

WASTEWATER TREATMENT SYSTEM DIAGNOSTIC INSPECTION REPORT

Purpose: NPDES Diagnostic Inspection

Facility: Gabriel Performance Products
725 State Road
Ashtabula, Ohio 44004

NPDES Permit Number: OH-0029149

Date of Inspection: July 13, 2021

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LIST OF ATTACHMENTS

Attachment A: Facility maps and diagrams

Attachment B: Permit effluent limit exceedances from August 2016 to May 2021

Attachment C: Documents provided by Gabriel Performance Products

Attachment D: Photo Log

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I. INTRODUCTION

On July 13, 2021, I inspected the Gabriel Performance Products facility in Ashtabula, Ohio (“Facility”) (see Facility Overview Plan in Attachment A). The main purpose of the inspection was to diagnose potential causes of chronic permit effluent limit exceedances for total suspended solids (“TSS”), total residual chlorine (“TRC”), biochemical oxygen demand (“BOD”), and *E. coli*. I assessed the Facility’s compliance with its National Pollutant Discharge Elimination System (“NPDES”) permit and the Clean Water Act, with a focus on monitoring and sampling issues. The inspection consisted of the following major activities:

- Inspection opening conference;
- Interview/discussions with representatives from the Facility including a description of facility operations and maintenance (“O&M”), results of Discharge Monitoring Report (DMR) review, potential causes of effluent limit exceedances, and review of self-monitoring and laboratory activities;
- Physical inspection of the Facility, including the in-house laboratory; and
- Closing conference.

This report summarizes the results of the inspection.

II. BACKGROUND

The Facility is authorized to discharge under NPDES permit OH-0029149 (“permit”). Gabriel Performance Products (“GPP”) is responsible for the Facility’s operation and compliance with NPDES permit requirements. GPP is responsible for conducting monitoring activities and reporting monitoring results to the Ohio Environmental Protection Agency (“Ohio EPA”).

According to the NPDES Permit Fact Sheet (Ohio EPA, 2016), Gabriel Performance Products manufactures limited runs of specialty organic chemicals. The Facility’s production operations are classified under Standard Industrial Classification (“SIC”) Code 2869, “Industrial Organic Chemicals, Not Elsewhere Classified.” Process wastewaters from these operations are regulated under the Federal Effluent Limitation Guidelines (“ELGs”) for existing point sources listed in Title 40 of the Code of Federal Regulations (“40 CFR”), Part 414 – “Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF)”. Subparts H and J apply to this facility based on the materials produced and the type of wastewater treatment employed. Subpart H (40 CFR 414.80-83) - “Specialty Organic Chemicals” provides limits for BOD, TSS, and pH. Subpart J (40 CFR 414.100-101) - “Direct Discharge Point Sources That Do Not Use End of Pipe Biological Treatment” lists the applicable organic chemical limits.

All process wastewater, cooling water, boiler blowdown, collected storm water and groundwater, and sanitary wastewater at Gabriel Performance Products are commingled prior to treatment and discharge. The discharge from Internal Monitoring Station 601 is comprised of treated sanitary effluent. The sanitary wastewater is pretreated by an extended aeration activated sludge package plant, clarification, slow sand filtration, and chlorination prior to commingling with other wastewater sources. The commingling wastewater is treated by neutralization (secondary and final pH treatment), equalization and settling, multimedia filtration, and carbon adsorption prior to discharge via Outfall 001 (see Permit Fact Sheet water balance diagram in Attachment A).

Prior to 2010, Gabriel Performance Products had a permitted design flow of 0.220 MGD. Approximately 39 percent of this flow, 0.086 MGD, was considered process wastewater. Subsequent to a capacity expansion of its wastewater treatment system, Gabriel Performance Products requested an increase in its permitted flow rate in 2010. The requested increase to 0.320 MGD was designed to facilitate greater flexibility in the operation of the batch treatment system.

GPP is subject to a U.S. EPA Administrative Order on Consent (“AOC”), dated June 22, 2021, to address chronic permit effluent limit exceedances at the Facility. The AOC requires GPP to submit, by August 22, 2021, a corrective action plan to address chronic effluent limit exceedances. The Facility reported, via electronic discharge monitoring reports (“DMRs”) submitted to Ohio EPA, 77 permit effluent limit exceedances from August 2016 to May 2021 (Attachment B).

III. INSPECTION ACTIVITY SUMMARY

III. A. Opening Conference

I arrived at the Facility, along with U.S. EPA Chemist Ken Gunter on July 13, 2021 at 8:45 a.m.. We met Kelly Mitchell at the security booth and escorted into an office building. After signing the visitor log, we were brought to a conference room and introduced to Heather Myers and Tyce Workman. I presented my U.S. EPA Inspector credentials to Heather Myers and Tyce Workman. Kenna Coltman and Brianne Workman joined us a few minutes later and we started the opening conference with formal introductions at 9:15 a.m.. I started by going over the intended scope of the inspection. I asked if there were any concerns regarding confidential business information (“CBI”) and specifically with respect to photographs. I offered to alert the GPP representatives prior to taking any photographs to make sure images did not capture any potential CBI. Kenna Coltman agreed. We then began the Interview portion of the inspection.

III. B. Interview

I started the interview portion of the inspection by asking for an overview of GPP’s activities at this site. Kenna Coltman said the Facility produces specialty chemicals including “GPM”, a mercaptan-based epoxy, along with other custom manufactured products. GPP manufactures products in five work areas across the Facility. However, only Area 1, the GPM production area, is currently active. Kenna Coltman added that all process wastewater is shipped off site, except for some plant clean-up wash water. Kelly Mitchell mentioned the names of companies that accept Facility process waste, including Buckeye Brine, Interstate Recovery, and Enviroclean. Kelly Mitchell also described the on-site sanitary sewage treatment system as a package plant (see Sanitary System Detail Figure in Attachment A), including an aerator, clarifier, sand beds, and a chlorine feed system that disinfects effluent prior to discharge via internal monitoring station (outfall 601) to the on-site equalization ponds (2). Currently, one of the ponds needs a new liner and is offline.

Kelly Mitchell described the system of groundwater interceptor trenches across the Facility, designed to collect groundwater contaminated with chlorinated solvents and volatile organic compounds. The groundwater is pumped out of the trenches and treated with an air stripper before going to the ponds for equalization/settling, then to pH treatment, filtration, and carbon treatment prior to discharge out of outfall 001.

Next, I asked about Facility staffing related to wastewater management, and operations and maintenance (“O&M”). Kelly Mitchell is working on operator training certification and mentioned that dedicated utility operators do rounds once per shift and complete an effluent log checklist. I requested a copy of the checklist which was provided via email on July 19, 2021 (Attachment C). Kenna Coltman said she has Ohio class 3 operator certification and mentioned that Kelly Mitchell does all of the NPDES sampling, other than the in-house monitoring (e.g., pH and TRC). Maintenance crews are responsible for O&M of the wastewater treatment systems. Kenna Coltman added that a consultant, ATC, does the O&M for the groundwater infiltration trenches and air stripper.

At this point in the interview we started a discussion regarding potential sources of effluent limit violations at outfall 601 (sanitary sewer treatment system discharge). Kelly Mitchell said that TSS issues may be due to unknown residue (perhaps deteriorating vault material) and the use of chlorine tablets for disinfection, and explained that the chlorine tablets appear to break apart in the tablet holders (see tablet holder in Photograph GPPI0006.jpg), potentially creating solids in the effluent. In addition, the procedure for collecting samples at outfall 601 changed, now requiring the use of a stainless steel sample jug instead of a plastic jug, and collection of flowing samples as of June 2021. Kenna Coltman added that the recent *E.coli* exceedance (May 2021) may be attributed to the past practice of sampling stagnant effluent at 601, and hoped the change to collection of flowing effluent would address the issue. We also discussed whether there was sufficient contact time for the effluent moving through the chlorine tablets. Kenna Coltman added that a consultant (Arcadis) was looking into the chlorine contact time issue.

We shifted the discussion to potential sources of effluent limit violations at outfall 001. I asked for a list of potential water sources coming into the ponds prior to treatment and eventual discharge from outfall 001. Kenna Coltman listed treated flows from the sanitary system, all stormwater, treated groundwater, boiler/steam condensate, cooling tower blowdown, and ASHCO water (untreated lake water used for cooling water and fire suppression). We started the pollutant-specific discussion with TRC. Heather Myers mentioned that sampling error was first believed to be the source of TRC effluent limit exceedances. Now they are looking into potential sources of instrument interference. Kenna Coltman and Heather Myers then discussed the ongoing interference monitoring study and provided a copy of the detailed monitoring study spreadsheet indicating the sampling frequencies, parameters, and monitoring locations (Attachment C). Heather Myers also mentioned that they have had issues with Hach Pocket Colorimeter method detection limits (“MDLs”) and that they are looking into the use of a Hach DR3900 benchtop spectrophotometer to potentially improve MDLs.

Heather Myers noted elevated levels of TRC in the ponds the day prior to the inspection and suspected the cause may be related to cleaning crews recently using chlorinated city water for general cleaning.

I asked about treatment processes and daily discharge rates for outfall 001. Kenna Coltman said batch discharges occur about 10 times per month and range from 0.25 to 0.3 MGD. Outfall 001 discharges are controlled by pH levels in the two equalization ponds. If pH is greater than 8.5, then further treatment and batch discharge can occur. If pH is below 8.5, pH adjustment (via HCL addition) and recirculation occurs until pH is greater than 8.5. I recommended they

investigate the potential contribution of HCL addition to elevated TRC concentrations. Kenna Coltman continued describing treatment after pH adjustment, including multimedia filtration (2 filters) and carbon treatment (2 carbon beds in series). After carbon treatment, effluent discharges to outfall 001, and sludge is collected for off-site disposal (see Permit Fact Sheet water balance diagram in Attachment A). Kelly Mitchell added that they now monitor TRC at the outfall and can keep effluent in recirculation, rather than discharge, if TRC is elevated.

I asked if GPP considered any O&M-related causes of effluent limit exceedances, such as excessive debris coating the inside of composite sampler tubing or timing of carbon bed replacement. Kelly Mitchell described the timing of recent carbon bed replacements and mentioned that the multimedia beds were changed out in August 2020. She also stated that the multimedia beds had the wrong type of media. Kenna Coltman said TSS issues may be a result of insufficient backwashing of carbon beds. I recommended they follow manufacturers recommendations for backwashing to minimize preferential channeling within the carbon beds. I also suggested GPP consider testing TRC concentrations before and after each carbon bed and see if there are any relationships between carbon bed change outs and TRC concentrations over the last couple years.

At this point we agreed to end the interview and break for lunch. We agreed to return around 1 p.m. and start the physical inspection of the wastewater treatment systems.

III. C. Physical Facility Inspection

We returned to the Facility at 12:50 p.m. and began the physical inspection of the Facility at 1:10 p.m.. The physical inspection is summarized below. Photographs referenced below are included in the Photo Log (Attachment D).

Sanitary Sewage Treatment System (internal outfall 601): Kenna Coltman and Kelly Mitchell led the group to the sanitary sewage treatment system, located in front of the office building. The sanitary treatment system includes a septic tank, small package plant (aeration and clarifier), sand filter, and a disinfection (chlorination) station (see Sanitary System Detail diagram in Attachment A). Upon our arrival, Kelly Mitchell opened the vault doors to the package plant (see Photographs GPPI0001.jpg and GPPI0002.jpg), and pointed out the aeration chamber and clarifier. The package plant appeared to be in poor condition. Kenna Coltman said the system was installed in the 1960s. I did not observe bubbling in the aeration chamber and it was clear that the system was not working properly. The surface of the clarifier also appeared to be covered by a thick layer of dark sludge. Kenna Coltman remarked that the issue may be due to a stuck aeration valve. A maintenance crew arrived and was able to fix the issue and the aeration system appeared to be working. I was concerned about the thick dark sludge in the clarifier and asked if it was possible to measure sludge depth in the clarifier. Kelly Mitchell grabbed a sample pole and dipped it into the clarifier to the bottom. There appeared to be a few feet of liquid in the clarifier with a thick layer of dark sludge on top. The package plant clarifier is designed to skim floating material. I observed an inlet just above the level of the floating sludge and asked if this was an inlet designed to capture floating sludge. Jose Rivera, one of GPP's maintenance technicians, confirmed that the inlet collected floating sludge, but none of the GPP representatives present knew where the inlet returned any skimmed sludge.

We followed the treatment train to the pump vault (Photograph GPPI0003.jpg) and sand filter (Photograph GPPI0004.jpg). I observed some plant growth on top of the sand bed but since the system was not in operation I could not tell if the flow was distributed across the filter or if plant growth was excessive enough to cause preferential channeling at the surface of the sand bed.

Next, we observed the chlorination station where GPP uses chlorine tablets to disinfect the effluent from the sand filter. This is also the location where GPP collects permit compliance samples required for internal monitoring station 601. Kelly Mitchell opened the vault cover and I observed the outlet from the sand filter, the inlet to the pipe conveying disinfected effluent to the equalization ponds, and the two metal chlorine tablet feeders (Photograph GPPI0005.jpg; note the lighting was insufficient to capture the influent outlet and effluent inlet). Based on my observation of flow through the tablet feeders, it seemed unlikely that there was sufficient contact time between effluent and chlorine tablets to fully disinfect the wastewater. Kelly Mitchell stated that she often sees debris, specifically white particles, in the effluent in the chlorine station, adding that the debris could be pieces of the vault walls or pieces of chlorine tablets. I asked to see a sample of the effluent after the chlorine tablets feeders. Kelly Mitchell pulled up a sample of the effluent and I observed small white particles which appeared to be chlorine tablet particles (see Photograph GPPI0006.jpg; showing the vault, and chlorine tablet feeder. The white particles are difficult to see in the photograph). I recommended using a microscope to examine any small particles found in the chlorine tablet feeder and the effluent channel, to help assess the source of the particles.

North Rain Sump: With the physical inspection of the sanitary sewage treatment system complete, we walked to the North Rain Sump which, according to Kenna Coltman, collects all stormwater from the north end of the Facility (Photograph GPPI0007.jpg). From here, stormwater is conveyed to the equalization ponds.

