Coliform | * | 100 | | CG | CFU/100ml | 100 | 07/30/2018 15:30 | R250255 |
| <i>CG-continuous growth that covers the whole or part of the filtration area on membrane filter which makes colonies indistinguishable</i> | | | | | | | | |
| EPA 1664A | | | | | | | | |
| Hexane Extractable Material | NELAP | 6 | | < 6 | mg/L | 1 | 07/31/2018 14:15 | R250304 |
| EPA 600 351.2 R2.0, 353.2 R2.0 | | | | | | | | |
| Nitrogen, Total | * | 1.05 | | < 1.05 | mg/L | 1 | 08/02/2018 0:00 | R250422 |
| EPA 600 365.4 (TOTAL) | | | | | | | | |
| Phosphorus, Total (as P) | NELAP | 0.100 | | 0.133 | mg/L | 1 | 08/02/2018 13:33 | 144418 |
| STANDARD METHODS 2540 D 1997 | | | | | | | | |
| Total Suspended Solids | NELAP | 6 | R | 9 | mg/L | 1 | 07/31/2018 14:20 | R250261 |
| <i>Sample and Duplicate RPD meet the SOP QC criteria for low level results. Data is reportable.</i> | | | | | | | | |
| STANDARD METHODS 4500-CL E (TOTAL) 1997 | | | | | | | | |
| Chloride | NELAP | 5 | | 40 | mg/L | 1 | 08/01/2018 13:09 | R250396 |



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group
Client Project: NPDES/15-3069
Lab ID: 18071801-002
Matrix: AQUEOUS

Work Order: 18071801
Report Date: 03-Aug-18
Client Sample ID: Downstream
Collection Date: 07/30/2018 14:04

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|--|---------------|-------|------|---------------|-----------|------|------------------|---------|
| STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER | | | | | | | | |
| Fecal Coliform | * | 100 | | CG | CFU/100ml | 100 | 07/30/2018 15:30 | R250255 |
| <i>CG-continuous growth that covers the whole or part of the filtration area on membrane filter which makes colonies indistinguishable</i> | | | | | | | | |
| EPA 1664A | | | | | | | | |
| Hexane Extractable Material | NELAP | 6 | | < 6 | mg/L | 1 | 07/31/2018 14:15 | R250304 |
| EPA 600 351.2 R2.0, 353.2 R2.0 | | | | | | | | |
| Nitrogen, Total | * | 1.05 | | 1.86 | mg/L | 1 | 08/02/2018 0:00 | R250422 |
| EPA 600 365.4 (TOTAL) | | | | | | | | |
| Phosphorus, Total (as P) | NELAP | 0.500 | | 0.570 | mg/L | 1 | 08/02/2018 13:36 | 144418 |
| STANDARD METHODS 2540 D 1997 | | | | | | | | |
| Total Suspended Solids | NELAP | 15 | | 251 | mg/L | 2.44 | 08/01/2018 10:48 | R250327 |
| STANDARD METHODS 4500-CL E (TOTAL) 1997 | | | | | | | | |
| Chloride | NELAP | 5 | | 9 | mg/L | 1 | 08/01/2018 13:17 | R250396 |



Receiving Check List

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18071801

Client Project: NPDES/15-3069

Report Date: 03-Aug-18

Carrier: Employee

Received By: NH

Completed by:

On:

30-Jul-18

Nathan Harer

Reviewed by:

On:

30-Jul-18

Elizabeth A. Hurley

Elizabeth A. Hurley

Pages to follow: Chain of custody

1

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 14.82

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water - at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

St. Clair County

pg. 1 of 1 Work order # 18071801

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No

Are these samples known to be hazardous? ☐ Yes ☒ No

Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. ☐ Yes ☒ No

[illegible]

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.tekiabinc.com for terms and conditions.

440

BottleOrder: 44524

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ds the terms and
nd conditions.

knowledges that he/she has read and understood the information. See www.teklabinc.com for the client.

...to sign on behalf

she has the author

the individual signing the agreement, and that he

November 09, 2018

Jennifer Gerwitz
RJN Group
2000 South 8th St.
St. Louis, MO 63104
TEL: (314) 588-9764
FAX:



RE: NPDES/15-3069

WorkOrder: 18110024

Dear Jennifer Gerwitz:

TEKLAB, INC received 2 samples on 11/1/2018 11:15:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

A handwritten signature in cursive script that reads "Marvin L. Darling II".

Marvin L. Darling
Project Manager
(618)344-1004 ex 41
mdarling@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18110024

Client Project: NPDES/15-3069

Report Date: 09-Nov-2018

This reporting package includes the following:

| | |
|----------------------|----------|
| Cover Letter | 1 |
| Report Contents | 2 |
| Definitions | 3 |
| Case Narrative | 4 |
| Accreditations | 5 |
| Laboratory Results | 6 |
| Receiving Check List | 8 |
| Chain of Custody | Appended |

Client: RJN Group

Work Order: 18110024

Client Project: NPDES/15-3069

Report Date: 09-Nov-2018

Abbr Definition

- * Analytes on report marked with an asterisk are not NELAP accredited
- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
- DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
- DNI Did not ignite
- DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count (> 200 CFU)

