Gelman Sciences, Inc. d/b/a
Pall Life Sciences
642 South Wagner Road
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CASE NARRATIVE

Monthly Data Pall Life Sciences
Project: 1,4-Dioxane Remediation
Date: October 2018

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Gelman Sciences, Inc. d/b/a Pall Life Sciences (PLS) attests to the validity of the laboratory data generated by PLS's Ann Arbor, Michigan Environmental Laboratory facilities reported herein. All analyses performed by PLS's Environmental Laboratory facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. PLS's Environmental group has reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

A drinking water sample, the barium sample and as noted in the Sample Analysis Report additional 1,4-dioxane samples were sent to Ann Arbor Technical Services (ATS) for analysis. ATS is a certified drinking water laboratory. The balance of the 1,4-dioxane and bromate samples were analyzed by Pall Corporation's Environmental Laboratory. The test results in this report meet all NELAP requirements for parameters for which accreditation are required or available. Any exceptions to NELAP requirements are noted in this report. All exceptions are noted per laboratory standard operating procedure based on EPA Method 1624c. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

The quarterly barium sample was sent to ATS for analysis. Sample data can be found in the Barium section of this narrative. These composite samples are analyzed to satisfy NPDES permit and are reported here.

Calculations are performed before rounding to avoid round-off errors in calculated results. The odd even rule is used for rounding. Holding times were met for all samples analyzed. Proper preservation was observed on all samples unless otherwise detailed in the individual sections below.

RECEIPT/ STORAGE

The samples were received on the days noted in the report for the Month; the samples arrived in good condition, properly preserved and on ice when necessary. Samples that require 1,4-dioxane analysis are collected in hydrochloric HCl acid-preserved vials to a pH of ≤2, with the exception of the Pall ozone treatment samples. These samples have chemicals that, when mixed with the HCl acid, cause interferences and trap damage. Every attempt is made to analyze these samples within 24 hours of receipt.

Samples that require Bromate analysis are collected and preserved in the laboratory with ethylene diamine and refrigerated.

The barium sample was taken as a composite sample, preserved with nitric acid, and refrigerated before and after being sent to ATS for analysis. This sample is preserved with nitric acid and refrigeration.

Samples that are delivered to the laboratory the same day as they are collected are likely not to have reached a fully chilled temperature. This is acceptable as long as there is evidence that chilling has begun. All samples are iced or refrigerated at 4°C (±2°C) from the time of collection until sample preparation or analysis.

1,4-Dioxane (GC-MS)

All ground water and treated water samples were analyzed for 1,4-Dioxane (GC-MS) in accordance with EPA 1624C, which has been modified to enhance detection limits. Samples that were diluted to bring them within the calibrated range of the instrument are noted with a "D" under the Qualifier Code section of the data report. Reporting limits were adjusted based on each dilution.

Reporting limit for undiluted samples is 1ppb (part per billion, micrograms per liter, µg/L). All quality control parameters were within the acceptance limits.

Bromate (Ion Chromatography)

All surface water and treated samples were analyzed for Bromate (Ion Chromatography) in accordance with EPA 300.1. Surrogates are added to all samples. All quality control parameters were within the acceptance limits with the balance of sample analyzed. Samples are preserved with ethylene diamine per EPA 300.1.

The reporting limit for treated samples is 5.0ppb and for surface samples is 2.0ppb.

Barium

A composite Outfall001 sample was sent to ATS for total barium analysis in accordance with EPA200.7. Barium samples are analyzed quarterly in compliance with PLS NPDES permit. This sample is preserved with nitric acid and refrigeration. The results were less than the permitted level of 440µg/L at 180µg/L.

Qualifiers

1,4-Dioxane Qualifier Codes:

Qualifier Code	*Description*
nd:	The compound was analyzed for, but was not detected at or above the detection limit indicated.
D:	Analyte value quantified from a dilution, reporting limit is raised to reflect dilution.
E:	The compound result is greater than the upper quantitation limit in the associated calibration curve, reported as estimate.
B:	The sample vials contained air bubbles larger than 5mm, which may affect compound results.
J:	The compound was positively identified; the associated numerical value is the approximate concentration.
M:	Matrix effects, sample required dilution.
R:	The reported value is unusable and rejected due to variance from quality control criteria.
V:	The reported value is considered estimated due to variance from quality control criteria.
H:	Sample was analyzed past 14 day hold time, but within 28 days.
O:	Samples analyzed in outside laboratory.
S:	Samples split with DEQ.

