

# 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, 2	019 Permit No. ILR40 0102						
MS4 OPERATOR INFORMATION: (As it appears on the current permit)							
Name: O'FALLON TOWNSHIP	Mailing Address 1: 801 EAST STATE STREET						
Mailing Address 2:	County: St. Clair						
City: O'FALLON State:	IL Zip: 62269 Telephone: 618-632-3517						
Contact Person: MARK DOWNS (Person responsible for Annual Report)	Email Address:						
Name(s) of governmental entity(ies) in which MS4 is loc	ated: (As it appears on the current permit)						
ILLINOIS DEPARTMENT OF TRANSPORTATION	ST. CLAIR COUNTY						
THE FOLLOWING ITEMS MUST BE ADDRESSED.							
A. Changes to best management practices (check appropria regarding change(s) to BMP and measurable goals.)	te BMP change(s) and attach information						
Public Education and Outreach     4	Construction Site Runoff Control						
Public Participation/Involvement     5	Post-Construction Runoff Control						
3. Illicit Discharge Detection & Elimination   6	Pollution Prevention/Good Housekeeping						
B. Attach the status of compliance with permit conditions, ar management practices and progress towards achieving the MEP, and your identified measurable goals for each of the	e statutory goal of reducing the discharge of pollutants to the						
C. Attach results of information collected and analyzed, included	iding monitoring data, if any during the reporting period.						
<ul> <li>D. Attach a summary of the storm water activities you plan t implementation schedule.)</li> </ul>	o undertake during the next reporting cycle (including an						
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 p	aid 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))							
Mark Downs Owner Signature:	Apric 22, 2019  Date:						
MARK DOWNS Printed Name:	Highway Commissioner 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

# ADMINISTRATIVE REVISIONS TO THE NOTICE OF INTENT

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

MS4 Operator Mailing Address:	Yes	No <u>X</u>
Persons Responsible:	Yes	No <u>X</u>
Name:		
Title:		
Telephone Number:		
Area of Responsibility		

### <u>Introduction</u>

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 2018-February 2019:

- 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.

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

- 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.

O'Fallon Township FOIA Officer for the reporting year:

	_	_		
Name: _	Debbie Alsup			
Title:	Deputy Town Clo	erk		
Telephon	ne Number: (6)	18) 632-3517		

COMMUNITY NAME	::O'Fallon Township	PERMIT #:		ILR400102	
	IEPA Annual Report for Stormwater Discharges from Ma	S4 Communities- Period: Ma	arch 2	2018 through February 2019	
A. Changes to Best Management- Were there any changes to the BMPs?	<b>B.</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	C. Provide results of information collected and analyzed, including monitor data. Information attached?	_	<b>D.</b> Summarize the stormwater actiundertake with an implementation	
Comment Su	minimum control measures.	If attached information, describe.	S S	Activity	Schedule
	ed Paper Materials- Informational Brochures				
Milestone For Reporting	Year: Promote the availability of brochures to the resident	S.	_		
	The County has brochures available to residents at the St. Clair County Health Department. The Township has brochures available at the Township Building.		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- Communi	ity Event- Sponsor Annual Booth at St. Clair County E	arth Day Festival			
Milestone For Reporting	Year: St. Clair County sponsored a booth at the Earth Day	/ Festival.			
	St. Clair County sponsored 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- Classrooi	m Education Material				
Milestone For Reporting	Year: Communities distributed educational materials and	tracked the number of broch	ures	and other materials handed out to t	he schools.
	St. Clair County posted educational newsletters on the Health Department's Website.	Review of Classroom Education Materials- See page 11	<	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	:O'Fallon Township	PERMIT #:		ILR400102		
	IEPA Annual Report for Stormwater Discharges from MS	S4 Communities- Period: N	March	n 2018 through February 2019		
any changes to the BMPs?	anagement- Were there appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MPs?  MEP, and identified measurable goals for each of the data. Information attached?		information collected and analyzed, including monitoring data. Information attached?		•	
Comment $S$	minimum control measures.	describe.	YES	Activity Activity	Schedule	
	er's Meeting- Coordinate Meetings and Annual Repo					
Milestone For Reporting \	<u>'ear</u> : Co-Permittee Group met three (3) times to complete	training and to develop ar	nd su	bmit the Annual Report.		
×	Co-Permittee Meetings were held on Feb. 222nd, May 2nd, 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 community attended all the meetings.			The Township 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.	
	Monitoring- Solicit and Encourage Public Assistance				ater Hotline	
Milestone For Reporting \	<u>'ear</u> : Community will work to involve more public assistan	ce in reporting stormwater	issu	es.		
×	The Township will update its website to include the community contact information for the reporting of stormwater issues. Any calls or emails will be recorded and addressed.			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 publ	lic awareness, including	: Inle	t Stenciling and Recycling		
Milestone for Reporting Y	ear: St. Clair County continued to promote programs relat	ed to stormwater activities	. Co	mmunities tracked participation.		
×	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.	