Qualifiers

- | | |
|---|--|
| # - Unknown hydrocarbon | B - Analyte detected in associated Method Blank |
| C - RL shown is a Client Requested Quantitation Limit | E - Value above quantitation range |
| H - Holding times exceeded | I - Associated internal standard was outside method criteria |
| J - Analyte detected below quantitation limits | M - Manual Integration used to determine area response |
| ND - Not Detected at the Reporting Limit | R - RPD outside accepted recovery limits |
| S - Spike Recovery outside recovery limits | T - TIC(Tentatively identified compound) |
| X - Value exceeds Maximum Contaminant Level | |



Case Narrative

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18110024

Client Project: NPDES/15-3069

Report Date: 09-Nov-2018

Cooler Receipt Temp: 7.22 °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18110024

Client Project: NPDES/15-3069

Report Date: 09-Nov-2018

| State | Dept | Cert # | NELAP | Exp Date | Lab |
|-----------|------|----------|-------|------------|--------------|
| Illinois | IEPA | 100226 | NELAP | 1/31/2019 | Collinsville |
| Kansas | KDHE | E-10374 | NELAP | 4/30/2019 | Collinsville |
| Louisiana | LDEQ | 166493 | NELAP | 6/30/2019 | Collinsville |
| Louisiana | LDEQ | 166578 | NELAP | 6/30/2019 | Collinsville |
| Oklahoma | ODEQ | 9978 | NELAP | 8/31/2019 | Collinsville |
| Arkansas | ADEQ | 88-0966 | | 3/14/2019 | Collinsville |
| Illinois | IDPH | 17584 | | 5/31/2019 | Collinsville |
| Indiana | ISDH | C-IL-06 | | 1/31/2019 | Collinsville |
| Kentucky | KDEP | 98006 | | 12/31/2018 | Collinsville |
| Kentucky | UST | 0073 | | 1/31/2019 | Collinsville |
| Louisiana | LDPH | LA170027 | | 12/31/2018 | Collinsville |
| Missouri | MDNR | 930 | | 1/31/2019 | Collinsville |
| Missouri | MDNR | 00930 | | 5/31/2019 | Collinsville |
| Tennessee | TDEC | 04905 | | 1/31/2019 | Collinsville |



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18110024

Client Project: NPDES/15-3069

Report Date: 09-Nov-2018

Lab ID: 18110024-001

Client Sample ID: Upstream

Matrix: AQUEOUS

Collection Date: 11/01/2018 9:51

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---------------|-------|------|---------|-----------|-----|------------------|---------|
| STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER | | | | | | | | |
| Fecal Coliform | * | 100 | | 3500 | CFU/100ml | 100 | 11/01/2018 13:30 | R254196 |
| EPA 1664A | | | | | | | | |
| Hexane Extractable Material | NELAP | 6 | | < 6 | mg/L | 1 | 11/02/2018 10:35 | R254176 |
| EPA 600 351.2 R2.0, 353.2 R2.0 | | | | | | | | |
| Nitrogen, Total | * | 1.05 | | < 1.05 | mg/L | 1 | 11/08/2018 0:00 | R254443 |
| EPA 600 365.4 (TOTAL) | | | | | | | | |
| Phosphorus, Total (as P) | NELAP | 0.100 | | < 0.100 | mg/L | 1 | 11/06/2018 12:21 | 147451 |
| STANDARD METHODS 2540 D 1997 | | | | | | | | |
| Total Suspended Solids | NELAP | 6 | | < 6 | mg/L | 1 | 11/02/2018 13:30 | R254217 |
| STANDARD METHODS 4500-CL E (TOTAL) 1997 | | | | | | | | |
| Chloride | NELAP | 5 | | 25 | mg/L | 1 | 11/07/2018 17:18 | R254454 |



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group
Client Project: NPDES/15-3069
Lab ID: 18110024-002
Matrix: AQUEOUS

Work Order: 18110024
Report Date: 09-Nov-2018

Client Sample ID: Downstream
Collection Date: 11/01/2018 10:47

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---------------|-------|------|--------|-----------|-----|------------------|---------|
| STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER | | | | | | | | |
| Fecal Coliform | * | 100 | | 4100 | CFU/100ml | 100 | 11/01/2018 13:30 | R254196 |
| EPA 1664A | | | | | | | | |
| Hexane Extractable Material | NELAP | 6 | | < 6 | mg/L | 1 | 11/02/2018 10:35 | R254176 |
| EPA 600 351.2 R2.0, 353.2 R2.0 | | | | | | | | |
| Nitrogen, Total | * | 1.05 | | 4.00 | mg/L | 1 | 11/08/2018 0:00 | R254443 |
| EPA 600 365.4 (TOTAL) | | | | | | | | |
| Phosphorus, Total (as P) | NELAP | 0.500 | | 1.07 | mg/L | 1 | 11/07/2018 11:28 | 147485 |
| STANDARD METHODS 2540 D 1997 | | | | | | | | |
| Total Suspended Solids | NELAP | 6 | | 128 | mg/L | 1 | 11/02/2018 13:30 | R254217 |
| STANDARD METHODS 4500-CL E (TOTAL) 1997 | | | | | | | | |
| Chloride | NELAP | 5 | | 50 | mg/L | 1 | 11/07/2018 17:26 | R254454 |



Receiving Check List

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 18110024

Client Project: NPDES/15-3069

Report Date: 09-Nov-2018

Carrier: Employee

Received By: BV

Completed by:

Marvin L. Darling II

Reviewed by:

Elizabeth A. Hurley

On:

On:

01-Nov-2018

01-Nov-2018

Marvin L. Darling

Elizabeth A. Hurley

Pages to follow: Chain of custody

1

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 7.22

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water - at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