Bromate Qualifier Codes:

Qualifier Code	*Description*
nd:	The compound was analyzed for, but was not detected at or above the detection limit indicated.
E:	The compound result is greater than the upper quantitation limit in the associated calibration curve.
J:	The compound was positively identified; the associated numerical value is the approximate concentration.
R:	The reported value is unusable and rejected due to variance from quality control criteria.
V:	The reported value is considered estimated due to variance from quality control criteria.
H:	Sample was analyzed past 28 day hold time

Analyst: *Susan E.O. Peters* Susan E.O. Peters Date: 11/9/18

Report Checked by: *Laurel Beyer* Laurel Beyer Date: 11/9/18

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642 South Wagner Road
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Sample Analysis Report

October, 2018

Analyst Initials: SEOP
Date: 11-9-18

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments	Qualifier(s)
Residential Wells								
D0								
5005 Jackson Rd-10-18-18-09:56-1	15	1.0						
Not Determined								
697 South Wagner Rd-10-11-18-11:40-1	nd	1.0						O
Miscellaneous Wells								
Bethlehem Cemetery-10-11-18-15:14-1	nd	1.0						
Extraction Wells								
C3								
DOLPH-10-03-18-09:00-1	130	1.0						
TW-1-10-30-18-14:24-1	58	2.0						O, D
TW-10-10-30-18-09:08-1	220	10						O, D
TW-14-10-31-18-13:40-1	33	1.0						O
TW-20-10-03-18-08:50-1	980	10.0						D
D2								
LB-4-10-03-18-09:36-1	480	10.0						D
TW-21-10-03-18-09:12-1	220	10.0						D
TW-9-10-30-18-09:23-1	630	10						O, D
E								
TW-12-10-31-18-14:24-1	17	1.0						O

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments	Qualifier(s)
TW-17-10-30-18-09:14-1	370	10						O, D
TW-18-10-03-18-09:02-1	260	10.0						D
TW-19-10-03-18-09:33-1	530	10.0						D
TW-23-10-03-18-09:48-1	690	10.0						D
Marshy								
PW-1-10-03-18-09:05-1	1000	10.0						D
SW								
TW-22-10-03-18-08:37-1	660	10.0						D
TW-8-10-03-18-08:34-1	740	10.0						D
Monitoring Wells								
C3								
MW-1 Replacement-10-25-18-16:16-1	2400	100						O, D
MW-105s-10-18-18-12:42-1	520	10.0						D
MW-18d-10-16-18-14:22-1	100	1.0						
MW-20-10-16-18-10:51-1	nd	1.0						
MW-22-10-11-18-14:40-1	580	10.0						D
MW-2d-10-11-18-14:03-1	78	1.0						
MW-32-10-10-18-13:08-1	23	1.0						
MW-34s-10-11-18-12:33-1	nd	1.0						
MW-35-10-11-18-13:25-1	3.3	1.0						
MW-37-10-17-18-15:52-1	280	10.0						D
MW-38s-10-11-18-12:06-1	nd	1.0						
MW-39s-10-24-18-11:57-1	2.0	1.0						
MW-75-10-16-18-11:36-1	850	20						O, D, H
D0								
A2 Cleaning Supply-10-02-18-12:50-1	83	1.0						

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments	Qualifier(s)
MW-136i-10-29-18-10:36-1	nd	1.0						O
MW-136s-10-29-18-11:49-1	nd	1.0						O
MW-138i-10-29-18-15:52-1	8	1.0						O
MW-138s-10-29-18-14:41-1	nd	1.0						O
MW-51-10-16-18-09:48-1	nd	1.0						
MW-53d-10-02-18-09:10-1	nd	1.0						
MW-53i-10-02-18-11:38-1	46	1.0						
MW-53s-10-02-18-10:25-1	nd	1.0						
MW-93-10-22-18-12:57-1	3.4	1.0						
D2								
175 Jackson Plaza-10-18-18-16:54-1	790	10.0						D
373 Pinewood Shallow-10-16-18-12:25-1	280	10.0						D
465 Dupont-10-25-18-13:28-1	1100	20						O, D
MW-118-10-24-18-14:40-1	44	1.0						
MW-11d-10-16-18-15:42-1	380	10.0						D
MW-120s-10-04-18-08:50-1	nd	1.0						
MW-121s-10-05-18-11:08-1	nd	1.0						
MW-123s-10-04-18-11:28-1	nd	1.0						
MW-124s-10-09-18-11:11-1	nd	1.0						
MW-126s-10-24-18-10:33-1	nd	1.0						
MW-129i-10-08-18-10:12-1	nd	1.0						
MW-129s-10-08-18-09:00-1	nd	1.0						
MW-130i-10-08-18-15:42-1	5.2	1.0						
MW-130s-10-08-18-14:28-1	nd	1.0						
MW-131s-10-19-18-16:15-1	nd	1.0						
MW-133i-10-19-18-11:14-1	1.8	1.0						
MW-133s-10-19-18-09:18-1	1.7	1.0						