	IEPA Annual Report for Stormwater Discharges from MS	34 Communities- Period: N	March	n 2018 through February 2019		
A. Changes to Best Management- Were there any changes to the BMPs?	appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the			undertake with an implementation	<b>D.</b> Summarize the stormwater activities you plan to undertake with an implementation schedule	
Comment S	minimum control measures.	If attached information, describe.	YES	Activity	Schedule	
BMP No. B.7- Other Pub	lic Involvement - the community will provide a public	meeting annually for pu	blic i	nput into for the MS4 program		
Milestone for Reporting Y	<u>ear:</u> The communities will provide a public meeting annua	lly for public input for the N	MS4 p	orogram.		
x	The Township held a meeting for public input regarding the adequacy of the MS4 program on April 10, 2018. No input was received.	Review of Other Public Involvement - See page 11	x	The Township 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 Sev						
Milestone for Reporting Y	ear: Co-Permittee member communities reviewed outfall	maps and conducted stream	am o	bservations annually at bridge inspect	ions.	
x	Co-Permittee communities reviewed their outfall maps for completeness and updated them if necessary. The Township currently has 100% of outfall locations mapped.		2	Communities will begin 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- Regi	ulatory Control Program- Ordinance language for Illici	t discharge/public notifi	catio	n		
Milestone for Reporting Y	ear: Communication brochures were distributed to the cor	nmunity.				
x	St. Clair County distributed brochures at the Earth Day event and has them available at the County Health Department.		2	X This BMP will not continue into the next NOI.		
BMP No. C.5- Inlet Stend	ciling					
Milestone for Reporting Y	ear: Survey condition of inlet stencils.					
x	The Township assessed the condition of the stencils and replaced any that needed to be replaced. Currently 100% of the inlets are marked.	Review of Illicit Source Removal Procedures - See page 11	x	Communities will survey samples of 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.	

PERMIT #: ILR400102

COMMUNITY NAME: O'Fallon Township

		IEPA Annual Report for Stormwater Discharges from M	S4 Communities- Period: Marc	ch	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			<b>D.</b> Summarize the stormwater activities you plan to undertake with an implementation schedule	
Comment	YES	minimum control measures.	If attached information, describe.	CZ	Activity	Schedule
		Evaluation and Assessment				
Milestone for Reporting	ng `	Year: Perform illicit discharge detection and elimination in	the Community's stormwater	sy	stem.	
		Communities will perform stream observations during their annual bridge inspections and take appropriate action if any illicit discharge is found.		×	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						
Milestone for Reporting	ng `	Year: Community will update ordinance brochure.				
		Brochures will be updated to address spcific stormwater ordinance prohibited acivities and distributed with brochures addressed in BMP A1.		>	Ordinance brochures will be updated and distributed to the community throughout years 2015-2019	On-going through 2019-2020 permit year.
		E.4- Site Plan and Pre-Construction Review Procedu	es			
Milestone for Reporting	ng `	<u>/ear:</u> Update stormwater ordinance.				
		X A stormwater ordinance update was not needed.		×	This BMP will not continue into the next NOI.	
BMP No. D.1- Regul						
Milestone for Reporting	ng `	<u>/ear:</u> Require SWPPP on all site plans disturbing more tha	n one acre of land inside the	Со	mmunity.	
		The community will require SWPPP on sites disturbing over 1 acre and enforce ordinance provisions.		×	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.

PERMIT #: *ILR400102* 

COMMUNITY NAME: O'Fallon Township

I	IEPA Annual Report for Stormwater Discharges from MS	64 Communities- Period: Mar	rch 2	2018 through February 2019		
Management- Were there any changes to the	appropriateness of the BMP and progress towards			<b>D.</b> Summarize the stormwater activities you plan to undertake with an implementation schedule		
Comment S S	minimum control measures.	If attached information, describe.	ON	Activity	Schedule	
BMP No. D.2- Erosion an	d Sediment Control BMPs					
Milestone for Reporting Yea	<u>ar:</u> Community will participate in BMP training during Anr	nual Operations Training.				
X.	The City attended Operations Training.		X	Community will continue to participate in BMP training.	On-going through 2019-2020 permit year.	
BMP No. D.5- Stormwater						
	<u>ar:</u> County continued to maintain a stormwater hotline nu	mber to address public conc	erns	related to stormwater issues. Cou	nty tracked and	
reported the number of call	S.					
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- Tr	aining for Construction Site Inspectors					
Milestone for Reporting Yea	ar: Inspector training was provideed this year.					
x			X	The last Construction Site Inpection training took place in April 2017. This BMP will not continue into the next NOI.		
BMP No. E.2- Regulatory						
Milestone for Reporting Yea	ar: Enforce Stormwater Ordinance.	_				
	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: O'Fallon Township

PERMIT #: ILR400102

COMMUNITY NAME	: O'Fallon Township	PERMIT #:		ILR400102		
	IEPA Annual Report for Stormwater Discharges from M	S4 Communities- Period: Mar	ch 2	2018 through February 2019		
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	C. Provide results of information collected and analyzed, including monitoring data. Information attached?		<b>D.</b> Summarize the stormwater activities you plan to undertake with an implementation schedule		
Comment	minimum control measures.	If attached information, describe.	ON	Activity	Schedule	
	ruction Review of BMP Designs					
Milestone for Reporting \	<u>ear:</u> Review post construction BMPs.		_			
	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 \	<u>fear:</u> The Co-Permittee held an Operations Training class					
	Training focused on a review of the Best Management Practices, Good Housekeeping, and the Storm Water Management Plan. The Township 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.	
	nicipal Operations Controls- Standard Operating Proc					
Milestone for Reporting \	<u>ear:</u> Communities reviewed operating procedures and B	MPs and modified if necessar	y.			
	Stormwater operation procedures for the street department were reviewed and modified as necessary.		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 N	AME: O'Fallon Township PERMIT #: ILR400102
	IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2018 through February 2019
	ADDITIONAL INFORMATION
MP A. <u>5</u>	Classroom Educational Materials
	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.
MP B.6	Community Events - Recycling Programs
	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 that collected 1,232 tons of waste. Telephone book recycling was sponsored by Illinois American Water and collected 10.61 tons. The county website also has a brochure listing recycling sites for over 29 different materials.  The Township participated in the IEPA "Government Only" tire recycling event in September 2018.
MP B.7	Other Public Involvement
	The County held a public meeting to provide for public input regarding the adequacy of the MS4 program. No feedback regarding the MS4 program was received. Public input regarding environmental justice was also not obtained; however, areas were identified and mapped. 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 Township or through the County.
MP C 5	Illicit Source Removal Procedures