Outfall 001 Treatment System: We began the inspection of the outfall 001 wastewater treatment system at the Effluent Building (Photograph GPPI0008.jpg). The Effluent Building houses two multimedia filters (Photograph GPPI0009.jpg), two carbon beds (Photograph GPPI0010.jpg), a low-profile air stripper (center of Photograph GPPI0008.jpg, behind the Bisco control panel), and an effluent composite sampler. I observed the tubing bringing the effluent into the composite sampler and noticed heavy staining on the inside walls of the tube (Photograph GPPI0011.jpg). I mentioned that a dirty sampling tubing can introduce contaminants and affect sample results. I asked if composite samples are collected as flow-based samples, as required by the permit. Kenna Coltman said she didn't think the composite sampler was set up for flow-based samples. [On July 19, 2021, Kelly Mitchell sent an email confirming that the composite sampler was set up for flow-based sampling and provided a print-out of the composite sampler input parameters for flow-based sample collection]. From the Effluent Building, we walked to the two lined equalization ponds. The north pond was out of service at the time of the inspection. Kenna Coltman said they were waiting for final approvals to get the north pond back in service. I noted that the south pond was partially covered by algae (Photograph GPPI0012.jpg). Kenna Coltman said the inlet for the pond was toward the bottom of the pond.

We completed the physical inspection of the wastewater treatment systems at 2:25 p.m. and returned to the office building to conduct a review of the laboratory.

Laboratory: In the laboratory we met Kari Demorest, laboratory technician. I asked if we could see a demonstration of chlorine analysis using the Hach Pocket Colorimeter test kit. Kari Demorest properly performed the analysis using tap water and provided a result of 1.78 mg/l. We also observed the sample log for the Hach Pocket Colorimeter and associated calibration standards. Ken Gunter asked if the laboratory conducts MDL and DMR QA studies. Heather Myers said they did and would provide copies. [Heather Myers provided electronic copies of MDL and DMR QA studies on July 19, 2021]. No issues were identified in the laboratory.

We concluded the physical inspection and returned to the office building to conduct the closing conference.

IV. CLOSING CONFERENCE, AREAS OF CONCERN, AND OTHER OBSERVATIONS

Ken Gunter and I returned to the office building conference room at 2:25 p.m. to conduct the closing conference. We were joined by Brianne Workman, Kenna Coltman, Heather Myers, and Kelly Mitchell.

First, I went over preliminary areas of concern, and noted that I may identify other areas of concern after further review of inspection notes and documents received as part of the inspection.

Areas of Concern

- The Facility reported, via electronic DMRs submitted to Ohio EPA, 77 permit effluent limit exceedances from August 2016 to May 2021 (Attachment B).
- Recent *E.coli* exceedance (May 2021) may be attributed to the past practice of sampling stagnant effluent at internal outfall 601.
- Operations and Maintenance Areas of Concern [noting that Permit Part III.3.A requires “[a]t all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit.”]

Sanitary Sewage Treatment System:

- o Lack of aeration in the sanitary package plant. I did not observe bubbling in the aeration chamber and it was clear that the system was not working properly. The surface of the clarifier also appeared to be covered by a thick layer of dark sludge.
- o An inlet in the package plant was designed to collect floating material but none of the GPP representatives present knew where the inlet returned any skimmed material.
- o I observed some plant growth on top of the sand bed but since the system was not in operation I could not tell if the flow was distributed across the filter or if plant growth was excessive enough to cause preferential channeling at the surface of the sand bed.
- o Contact time for the effluent moving through the chlorine tablets may be insufficient for disinfection. Potential to contribute to *E.coli* limit exceedances.

- o TSS issues may be due to observed unknown residue (perhaps deteriorating vault material) and the use of chlorine tablets for disinfection. Chlorine tablets appear to break apart in the tablet holders, potentially creating solids in the effluent.

Outfall 001 Treatment System:

- o Multimedia beds were operated with the wrong type of filter media prior to August 2020.
- o I observed the tubing bringing the effluent into the composite sampler and noticed heavy staining on the inside walls of the tube. Dirty sample tubing can introduce contaminants and affect sample results.
- o The north equalization pond was out of service at the time of the inspection.

Other Observations

- GPP representatives will explore the use of a Hach DR3900 benchtop spectrophotometer to determine if better MDLs can be achieved compared to the Hach Pocket Colorimeter.
- Outfall 001 Treatment System: Elevated TRC concentrations were measured in the equalization pond the day prior to the inspection. GPP representatives suspect the cause may be related to cleaning crews recently using chlorinated city water for general cleaning.
- Outfall 001 Treatment System: pH adjustment via HCL addition occurs until pH is greater than 8.5 in the equalization pond. Addition of HCL may contribute to elevated TRC concentrations.
- Outfall 001 Treatment System: TSS issues may be a result of insufficient backwashing of carbon beds. Manufacturer's recommendations should be followed for backwashing to minimize preferential channeling within the carbon beds. Testing TRC concentrations before and after each carbon bed may reveal relationships between carbon bed change outs and TRC concentrations.
- Sanitary sewage treatment system: Microscope examination of any small particles found in the chlorination station chlorine tablet feeder and the effluent channel may help to assess the source of the solids in effluent at outfall 601.

Next, I went over the list of documents requested during the inspection, including:

- Laboratory MDL and QA DMR studies;
- Daily Effluent Log Sheets; and
- Flow meter type

[the above documents were provided via email on July 19, 2021; see Attachment C]

Prior to concluding the closing conference, I provided an estimated timeframe for preparing an inspection report and asked if there were any questions. With no further questions, we

concluded the closing conference at 3:30 p.m. Ken Gunter and I signed out on the visitor log and departed the Facility at 3:50 p.m. on July 13, 2021.

V. DOCUMENTS RECEIVED AND REFERENCES

Documents received during the inspection (see Attachment C):

- Sanitary Septic Tank System Diagram
- General Plot of Ashtabula Plant
- Interference Study Monitoring Spreadsheet

Documents received after the inspection (see Attachment C):

- Laboratory MDL and QA DMR studies
- Daily Effluent Log Sheets
- Effluent Discharge Auto Sample Parameters

Specific resources included by reference:

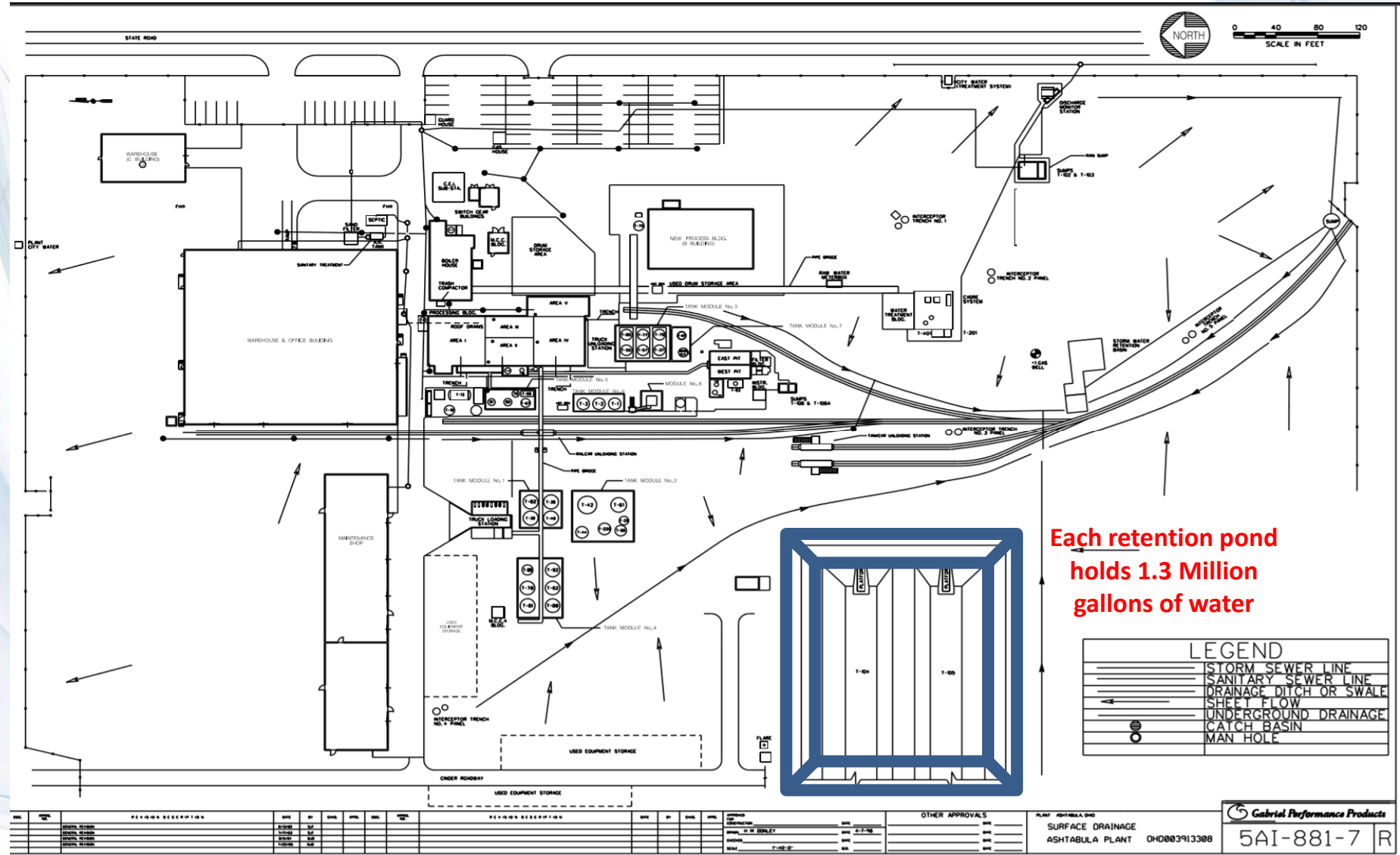
- Gabriel Performance Products NPDES Permit# OH-0029149 (Ohio ID# 3IF00002*ND); issued by Ohio EPA on April 11, 2019; expiration date April 30, 2024;
- Fact Sheet: Gabriel Performance Products NPDES Permit# OH-0029149 (Ohio ID# 3IF00002*ND), Public Notice Date – November 14, 2018.

Attachment A: Facility maps and diagrams

- Facility Overview Plan
- Sanitary Sewer System Detail Plan
- Water Balance Diagram (NPDES Permit Fact Sheet, 2018)

OVERVIEW

ALL surface water flow within the active portions of the facility ultimately ends up in the retention ponds.



Sanitary System Detail

From the Septic Tank to the Sand Filter Feed Sump the system operates by gravity. The Primary Sand Filter Dosing Pump operates on floats, with a backup pump available in case of failure.

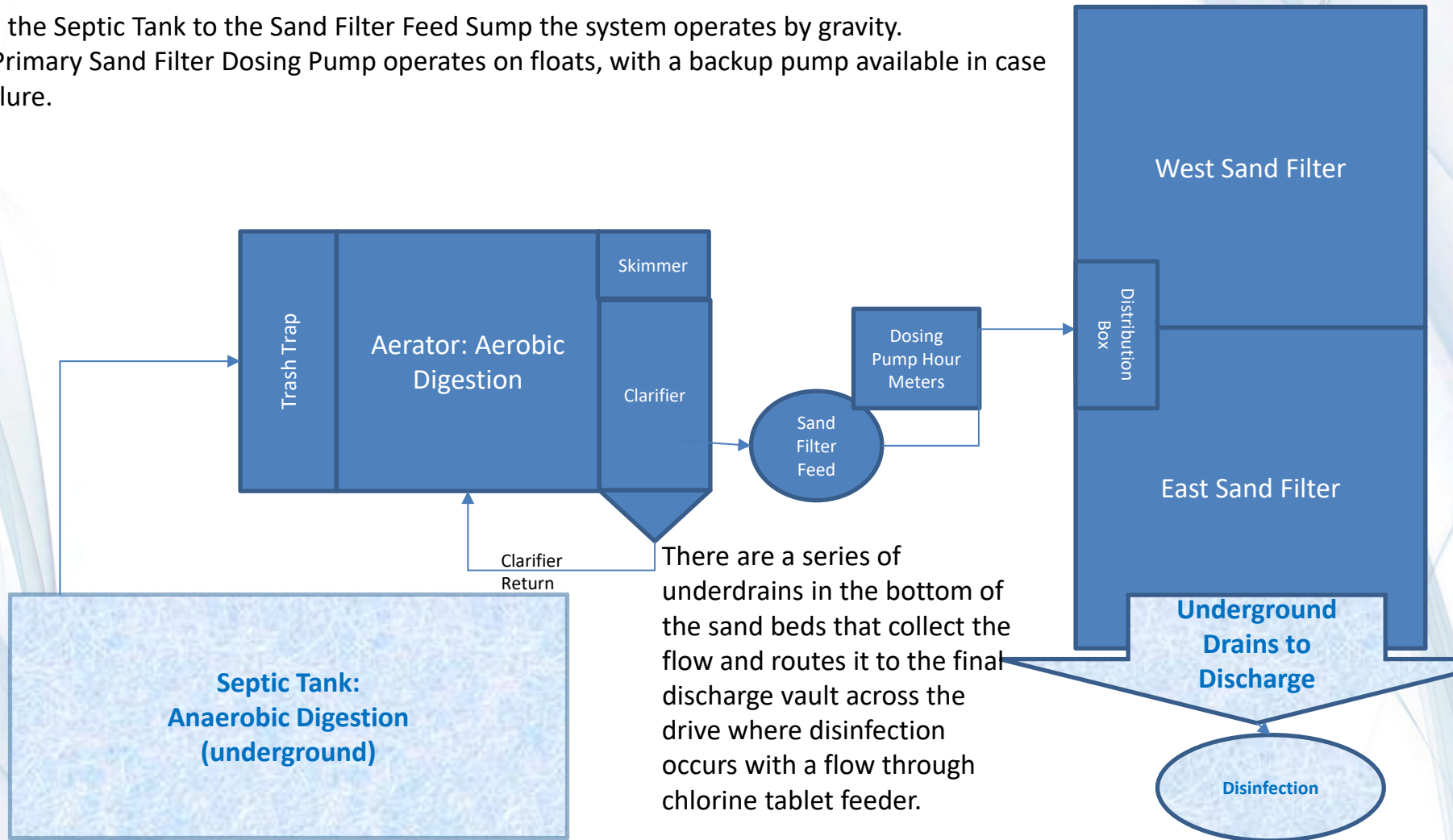
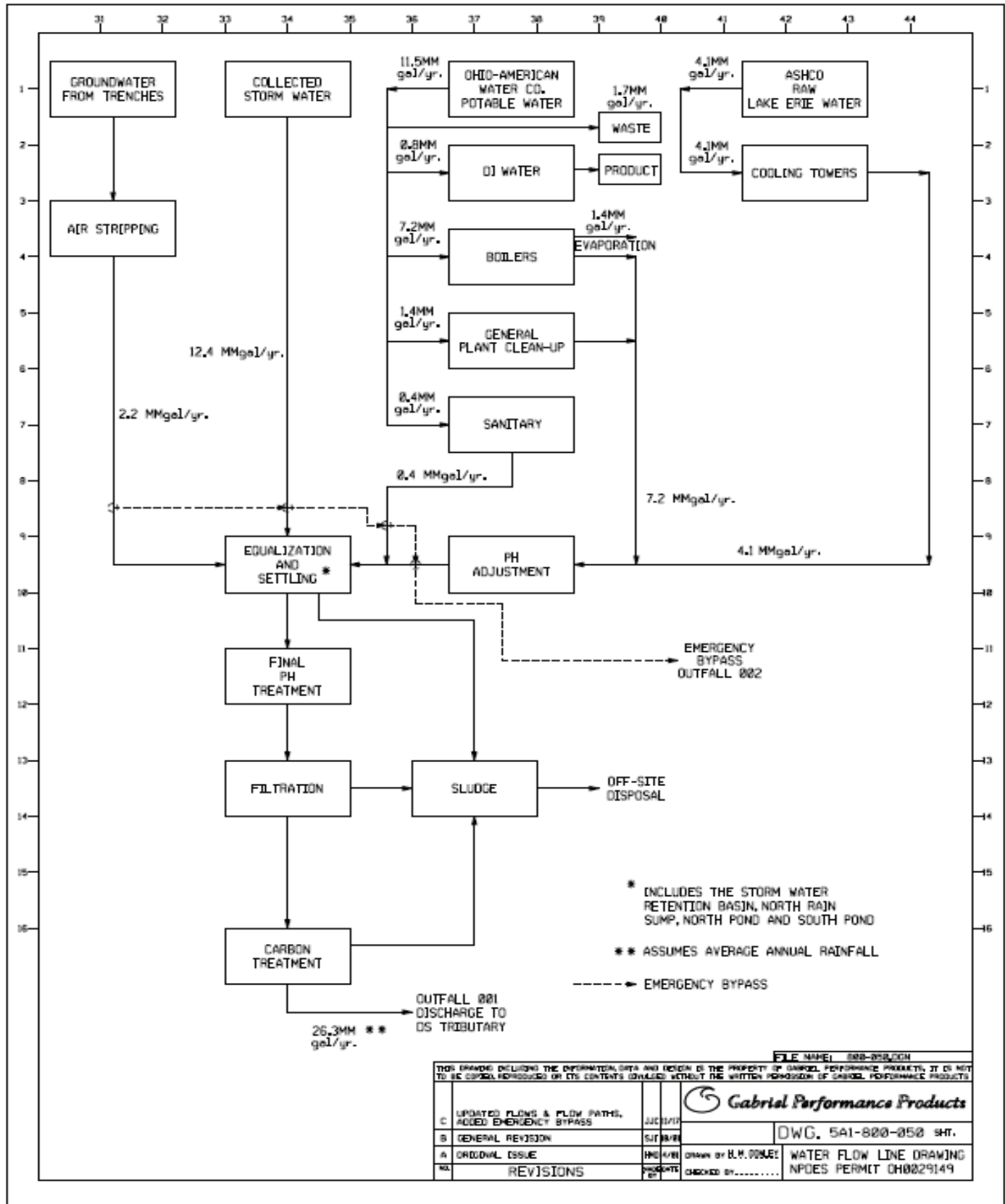