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments	Qualifier(s)
MW-134i-10-22-18-10:14-1	9	1.0						O
MW-134s-10-22-18-11:30-1	9.4	1.0						
MW-17-10-25-18-08:53-1	310	10						O, D
MW-34d-10-17-18-09:53-1	nd	1.0						
MW-38d-10-17-18-14:25-1	37	1.0						
MW-39d-10-24-18-13:16-1	27	1.0						O
MW-4d-10-17-18-17:15-1	450	10.0						D
MW-77-10-25-18-14:51-1	1500	40						O, D
MW-94s-10-25-18-10:19-1	690	10						O, D
E								
MW-103s-10-03-18-14:17-1	85	1.0						
MW-105d-10-18-18-11:21-1	200	10.0						D
MW-106s-10-24-18-16:00-1	210	10						O, D
MW-108d-10-18-18-15:23-1	1000	25.0						D
MW-108s-10-18-18-14:05-1	310	10.0						D
MW-112i-10-03-18-12:40-1	11	1.0						
MW-112s-10-03-18-11:26-1	nd	1.0						
MW-115-10-23-18-12:23-1	580	10						O, D
MW-119-10-05-18-13:50-1	48	1.0						
MW-120d-10-04-18-10:05-1	nd	1.0						
MW-121d-10-05-18-12:21-1	2.0	1.0						
MW-123d-10-04-18-12:47-1	nd	1.0						
MW-124d-10-09-18-09:47-1	nd	1.0						
MW-126d-10-24-18-09:17-1	nd	1.0						
MW-129d-10-08-18-11:28-1	1.5	1.0						
MW-130d-10-08-18-13:06-1	nd	1.0						
MW-131d-10-19-18-14:55-1	nd	1.0						

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments	Qualifier(s)
MW-133d-10-19-18-12:57-1	3.3	1.0						
MW-134d-10-22-18-08:44-1	6.1	1.0						
MW-135-10-09-18-12:54-1	nd	1.0						
MW-136d-10-29-18-09:21-1	nd	1.0						O
MW-138d-10-29-18-13:27-1	nd	1.0						O
MW-64-10-17-18-12:54-1	50	1.0						
MW-66-10-17-18-11:20-1	2.0	1.0						
MW-76i-10-04-18-14:22-1	100	10.0						D
MW-76s-10-04-18-15:37-1	290	10.0						D
MW-79d-10-23-18-09:48-1	nd	1.0						
MW-79s-10-23-18-11:04-1	430	10						O, D
MW-81-10-25-18-11:54-1	240	10						O, D
MW-84s-10-02-18-14:32-1	7.9	1.0						
MW-85-10-23-18-15:20-1	730	20						O, D
MW-88-10-23-18-13:47-1	340	10						O, D
SH								
MW-25s-10-11-18-14:21-1	200	10.0						D
MW-2s-10-11-18-12:55-1	2.1	1.0						
MW-5d-10-11-18-14:55-1	18000	100.0						D
SW								
MW-10d-10-22-18-14:34-1	460	10						O, D
MW-46-10-30-18-14:34-1	150	10						O, D
MW-57-10-16-18-11:15-1	2.9	1.0						
TW-4-10-30-18-11:20-1	50	1.0						O
Surface Water								
Not Applicable								