The St. Clair County Highway Department sponsors an Adopt-a-Highway Program throughout the County. Seventy seven miles of roads in the County were adopted and cleaned at least four times a year. 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.

### ADDITIONAL COMMUNITY ACTIVITIES

(Make additional copies of form, as necessary)

Community Name: O'Fallon Township Permit #: ILR400102

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:

O'Fallon Township has a municipality website and posts educational brochures, the NOI, and annual reports.

The attached five-page list details the Township's Road District stormwater-related work during the reporting year.

The Township uses one cubic yard dumpster for debris retrieved from roads and ditches which is disposed of as needed.

Circle which minimum control measure addressed:

- 1. Public Education and Outreach
- 2. Public Participation/Involvement
- (3) Illicit Discharge Detection & Elimination
- 4. Construction Site Runoff Control
- Post-Construction Runoff Control
- 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 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

O'Fallon Township had no public construction projects during the reporting year

AP ACCREC

WorkOrder: 18021191



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

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,

Marvin L. Darling

Project Manager (618)344-1004 ex 41

mdarling@teklabinc.com

Mowin L. Darling II



# **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
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Laboratory Results	6
Receiving Check List	8
Chain of Custody	Appended



#### **Definitions**

http://www.teklabinc.com/

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
- E Value above quantitation range
- I Associated internal standard was outside method criteria
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside recovery limits
- X Value exceeds Maximum Contaminant Level

- B Analyte detected in associated Method Blank
- H Holding times exceeded
- M Manual Integration used to determine area response
- R RPD outside accepted recovery limits
- T TIC(Tentatively identified compound)



## **Case Narrative**

http://www.teklabinc.com/

Work Order: 18021191

Report Date: 01-Mar-18

Client: RJN Group Client Project: NPDES/15-3069 SCC

Cooler Receipt Temp: 15.82 °C

### Locations

	Collinsville		Springfield		Kansas City
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com
	Collinsville Air		Chicago		
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.		
	Collinsville, IL 62234-7425		Downers Grove, IL 60515		
Phone	(618) 344-1004	Phone	(630) 324-6855		
Fax	(618) 344-1005	Fax			
Email	EHurley@teklabinc.com	Email	arenner@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 22NI	D ED. 9222 D MEMBR	ANE 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 R	2.0						
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
<b>STANDARD METHODS 2540</b>	D 1997						
Total Suspended Solids	NELAP	6	123	mg/L	1	02/22/2018 13:16	R243843
<b>STANDARD METHODS 4500</b>	-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 Work Order: 18021191
Client Project: NPDES/15-3069 SCC Report Date: 01-Mar-18

Lab ID: 18021191-002 Client Sample ID: Downstream

Matrix: AQUEOUS Collection Date: 02/20/2018 10:58

Analyses	Certification	RL Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 22ND	D ED. 9222 D MEMBR	ANE 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 R	2.0						
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
<b>STANDARD METHODS 2540</b>	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: Ottoor Ollawa

20-Feb-18 Amber M. Dilallo

Reviewed by:
On:
20-Feb-18

Elizabeth A. Hurley

Elizabeth a thurley

Pages to follow: Chain of custody 1	Extra pages included	d 0				
Shipping container/cooler in good condition?	Yes 🗸	No 🗌	Not Present		Temp °C	15.82
Type of thermal preservation?	None	Ice 🗸	Blue Ice		Ory 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	<b>✓</b>		
Container/Temp Blank temperature in compliance?	Yes 🗹	No 🗌				
When thermal preservation is required, samples are complia 0.1°C - 6.0°C, or when samples are received on ice the sam		between				
Water – at least one vial per sample has zero headspace?	Yes 🗌	No	No VOA vials	<b>✓</b>		
Water - TOX containers have zero headspace?	Yes	No 🗌	No TOX containers	<b>✓</b>		
Water - pH acceptable upon receipt?	Yes 🗹	No 🗌	NA			
NPDES/CWA TCN interferences checked/treated in the field?	Yes	No 🗌	NA	<b>✓</b>		
Any No responses i	must be detailed belo	ow or on the	coc.			