Figure 3. Water Balance Diagram



Attachment B: Permit effluent limit exceedances from August 2016 to May 2021

Effluent Limit Exceedances Report

OH0029149: GABRIEL PERFORMANCE PRODUCTS LLC, ASHTABULA, OH 44004-3934

Monitoring Period Date Range: 08/01/2016 to 05/31/2021

Monitoring Period Date	Outfall	Parameter Description	Limit Type	DMR Value	DMR Value Unit	Limit Value	Limit Value Qualifier
8/31/2016	1	Mercury, total low level	MO AVG	0.00001	kg/d	0.000008	<=
8/31/2016	1	Mercury, total low level	MO AVG	2.5E-05	mg/L	6.2E-06	<=
8/31/2016	601	Coliform, fecal MF, MFC broth, 44.5 C	DAILY MX	8400	#/100mL	2000	<=
8/31/2016	601	Coliform, fecal MF, MFC broth, 44.5 C	MO GEOMN	1137	#/100mL	1000	<=
3/31/2017	1	Zinc, total (as Zn)	DAILY MX	0.118	mg/L	0.117	<=
3/31/2017	1	Carbon tetrachloride	MO AVG	0.02	mg/L	0.019	<=
4/30/2017	1	pH	DAILY MX	9.26	SU	9	<=
5/31/2017	601	Solids, total suspended	MO AVG	37	mg/L	30	<=
6/30/2017	1	Mercury, total low level	MO AVG	7.47E-06	mg/L	6.2E-06	<=
9/30/2017	1	BOD, 5-day, 20 deg. C	MO AVG	15	kg/d	13.3	<=
10/31/2017	1	BOD, 5-day, 20 deg. C	MO AVG	15	kg/d	13.3	<=
12/31/2017	601	Solids, total suspended	DAILY MX	57	mg/L	45	<=
12/31/2017	601	Solids, total suspended	MO AVG	34	mg/L	30	<=
2/28/2018	1	Zinc, total (as Zn)	DAILY MX	0.149	mg/L	0.117	<=
2/28/2018	1	Zinc, total (as Zn)	DAILY MX	0.174	kg/d	0.142	<=
3/31/2018	1	Mercury, total low level	MO AVG	6.62E-06	mg/L	6.2E-06	<=
5/31/2018	1	Zinc, total (as Zn)	DAILY MX	0.182	mg/L	0.117	<=
5/31/2018	1	Zinc, total (as Zn)	DAILY MX	0.196	kg/d	0.142	<=
6/30/2018	1	Zinc, total (as Zn)	DAILY MX	0.217	kg/d	0.142	<=
6/30/2018	1	Zinc, total (as Zn)	DAILY MX	0.206	mg/L	0.117	<=
10/31/2018	601	Coliform, fecal MF, MFC broth, 44.5 C	MO GEOMN		#/100mL	1000	<=
10/31/2018	601	Coliform, fecal MF, MFC broth, 44.5 C	DAILY MX		#/100mL	2000	<=
11/30/2018	1	Zinc, total (as Zn)	DAILY MX	1.07	mg/L	0.117	<=
11/30/2018	1	Zinc, total (as Zn)	DAILY MX	1.025	kg/d	0.142	<=
1/31/2019	1	pH	DAILY MX	9.5	SU	9	<=
3/31/2019	1	Zinc, total (as Zn)	DAILY MX	0.155	kg/d	0.142	<=
3/31/2019	1	Zinc, total (as Zn)	DAILY MX	0.155	mg/L	0.117	<=
4/30/2019	1	Zinc, total (as Zn)	DAILY MX	0.833	mg/L	0.117	<=
4/30/2019	1	Zinc, total (as Zn)	DAILY MX	0.945	kg/d	0.142	<=
8/31/2019	1	Zinc, total (as Zn)	DAILY MX	0.444	mg/L	0.117	<=
8/31/2019	1	Zinc, total (as Zn)	DAILY MX	0.374	kg/d	0.142	<=
8/31/2019	601	Solids, total suspended	MO AVG	33	mg/L	30	<=
8/31/2019	601	Solids, total suspended	DAILY MX	85	mg/L	45	<=
9/30/2019	1	Zinc, total (as Zn)	DAILY MX	0.143	kg/d	0.142	<=
9/30/2019	1	Zinc, total (as Zn)	DAILY MX	0.155	mg/L	0.117	<=
10/31/2019	1	BOD, 5-day, 20 deg. C	MO AVG	26	mg/L	11	<=
10/31/2019	1	BOD, 5-day, 20 deg. C	MO AVG	24	kg/d	13.3	<=
10/31/2019	1	Zinc, total (as Zn)	DAILY MX	0.213	kg/d	0.142	<=
10/31/2019	1	Zinc, total (as Zn)	DAILY MX	0.228	mg/L	0.117	<=

Effluent Limit Exceedances Report

OH0029149: GABRIEL PERFORMANCE PRODUCTS LLC, ASHTABULA, OH 44004-3934

Monitoring Period Date Range: 08/01/2016 to 05/31/2021

Monitoring Period Date	Outfall	Parameter Description	Limit Type	DMR Value	DMR Value Unit	Limit Value	Limit Value Qualifier
10/31/2019	601	Solids, total suspended	MO AVG	35	mg/L	30	<=
11/30/2019	1	Zinc, total (as Zn)	DAILY MX	0.198	mg/L	0.117	<=
12/31/2019	1	Zinc, total (as Zn)	DAILY MX	0.241	kg/d	0.142	<=
12/31/2019	1	Zinc, total (as Zn)	DAILY MX	0.222	mg/L	0.117	<=
1/31/2020	1	Zinc, total (as Zn)	DAILY MX	0.172	mg/L	0.117	<=
1/31/2020	1	Zinc, total (as Zn)	DAILY MX	0.245	kg/d	0.142	<=
2/29/2020	1	BOD, 5-day, 20 deg. C	MO AVG	13.4	mg/L	11	<=
2/29/2020	1	Solids, total suspended	MO AVG	21	mg/L	14.3	<=
2/29/2020	1	Solids, total suspended	MO AVG	19	kg/d	17.5	<=
5/31/2020	1	Chlorine, total residual	MO AVG	0.0289	mg/L	0.011	<=
5/31/2020	1	Chlorine, total residual	DAILY MX	0.185	mg/L	0.019	<=
5/31/2020	601	E. coli, MTEC-MF	MO GEOMN	3449.88	MPN/100n	126	<=
5/31/2020	601	E. coli, MTEC-MF	WK GEOMN	141000	MPN/100n	284	<=
8/31/2020	1	Chlorine, total residual	MO AVG	0.0321	mg/L	0.011	<=
8/31/2020	1	Chlorine, total residual	DAILY MX	0.0733	mg/L	0.019	<=
8/31/2020	601	E. coli, MTEC-MF	MO GEOMN	199	MPN/100n	126	<=
9/30/2020	1	Mercury, total low level	MO AVG	2.34E-05	mg/L	6.2E-06	<=
9/30/2020	1	Mercury, total low level	MO AVG	0.0000178	kg/d	0.000008	<=
10/31/2020	601	Solids, total suspended	DAILY MX	1450	mg/L	45	<=
10/31/2020	601	Solids, total suspended	MO AVG	1450	mg/L	30	<=
11/30/2020	601	Solids, total suspended	MO AVG	1450	mg/L	30	<=
11/30/2020	601	Solids, total suspended	DAILY MX	1450	mg/L	45	<=
12/31/2020	1	Chlorine, total residual	MO AVG	0.025	mg/L	0.011	<=
12/31/2020	1	Chlorine, total residual	DAILY MX	0.09	mg/L	0.019	<=
12/31/2020	601	Solids, total suspended	MO AVG	85.5	mg/L	30	<=
12/31/2020	601	Solids, total suspended	DAILY MX	162	mg/L	45	<=
1/31/2021	1	BOD, 5-day, 20 deg. C	MO AVG	20	kg/d	13.3	<=
1/31/2021	1	Solids, total suspended	MO AVG	23	kg/d	17.5	<=
1/31/2021	1	Chlorine, total residual	DAILY MX	0.067	mg/L	0.019	<=
1/31/2021	1	Chlorine, total residual	MO AVG	0.018	mg/L	0.011	<=
2/28/2021	1	BOD, 5-day, 20 deg. C	MO AVG	15	mg/L	11	<=
2/28/2021	1	BOD, 5-day, 20 deg. C	MO AVG	16	kg/d	13.3	<=
2/28/2021	601	BOD, carbonaceous, 05 day, 20 C	MO AVG	29	mg/L	25	<=
3/31/2021	1	Solids, total suspended	MO AVG	18	mg/L	14.3	<=
3/31/2021	1	Solids, total suspended	MO AVG	20	kg/d	17.5	<=
3/31/2021	1	Chlorine, total residual	MO AVG	0.037	mg/L	0.011	<=
3/31/2021	1	Chlorine, total residual	DAILY MX	0.07	mg/L	0.019	<=
5/31/2021	601	E. coli, MTEC-MF	WK GEOMN	6490	MPN/100n	284	<=

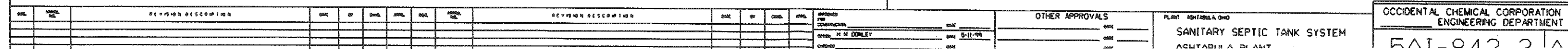
Attachment C: Documents provided by Gabriel Performance Products

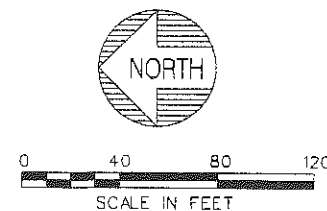
Documents received during the inspection:

- Sanitary Septic Tank System Diagram
- General Plot of Ashtabula Plant
- Interference Study Monitoring Spreadsheet

Documents received after the inspection:

- Laboratory MDL and QA DMR studies
- Daily Effluent Log Sheets
- Effluent Discharge Auto Sample Parameters





REV.	APPRO. NO.	REVISION DESCRIPTION	DATE	BY	CMD.	APPR.	REV.	APPRO. NO.	REVISION DESCRIPTION	DATE	BY	CMD.	APPR.
V		GENERAL REVISION ADDED T-93	2-4-08	WJB									
W		GENERAL REVISION ADDED T-94	7-15-09	WJB									
X		GENERAL REVISION ADDED T-95	6-13-11	WJB									
Y		GENERAL REVISION	11/15	DCJ									