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments	Qualifier(s)
HC/HR-10-01-18-08:40-1			nd	2.0				
HC/HR-10-02-18-10:00-1			nd	2.0				
HC/HR-10-03-18-09:20-1			nd	2.0				
HC/HR-10-04-18-14:15-1			nd	2.0				
HC/HR-10-05-18-10:15-1			nd	2.0				
HC/HR-10-08-18-08:50-1			nd	2.0				
HC/HR-10-09-18-08:30-1			nd	2.0				
HC/HR-10-10-18-08:50-1			nd	2.0				
HC/HR-10-11-18-08:25-1			nd	2.0				
HC/HR-10-12-18-08:50-1			nd	2.0				
HC/HR-10-15-18-08:53-1			nd	2.0				
HC/HR-10-16-18-08:43-1			nd	2.0				
HC/HR-10-17-18-09:08-1			nd	2.0				
HC/HR-10-18-18-09:35-1			nd	2.0				
HC/HR-10-19-18-08:52-1			nd	2.0				
HC/HR-10-22-18-09:00-1			nd	2.0				
HC/HR-10-23-18-08:45-1			nd	2.0				
HC/HR-10-24-18-08:02-1			nd	2.0				
HC/HR-10-25-18-07:45-1			nd	2.0				
HC/HR-10-26-18-07:00-1			nd	2.0				
HC/HR-10-29-18-11:00-1			nd	2.0				
HC/HR-10-30-18-10:50-1			nd	2.0				
HC/HR-10-31-18-08:15-1			nd	2.0				
Treatment System								
Green Pond-10-11-18-14:30-1	nd	1.0						
OUTFALL-10-01-18-1	5.0	1.0						H
OUTFALL-10-01-18-2			8.0	2.0				

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments	Qualifier(s)
OUTFALL-10-02-18-1	4.9	1.0						
OUTFALL-10-02-18-2			6.8	5.0				
OUTFALL-10-03-18-1	5.0	1.0						
OUTFALL-10-03-18-2			7.2	5.0				
OUTFALL-10-04-18-1	5.2	1.0						
OUTFALL-10-04-18-2			7.2	5.0				
OUTFALL-10-07-18-1	4.8	1.0						
OUTFALL-10-07-18-2			7.5	5.0				
OUTFALL-10-08-18-1	5.1	1.0						
OUTFALL-10-08-18-2			7.6	5.0				
OUTFALL-10-09-18-1	4.9	1.0						
OUTFALL-10-09-18-2			8.4	5.0				
OUTFALL-10-10-18-1	5.2	1.0						
OUTFALL-10-10-18-2			7.7	5.0				
OUTFALL-10-11-18-1	5.7	1.0						
OUTFALL-10-11-18-2			7.4	5.0				
OUTFALL-10-14-18-1	6.0	1.0						
OUTFALL-10-14-18-2			6.5	5.0				
OUTFALL-10-15-18-1	5.4	1.0						
OUTFALL-10-15-18-2			6.7	5.0				
OUTFALL-10-16-18-1	5.8	1.0						
OUTFALL-10-16-18-2			8.5	5.0				
OUTFALL-10-17-18-1	5.0	1.0						
OUTFALL-10-17-18-2			9.0	5.0				
OUTFALL-10-18-18-1	5.0	1.0						
OUTFALL-10-18-18-2			8.9	5.0				
OUTFALL-10-21-18-1	4.7	1.0						

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments	Qualifier(s)
OUTFALL-10-21-18-2			6.2	5.0				
OUTFALL-10-22-18-1	4.5	1.0						
OUTFALL-10-22-18-2			8.1	5.0				
OUTFALL-10-23-18-1	5.1	1.0						
OUTFALL-10-23-18-2			6.8	5.0				
OUTFALL-10-24-18-1	4.8	1.0						
OUTFALL-10-24-18-2			7.7	5.0				
OUTFALL-10-25-18-1	5.2	1.0						
OUTFALL-10-25-18-2			7.4	5.0				
OUTFALL-10-28-18-1	6	1.0						O
OUTFALL-10-28-18-2			7.7	5.0				
OUTFALL-10-29-18-1	6	1.0						O
OUTFALL-10-29-18-2			7.1	5.0				
OUTFALL-10-30-18-1	6	1.0						O
OUTFALL-10-30-18-2			5.7	5.0				
OUTFALL-10-31-18-1	6.1	1.0						
OUTFALL-10-31-18-2			5.4	5.0				
Red Pond-10-01-18-07:55-1	390	10.0						D, H
Red Pond-10-08-18-08:30-1	420	10.0						D
Red Pond-10-15-18-08:50-1	440	10.0						D
Red Pond-10-22-18-09:30-1	380	10.0						D
Red Pond-10-29-18-08:45-1	420	10						O, D

PLS Qualifier Codes:

nd: The compound was analyzed for, but was not detected at or above the detection limit indicated.
D: Analyte value quantified from a dilution, reporting limit is raised to reflect dilution.
H: Sample was analyzed past 14 day hold time, but within 28 days used by ATS for same method with EPA approval.
O: Samples analyzed in outside laboratory.