**CHAIN OF CUSTODY** 

Work order # 18031191

pg. of

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

Address:							T			2	١				ì		1	-			
1 Ctoto / 7	2000 South 8th St.						Δ	eserve	Preserved in: 🔤 LAB	■ LAB	Ŋ.	HELD			1	ORLA	FOR LAB USE ONLY	ONE			
コージーのになって	ip St. Louis, MO 63104	04					Ľ	Lab Notes:	.: Se:		E B	14 25									
Contact: Jen	Jennifer Gerwitz	Phone:	ne:	(314)	(314) 588-9764	64					¥	Ĺ									
E-Mail: jgen	igerwitz@rjnmail.com	Fax:					<u> </u>	ient C	Client Comments	nts											:
nese samples kno nese samples kno	Are these samples known to be involved in litigation? If Are these samples known to be hazardous? $\ \ \square$ Yes	Are these samples known to be involved in litigation? If yes, a surcharge will apply Are these samples known to be hazardous? $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	ge will a	ylddi	☐ Yes	oN 🔀 s			ğ	rainfall 0.40 in	0	, <del>4</del> ,	ζ <u>c</u>								
Are there any required reportin limits in the comment section.	I reporting limits to be me section. $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	_	lysis?. I	f yes, p	lease p	rovide															
Project	Project Name/Number	Samp	le Col	lecto	Sample Collector's Name	me		MATRIX	RIX				N N	CAT	AN	ALYSI	INDICATE ANALYSIS REQUESTED	UEST			
NPDES/15-3069 SCC	25											<u></u>			_						
Results Requested	rcharge)	Billing Instructions		# and Ty	pe of C	Type of Containers				O111	Fecal (	Oil and	Phos	Total 1	Т						
]	3 Day (50% Surcharge)		UN	H2S0			eous			J,106	Colifor  oride		phoru		SS		- uh-				
Lab Use Only S	Sample Identification	Date/Time Sampled	T	04_			3				m		S	en							
Son Life icosi	Upstream	02/26/18 10:30	2	7			×			×	×	×	×	×	×				1		
_	Downstream	20/18	2	2			×			×	×	×	×	×	×						
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									<b>}</b>												
ndividual signing 1	this agreement on behalf	The individual signing this agreement on behalf of the client anknowledges that baken has read and understands the terms and conditions of this	dy sect	t he/s	hac hac	one bee	- Sabore	the space	o forms	200	odition.	of this			┨	0 ch+0 0	, F	44200	3	w.7.a	1

agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

AP ACCREC

**WorkOrder:** 18050329



May 15, 2018

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

FAX:

**RE:** NPDES/15-3069

Dear Jennifer Gerwitz:

**RE.** 141 DES/13 3007

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

Mowin L. Darling II



# **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



#### **Definitions**

http://www.teklabinc.com/

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
- C RL shown is a Client Requested Quantitation Limit
- H Holding times exceeded
- M Manual Integration used to determine area response
- R RPD outside accepted recovery limits
- T TIC(Tentatively identified compound)

- B Analyte detected in associated Method Blank
- E Value above quantitation range
- I Associated internal standard was outside method criteria
- ND Not Detected at the Reporting Limit
  - S Spike Recovery outside recovery limits
  - 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		Springfield		Kansas City
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com
	Collinsville Air		Chicago		
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.		
	Collinsville, IL 62234-7425		Downers Grove, IL 60515		
Phone	(618) 344-1004	Phone	(630) 324-6855		
Fax	(618) 344-1005	Fax			
Email	EHurley@teklabinc.com	Email	arenner@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 22NI	D ED. 9222 D MEMBR	ANE 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 R	2.0						
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
<b>STANDARD METHODS 2540</b>	D 1997						
Total Suspended Solids	NELAP	6	< 6	mg/L	1	05/04/2018 14:37	R246759
<b>STANDARD METHODS 4500</b>	-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	D ED. 9222 D MEMBR	ANE 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 R	2.0						
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
<b>STANDARD METHODS 2540</b>	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



Client: RJN Group

## **Receiving Check List**

http://www.teklabinc.com/

Work Order: 18050329

Client Project: NPDES/15-3069 Report Date: 15-May-18 Carrier: Kevin Madden Received By: AMD Elizabeth a thurley Marin L. Darling II Completed by: Reviewed by: On: On: 04-May-18 04-May-18 Elizabeth A. Hurley Marvin L. Darling Extra pages included 0 Pages to follow: Chain of custody Shipping container/cooler in good condition? Yes 🗸 No Not Present Temp °C 10.22 Type of thermal preservation? Ice 🗹 Blue Ice None Dry Ice Chain of custody present? **V** No 🗀 Yes **V** Chain of custody signed when relinquished and received? Yes No L **V** Chain of custody agrees with sample labels? No 🗔 Yes **V** Samples in proper container/bottle? Yes No 🗀 **V** Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes ~ No **V** No 🗌 All samples received within holding time? Yes NA 🗸 Field Lab 🗌 Reported field parameters measured: Yes 🗹 No 🗌 Container/Temp Blank temperature in compliance? 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. No VOA vials 🗸 Water - at least one vial per sample has zero headspace? Yes 📙 No 🗀 No TOX containers Water - TOX containers have zero headspace? Yes No 🗌 Yes 🗹 No 🗌 Water - pH acceptable upon receipt? NA 🗸 NPDES/CWA TCN interferences checked/treated in the field? Yes No 🗌