APPROVED FOR CONSTRUCTION _____ DATE _____

DRAWN BY BRENNEMAN _____ DATE 1-25-98

CHECKED _____ DATE _____

SCALE 1"=40'-0" S.W. _____ DATE _____

OTHER APPROVALS _____

PLANT ASHTABULA OHIO

GENERAL PLOT PLAN OF
ASHTABULA PLANT CHD003913308

5AI-581-001Y

CWM has agreed to a 3-day turn-around				Alkalinity 3x/week for 1 month	TRC 3x/week for 1 month		Ammonia 3x/week for 1 month	Chloramine (Mono) 3x/week for 1 month	E.coli 3x/week for 1 month	Total Mn 2x/month	Dissolved Mn 2x/month	Total Chromium 2x/month	Hex Chromium 2x/month	VOC 2x/month	sVOC 2x/month	Bromide 2x/month
Date	Time	Sample Point	Sampler	CWM	QC	CWM	CWM	CWM	CWM	CWM	CWM	CWM	CWM	CWM	CWM	CWM
7-Jul	630	North Rain Sump	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	730	After air stripper	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	830	Before air stripper	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	930	West Pit	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1030	Steam Condensate	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1430	City Water	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1530	North or South Pond ¹	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1630	Before Carbon ²	Operator	X	X	X	X	X		X	X	X	X	X	X	X
8-Jul	1730	Between Carbon Beds ²	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X	X	X	X	X			
12-Jul	630	North Rain Sump	Operator	X	X	X	X	X								
	730	After air stripper	Operator	X	X	X	X	X								
	830	Before air stripper	Operator	X	X	X	X	X								
	930	West Pit	Operator	X	X	X	X	X								
	1030	Steam Condensate	Operator	X	X	X	X	X								
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X								
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X								
	1430	City Water	Operator	X	X	X	X	X								
	1530	North or South Pond ¹	Operator	X	X	X	X	X								
	1630	Before Carbon ²	Operator	X	X	X	X	X								
13-Jul	1730	Between Carbon Beds ²	Operator	X	X	X	X	X								
	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X							
		North Rain Sump	Operator	X	X	X	X	X								
	730	After air stripper	Operator	X	X	X	X	X								
	830	Before air stripper	Operator	X	X	X	X	X								
	930	West Pit	Operator	X	X	X	X	X								
	1030	Steam Condensate	Operator	X	X	X	X	X								
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X								
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X								
	1430	City Water	Operator	X	X	X	X	X								
	1530	North or South Pond ¹	Operator	X	X	X	X	X								
	1630	Before Carbon ²	Operator	X	X	X	X	X								
	1730	Between Carbon Beds ²	Operator	X	X	X	X	X								
14-Jul	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X							
		North Rain Sump	Operator	X	X	X	X	X								
	730	After air stripper	Operator	X	X	X	X	X								
	830	Before air stripper	Operator	X	X	X	X	X								
	930	West Pit	Operator	X	X	X	X	X								
	1030	Steam Condensate	Operator	X	X	X	X	X								
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X								
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X								
	1430	City Water	Operator	X	X	X	X	X								
	1530	North or South Pond ¹	Operator	X	X	X	X	X								
	1630	Before Carbon ²	Operator	X	X	X	X	X								
	1730	Between Carbon Beds ²	Operator	X	X	X	X	X								
15-Jul	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X							

				Alkalinity 3x/week for 1 month	TRC 3x/week for 1 month		Ammonia 3x/week for 1 month	Chloramine (Mono) 3x/week for 1 month	E.coli 3x/week for 1 month	Total Mn 2x/month	Dissolved Mn 2x/month	Total Chromium 2x/month	Hex Chromium 2x/month	VOC 2x/month	sVOC 2x/month	Bromide 2x/month
CWM has agreed to a 3-day turn-around																
19-Jul	630	North Rain Sump	Operator	X	X	X	X	X								
	730	After air stripper	Operator	X	X	X	X	X								
	830	Before air stripper	Operator	X	X	X	X	X								
	930	West Pit	Operator	X	X	X	X	X								
	1030	Steam Condensate	Operator	X	X	X	X	X								
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X								
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X								
	1430	City Water	Operator	X	X	X	X	X								
	1530	North or South Pond ¹	Operator	X	X	X	X	X								
	1630	Before Carbon ²	Operator	X	X	X	X	X								
	1730	Between Carbon Beds ²	Operator	X	X	X	X	X								
20-Jul	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X							
		North Rain Sump	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	730	After air stripper	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	830	Before air stripper	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	930	West Pit	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1030	Steam Condensate	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1430	City Water	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1530	North or South Pond ¹	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1630	Before Carbon ²	Operator	X	X	X	X	X		X	X	X	X	X	X	X
	1730	Between Carbon Beds ²	Operator	X	X	X	X	X		X	X	X	X	X	X	X
21-Jul	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X	X	X	X	X			
		North Rain Sump	Operator	X	X	X	X	X								
	730	After air stripper	Operator	X	X	X	X	X								
	830	Before air stripper	Operator	X	X	X	X	X								
	930	West Pit	Operator	X	X	X	X	X								
	1030	Steam Condensate	Operator	X	X	X	X	X								
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X								
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X								
	1430	City Water	Operator	X	X	X	X	X								
	1530	North or South Pond ¹	Operator	X	X	X	X	X								
	1630	Before Carbon ²	Operator	X	X	X	X	X								
	1730	Between Carbon Beds ²	Operator	X	X	X	X	X								
22-Jul	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X							

CWM has agreed to a 3-day turn-around				Alkalinity 3x/week for 1 month	TRC 3x/week for 1 month		Ammonia 3x/week for 1 month	Chloramine (Mono) 3x/week for 1 month	E.coli 3x/week for 1 month	Total Mn 2x/month	Dissolved Mn 2x/month	Total Chromium 2x/month	Hex Chromium 2x/month	VOC 2x/month	sVOC 2x/month	Bromide 2x/month
26-Jul	630	North Rain Sump	Operator	X	X	X	X	X								
	730	After air stripper	Operator	X	X	X	X	X								
	830	Before air stripper	Operator	X	X	X	X	X								
	930	West Pit	Operator	X	X	X	X	X								
	1030	Steam Condensate	Operator	X	X	X	X	X								
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X								
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X								
	1430	City Water	Operator	X	X	X	X	X								
	1530	North or South Pond ¹	Operator	X	X	X	X	X								
	1630	Before Carbon ²	Operator	X	X	X	X	X								
	1730	Between Carbon Beds ²	Operator	X	X	X	X	X								
27-Jul	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X							
		North Rain Sump	Operator	X	X	X	X	X								
	730	After air stripper	Operator	X	X	X	X	X								
	830	Before air stripper	Operator	X	X	X	X	X								
	930	West Pit	Operator	X	X	X	X	X								
	1030	Steam Condensate	Operator	X	X	X	X	X								
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X								
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X								
	1430	City Water	Operator	X	X	X	X	X								
	1530	North or South Pond ¹	Operator	X	X	X	X	X								
	1630	Before Carbon ²	Operator	X	X	X	X	X								
	1730	Between Carbon Beds ²	Operator	X	X	X	X	X								
28-Jul	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X							
		North Rain Sump	Operator	X	X	X	X	X								
	730	After air stripper	Operator	X	X	X	X	X								
	830	Before air stripper	Operator	X	X	X	X	X								
	930	West Pit	Operator	X	X	X	X	X								
	1030	Steam Condensate	Operator	X	X	X	X	X								
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X								
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X								
	1430	City Water	Operator	X	X	X	X	X								
	1530	North or South Pond ¹	Operator	X	X	X	X	X								
	1630	Before Carbon ²	Operator	X	X	X	X	X								
	1730	Between Carbon Beds ²	Operator	X	X	X	X	X								
29-Jun	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X							

CWM has agreed to a 3-day turn-around				Alkalinity 3x/week for 1 month	TRC 3x/week for 1 month		Ammonia 3x/week for 1 month	Chloramine (Mono) 3x/week for 1 month	E.coli 3x/week for 1 month	Total Mn 2x/month	Dissolved Mn 2x/month	Total Chromium 2x/month	Hex Chromium 2x/month	VOC 2x/month	sVOC 2x/month	Bromide 2x/month
2-Aug	630	North Rain Sump	Operator	X	X	X	X	X								
	730	After air stripper	Operator	X	X	X	X	X								
	830	Before air stripper	Operator	X	X	X	X	X								
	930	West Pit	Operator	X	X	X	X	X								
	1030	Steam Condensate	Operator	X	X	X	X	X								
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X								
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X								
	1430	City Water	Operator	X	X	X	X	X								
	1530	North or South Pond ¹	Operator	X	X	X	X	X								
	1630	Before Carbon ²	Operator	X	X	X	X	X								
	1730	Between Carbon Beds ²	Operator	X	X	X	X	X								
3-Aug	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X							
		North Rain Sump	Operator	X	X	X	X	X								
	730	After air stripper	Operator	X	X	X	X	X								
	830	Before air stripper	Operator	X	X	X	X	X								
	930	West Pit	Operator	X	X	X	X	X								
	1030	Steam Condensate	Operator	X	X	X	X	X								
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X								
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X								
	1430	City Water	Operator	X	X	X	X	X								
	1530	North or South Pond ¹	Operator	X	X	X	X	X								
	1630	Before Carbon ²	Operator	X	X	X	X	X								
	1730	Between Carbon Beds ²	Operator	X	X	X	X	X								
4-Aug	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X							
		North Rain Sump	Operator	X	X	X	X	X								
	730	After air stripper	Operator	X	X	X	X	X								
	830	Before air stripper	Operator	X	X	X	X	X								
	930	West Pit	Operator	X	X	X	X	X								
	1030	Steam Condensate	Operator	X	X	X	X	X								
	1230	Stormwater Retention Basin	Operator	X	X	X	X	X								
	1330	Cooling Tower Blowdown	Operator	X	X	X	X	X								
	1430	City Water	Operator	X	X	X	X	X								
	1530	North or South Pond ¹	Operator	X	X	X	X	X								
	1630	Before Carbon ²	Operator	X	X	X	X	X								
	1730	Between Carbon Beds ²	Operator	X	X	X	X	X								
5-Aug	630	Distribution Box (sanitary SF)	Kelly		X	X			X							
		Outfall 601	Kelly	X	X	X	X	X	X							



**Kenna Coltman
Gabriel Performance Products
725 State Road
Ashtabula, OH 44004
USA**

DMR-QA 39 ***Final Report***

DMR-QA Proficiency Testing

The section header is centered and features a teal background bar. On the left, "DMR-QA 39" is in a bold, italicized, teal font. In the middle is a circular logo with a teal border containing a stylized white industrial facility with smokestacks and a curved path. To the right of the logo is the text "Final Report" in a bold, italicized, teal font. Below the logo and text, a wide teal bar contains the words "DMR-QA Proficiency Testing" in a bold, white, sans-serif font.

NPDES Permit: OH0029149

DMR-QA Study

Open Date: 03/22/19

Close Date: 07/19/19

Report Issued Date: 08/16/19



A Waters Company

August 16, 2019

Kenna Coltman
Gabriel Performance Products
725 State Road
Ashtabula, OH 44004

Enclosed is your final report for ERA's DMR-QA 39 Proficiency Testing study. Please note that reports were sent on your behalf to your state or regional DMR-QA coordinator. As the permit holder, you are required to review and sign the attached EPA forms and checklists and forward them to your DMR-QA coordinator by September 13, 2019. Your coordinator's contact information is provided below.

All analytes in ERA's DMR-QA 39 Proficiency Testing study have been evaluated by comparing the reported result to the acceptance limits generated using the criteria contained in the most current TNI FoPT tables.

If you have any "Not Acceptable" evaluations for the DMR-QA 39 study, a letter of corrective action and an order form for the required remedial samples are attached for your convenience. If you have a "Not Acceptable" evaluation, but there is not an order form or a list of standards for your in-house or outside laboratories, ERA recommends that you contact your DMR-QA coordinator for their corrective action requirements, if any.

Thank you for your participation in ERA's DMR-QA 39 Proficiency Testing study. If you have any questions, please contact the Proficiency Testing Department at 1-800-372-0122.

Your DMR-QA coordinator is:

Ohio EPA
Steve Roberts
8955 East Main Street
Reynoldsburg, OH 43068
Phone: 614-644-4225
Fax: 614-644-4272
steven.roberts@epa.ohio.gov

Sincerely,

Matthew Seebeck
Quality Officer

attachments



A Waters Company

DMR-QA 39 Definitions & Study Discussion

Study Dates: 03/22/19 - 07/19/19

Report Issued: 08/16/19

DMRQA Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the current FoPT tables. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards.

The Acceptance Limits are established per the criteria contained in the most current TNI FoPT tables, or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

Acceptable	= Reported Value falls within the Acceptance Limits.
Not Acceptable	= Reported Value falls outside the Acceptance Limits.
No Evaluation	= Reported Value cannot be evaluated.
Not Reported	= No Value reported.

The Method Description is the method the laboratory reported to ERA.

DMRQA Study Discussion

ERA's DMR-QA 39 Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2009 TNI PT Standards and the criteria contained in the most current TNI FoPT tables.

ERA's DMR-QA 39 study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in the 2009 TNI PT Standard and the criteria contained in the most current TNI Fields of Proficiency Testing (FoPT) tables.

All activities associated with this proficiency testing study were performed by Waters/ERA with the exception of those noted below. The following physical samples/products were manufactured for Waters/ERA by a subcontractor:

Microbiology products with the following catalog numbers: 880, 935, 079, 077, 080, 595, 595A, 576, 576A

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's DMR-QA 39 study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's DMRQA Proficiency Testing program, please contact our Proficiency Testing Department at 1-800-372-0122.