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Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321730

Data Transmittal Cover Page

Project Name: Pall Corporation
ATS Project Number: G001-002
ATS Report Number(s): SRF_1018181

Project Description: This data report contains the results of two water samples, received by ATS on 10/18/18, to be analyzed for 1,4-Dioxane and Barium.

We certify that the sample analyses for this report have been conducted in accordance with guidelines provided in the referenced standard test method, and are consistent with detailed procedures described in a written Standard Operating Procedure specific to the ATS Laboratories, as required by USEPA. Laboratory data sheets, SOPs, and QA/QC information are available for inspection and audit at the laboratory upon request. Unless specifically noted on the data report, all applicable sample preservation and holding time requirements have been met.

Recipient: Ms. Sue Peters **Email:** Sue_Peters@Pall.com
FAX Number:

No. of Pages (Including cover pg.): 9

From: Sarah Stubblefield, Senior Chemist / Lab Manager **Email:** Sarah.Stubblefield@AnnArborTechnicalServices.com
FAX Number: 734-995-3731

Additional Message:

Date: 10/29/18 **Signed:**

IF YOU DO NOT RECEIVE ALL PAGES OF THIS TRANSMITTAL, PLEASE CALL 734-995-0995.

LABORATORY OPERATIONS
SAMPLE DELIVERY GROUP (SDG) CASE NARRATIVE

ATS Project Number: G001-002
Report Date: 10/29/18
SDG Number: 1018181

SDG Summary

This case narrative applies to the following samples that were received by Ann Arbor Technical Services, Inc. (ATS) on 10/18/18, and associated matrix-specific QA/QC:

Samples

Client Sample Identification	Sample Date	Analysis	Matrix
697 South Wagner Road	10/11/18	1,4-Dioxane	Drinking Water
Outfall	10/5/18	Barium	Treated Water

Matrix Specific QC

Client Sample Identification	Sample Date	Analysis	Matrix
AA Tap Matrix Spike	10/23/18	1,4-Dioxane	Drinking Water
AA Tap Matrix Spike Duplicate	10/23/18	1,4-Dioxane	Drinking Water
TER Composite Matrix Spike	10/17/18	Barium	Waste Water
TER Composite Matrix Spike Duplicate	10/17/18	Barium	Waste Water

Upon receipt, samples were scheduled for the following analyses:

- 1,4-Dioxane by EPA method 1624 (select samples)
- Total Barium by EPA method 200.7 (select samples)

Sample Receipt and Chain of Custody Records

Samples were delivered directly to ATS by Pall Corporation staff. Samples were received with proper chain of custody records included. Sample condition and anomalies are presented in the "Chain of Custody and Sample Receipt Documentation" section of this report.

Data Review and Approval

All data contained in this report have been generated in accordance with guidelines provided in the referenced standard test method, and are consistent with detailed procedures described in a written standard operating procedure (SOP) specific to the ATS Laboratory, as required by USEPA. All data are peer and management reviewed to ensure compliance with the above referenced SOP's and project specifications. In addition, all data conform to the laboratory's Quality Assurance / Quality Control Manuals.

Consultants in Chemistry & Environmental Science
290 South Wagner Road, Ann Arbor, Michigan 48103 Tel 734/995-0995 Fax 734/995-3731

A single QA/QC batch is defined as no more than 20 samples excluding method blanks (MB, LRB), fortified blanks (BS, LFB, LCS), matrix spikes (MS, SPK), and duplicates whether spiked or native (MSD, SPK DUP, DUP, LR).

Data Deliverables

This data package constitutes a Level II package, other data report packages (Level I, Level IV DVP, EPA R5 EDD) are available upon request. There were no hardcopy data summary sheets generated for this project.

Sample Analysis

1,4-Dioxane Analysis (GC/MS): Samples were analyzed in accordance with EPA method 1624 (Volatile Organic Compounds by Isotope Dilution Gas Chromatography – Mass Spectrometry). An initial calibration with at least five levels was used to quantitate 1,4-Dioxane. Samples were reported to project specific reporting limits.

Metals Analysis: Samples were analyzed in accordance with USEPA method 200.7 (Determination of Metals and Trace Elements in Water and Wastes by Inductively Coupled Plasma-Atomic Emission Spectrometry). An initial calibration with at least five levels was used to quantitate individual metals. Samples were reported to project specific reporting limits.