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

**CHAIN OF CUSTODY** 

pg. of

Work order # 105033F

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

Client:	RJN Group			Samples on: 📓 ICE	CE BLUEICE MOICE	ා <sub>ල</sub> <del>උළ`ට</del> \ නා	
Address:	2000 South 8th St.	ļ.		Preserved in:	AB 🛣 FIELD	FOR LAB USE ONLY	
City / State / Zip	/ Zip St. Louis, MO 63104	104		Lab Notes:			
Contact:	Jennifer Gerwitz	Phone:	(314) 588-9764	100 May 11	Mario vy		\ \{
E-Mail:	jgerwitz@rjnmail.com	Fax:		- Client Comments		Client Comments	,  ≥
Are these samples known to be Are these samples known to be Are there any required reportini limits in the comment section.	involved in hazardous g limits to b	n litigation? If yes, a surcharges? ☐ Yes ☒ No e met on the requested analys ☒ No	e will apply 📗 Yes 🔀 No sis?. If yes, please provide		rainfall ,83 in. on 5/3/18	on 5/3/18	2
Pro	Project Name/Number	Sample	Sample Collector's Name	MATRIX	INDICATE	E ANALYSIS REQUESTED	1
NPDES/15-3069							
ฐ	Results Requested	Billing Instructions	# and Type of Containers		Pho il ar		
Standard Other	1-2 Day (100% Surcharge)		H2S	ueous	Nitroge sphoru nd Grea l Colifor nloride	TSS	
Lab Use Only	Sample Identification	Date/Time Sampled	P 	3	s se		
18m01329~m	Upstream	1415 WHESE B	2 2 2	×	× × × ×	×	
60%	Downstream	4.26 AMS/41	1/82 2	×	× × × ×	×	
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	The state of the s	and a septiment of the					
	Relinguished Bv.		Date/Time		Received Rv	Date/Time	
Keuh	Madden		9:50AM 5/4/10		,		
Andh	hony Vitale	05:6	0 AM 5/4/18 5	70W	STORTES TO	5/4/18 GOD	
	/						
The individual sig agreement, and the	ning this agreement on behanat he/she has the authority	half of the client, acknowled; to sign on behalf of the clie	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.	nderstands the terms and rerms and rerms and	conditions of this	BottleOrder: 42821	1





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,

Marvin L. Darling

Project Manager

(618)344-1004 ex 41 mdarling@teklabinc.com

Mowin L. Darling II

Page 1 of 8



# **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



#### **Definitions**

http://www.teklabinc.com/

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
- C RL shown is a Client Requested Quantitation Limit
- H Holding times exceeded
- M Manual Integration used to determine area response
- R RPD outside accepted recovery limits
- T TIC(Tentatively identified compound)

- B Analyte detected in associated Method Blank
- E Value above quantitation range
- I Associated internal standard was outside method criteria
- ND Not Detected at the Reporting Limit
  - S Spike Recovery outside recovery limits
  - X Value exceeds Maximum Contaminant Level



## **Case Narrative**

http://www.teklabinc.com/

Work Order: 18071801

Client: RJN Group Report Date: 03-Aug-18 Client Project: NPDES/15-3069

Cooler Receipt Temp: 14.82 °C

### Locations

Collinsville		Springfield		Kansas City	
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com
Collinsville Air		Chicago			
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.		
	Collinsville, IL 62234-7425		Downers Grove, IL 60515		
Phone	(618) 344-1004	Phone	(630) 324-6855		
Fax	(618) 344-1005	Fax			
Email	EHurley@teklabinc.com	Email	arenner@teklabinc.com		



Client: RJN Group

TDEC

Client Project: NPDES/15-3069

Tennessee

## **Accreditations**

http://www.teklabinc.com/

Work Order: 18071801

Collinsville

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

1/31/2019

04905



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 22NI	D ED. 9222 D MEMBR	ANE FILTER	1					
Fecal Coliform	*	100		CG	CFU/100ml	100	07/30/2018 15:30	R250255
CG-continuous growth that covers	s the whole or part of the	filtration area c	on membr	ane filter which	h makes colon	ies indistir	nguishable	
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 R	2.0							
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
Sample and Duplicate RPD meet	the SOP QC criteria for lo	ow level results	s. Data is	reportable.				
<b>STANDARD METHODS 4500</b>	-CL E (TOTAL) 1997							
Chloride	NELAP	5		40	mg/L	1	08/01/2018 13:09	R250396



http://www.teklabinc.com/

Client: RJN Group Work Order: 18071801

Client Project: NPDES/15-3069 Report Date: 03-Aug-18

Lab ID: 18071801-002 Client Sample ID: Downstream

Matrix: AQUEOUS Collection Date: 07/30/2018 14:04

Analyses	Certification	RL Q	Qual Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 22ND	ED. 9222 D MEMBR	ANE FILTER					
Fecal Coliform	*	100	CG	CFU/100ml	100	07/30/2018 15:30	R250255
CG-continuous growth that covers	the whole or part of the	filtration area on l	membrane filter which	h makes color	nies indistii	nguishable	
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	2.0						
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