Study: **DMR-QA 39**
NPDES Permit #: **OH0029149**
Laboratory Name: **Gabriel Performance
Products**

Inorganic Results





A Waters Company

DMR-QA 39 Final Report

NPDES Permit #: OH0029149
Permit Holder: Kenna Coltman
 Gabriel Performance Products
 725 State Road
 Ashtabula, OH 44004

ERA Customer Number: G234480
Report Issued: 08/16/19
Study Dates: 03/22/19 - 07/19/19

TNI Analyte Code	Analyte	Units	Performance Evaluation	Reported Value	Assigned Value	Acceptance Limits	Method Description	Study Mean	Study Standard Deviation	USEPA Lab Code	Study
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WP Minerals (cat# 581, lot# P289-506)

1955	Total Dissolved Solids at 180°C	mg/L	Acceptable	280	299	254 - 344	SM2540C online	290	11.9	OH00232	WP289
------	---------------------------------	------	------------	-----	-----	-----------	----------------	-----	------	---------	-------

WP Hardness (cat# 580, lot# P289-507)

1960	Total Suspended Solids	mg/L	Acceptable	75	80.6	65.8 - 89.8	SM2540D online	77.2	2.66	OH00232	WP289
------	------------------------	------	------------	----	------	-------------	----------------	------	------	---------	-------

DMRQA pH (cat# 577, lot# Q039-977)

1900	pH	S.U.	Acceptable	6.7	6.82	6.62 - 7.02	123-00-002 4	6.83	0.0592	OH01205	DMRQA39
------	----	------	------------	-----	------	-------------	--------------	------	--------	---------	---------

WP Demand (cat# 578, lot# P289-516)

1530	BOD	mg/L	Acceptable	158	142	77.1 - 207	SM5210B online	144	22.2	OH00232	WP289
1555	CBOD	mg/L	Acceptable	131	129	60.7 - 197	SM5210B online	128	20.4	OH00232	WP289

WP Oil & Grease (cat# 582, lot# P289-518)

1803	n-Hexane Extractable Material(O&G)(Grav)	mg/L	Acceptable	127	160	118 - 182	EPA 1664A 1999	144	13.5	OH00232	WP289
------	--	------	------------	-----	-----	-----------	----------------	-----	------	---------	-------

WP Trace Metals (cat# 586, lot# P289-500)

1040	Chromium	µg/L	Acceptable	586	602	512 - 692	EPA 200.7 4.4 1994	605	32.2	OH00232	WP289
1055	Copper	µg/L	Acceptable	812	739	628 - 850	EPA 200.7 4.4 1994	752	39.8	OH00232	WP289
1075	Lead	µg/L	Acceptable	172	177	150 - 204	EPA 200.7 4.4 1994	177	10.2	OH00232	WP289
1105	Nickel	µg/L	Acceptable	670	663	581 - 750	EPA 200.7 4.4 1994	672	33.2	OH00232	WP289
1190	Zinc	µg/L	Acceptable	1140	1120	952 - 1290	EPA 200.7 4.4 1994	1110	50.2	OH00232	WP289

DMRQA Total Residual Chlorine (cat# 587, lot# Q039-501)

1945	Free Residual Chlorine	mg/L	Not Reported		0.762	0.572 - 0.930		0.695	0.102	OH01205	DMRQA39
1940	Total Residual Chlorine	mg/L	Acceptable	0.71	0.762	0.572 - 0.930	123-00-026 8	0.751	0.0663	OH01205	DMRQA39



All analytes are included in ERA's A2LA accreditation. Lab Code: 1539-01

16341 Table Mountain Pkwy • Golden, CO 80403 • 800.372.0122 • 303.431.8454 • fax 303.421.0159 • www.eraqc.com

Study # : DMR-QA 39





Study: **DMR-QA 39**
NPDES Permit #: **OH0029149**
Laboratory Name: **Gabriel Performance
Products**

WET Results





A Waters Company

DMR-QA 39 Final Report

NPDES Permit #: OH0029149
 Permit Holder: Kenna Coltman
 Gabriel Performance Products
 725 State Road
 Ashtabula, OH 44004

ERA Customer Number: G234480
 Report Issued: 08/16/19
 Study Dates: 03/22/19 - 07/19/19

Analyte Code	Test End Point	Performance Evaluation	Reported Value %	Assigned Value %	Acceptance Limits %	Method Description	Study Mean	Study Standard Deviation	USEPA Lab Code	Study
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DMRWet Fathead minnow (Test Code 13) (cat# WET002, lot# Q039-002)
 48Hr., Acute, Non-Renewal, 25° C, MHSF
 Potassium chloride

0754	LC50	Acceptable	42.33	45.2	24.7 - 65.6	EPA 2000.0 MHSF 25 deg C 5th ED 2002	45.2	10.2	OH01191	DMRWet39
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DMRWet Fathead minnow (Test Code 16) (cat# WET005, lot# Q039-005)
 7-day Chronic, Daily Renewal, 20% DMW
 Potassium chloride

0812	IC25 (ON) Growth	Acceptable	56.29	39.3	13.8 - 64.8	EPA 1000.0 DMW 2002	39.3	12.8	OH01191	DMRWet39
0814	NOEC (ON) Growth	Acceptable	50	25.0	12.5 - 50.0	EPA 1000.0 DMW 2002			OH01191	DMRWet39
0759	NOEC Survival	Acceptable	50	25.0	12.5 - 50.0	EPA 1000.0 DMW 2002			OH01191	DMRWet39

DMRWet Ceriodaphnia dubia (Test Code 19) (cat# WET008, lot# Q039-008)
 48-Hr Acute, Nonrenewal, 25° C, MHSF
 Potassium chloride

0764	LC50	Acceptable	34.15	37.0	24.1 - 49.9	EPA 2002.0 MHSF 25 deg C 5th ED 2002	37.0	6.45	OH01191	DMRWet39
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DMRWet Ceriodaphnia dubia (Test Code 21) (cat# WET010, lot# Q039-010)
 3-Brood Chronic, Daily Renewal, MHSF
 Potassium chloride

0767	IC25 Reproduction	Acceptable	29.92	27.6	20.9 - 34.3	EPA 1002.0 MHSF 2002	27.6	3.33	OH01191	DMRWet39
0768	NOEC Reproduction	Acceptable	25	25.0	12.5 - 50.0	EPA 1002.0 MHSF 2002			OH01191	DMRWet39
0766	NOEC Survival	Acceptable	25	25.0	12.5 - 50.0	EPA 1002.0 MHSF 2002			OH01191	DMRWet39

DMRWet Daphnia magna (Test Code 32) (cat# WET012, lot# Q039-012)
 48Hr., Acute, Non-Renewal, 25° C, MHSF
 Potassium chloride

0788	LC50	Acceptable	70.71	60.8	30.1 - 91.4	EPA 2021.0	60.8	15.3	OH01191	DMRWet39
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All analytes are included in ERA's A2LA accreditation. Lab Code: 1539-01

16341 Table Mountain Pkwy • Golden, CO 80403 • 800.372.0122 • 303.431.8454 • fax 303.421.0159 • www.eraqc.com

Study # : DMR-QA 39



**USEPA
DMR-QA 39****NPDES PERMITTEE
DATA REPORT FORM**

A Waters Company

Due September 13, 2019

USEPA NPDES OH0029149

Permit #:

Permit Ext:

Permittee Name: Gabriel Performance Products

Facility Address: 725 State Road

City: Ashtabula

State: OH

Postal Code: 44004

Phone Number:

Fax Number:

E-mail address: kenna.coltman@gabrielchem.com

Optional: If WP study was used, list PT provider name:

Optional: WP study number(s):

Environmental Resource Associates

WP-289

For DMRQA-39, conducted in 2019, the Permittee ensured that their laboratory(s) performing the required analyses:

Received PT Samples

Submitted Complete and Accurate Data
by July 19, 2019Received a Graded Report by
August 16, 2019Yes ☐ No ☐Yes ☐ No ☐Yes ☐ No ☐**Certification by Permit Holder or Authorized Representative**

(as per 40 C.F.R. Section 122.22)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. Each reported value was produced from a single analytical run using the analytical system that routinely performs these analyses to produce compliance monitoring data required under our National Pollutant Discharge Elimination System (NPDES) Permit. Neither I nor any of my subordinates compared our results from independent analyses conducted by us or any other laboratory before we reported our results to the USEPA. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of
Certifying Official: Kenna Coltman

Title:

Signature:

Date Signed:

/ /

Mailing Address: 725 State Road

(enter only if different
from address above)

City: Ashtabula

State: OH

Postal Code: 44004

Phone Number:

E-mail address: kenna.coltman@gabrielchem.com

Please make corrections in boxes above

United States
ENVIRONMENTAL PROTECTION AGENCY
Laboratory Performance Evaluation
Laboratory DMR-QA Evaluation Study 39

USEPA NPDES Permit #: OH0029149

Permit Ext:

Identification of all CHEM, MICRO and TOX laboratories who did analyses for this permit							
Name of Laboratory	Address of Laboratory	U.S. EPA Lab Code	Lab Analysis Check box(es) that apply			Lab Type*	State-certified Lab**
			CHEM	MICRO	TOX		
EA Group	7118 Industrial Park Blvd Mentor, OH 44060	OH00232	☐	☐	☐		☐
Enviroscience Inc	5070 Stow Rd Stow, OH 44224	OH01191	☐	☐	☐		☐
Gabriel Performance Products	725 State Road Ashtabula, OH 44004	OH01205	☐	☐	☐		☐

* Lab Types: C = Commercial F = Federal G = Local Government I = Industrial O = Other S = State

** See Footnote 2 on DMRQA-39, Frequently Asked Questions page

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH00232

Chemistry/Microbiology Analyte Checklist

WP Study 289

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
Minerals				
Alkalinity as CaCO ₃				
Chloride				
Conductivity at 25°C				
Fluoride				
Potassium				
Sodium				
Sulfate				
Total Dissolved Solids at 180°C				
SM2540C	☐	☒	☐	☐
Total Solids at 105°C				
Hardness				
Total Suspended Solids				
SM2540D	☐	☒	☐	☐
Calcium				
Magnesium				
Calcium Hardness as CaCO ₃				
Total Hardness as CaCO ₃				
pH				
pH				
Settleable Solids				
Settleable Solids				
Solids Concentrate				
Total Suspended Solids				
Total Dissolved Solids at 180°C				
Total Solids at 105°C				
Solids				
Total Suspended Solids				
Total Dissolved Solids at 180°C				
Total Solids at 105°C				
Simple Nutrients				
Ammonia as N				
Nitrate + Nitrite as N				
Nitrate as N				
ortho-Phosphate as P				
Complex Nutrients				
Total Kjeldahl Nitrogen				
Total phosphorus as P				
Nitrite				
Nitrite as N				
Demand				
BOD				
SM5210B	☐	☒	☐	☐

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH00232

Chemistry/Microbiology Analyte Checklist

WP Study 289

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
CBOD SM5210B	☐	☒	☐	☐
COD				
TOC				
Oil & Grease Concentrate				
n-Hexane Extractable Material(O&G) (Grav)				
Oil & Grease				
n-Hexane Extractable Material(O&G) (Grav)				
EPA 1664A	☐	☒	☐	☐
n-Hexane Extractable Material(O&G) (IR)				
Trace Metals				
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Chromium				
EPA 200.7	☐	☒	☐	☐
Cobalt				
Copper				
EPA 200.7	☐	☒	☐	☐
Iron				
Lead				
EPA 200.7	☐	☒	☐	☐
Manganese				
Molybdenum				
Nickel				
EPA 200.7	☐	☒	☐	☐
Selenium				
Silver				
Strontium				
Thallium				
Vanadium				
Zinc				
EPA 200.7	☐	☒	☐	☐
Mercury				
Mercury				
Low-Level Mercury				
Low Level Mercury				

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH00232

Chemistry/Microbiology Analyte Checklist

WP Study 289

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
<u>Hexavalent Chromium</u>				
Hexavalent Chromium				
<u>Turbidity</u>				
Turbidity				
<u>Total Cyanide</u>				
Cyanide, total				
Amenable Cyanide				
<u>Total Phenolics (4-AAP)</u>				
Phenolics, total				
<u>Total Residual Chlorine</u>				
Free Residual Chlorine				
Total Residual Chlorine				
<u>Low-Level Total Residual Chlorine</u>				
Low Level Total Residual Chlorine				
<u>WasteWatR™ Coliform MicrobE™</u>				
Total Coliforms (MF)				
Fecal Coliforms (MF)				
E.coli (MF)				
Total Coliforms (MPN)				
Fecal Coliforms (MPN)				
E.coli (MPN)				
<u>WasteWatR™ Coliform MicrobE™ - SM. 9221</u>				
Total Coliforms (MPN)				
Fecal Coliforms (MPN)				
E.coli (MPN)				

 Print Name

 Date

 Signature/Title

Use a separate checklist for EACH lab used

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH01191

WET Organisms/Test Conditions/End Points Checklist**DMRWet Study 39**

Analyte Number	Organisms / Conditions	End Points	Test Req	Laboratory's Graded Result		Analyte determined by state-certified lab
				Acceptable	Not Acceptable (Corrective Action Required)	
<u>Fathead minnow (Test Code 13)</u>						
0754	48Hr., Acute, Non-Renewal, 25° C, MHSF EPA 2000.0 MHSF 25 deg C	LC50	☐	☒	☐	☐
<u>Fathead minnow (Test Code 14)</u>						
0755	48Hr., Acute, Non-Renewal, 25° C, 20% DMW	LC50				
<u>Fathead minnow (Test Code 15)</u>						
0808	7-day Chronic, Daily Renewal, MHSF	IC25 (ON) Growth				
0810	7-day Chronic, Daily Renewal, MHSF	NOEC (ON) Growth				
0756	7-day Chronic, Daily Renewal, MHSF	NOEC Survival				
<u>Fathead minnow (Test Code 16)</u>						
0812	7-day Chronic, Daily Renewal, 20% DMW EPA 1000.0 DMW	IC25 (ON) Growth	☐	☒	☐	☐
0814	7-day Chronic, Daily Renewal, 20% DMW EPA 1000.0 DMW	NOEC (ON) Growth	☐	☒	☐	☐
0759	7-day Chronic, Daily Renewal, 20% DMW EPA 1000.0 DMW	NOEC Survival	☐	☒	☐	☐
<u>Ceriodaphnia dubia (Test Code 19)</u>						
0764	48-Hr Acute, Nonrenewal, 25° C, MHSF EPA 2002.0 MHSF 25 deg C	LC50	☐	☒	☐	☐
<u>Ceriodaphnia dubia (Test Code 20)</u>						
0765	48-Hr Acute, Nonrenewal, 25° C, 20% DMW	LC50				
<u>Ceriodaphnia dubia (Test Code 21)</u>						
0767	3-Brood Chronic, Daily Renewal, MHSF EPA 1002.0 MHSF	IC25 Reproduction	☐	☒	☐	☐
0768	3-Brood Chronic, Daily Renewal, MHSF EPA 1002.0 MHSF	NOEC Reproduction	☐	☒	☐	☐
0766	3-Brood Chronic, Daily Renewal, MHSF EPA 1002.0 MHSF	NOEC Survival	☐	☒	☐	☐
<u>Ceriodaphnia dubia (Test Code 22)</u>						
0770	3-Brood Chronic, Daily Renewal, 20% DMW	IC25 Reproduction				
0771	3-Brood Chronic, Daily Renewal, 20% DMW	NOEC Reproduction				
0769	3-Brood Chronic, Daily Renewal, 20% DMW	NOEC Survival				
<u>Daphnia magna (Test Code 32)</u>						
0788	48Hr., Acute, Non-Renewal, 25° C, MHSF EPA 2021.0	LC50	☐	☒	☐	☐

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH01191

WET Organisms/Test Conditions/End Points Checklist**DMRWet Study 39**

Analyte Number	Organisms / Conditions	End Points	Test Req	Laboratory's Graded Result		Analyte determined by state-certified lab
				Acceptable	Not Acceptable (Corrective Action Required)	
<u>Daphnia pulex (Test Code 38)</u>						
0794	48Hr., Acute, Non-Renewal, 25° C, MHSF	LC50				
<u>Mysid (Test Code 42)</u>						
0798	48-Hr Acute, Nonrenewal, 25° C, SSW	LC50				
<u>Mysid (Test Code 43)</u>						
0816	7-day Chronic, Daily Renewal, SSW	IC25 (ON) Growth NOEC (ON) Growth NOEC Survival				
0818	7-day Chronic, Daily Renewal, SSW					
0799	7-day Chronic, Daily Renewal, SSW					
<u>Inland silverside (Test Code 44)</u>						
0803	48-Hr Acute, Nonrenewal, 25° C, SSW	LC50				
<u>Inland Silverside (Test Code 45)</u>						
0825	7-day Chronic, Daily Renewal, SSW	IC25 (ON) Growth NOEC (ON) Growth NOEC Survival				
0826	7-day Chronic, Daily Renewal, SSW					
0824	7-day Chronic, Daily Renewal, SSW					
<u>Sheepshead minnow (Test Code 46)</u>						
0804	48-Hr Acute, Nonrenewal, 25° C, SSW	LC50				
<u>Sheepshead minnow (Test Code 47)</u>						
0820	7-day Chronic, Daily Renewal, SSW	IC25 (ON) Growth NOEC (ON) Growth NOEC Survival				
0822	7-day Chronic, Daily Renewal, SSW					
0805	7-day Chronic, Daily Renewal, SSW					