Anomalies Noted:

- None

Analytical QA/QC Summary

Calibration Verification

Method calibration was verified through the running of a mid-level initial calibration verification (CV) standard at a frequency of every 12 hours (GC/MS) or every ten samples (ICP/AES). All verification standards met the acceptance criteria with the following exceptions:

- None

Instrument Blanks

Instrument blanks were analyzed at a frequency of every 12 hours (GC/MS) or every ten samples (ICP/AES). All blanks met the acceptance criteria with the following exceptions:

- None

QA/QC Batch Summary

Laboratory Reagent Blanks

A laboratory reagent blank (LRB) was analyzed with each QA/QC batch. The LRB's met the acceptance criteria with the following exceptions:

- None

Laboratory Fortified Blanks and Matrix Spikes

A laboratory fortified blank (LFB) / laboratory control sample (LCS) was analyzed with each QA/QC batch. The LCS/LFB's met the acceptance criteria with the following exceptions:

- None

A matrix spike (MS) and matrix spike duplicate (MSD) was analyzed with each QA/QC batch. The MS/MSD met the acceptance criteria with the following exceptions:

- None

Matrix Duplicates

A replicate analysis was analyzed with each QA/QC batch. All replicates met the acceptance criteria with the following exceptions:

- None

Sample Dilutions

Samples containing compounds at concentrations above the initial calibration curve were diluted and reanalyzed for those compounds. The following samples were diluted:

- None

Mark T. DeLong / October 29, 2018
Mark T. DeLong (Quality Assurance Coordinator)

Philip B. Simon / October 29, 2018
Philip B. Simon (Laboratory Director)

ATS
259 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Organic Analysis Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 10/29/18
ATS SRF: 1018181

Sample Identification: 697 South Wagner Road

Entered in SRF checked in LIMS

Sample Date: 10/11/18
Sample Time: 11:40 AM
Sampled By: Client
Laboratory Receipt Date: 10/18
Sample Matrix: Drinking Water

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	<0.001	0.001	10/23/18	14:01	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

X:\G001-002_18\SRF_1018181 rev. 10/29/18

ATS
259 South Wagner Road
Ann Arbor, Michigan 48103
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Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Inorganic Analysis Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 10/29/18
ATS SRF: 1018181

Sample Identification: Outfall 001

Sample Date: 10/8/18
Sample Time: na
Sampled By: Client
Laboratory Receipt Date: 10/18/18
Sample Matrix: Treated Water

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Metals Analysis							
Total Barium	EPA 200.7	mg/L	0.18	0.001	10/23/18	16:52	DMS

Comments
All methods reference USEPA methods unless otherwise noted.

X:\G001-002_18\SRF_1018181 rev. 10/29/18

ATS
259 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Quality Assurance / Quality Control Data Summary

QC Batch Number: QCORG1023181-G
Parameter: 1,4-Dioxane (EPA 1624)

ATS Project: Pall Corporation #G001-002
Report Date: 10/29/18

Results of QA Samples run concurrently with project samples

REPLICATE ANALYSIS

Sample	Replicate #1	Replicate #2	Mean	Relative Range (percent)
#A100-000 AA Tap 10/23/18 Matrix Spike	0.011 mg/L	0.011 mg/L	0.011 mg/L	0.5

SPIKES and/or QC CHECK SAMPLES

Sample/Analyte	Known Concentration	Spike Concentration	Analyzed Concentration	Recovery (percent)
#A100-000, #G001-002 Laboratory Fortified Blank 10/23/18	<0.001 mg/L	0.010 mg/L	0.010 mg/L	98.2
#A100-000 AA Tap 10/23/18 Matrix Spike	<0.001 mg/L	0.010 mg/L	0.011 mg/L	110.4
AA Tap 10/23/18 Matrix Spike Duplicate	<0.001 mg/L	0.010 mg/L	0.011 mg/L	109.8

BLANK ANALYSIS

Sample	Analyzed Concentration	QC Decision
#A100-000, #G001-002 Laboratory Reagent Blank 10/23/18	<0.001 mg/L	Acceptable

Comments:
Calculations performed prior to rounding.