Client: RJN Group

### **Receiving Check List**

http://www.teklabinc.com/

Work Order: 18071801

Client Project: NPDES/15-3069 Report Date: 03-Aug-18 Carrier: Employee Received By: NH Elizabeth a Hurley Completed by: Reviewed by: Vonn Hamm On: On: 30-Jul-18 30-Jul-18 Nathan Harer Elizabeth A. Hurley Extra pages included 0 Pages to follow: Chain of custody Shipping container/cooler in good condition? Yes 🗸 No Not Present Temp °C 14.82 Type of thermal preservation? Ice 🗹 Blue Ice None Dry Ice Chain of custody present? **V** No 🗀 Yes **V** Chain of custody signed when relinquished and received? Yes No L **V** Chain of custody agrees with sample labels? No 🗔 Yes **V** No 🗌 Samples in proper container/bottle? Yes **V** Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes ~ No **V** No 🗌 All samples received within holding time? Yes NA 🗸 Field Lab 🗌 Reported field parameters measured: Yes 🗸 No 🗌 Container/Temp Blank temperature in compliance? 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. No VOA vials 🗸 Water - at least one vial per sample has zero headspace? Yes 📙 No 🗀 No 🗌 No TOX containers Water - TOX containers have zero headspace? Yes Yes 🗹 No 🗌 Water - pH acceptable upon receipt? No 🗌 NA 🗸 NPDES/CWA TCN interferences checked/treated in the field? Yes

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

CHAIN OF CUSTODY pg. of Work order # 1617180

TEKLA	TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005	45 Hors	eshoe Lak	e Roa	o) - p	llinsvil	le, IL 6	2234 -	Phon	e: (618	3) 344	-1004	- Fax	: (618)	344-	1005		
Client: R	RJN Group						Samo	Samples on: MCE	DOE	BE	E CE	- 0 -		4.4	ی			
	2000 South 8th St.						Prese	reserved in:  LAB				160	% FOR	THELD ALONG FOR LAB USE ONLY	SEON	>		
te / Zip	St. Louis, MO 63104	04					Lab	Lab Notes:			<b>,</b> 6	(8)	3					
Contact: Jennifer Gerwitz	3erwitz		Phone:	'	(314) 588-9764	25												
E-Mail: jgerwitz@	jgerwitz@rjnmail.com		Fax:				Client	Client Comments	urts			64.						
Are these samples known to be involved in litigation? If yes, a surcharge will apply Ses Xere these samples known to be hazardous? Yes Xere there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section	be involved in litight be hazardous? ting limits to be m	Iltigation? If ye S? S? Yes See met on the received.	es, a surcharge v X No equested analysis	vill apply	☐ Yes please prov	ovide		Ž.	Rainfall 6,44 7/29/18	O. £	7 +	31/18	•					
Project Name/Number	☐ Yes Number	02	Sample Collector's Name	Collect	or's Nar	J. D.	Σ	MATRIX						MINICATE ANALYSIS BEGINS				
NPDES/15-3069													7	200 P	ر در الراح 			
Results Requested	discourant of the state of the	Billing In	Billing Instructions	# and 1	# and Type of Containers	ntainers	Aq		С	Feca		Tota						
]	1-2 Day (100% Surcharge)			H2S			ueous		hloride	l Colifo	osphoru nd Grea	TSS I Nitrog						
Lab Use Only Sample	Sample Identification	Date/Ti	Date/Time Sampled				3					en						
16071801-00  Upstream		1130/18	4 1:38pm	7			×		×	×	×	×						
Downstream	am	7/30/19	- 1	2 2			×		×	×	×	×						
Relinqu	Relinquished By			Date/Tim	- ime													
M English M	110		18/1	1/2	DC: C	3			veceived by	an Di			1		Date/Time	ıme		1
11 Then			7/20		12.2	22			12	1			1	7,0			3	
									<i>†</i>	<b>X</b>			1	120	   	2011 1205	×	
																		T
The individual signing this agreement on behalf of the client, acknowledges that	reement on behalf	f of the clien	ıt, acknowledges	that he/s	she has re	ad and un	derstands	he/she has read and understands the terms and conditions of this	and cond	tions of t	sic		Bottle	BottleOrder	ACANA	3.50	ş	1

agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.





November 09, 2018

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

FAX:

**RE:** NPDES/15-3069

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,

Marvin L. Darling

Project Manager

(618)344-1004 ex 41

mdarling@teklabinc.com

Mowin L. Darling II





# **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



#### **Definitions**

http://www.teklabinc.com/

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
- C RL shown is a Client Requested Quantitation Limit
- H Holding times exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
  - S Spike Recovery outside recovery limits
- X Value exceeds Maximum Contaminant Level

- B Analyte detected in associated Method Blank
- E Value above quantitation range
- I Associated internal standard was outside method criteria
- M Manual Integration used to determine area response
- R RPD outside accepted recovery limits
- T TIC(Tentatively identified compound)



### **Case Narrative**

http://www.teklabinc.com/

Work Order: 18110024

Report Date: 09-Nov-2018

Client: RJN Group Client Project: NPDES/15-3069

Cooler Receipt Temp: 7.22 °C

#### Locations

	Collinsville		Springfield		Kansas City
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com
	Collinsville Air		Chicago		
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.		
	Collinsville, IL 62234-7425		Downers Grove, IL 60515		
Phone	(618) 344-1004	Phone	(630) 324-6855		
Fax	(618) 344-1005	Fax			
Email	EHurley@teklabinc.com	Email	arenner@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



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 22NI	D ED. 9222 D MEMBR	ANE 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 R	2.0						
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
<b>STANDARD METHODS 2540</b>	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



http://www.teklabinc.com/

Client: RJN Group Work Order: 18110024

Client Project: NPDES/15-3069 Report Date: 09-Nov-2018

Lab ID: 18110024-002 Client Sample ID: Downstream

Matrix: AQUEOUS Collection Date: 11/01/2018 10:47

Analyses	Certification	RL Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 22ND	D ED. 9222 D MEMBR	ANE 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 R	2.0						
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
<b>STANDARD METHODS 2540</b>	D 1997						
Total Suspended Solids	NELAP	6	128	mg/L	1	11/02/2018 13:30	R254217
<b>STANDARD METHODS 4500</b>	-CL E (TOTAL) 1997						
Chloride	NELAP	5	50	mg/L	1	11/07/2018 17:26	R254454



Water - pH acceptable upon receipt?