Print Name_____
Date_____
Signature/Title

Use a separate checklist for EACH lab used

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH01205

Chemistry/Microbiology Analyte Checklist**DMRQA Study 39**

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
Minerals Alkalinity as CaCO ₃ Chloride Conductivity at 25°C Fluoride Potassium Sodium Sulfate Total Dissolved Solids at 180°C Total Solids at 105°C				
Hardness Total Suspended Solids Calcium Magnesium Calcium Hardness as CaCO ₃ Total Hardness as CaCO ₃				
pH pH 123-00-002	☐	☒	☐	☐
Settleable Solids Settleable Solids				
Solids Concentrate Total Suspended Solids Total Dissolved Solids at 180°C Total Solids at 105°C				
Solids Total Suspended Solids Total Dissolved Solids at 180°C Total Solids at 105°C				
Simple Nutrients Ammonia as N Nitrate + Nitrite as N Nitrate as N ortho-Phosphate as P				
Complex Nutrients Total Kjeldahl Nitrogen Total phosphorus as P				
Nitrite Nitrite as N				
Demand BOD CBOD COD TOC				

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH01205

Chemistry/Microbiology Analyte Checklist

DMRQA Study 39

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
<u>Oil & Grease Concentrate</u> n-Hexane Extractable Material(O&G) (Grav)				
<u>Oil & Grease</u> n-Hexane Extractable Material(O&G) (Grav) n-Hexane Extractable Material(O&G) (IR)				
<u>Trace Metals</u> Aluminum Antimony Arsenic Barium Beryllium Boron Cadmium Chromium Cobalt Copper Iron Lead Manganese Molybdenum Nickel Selenium Silver Strontium Thallium Vanadium Zinc				
<u>Mercury</u> Mercury				
<u>Low-Level Mercury</u> Low Level Mercury				
<u>Hexavalent Chromium</u> Hexavalent Chromium				
<u>Turbidity</u> Turbidity				
<u>Total Cyanide</u> Cyanide, total Amenable Cyanide				
<u>Total Phenolics (4-AAP)</u> Phenolics, total				

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH01205

Chemistry/Microbiology Analyte Checklist**DMRQA Study 39**

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
Total Residual Chlorine				
Free Residual Chlorine				
Total Residual Chlorine				
123-00-026	☐	☒	☐	☐
Low-Level Total Residual Chlorine				
Low Level Total Residual Chlorine				
WasteWatR™ Coliform MicrobE™				
Total Coliforms (MF)				
Fecal Coliforms (MF)				
E.coli (MF)				
Total Coliforms (MPN)				
Fecal Coliforms (MPN)				
E.coli (MPN)				
WasteWatR™ Coliform MicrobE™ - SM. 9221				
Total Coliforms (MPN)				
Fecal Coliforms (MPN)				
E.coli (MPN)				

Print Name_____
Date_____
Signature/Title

Use a separate checklist for EACH lab used

CERTIFICATE OF RECOGNITION

ERA congratulates

GABRIEL PERFORMANCE PRODUCTS

for your participation and successful evaluation in DMR-QA 39. We recognize the performance of this laboratory for achieving acceptable evaluations for the following analytes.

pH

Total Residual Chlorine



Matthew Seebeck
Quality Officer

G234480



Kenna Coltman
Gabriel Performance Products
725 State Road
Ashtabula, OH 44004
USA

DMR-QA 40 *Final Report*

DMR-QA Proficiency Testing

NPDES Permit: OH0029149

DMR-QA Study

Open Date: 03/20/20

Close Date: 09/18/20

Report Issued Date: 10/16/20



A Waters Company

October 16, 2020

Kenna Coltman
Gabriel Performance Products
725 State Road
Ashtabula, OH 44004

Enclosed is your final report for ERA's DMR-QA 40 Proficiency Testing study. Please note that reports were sent on your behalf to your state or regional DMR-QA coordinator. As the permit holder, you are required to review and sign the attached EPA forms and checklists and forward them to your DMR-QA coordinator by November 20, 2020. Your coordinator's contact information is provided below.

All analytes in ERA's DMR-QA 40 Proficiency Testing study have been evaluated by comparing the reported result to the acceptance limits generated using the criteria contained in the most current TNI/NELAP and Whole Effluent Toxicity Testing-Non Potable Water Fields of Proficiency Testing (FoPT) tables.

If you have any "Not Acceptable" evaluations for the DMR-QA 40 study, a letter of corrective action and an order form for the required remedial samples are attached for your convenience. If you have a "Not Acceptable" evaluation, but there is not an order form or a list of standards for your in-house or outside laboratories, ERA recommends that you contact your DMR-QA coordinator for their corrective action requirements, if any.

Thank you for your participation in ERA's DMR-QA 40 Proficiency Testing study. If you have any questions, please contact the Proficiency Testing Department at 1-800-372-0122.

Your DMR-QA coordinator is:

Ohio EPA
Steve Roberts
8955 East Main Street
Reynoldsburg, OH 43068
Phone: 614-644-4225
steven.roberts@epa.ohio.gov

Sincerely,

A handwritten signature in black ink, appearing to read "Matthew Seebeck", is written over a light blue horizontal line.

Matthew Seebeck
Quality Officer

attachments



A Waters Company

DMR-QA 40 Definitions & Study Discussion

Study Dates: 03/20/20 - 09/18/20

Report Issued: 10/16/20

DMRQA Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the most current TNI/NELAP Fields of Proficiency Testing (FoPT) table. A parameter not added to the standard is given an Assigned Value of "< PTRL" per the guidelines contained in the 2009 TNI Standards. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards.

The Acceptance Limits are established per the criteria contained in the most current TNI/NELAP FoPT table or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable. This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.

The Performance Evaluation:

Acceptable	= Reported Value falls within the Acceptance Limits.
Not Acceptable	= Reported Value falls outside the Acceptance Limits.
No Evaluation	= Reported Value cannot be evaluated.
Not Reported	= No Value reported.

The Method Description is the method the laboratory reported to ERA.

DMRQA Study Discussion

ERA's DMR-QA 40 Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2009 TNI PT Standards and the 2016 TNI Standard, Volume 3, Section 5.9 and the criteria contained in the most current TNI/NELAP FoPT table.

ERA's DMR-QA 40 study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in the 2009 TNI Standard and the criteria contained in the most current TNI/NELAP FoPT table.

All analytes are included in ERA's A2LA accreditation, certification number 1539.01.

All activities associated with this proficiency testing study were performed by Waters/ERA with the exception of those noted below. The following physical samples/products were manufactured for Waters/ERA by a subcontractor:

Microbiology products with the following catalog numbers: 880, 935, 079, 077, 080, 595, 595A, 576, 576A

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's DMR-QA 40 study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's DMRQA Proficiency Testing program, please contact our Proficiency Testing Department at 1-800-372-0122.





Study: **DMR-QA 40**
NPDES Permit #: **OH0029149**
Laboratory Name: **Gabriel Performance
Products**

Inorganic Results

This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.

Study # : DMR-QA 40





A Waters Company

DMR-QA 40 Final Report

NPDES Permit #: OH0029149
Permit Holder: Kenna Coltman
Gabriel Performance Products
725 State Road
Ashtabula, OH 44004

ERA Customer Number: G234480
Report Issued: 10/16/20
Study Dates: 03/20/20 - 09/18/20

TNI Analyte Code	Analyte	Units	Performance Evaluation	Reported Value	Assigned Value	Acceptance Limits	Method Description	Study Mean	Study Standard Deviation	USEPA Lab Code	Study
WP Minerals (cat# 581, lot# P301-506)											
1955	Total Dissolved Solids at 180°C	mg/L	Acceptable	300	309	264 - 354	SM2540C online	299	19.4	OH00232	WP301
WP Hardness (cat# 580, lot# P301-507)											
1960	Total Suspended Solids	mg/L	Acceptable	26	27.6	19.0 - 33.4	SM2540D online	25.6	1.53	OH00232	WP301
DMRQA pH (cat# 577, lot# Q040-977)											
1900	pH	S.U.	Acceptable	6.32	6.30	6.10 - 6.50	EPA 9040C 2004	6.31	0.0607	OH01205	DMRQA40
WP Demand (cat# 578, lot# P301-516)											
1530	BOD	mg/L	Acceptable	42.5	33.2	16.7 - 49.7	SM5210B online	32.9	5.81	OH00232	WP301
1555	CBOD	mg/L	Acceptable	36.0	30.1	12.5 - 47.7	SM5210B online	30.5	6.60	OH00232	WP301
WP Oil & Grease (cat# 582, lot# P301-518)											
1803	n-Hexane Extractable Material(O&G)(Grav)	mg/L	Acceptable	110	132	95.8 - 151	EPA 1664A 1999	127	6.91	OH00232	WP301
WP Trace Metals (cat# 586, lot# P301-500)											
1040	Chromium	µg/L	Acceptable	510	502	427 - 577	EPA 200.7 4.4 1994	509	28.9	OH00232	WP301
1055	Copper	µg/L	Acceptable	698	658	559 - 757	EPA 200.7 4.4 1994	661	39.1	OH00232	WP301
1075	Lead	µg/L	Acceptable	527	518	440 - 596	EPA 200.7 4.4 1994	524	31.5	OH00232	WP301
1105	Nickel	µg/L	Acceptable	1820	1760	1560 - 1970	EPA 200.7 4.4 1994	1780	111	OH00232	WP301
1190	Zinc	µg/L	Acceptable	1390	1360	1160 - 1560	EPA 200.7 4.4 1994	1370	94.2	OH00232	WP301
DMRQA Low-Level Total Residual Chlorine (cat# 881, lot# Q040-917)											
1940	Low Level Total Residual Chlorine	µg/L	Acceptable	40	79.0	19.0 - 139	SM 4500-Cl G-2011 2011	80.9	15.3	OH01205	DMRQA40

This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.

Study #: DMR-QA 40





Study: **DMR-QA 40**
NPDES Permit #: **OH0029149**
Laboratory Name: **Gabriel Performance
Products**

WET Results

This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.

Study # : DMR-QA 40





A Waters Company

DMR-QA 40 Final Report

NPDES Permit #: OH0029149
 Permit Holder: Kenna Coltman
 Gabriel Performance Products
 725 State Road
 Ashtabula, OH 44004

ERA Customer Number: G234480
 Report Issued: 10/16/20
 Study Dates: 03/20/20 - 09/18/20

Analyte Code	Test End Point	Performance Evaluation	Reported Value %	Assigned Value %	Acceptance Limits %	Method Description	Study Mean	Study Standard Deviation	USEPA Lab Code	Study
--------------	----------------	------------------------	------------------	------------------	---------------------	--------------------	------------	--------------------------	----------------	-------

DMRWet Fathead minnow (Test Code 13) (cat# WET002, lot# Q040-002)
48Hr., Acute, Non-Renewal, 25° C, MHSF
Potassium chloride

0754	LC50	Acceptable	65.98	53.2	28.1 - 78.4	EPA 2000.0 MHSF 25 deg C 5th ED 2002	53.2	12.6	OH01191	DMRWet40
------	------	------------	-------	------	-------------	---	------	------	---------	----------

DMRWet Fathead minnow (Test Code 16) (cat# WET005, lot# Q040-005)
7-day Chronic, Daily Renewal, 20% DMW
Potassium chloride

0812	IC25 (ON) Growth	Acceptable	60.46	46.8	24.5 - 69.1	EPA 1000.0 DMW 2002	46.8	11.2	OH01191	DMRWet40
0814	NOEC (ON) Growth	Acceptable	50	50.0	25.0 - 100	EPA 1000.0 DMW 2002			OH01191	DMRWet40
0759	NOEC Survival	Acceptable	50	25.0	12.5 - 50.0	EPA 1000.0 DMW 2002			OH01191	DMRWet40

DMRWet Ceriodaphnia dubia (Test Code 19) (cat# WET008, lot# Q040-008)
48-Hr Acute, Nonrenewal, 25° C, MHSF
Potassium chloride

0764	LC50	Acceptable	25.88	37.9	13.7 - 62.2	EPA 2002.0 MHSF 25 deg C 5th ED 2002	37.9	12.1	OH01191	DMRWet40
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DMRWet Ceriodaphnia dubia (Test Code 21) (cat# WET010, lot# Q040-010)
3-Brood Chronic, Daily Renewal, MHSF
Potassium chloride

0767	IC25 Reproduction	Acceptable	27.06	29.4	22.7 - 36.2	EPA 1002.0 MHSF 2002	29.4	3.37	OH01191	DMRWet40
0768	NOEC Reproduction	Acceptable	12.5	25.0	12.5 - 50.0	EPA 1002.0 MHSF 2002			OH01191	DMRWet40
0766	NOEC Survival	Acceptable	50	25.0	12.5 - 50.0	EPA 1002.0 MHSF 2002			OH01191	DMRWet40

DMRWet Daphnia magna (Test Code 32) (cat# WET012, lot# Q040-012)
48Hr., Acute, Non-Renewal, 25° C, MHSF
Potassium chloride

0788	LC50	Acceptable	55.48	36.8	9.58 - 64.1	EPA 2021.0 MHSF 20 deg C 5th ED 2002	36.8	13.6	OH01191	DMRWet40
------	------	------------	-------	------	-------------	---	------	------	---------	----------

This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.