Control Limits:
Recoveries
Laboratory Fortified Blank (85 - 115 %)
Matrix Spike <5ppb (70 - 130 %)
Matrix Spike >5ppb (80 - 120 %)
Relative Range
Replicates <2ppb (<50%)

ATS
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Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Quality Assurance / Quality Control Data Summary

QC Batch Number: QCINORG1023181-G
Parameter: Barium (EPA 200.7)

ATS Project: Pall Corporation #G001-002
Report Date: 10/29/18

Results of QA Samples run concurrently with project samples

REPLICATE ANALYSIS

Sample	Replicate #1	Replicate #2	Mean	Relative Range (percent)
#S001-TER TER Composite 10/17/18 Matrix Spike	1.9 mg/L	1.9 mg/L	1.9 mg/L	0.3

SPIKES and/or QC CHECK SAMPLES

Sample/Analyte	Known Concentration	Spike Concentration	Analyzed Concentration	Recovery (percent)
#G001-002, #H002-HTI, #S001-KOS, #S001-TER Laboratory Fortified Blank 10/23/18	<0.001 mg/L	2.0 mg/L	1.8 mg/L	89.7
TER Composite 10/17/18 Matrix Spike	0.10 mg/L	2.0 mg/L	1.9 mg/L	88.3
TER Composite 10/17/18 Matrix Spike Duplicate	0.10 mg/L	2.0 mg/L	1.9 mg/L	88.5

BLANK ANALYSIS

Sample	Analyzed Concentration	QC Decision
#G001-002, #H002-HTI, #S001-KOS, #S001-TER Laboratory Reagent Blank 10/23/18	<0.001 mg/L	Acceptable

Comments:
Calculations performed prior to rounding.

Control Limits:
Recoveries
Laboratory Fortified Blank (85 - 115 %)
Matrix Spike (75 - 125 %)
Relative Range
Replicates (<20%)

CHAIN OF CUSTODY RECORD

Page 1

Pall Corp. Samples									
Susan Peters, 642 S. Wagner Road, Ann Arbor, Michigan; sue_peters@pall.com									
Susan Peters	10-18-18 16:17								
Barium-HNO3; 1,4-dioxane HCl									
							1,4-dioxane	Barium	
1			X		Outfall 2 day Comp.	1		X	<200
2		11:40		X	697 S. Wagner, drinking water	2	X		nd

290 South Wagner Road
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Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 999321720

Data Transmittal Cover Page

Project Name: Pall Corporation
ATS Project Number: G001-002
ATS Report Number(s): SRF_1031181

Project Description: This data report contains the results of thirty-three water samples, received by ATS on 10/31/18, to be analyzed for 1,4-Dioxane.

We certify that the sample analyses for this report have been conducted in accordance with guidelines provided in the referenced standard test method, and are consistent with detailed procedures described in a written Standard Operating Procedure specific to the ATS Laboratories, as required by USEPA. Laboratory data sheets, SOPs, and QA/QC information are available for inspection and audit at the laboratory upon request. Unless specifically noted on the data report, all applicable sample preservation and holding time requirements have been met.

Recipient: Ms. Sue Peters **Email:** Sue_Peters@Pall.com
FAX Number:

No. of Pages (including cover pg.): 41

From: Sarah Stubblefield, Senior Chemist / Lab Manager **Email:** Sarah.Stubblefield@AnnArborTechnicalServices.com
FAX Number: 734-995-3731

Additional Message:

Date: 11/8/18 **Signed:**

IF YOU DO NOT RECEIVE ALL PAGES OF THIS TRANSMITTAL, PLEASE CALL 734-995-0995.

X:\G001-002_18\Data_Transmittal_Cover_Page SLS

ANN ARBOR TECHNICAL SERVICES, INC.

LABORATORY OPERATIONS CASE NARRATIVE

ATS Project Number: G001-002
Report Date: 11/8/18
SDG Number's: 1031181

Case Narrative Summary

This case narrative applies to the following 33 samples that were received by Ann Arbor Technical Services, Inc. (ATS) on 10/31/18, and associated matrix-specific QA/QC.