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

### **Receiving Check List**

http://www.teklabinc.com/

Work Order: 18110024 Client: RJN Group Client Project: NPDES/15-3069 Report Date: 09-Nov-2018 Carrier: Employee Received By: BV Elizabeth a Hurley Completed by: Marin L. Darling II Reviewed by: On: 01-Nov-2018 01-Nov-2018 Marvin L. Darling Elizabeth A. Hurley Extra pages included 0 Pages to follow: Chain of custody Shipping container/cooler in good condition? Yes 🗸 No Not Present Temp °C 7.22 Type of thermal preservation? Ice 🗹 Blue Ice None Dry Ice **V** No 🗀 Chain of custody present? Yes **V** Chain of custody signed when relinquished and received? Yes No L **V** Chain of custody agrees with sample labels? No 🗔 Yes **V** Samples in proper container/bottle? Yes No 🗀 **V** Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes ~ No **V** No 🗌 All samples received within holding time? Yes NA 🗸 Field \_ Lab 🗌 Reported field parameters measured: Yes 🗸 No 🗌 Container/Temp Blank temperature in compliance? 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 🗸 No TOX containers Water - TOX containers have zero headspace? Yes No 🗌

Yes 🗹

Yes

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

No 🗌

No 🗌

NA 🗸

## CHAIN OF CUSTODY pg. of Work order # 18110024

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

Client:	RJN Group								Sa	amp	les o	n: )	dic	E	<b>E</b>	SLUE	ICE	₩ N	O ICE		1.26	λ°c				
Address:	2000 South 8th St	•									rved									<b>FOR</b>				<u>(</u>		
City / State / Zi	St. Louis, MO 63	104							La	ab N	otes			당하다. 바로,	'n	EK	" '	ቖ							error Filipina	
Contact: Jenr	nifer Gerwitz		Phone	: (	314)	588-9	764																			
E-Mail: jgen	vitz@rjnmail.com		Fax:	_					<u></u>	iont	Con	omo	nte		* 2* * / 2			27 - 5 , 5 3	e e a filología		AND THE RESERVE		<u> </u>		***************************************	
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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:

46245







801 East State Street, O'Fallon, IL 62269-1579

1/3/2018	Picked up culverts from St. Clair County Highway Department for stock.
1/22/2018	All culverts storm drains and drainage areas check and cleared as needed.
1/24/2018	Drainage culverts opened and cleared on Weil Rd.
1/30/2018	Cut brush, vegetation and cleaned concrete culvert ends on Quarry Rd.
1/31/2018	Continued maintenance work on Quarry Rd.
2/1/2018	Cut brush and vegetation on Haury Rd.
2/2/2018	Continued maintenance on Haury Rd.
2/12/2018	All drainage areas checked and obstructions removed.
2/15/2018	All Township Road District roads checked for drainage issues Debris and waste was removed from drainage areas and culvert ends.
2/20/2018	All Township Road District roads checked. Debris and waste cleared from culvert ends and storm drains.
2/22/2018	Culverts cleared and debris removed Township wide.
2/27/2018	Ditching operations performed on County Line Rd. and Bowler Rd. Barricades removed and road opened at Old Lebanon-Troy Rd.
2/28/2018	Ditched operations performed on Bethel, Simmons and Witte Roads. Cleaned culverts and removed trash from same.
3/1/2018	Ditching operations performed on Witte, Bowler, Haury and Mission Hill Roads. Cleaned culverts on same.
3/2/2018	Ditching operations performed on Hagemann Rd. and Oak Hill School Rd. Cleaned culverts and removed trash from same.

3/5/2018	Cleaned various culverts and checked roads for debris.
3/8/2018	Ditching operations performed on Oak Hill School, N. Rieder and Quarry Roads. Cleaned culverts on same.
3/9/2018	Ditching operations performed on Borchers Ln.
3/26/2018	Cleaned various storm drains and culverts Township wide.
3/27/2018 3/28/2018	Cleaned various culverts Township wide. Installed barricades and closed both ends of Old Lebanon Troy Road at Silver Creek due to high water. Crews cleaned various culverts and storm drains Township wide.
3/29/2018	All culverts and drainage areas Township wide checked after heavy rains.
4/1/2018	Reopened Old Lebanon Troy Rd. after water receded.
4/3/2018	Cleaned culverts and storm drains Township wide.
4/4/2018	Closed Old Lebanon Troy Rd. due to high water.
4/5/2018	Reestablished roadside ditch at 8619 Oak Hill School Rd. Extended driveway culvert on Richwood School Rd.
4/6/2018	Cut culverts for installation.
4/9/2018	Hauled culverts to Bowler Rd. for installation. Checked Township roads and picked up trash.
4/10/2018	Ditching operations began on Simmons, Witte, Bowler, Heck and Haury Roads. Cleaned culverts and removed trash on same.
4/11/2018	Installed 12" x 30' and 12" x 20' driveway culverts on Bowler Rd.
4/12/2018	Ditching operations took place at 8619 Oak Hill School Rd. Added driveway culvert on Richwood School Rd.
4/17/2018	Ditching operations took place on Bowler Rd.
4/18/2018	Ditching operations continued on Bowler Rd.
4/19/2018	Conducted site restoration on Bowler Rd. from ditching operations installed rip rap in washed out areas on Haury Rd.
	3/8/2018 3/9/2018 3/26/2018 3/27/2018 3/28/2018  3/29/2018  4/1/2018 4/3/2018 4/4/2018 4/5/2018 4/6/2018 4/9/2018  4/10/2018 4/11/2018 4/11/2018 4/11/2018 4/11/2018 4/11/2018 4/11/2018