Study #: DMR-QA 40



**USEPA
DMR-QA 40****NPDES PERMITTEE
DATA REPORT FORM**

A Waters Company

Due November 20, 2020

USEPA NPDES OH0029149

Permit #:

Permit Ext:

Permittee Name: Gabriel Performance Products

Facility Address: 725 State Road

City: Ashtabula

State: OH

Postal Code: 44004

Phone Number:

Fax Number:

E-mail address: kenna.coltman@gabrielchem.com

Optional: If WP study was used, list PT provider name:

Optional: WP study number(s):

Environmental Resource Associates

WP-301

For DMRQA-40, conducted in 2020, the Permittee ensured that their laboratory(s) performing the required analyses:

Received PT Samples

Submitted Complete and Accurate Data
by September 18, 2020Received a Graded Report by
October 16, 2020Yes ☐ No ☐Yes ☐ No ☐Yes ☐ No ☐**Certification by Permit Holder or Authorized Representative**

(as per 40 C.F.R. Section 122.22)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. Each reported value was produced from a single analytical run using the analytical system that routinely performs these analyses to produce compliance monitoring data required under our National Pollutant Discharge Elimination System (NPDES) Permit. Neither I nor any of my subordinates compared our results from independent analyses conducted by us or any other laboratory before we reported our results to the USEPA. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of
Certifying Official: Kenna Coltman

Title:

Signature:

Date Signed:

/ /

Mailing Address: 725 State Road

(enter only if different
from address above)

City: Ashtabula

State: OH

Postal Code: 44004

Phone Number:

E-mail address: kenna.coltman@gabrielchem.com

Please make corrections in boxes above

United States
ENVIRONMENTAL PROTECTION AGENCY
Laboratory Performance Evaluation
Laboratory DMR-QA Evaluation Study 40

USEPA NPDES Permit #: OH0029149

Permit Ext:

Identification of all CHEM, MICRO and TOX laboratories who did analyses for this permit							
Name of Laboratory	Address of Laboratory	U.S. EPA Lab Code	Lab Analysis Check box(es) that apply			Lab Type*	State-certified Lab**
			CHEM	MICRO	TOX		
EA Group	7118 Industrial Park Blvd Mentor, OH 44060	OH00232	☐	☐	☐		☐
Enviroscience Inc	5070 Stow Rd Stow, OH 44224	OH01191	☐	☐	☐		☐
Gabriel Performance Products	725 State Road Ashtabula, OH 44004	OH01205	☐	☐	☐		☐

* Lab Types: C = Commercial F = Federal G = Local Government I = Industrial O = Other S = State

** See Footnote 2 on DMRQA-40, Frequently Asked Questions page

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH00232

Chemistry/Microbiology Analyte Checklist

WP Study 301

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
Minerals				
Alkalinity as CaCO ₃				
Chloride				
Conductivity at 25°C				
Fluoride				
Potassium				
Sodium				
Sulfate				
Total Dissolved Solids at 180°C				
SM2540C	☐	☒	☐	☐
Total Solids at 105°C				
Hardness				
Total Suspended Solids				
SM2540D	☐	☒	☐	☐
Calcium				
Magnesium				
Calcium Hardness as CaCO ₃				
Total Hardness as CaCO ₃				
pH				
pH				
Settleable Solids				
Settleable Solids				
Solids Concentrate				
Total Suspended Solids				
Total Dissolved Solids at 180°C				
Total Solids at 105°C				
Solids				
Total Suspended Solids				
Total Dissolved Solids at 180°C				
Total Solids at 105°C				
Simple Nutrients				
Ammonia as N				
Nitrate + Nitrite as N				
Nitrate as N				
ortho-Phosphate as P				
Complex Nutrients				
Total Kjeldahl Nitrogen				
Total phosphorus as P				
Nitrite				
Nitrite as N				
Demand				
BOD				
SM5210B	☐	☒	☐	☐

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH00232

Chemistry/Microbiology Analyte Checklist

WP Study 301

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
CBOD SM5210B	☐	☒	☐	☐
COD				
TOC				
Oil & Grease Concentrate				
n-Hexane Extractable Material(O&G) (Grav)				
Oil & Grease				
n-Hexane Extractable Material(O&G) (Grav)				
EPA 1664A	☐	☒	☐	☐
n-Hexane Extractable Material(O&G) (IR)				
Trace Metals				
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Chromium				
EPA 200.7	☐	☒	☐	☐
Cobalt				
Copper				
EPA 200.7	☐	☒	☐	☐
Iron				
Lead				
EPA 200.7	☐	☒	☐	☐
Manganese				
Molybdenum				
Nickel				
EPA 200.7	☐	☒	☐	☐
Selenium				
Silver				
Strontium				
Thallium				
Vanadium				
Zinc				
EPA 200.7	☐	☒	☐	☐
Mercury				
Mercury				
Low-Level Mercury				
Low Level Mercury				

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH00232

Chemistry/Microbiology Analyte Checklist

WP Study 301

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
<u>Hexavalent Chromium</u>				
Hexavalent Chromium				
<u>Turbidity</u>				
Turbidity				
<u>Total Cyanide</u>				
Cyanide, total				
Amenable Cyanide				
<u>Total Phenolics (4-AAP)</u>				
Phenolics, total				
<u>Total Residual Chlorine</u>				
Free Residual Chlorine				
Total Residual Chlorine				
<u>Low-Level Total Residual Chlorine</u>				
Low Level Total Residual Chlorine				
<u>WasteWatR™ Coliform MicrobE™</u>				
Total Coliforms (MF)				
Fecal Coliforms (MF)				
E.coli (MF)				
Total Coliforms (MPN)				
Fecal Coliforms (MPN)				
E.coli (MPN)				
<u>WasteWatR™ Coliform MicrobE™ - SM. 9221</u>				
Total Coliforms (MPN)				
Fecal Coliforms (MPN)				
E.coli (MPN)				

 Print Name

 Date

 Signature/Title

Use a separate checklist for EACH lab used

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH01191

WET Organisms/Test Conditions/End Points Checklist**DMRWet Study 40**

Analyte Number	Organisms / Conditions	End Points	Test Req	Laboratory's Graded Result		Analyte determined by state-certified lab
				Acceptable	Not Acceptable (Corrective Action Required)	
<u>Fathead minnow (Test Code 13)</u>						
0754	48Hr., Acute, Non-Renewal, 25° C, MHSF EPA 2000.0 MHSF 25 deg C	LC50	☐	☒	☐	☐
<u>Fathead minnow (Test Code 14)</u>						
0755	48Hr., Acute, Non-Renewal, 25° C, 20% DMW	LC50				
<u>Fathead minnow (Test Code 15)</u>						
0808	7-day Chronic, Daily Renewal, MHSF	IC25 (ON) Growth				
0810	7-day Chronic, Daily Renewal, MHSF	NOEC (ON) Growth				
0756	7-day Chronic, Daily Renewal, MHSF	NOEC Survival				
<u>Fathead minnow (Test Code 16)</u>						
0812	7-day Chronic, Daily Renewal, 20% DMW EPA 1000.0 DMW	IC25 (ON) Growth	☐	☒	☐	☐
0814	7-day Chronic, Daily Renewal, 20% DMW EPA 1000.0 DMW	NOEC (ON) Growth	☐	☒	☐	☐
0759	7-day Chronic, Daily Renewal, 20% DMW EPA 1000.0 DMW	NOEC Survival	☐	☒	☐	☐
<u>Ceriodaphnia dubia (Test Code 19)</u>						
0764	48-Hr Acute, Nonrenewal, 25° C, MHSF EPA 2002.0 MHSF 25 deg C	LC50	☐	☒	☐	☐
<u>Ceriodaphnia dubia (Test Code 20)</u>						
0765	48-Hr Acute, Nonrenewal, 25° C, 20% DMW	LC50				
<u>Ceriodaphnia dubia (Test Code 21)</u>						
0767	3-Brood Chronic, Daily Renewal, MHSF EPA 1002.0 MHSF	IC25 Reproduction	☐	☒	☐	☐
0768	3-Brood Chronic, Daily Renewal, MHSF EPA 1002.0 MHSF	NOEC Reproduction	☐	☒	☐	☐
0766	3-Brood Chronic, Daily Renewal, MHSF EPA 1002.0 MHSF	NOEC Survival	☐	☒	☐	☐
<u>Ceriodaphnia dubia (Test Code 22)</u>						
0770	3-Brood Chronic, Daily Renewal, 20% DMW	IC25 Reproduction				
0771	3-Brood Chronic, Daily Renewal, 20% DMW	NOEC Reproduction				
0769	3-Brood Chronic, Daily Renewal, 20% DMW	NOEC Survival				
<u>Daphnia magna (Test Code 32)</u>						
0788	48Hr., Acute, Non-Renewal, 25° C, MHSF EPA 2021.0 MHSF 20 deg C	LC50	☐	☒	☐	☐

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH01191

WET Organisms/Test Conditions/End Points Checklist**DMRWet Study 40**

Analyte Number	Organisms / Conditions	End Points	Test Req	Laboratory's Graded Result		Analyte determined by state-certified lab
				Acceptable	Not Acceptable (Corrective Action Required)	
<u>Daphnia pulex (Test Code 38)</u>						
0794	48Hr., Acute, Non-Renewal, 25° C, MHSF	LC50				
<u>Mysid (Test Code 42)</u>						
0798	48-Hr Acute, Nonrenewal, 25° C, SSW	LC50				
<u>Mysid (Test Code 43)</u>						
0816	7-day Chronic, Daily Renewal, SSW	IC25 (ON) Growth NOEC (ON) Growth NOEC Survival				
0818	7-day Chronic, Daily Renewal, SSW					
0799	7-day Chronic, Daily Renewal, SSW					
<u>Inland silverside (Test Code 44)</u>						
0803	48-Hr Acute, Nonrenewal, 25° C, SSW	LC50				
<u>Inland Silverside (Test Code 45)</u>						
0825	7-day Chronic, Daily Renewal, SSW	IC25 (ON) Growth NOEC (ON) Growth NOEC Survival				
0826	7-day Chronic, Daily Renewal, SSW					
0824	7-day Chronic, Daily Renewal, SSW					
<u>Sheepshead minnow (Test Code 46)</u>						
0804	48-Hr Acute, Nonrenewal, 25° C, SSW	LC50				
<u>Sheepshead minnow (Test Code 47)</u>						
0820	7-day Chronic, Daily Renewal, SSW	IC25 (ON) Growth NOEC (ON) Growth NOEC Survival				
0822	7-day Chronic, Daily Renewal, SSW					
0805	7-day Chronic, Daily Renewal, SSW					

Print Name_____
Date_____
Signature/Title

Use a separate checklist for EACH lab used

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH01205

Chemistry/Microbiology Analyte Checklist

DMRQA Study 40

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
Minerals Alkalinity as CaCO ₃ Chloride Conductivity at 25°C Fluoride Potassium Sodium Sulfate Total Dissolved Solids at 180°C Total Solids at 105°C				
Hardness Total Suspended Solids Calcium Magnesium Calcium Hardness as CaCO ₃ Total Hardness as CaCO ₃				
pH pH EPA 9040C	☐	☒	☐	☐
Settleable Solids Settleable Solids				
Solids Concentrate Total Suspended Solids Total Dissolved Solids at 180°C Total Solids at 105°C				
Solids Total Suspended Solids Total Dissolved Solids at 180°C Total Solids at 105°C				
Simple Nutrients Ammonia as N Nitrate + Nitrite as N Nitrate as N ortho-Phosphate as P				
Complex Nutrients Total Kjeldahl Nitrogen Total phosphorus as P				
Nitrite Nitrite as N				
Demand BOD CBOD COD TOC				

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH01205

Chemistry/Microbiology Analyte Checklist**DMRQA Study 40**

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
<u>Oil & Grease Concentrate</u> n-Hexane Extractable Material(O&G) (Grav)				
<u>Oil & Grease</u> n-Hexane Extractable Material(O&G) (Grav) n-Hexane Extractable Material(O&G) (IR)				
<u>Trace Metals</u> Aluminum Antimony Arsenic Barium Beryllium Boron Cadmium Chromium Cobalt Copper Iron Lead Manganese Molybdenum Nickel Selenium Silver Strontium Thallium Vanadium Zinc				
<u>Mercury</u> Mercury				
<u>Low-Level Mercury</u> Low Level Mercury				
<u>Hexavalent Chromium</u> Hexavalent Chromium				
<u>Turbidity</u> Turbidity				
<u>Total Cyanide</u> Cyanide, total Amenable Cyanide				
<u>Total Phenolics (4-AAP)</u> Phenolics, total				

Permittee Name: Gabriel Performance Products

Permit Number: OH0029149

EPA Lab Code: OH01205

Chemistry/Microbiology Analyte Checklist**DMRQA Study 40**

Analyte Test / Method	Test Required	Laboratory's Graded Result		Analyte determined by state-certified lab
		Acceptable	Not Acceptable (Corrective Action Required)	
Total Residual Chlorine				
Free Residual Chlorine				
Total Residual Chlorine				
Low-Level Total Residual Chlorine				
Low Level Total Residual Chlorine SM 4500-Cl G-2011	☐	☒	☐	☐
WasteWatR™ Coliform MicrobE™				
Total Coliforms (MF)				
Fecal Coliforms (MF)				
E.coli (MF)				
Total Coliforms (MPN)				
Fecal Coliforms (MPN)				
E.coli (MPN)				
WasteWatR™ Coliform MicrobE™ - SM. 9221				
Total Coliforms (MPN)				
Fecal Coliforms (MPN)				
E.coli (MPN)				

 Print Name

 Date

 Signature/Title

Use a separate checklist for EACH lab used

CERTIFICATE OF RECOGNITION

ERA congratulates

GABRIEL PERFORMANCE PRODUCTS

for your participation and successful evaluation in DMR-QA 40. We recognize the performance of this laboratory for achieving acceptable evaluations for the following analytes.