4/20/2018	Ditching operations continued on Hagemann, Oak Hill School, N. Rieder and Widicus Roads.
4/23/2018	Checked Township roads district wide.
4/26/2018	Installed cold patch on culvert areas at Widicus, Old Lebanon Troy and Witte Roads.
5/2/2018	Rip rock added to banks of drainage areas on Oak Hill School N. Rieder and Bowler Roads.
5/3/2018	Rip rock added to drainage washout areas on Hagemann Rd.
5/4/2018	$12^{\prime\prime}$ x $30^{\prime}$ driveway entrance culvert installed on 9201 Old Lebanon Troy Rd. $15^{\prime\prime}$ x $30^{\prime}$ field entrance culvert installed at 11201 Richwood School Rd.
5/7/2018	Ditching operations along Old Lebanon Troy Rd. to 9201 Old Lebanon Troy Rd.
5/18/2018	Cleaned culverts and drainage areas Road District wide after storm event.
5/23/2018	Repaired leaking catch basins on Windy Hill and Bernhardt Roads.
5/30/2018	Installed rip rap rock in washout drainage areas on Richwood School Rd.
6/20/2018	Cleared limbs and deadwood from drainage area underneath bridge at Quarry Rd.
7/18/2018	Applied cold patch on culverts on Witte and Weil Roads.
7/30/2018	Crosscut roadway at 2139 Bowler Rd. for culvert replacement.
8/2/2018	Picked up culverts from St. Clair County.
8/3/2018	installed new 12" x 48' driveway entrance culvert at new residence on Bowler Rd.
8/6/2018	Installed grade 8 rock on new culvert on Bowler Rd.
8/7/2018	Cleaned culverts along Hagemann Rd.
8/21/2018	Cleaned various culverts and storm drains Township wide.
8/24/2018	Cleaned culverts and stormwater drains Township wide.

8/29/2018	Cleaned culverts and storm drains Township wide.
8/30/2018	Installed 10' x 30" field culvert extension on Hagemann Rd.
9/8/2018	Closed Old Lebanon Troy Rd. due to high water.
9/10/2018	Cleaned culverts Township wide. Filled sinkhole on N. Rieder Rd. Reopened Old Lebanon Troy Rd.
9/11/2018	Assisted LW Contractors with the replacement of a 44" x 56' cross-cut culvert at 2039 Bowler Rd.
9/12/2018	Assisted LW Contractors with the replacement of a 24" x 40' cross-cut culvert at 2100 Bowler Rd. Installed concrete at culvert ends. Cleaned various culverts. Cut up and removed tree limbs on Bernhardt and Mission Hill Roads.
9/14/2018	Cleaned culverts and storm drains Township wide.
9/21/2018	Installed Grade 8 rock on new installed culverts on Bowler Rd. Seeded grass on same. Cleaned various culverts Township wide
10/10/2018	Conducted potholing on N. Rieder Rd. for utilities to replace culvert. Hauled culverts to same.
10/11/2018	Replaced culvert at 10458 N. Rieder Rd.
10/17/2018	Installed rock on cross culvert at 10458 N. Rieder Rd.
10/29/2018	Ditching operations began on Old Lebanon Troy, Oak Hill School, N. Rieder and Hagemann Roads. Cleaned culverts on same.
10/30/2018	Installed 30" x 30' culvert at Township garage for future construction access. Ditching operations took place on Hagemann, Albers and Bowler Roads. Culverts cleaned on same.
10/31/2018	Cleaned culverts and storm drains throughout Township.
11/2/2018	Ditching operations took place on Simmons and Bowler Roads.
11/5/2018	Cleaned storm drains Township wide.
11/6/2018	Installed Grade 8 rock by mailboxes and field entrances on Hagemann and Albers Roads.

11/7/2018	Continued installing Grade 8 rock by mailboxes and field entrances on Hagemann Rd.
11/9/2018	Installed Grade 8 rock by mailboxes and field entrances on north end of Bowler Rd. Hauled 26 ½ tons of Grade 8 rock from quarry.
11/13/2018	Installed Grade 8 rock by mailboxes and field entrances on N. Rieder and Bowler Roads.
11/20/2018	Cleaned drains and reinstalled sod on shoulder of Charles Trail.
11/21/2018	Installed Grade 8 rock by mailboxes.
11/29/2018	Cleaned storm drains Township wide.
12/3/2018	Cleaned storm drains and culverts Township wide.
12/4/2018	Continued cleaning storm drains and culverts Township wide.
12/12/2018	Installed 40' x 15" driveway culvert on Richwood School Rd.
12/19/2018	Cleaned storm drains along Seven Hills Rd., Borchers Ln. and in Sunny Hills Lakes subdivision.