Low Level Total Residual pH
Chlorine



Matthew Seebeck
Quality Officer

G234480

MDL Study

Initial MDL (For Annual Verification and new methods only)

Revised MDL

Method:	480A	☒ Aqueous	☐ Solid
Instrument:	HACH DR 300		
Analyte:	Residual Chlorine		
Dates of Study:	7/8/2020, 7/9/2020, 7/10/2020		
Spike Level:	0.275		
Analyte Units :	☒ mg/L	☐ µg/L	☐ ng/L

Spike No.	RESULTS	Blank No.	RESULTS
Spike 1	0.25	Blank 1	0
Spike 2	0.25	Blank 2	0
Spike 3	0.23	Blank 3	0
Spike 4	0.2	Blank 4	0
Spike 5	0.22	Blank 5	0
Spike 6	0.23	Blank 6	0
Spike 7	0.21	Blank 7	0
Spike 8	0.2	Blank 8	0
Spike 9	0.21	Blank 9	0
Spike 10	0.26	Blank 10	0
Spike 11	0.23	Blank 11	0

PREP BATCH ID	PREP DATE	ANALYST

ANALYSIS BATCH ID	ANALYSIS DATE	ANALYST
NA	7/8/2020	MC
NA	7/8/2020	JS
NA	7/8/2020	RL
NA	7/8/2020	LM
NA	7/9/2020	MC
NA	7/9/2020	JS
NA	7/9/2020	RL
NA	7/9/2020	LM
NA	7/10/2020	MC
NA	7/10/2020	JS
NA	7/10/2020	LM

Spike Avg	0.226	Blank Avg	0.00000
SD	0.021	SD	0.00000
Student's t-value	2.76400	Student's t-value	2.76400
MDL_S	0.057	MDL_B	0.00000
PQL	0.1140		

Table 1: Student's t values

Number of Replicates	Degrees of Freedom (n-1)	Student's t Value (0.99)
7	6	3.143
8	7	2.998
9	8	2.896
10	9	2.821

- Notes:**
- A minimum of 7 blanks and spikes, prepped and analyzed across 3 calendar days are required.
 - Add rows to spreadsheet if number of spikes and blanks is > 10. Also, use t-values for n > 10 found in SOP 5019. Make sure to update sheet and calculations according to number of replicates; calculations default to a max of 10 spikes/blanks only
 - Record all numerical values. If any spike is ≤ 0, MDL study must be re-run. If blanks are all 'ND', MDLb calculation does not apply
 - MDLspike MUST be less than spike level; if not re-run study at different spike level
 - A negative average for blanks means that MDLb does not apply.
 - If blanks are a combination of 'ND' and numerical results, set MDLb to highest blank value.
 - Ensure that PQL is at least 2x MDL and any regulatory requirement is met

Comments:

Supervisor Approval Signature:	Date:
---------------------------------------	--------------

QA Review Only:

Doc. No. EHSS-037A.7 Effective Date: 02/22/2021 Supersedes: EHSS-037A.6 Supersedes Date: 11/18/2020	Subject: Effluent Log Sheet	
Approved By: EHS Department		

DATE: _____

OPERATORS SIGNATURES :

TIME :

0700

1300

1900

0100

SANITARY SYSTEM:

Everyday

EVERY MONDAY:

Clean weeds & solids from unused bed, then switch flow to unused bed. **Circle bed in service: EAST / WEST**
 Change Blower in service (turn one that is running off, turn other on). **Circle blower in service: NORTH / SOUTH**

EVERY MONDAY: Record the secondary dosing pump hour reading

Prev. Day

Today

Difference

EVERY DAY RECORD PRIMARY DOSING PUMP HOUR READING**COLOR, ODOR, TURBIDITY & TR CHLORINE SCREEN AT DISCHARGE**

C,O,T:

TR Chlorine:

CLEAN SAMPLE COLLECTION BOTTLE DAILY, AND DISCHARGE FLUE AS NECESSARY

CHECK CHLORINATOR - TABLETS PRESENT AND FEEDING PROPERLY**SAMPLE AERATOR ALKALINITY M,W,F (units: mg/l CaCO₃)**

Mon, Wed and Fri

Sodium bicarb addition at aerator & lab sink: If Alkalinity is <150 add 2lb/shift / If Alkalinity is <200 add 1lb/shift**BOILER CHECKS****Weekly checks are to be performed every Monday on Night Shift**

Operator

Time

Montly Checks to be performed first Monday Night Shift of the Month

Operator

Time

EFFLUENT SYSTEM**TAKE 1 pt. GRAB SAMPLES FOR LAB & RECORD:**

WEST PIT OUTLET Appearance

WEST PIT OUTLET Color

WEST PIT OUTLET Odor

OUTLET FROM CARBON BEDS pH**Lab-tested pH must be between 6.5 and 9.0SU***IF lab-tested pH is out of spec - confirm that the system is in RECIRC***OUTLET FROM CARBON BEDS TRCI (Must be <0.04 mg/l)**

OUTLET FROM CARBON BEDS COND

NORTH RAIN SUMP Appearance

NORTH RAIN SUMP Color

NORTH RAIN SUMP Odor

T-97 ("New" HCL Tank) ACID TANK LEVEL (GALS.)

P-304 NORTH POND PUMP

NORTH POND LEVEL

NORTH POND UNDERDRAIN HOUR READING **(2 X PER WEEK)**

Readings on Mon. and on Fri.

SOUTH POND LEVEL

SOUTH POND UNDERDRAIN HOUR READING **(2 X PER WEEK)**

Readings on Mon. and on Fri.

NORTH RAIN SUMP PH READING

NORTH RAIN VISUAL CHECK

B/South sump level is below inlet line & overflow screen is clear

STORM WATER RETENTION BASIN LEVEL

ACCUM / DISCH (circle)**FINAL DISCHARGE FLOW (GPM) (Should be <225 GPM)****FINAL DISCHARGE TEMP**

SAMPLE PLANT DISCHARGE AT ~0730 HR'S

CLEAN FINAL SAMPLE JUG daily after EHS collects samples (1st shift)

FINAL AUTOSAMPLER "STANDBY"(ACCUM)

FINAL AUTOSAMPLER "PROGRAM RUNNING" (DISCHARGE)

TEMP IN SAMPLE JUG REFRIG. (ADJUST IF < 2° OR >7°C)

FINAL SAMPLE JUG LEVEL (GALS.)

Prev Day (A)

Today (B)

Difference (B)-(A)*

*** Note that totalizer resets at 10,000. If (B) < (A), then Difference = 10,000 - (A) + (B):****RECORD TOTALIZER READING (Daily)**

Doc. No. EHSS-037A.7 Effective Date: 02/22/2021 Supersedes: EHSS-037A.6 Supersedes Date: 11/18/2020	Subject: Effluent Log Sheet	
Approved By: EHS Department		

DATE: _____

OPERATORS SIGNATURES :

TIME :

0700

1300

1900

0100

SAND FILTERS:

P-301 DISCHARGE PRESSURE				
P-302 DISCHARGE PRESSURE (WHEN IN SERVICE)				
P-303 DISCHARGE PRESSURE (WHEN IN SERVICE)				
SAND FILTER INLET PRESS				
SAND FILTER OUTLET PRESS				

CARBON BEDS:

INLET PRESS CARBON BED-A				
OUTLET PRESS CARBON BED-A				
INLET PRESS CARBON BED-B				
OUTLET PRESS CARBON BED-B				

FIRST DAY OF EACH MONTH

DO VITAL EQUIPMENT CHECKLIST (EHSS-037D)				
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DAILY ON DAY SHIFT : CHECK FOR LEAKS, CONDITION OF AREA +THAT DRAINS ARE CLOSED (BB/CC RQTS)

DIKE #	Tanks	Note A >	Tank	Pump	Lines	Areas Near Dike
#1	T38, 39, 40 & 82					
#2	T-44, 86, 61, 220					
#3	T-57,77,79,85,94,96					
#4	T- 62,78,80,81,88,92					
#5	T-66,67,70,90,91					
#6	T-1, 2					
#7	T-87					
#8	Distillation Column					
T-8	T-87					
T-41	T-41, T-95					
T-93	T-93					
ACID	T97					

FRAC TANKS	NOTE: PLEASE LIST BELOW

>Note A- DAILY ON DAY SHIFT, SAMPLE AND PUMP DRY IF NEEDED (see legend below). Complete Containment Log (EHSS-037C) accordingly.

LEGEND: "D" = DRY

"P" = PRECIPITATION

"S&PD" = SAMPLED& PUMPED DRY

NOTE B: ANY ISSUE, LEAK OR PROBLEM WITH ANY PIECE OF EQUIPMENT ABOVE MUST BE REPORTED IMMEDIATELY TO THE SHIFT SUPERVISOR AND EHS PERSONNEL.

EVERY WEDNESDAY - EMPTY FUNDABAC HOPPER				Wednesdays
TOWMOTORS:				
#33 & 34 COMPLETE INSPECTION SHEET (EHSS-032A)				Everyday
PLANT HOIST SHEETS: ALL HOISTS				
PLANT HOISTS CHECK LISTS AREAS I AND IV				
MONDAY COLLECT INSPECTION SHEETS, SUBMIT TO EHS, & INSTALL NEW ONES				Mondays

Doc. No. **EHSS-037A.7**

Subject:

Effective Date: **02/22/2021**

Supersedes: EHSS-037A.6

Supersedes Date: 11/18/2020

Effluent Log Sheet**Approved By:** EHS Department

DATE: _____

OPERATORS SIGNATURES :

TIME :

0700

1300

1900

0100

GENERAL PLANT & SECURITY CHECKS:

RCRA				
HEATED AREA				
WAREHOUSE INCLUDING C BUILDING				
IT Room Secured (confirm locked/secure)				
Gates & Guard House Secured (confirm locked/secure)				
DCS Room Secured (confirm locked/secure)				
H2S Rail Cars Secured (confirm locked derailler is secure)				

Every Monday 'Inspect: Showers/Eye washes

Sign off on tag for both eye wash and safety shower				
Effluent ES4			Mondays	
Boiler House ES7			Mondays	
Sulfuric Acid Mini-Bulk ES23			Mondays	

ASHCO WATER:

RECORD TOTALIZER READING ON DAY SHIFT				
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COOLING TOWERS:	RECORD CTW TEMP	°C		
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INSPECT TRAYS/AREA/TOWERS				
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COOLING PUMPS:

A. STARTUP CTW PUMP A-II-4 THAT IS DOWN & PUT ONLINE.			Saturdays on Day Shift	
B. SHUT DOWN & TAKE OTHER PUMP OFF LINE.			Saturdays on Day Shift	

HAYWARD STRAINER:

ONE TIME PER SHIFT: MANUALLY BACKWASH				
Note: Notify foreman if Hayward is "Off line"				

MISCELLANEOUS CHECKS:

TANKAGE FOR LEAKS				
RAILROAD CARS FOR LEAKS				
ROOF INSPECTION-REPORT ISSUES TO FOREMAN ASAP				
RECORD LEVEL IN NORTH FAT TRAP				
RECORD LEVEL IN SOUTH FAT TRAP				
CHECK AREA V SUMP				

COLD WEATHER CHECKLIST:

DO LIST 2 TIMES PER SHIFT WHEN EVER TEMP. IS BELOW 33o F

IF ANY ANSWER BELOW IS NO, CONTACT FOREMAN/ENGINEERING IMMEDIATELY

NOTE: T-2: Napthalene - Freezing Point of 85°C	0700	1300	1900	0100
IS THE RECIRC. PUMP PUMPING? YES NO				
IS THERE A LEVEL IN THE PUMP SEAL POT? YES NO				
IS THE TEMPERATURE at ~100°C? YES NO	°C	°C	°C	°C

T-87 (HRI-1) TANK TEMP. / Pump Seal Pot	CHECK 3 TIMES PER SHIFT			
TIME	0700 HR'S	1100 HR'S	1500 HR'S	
TEMP.	°C	°C	°C	
Seal Pot	#	#	#	
Seal Pot Level				

NOTE: IF TEMP OF T-87 IS NOT 70 - 75° C : NOTIFY THE HRI OPERATOR - DO NOT TRY TO ADJUST TEMP.

HOT BOXES					CHECK ON DAY SHIFT
TIME	0700 HR'S	1100 HR'S	1900 HR'S	0100 HR'S	T-96 mesurements
#1 TEMP	°C	°C	°C	°C	0700 hrs 1300 hrs
#2 TEMP	°C	°C	°C	°C	pH pH
#3 TEMP	°C	°C	°C	°C	1900 hrs 0100 hrs

Doc. No. EHSS-037A.7 Effective Date: 02/22/2021 Supersedes: EHSS-037A.6 Supersedes Date: 11/18/2020	Subject: Effluent Log Sheet	
Approved By: EHS Department		

DATE: _____	OPERATORS SIGNATURES :					
	TIME :	0700	1300	1900	0100	
MELT ROOM	°C	°C	°C	°C	pH	pH

[illegible]

Attachment D: Photo Log

Gabriel Performance Products

EPA Inspection July 13, 2021

All photos taken by Dean Maraldo, Inspector, U.S. EPA

Camera: Ricoh-WG4



1: GPPI0001

Description: Sanitary sewer package plant. View of aeration tank.

Location: Sanitary Sewer Treatment System; NE quadrant of Facility

Camera Direction: 160°

Date/Time: July 13, 2021; 1:10 p.m.



2: GPPI0002

Description: Sanitary sewer package plant. View of aeration tank (center) and clarifier (top).

Location: Sanitary Sewer Treatment System; NE quadrant of Facility

Camera Direction: 40°

Date/Time: July 13, 2021; 1:13 p.m.



3: GPPI0003

Description: Sanitary sewer pump vault.

Location: Sanitary Sewer Treatment System; NE quadrant of Facility

Camera Direction: 200°

Date/Time: July 13, 2021; 1:20 p.m.



4: GPPI0004

Description: View of sand filter.

Location: Sanitary Sewer Treatment System; NE quadrant of Facility

Camera Direction: 316°

Date/Time: July 13, 2021; 1:21 p.m.



5: GPPI0005

Description: Chlorine station vault, with two chlorine feeders in the center.

Location: Sanitary Sewer Treatment System; NE quadrant of Facility

Camera Direction: 272°

Date/Time: July 13, 2021; 1:42 p.m.



6: GPPI0006

Description: Chlorine station vault. Sample of the effluent after the chlorine tablets feeders. Note small white particles (outlined in red) in the bottom of the sampler.

Location: Sanitary Sewer Treatment System; NE quadrant of Facility

Camera Direction: 96°

Date/Time: July 13, 2021; 1:47 p.m.



7: GPPI0007

Description: North Rain Sump.

Location: SE quadrant of Facility

Camera Direction: 126°

Date/Time: July 13, 2021; 1:56 p.m.



8: GPPI0008

Description: Effluent Building. Note low-profile air stripper behind Bisco control panel (center), carbon beds (2) on the right, and a multimedia filter on the left. The second multimedia filter is not captured in the photo.

Location: Outfall 001 Treatment System. SE quadrant of Facility

Camera Direction: 186°

Date/Time: July 13, 2021; 1:58 p.m.



9: GPPI0009

Description: Multimedia filters (2) in the Effluent Building.

Location: Outfall 001 Treatment System. SE quadrant of Facility

Camera Direction: 155°

Date/Time: July 13, 2021; 2:00 p.m.



10: GPPI0010

Description: Carbon Beds (2) in the Effluent Building.

Location: Outfall 001 Treatment System. SE quadrant of Facility

Camera Direction: 232°

Date/Time: July 13, 2021; 2:00 p.m.



11: GPPI0011

Description: Inside of effluent composite sampler in the Effluent Building. Note heavy staining/debris on inside walls of sample tubing.

Location: Outfall 001 Treatment System. SE quadrant of Facility

Camera Direction: 271°

Date/Time: July 13, 2021; 2:02 p.m.



12: GPPI0012

Description: South equalization pond. Note algae on surface of the pond.

Location: Outfall 001 Treatment System. SW quadrant of Facility

Camera Direction: 256°

Date/Time: July 13, 2021; 2:14 p.m.