Samples

Client Sample Identification	Sample Date	Requested Turn Around Time	Analysis	Matrix
Received 10/31/18				
MW-75	10/16/18	Standard	1,4-Dioxane	Groundwater
MW-134I	10/22/18	Standard	1,4-Dioxane	Groundwater
MW-10d	10/22/18	Standard	1,4-Dioxane	Groundwater
MW-78s	10/23/18	Standard	1,4-Dioxane	Groundwater
MW-115	10/23/18	Standard	1,4-Dioxane	Groundwater
MW-88	10/23/18	Standard	1,4-Dioxane	Groundwater
MW-85	10/23/18	Standard	1,4-Dioxane	Groundwater
MW-39d	10/24/18	Standard	1,4-Dioxane	Groundwater
MW-106s	10/24/18	Standard	1,4-Dioxane	Groundwater
MW-17	10/25/18	Standard	1,4-Dioxane	Groundwater
MW-94s	10/25/18	Standard	1,4-Dioxane	Groundwater
MW-81	10/25/18	Standard	1,4-Dioxane	Groundwater
465 Dupont	10/25/18	Standard	1,4-Dioxane	Groundwater
MW-77	10/25/18	Standard	1,4-Dioxane	Groundwater
MW-1 Replacement	10/25/18	Standard	1,4-Dioxane	Groundwater
Outfall	10/28/18	Standard	1,4-Dioxane	Treated Water
Red Pond	10/29/18	Standard	1,4-Dioxane	Groundwater
Outfall	10/29/18	Standard	1,4-Dioxane	Treated Water
MW-136d	10/29/18	Standard	1,4-Dioxane	Groundwater
MW-136s	10/29/18	Standard	1,4-Dioxane	Groundwater
MW-136I	10/29/18	Standard	1,4-Dioxane	Groundwater
MW-138d	10/29/18	Standard	1,4-Dioxane	Groundwater
MW-138s	10/29/18	Standard	1,4-Dioxane	Groundwater
MW-138I	10/29/18	Standard	1,4-Dioxane	Groundwater
TW-10	10/30/18	Standard	1,4-Dioxane	Groundwater

TW-17	10/30/18	Standard	1,4-Dioxane	Groundwater
TW-9	10/30/18	Standard	1,4-Dioxane	Groundwater
TW-4	10/30/18	Standard	1,4-Dioxane	Groundwater
TW-1	10/30/18	Standard	1,4-Dioxane	Groundwater
MW-46	10/30/18	Standard	1,4-Dioxane	Groundwater
TW-14	10/31/18	Standard	1,4-Dioxane	Groundwater
TW-12	10/31/18	Standard	1,4-Dioxane	Groundwater
Outfall	10/30/18	Standard	1,4-Dioxane	Treated Water

Matrix Specific QC

Client Sample Identification	Sample Date	Analysis	Matrix
MW-136s Matrix Spike	10/29/18	1,4-Dioxane	Groundwater
MW-136s Matrix Spike Duplicate	10/29/18	1,4-Dioxane	Groundwater
MW-136d Matrix Spike	10/29/18	1,4-Dioxane	Groundwater
MW-136d Matrix Spike Duplicate	10/29/18	1,4-Dioxane	Groundwater

Upon receipt, samples were scheduled for the following analyses:

- 1,4-Dioxane by EPA method 1624

Sample Receipt and Chain of Custody Records

Samples were delivered directly to ATS by Pall Corporation staff. Samples were received with proper chain of custody records included. Sample condition and anomalies are presented in the "Chain of Custody and Sample Receipt Documentation" section of this report.

Data Review and Approval

All data contained in this report have been generate in accordance with guidelines provided in the referenced standard test method, and are consistent with detailed procedures described in a written standard operating procedure (SOP) specific to the ATS Laboratory, as required by US EPA. All data are peer and management reviewed to ensure compliance with the above referenced SOP's and project specifications. In addition, all data conform to the laboratory's Quality Assurance / Quality Control Manuals.

A single QA/QC batch is defined as no more than 20 samples excluding method blanks (MB, LRB), fortified blanks (BS, LFB, LCS), matrix spikes (MS, SPK), and duplicates whether spiked or native (MSD, SPK DUP, DUP, LR).

Data Deliverables

This data package constitutes a Level II package; other data report packages (Level I, Level IV DVP, EPA R5 EDD) are available upon request. There were no hardcopy data summary sheets generated for this project.

Sample Analysis

1,4-Dioxane Analysis (GC/MS): Samples were analyzed in accordance with EPA method 1624 (Volatile Organic Compounds by Isotope Dilution Gas Chromatography – Mass Spectrometry). An initial calibration with at least five levels was used to quantitate 1,4-Dioxane. Samples were reported to project specific reporting limits.

Anomalies Noted:

- None

Analytical QA/QC Summary

Calibration Verification

Method calibration was verified through the running of a mid-level initial calibration verification (CV) standard at a frequency of every 12 hours. All verification standards met the acceptance criteria with the following exceptions:

- None

Instrument Blanks

Instrument blanks were analyzed at a frequency of every 12 hours. All blanks met the acceptance criteria with the following exceptions:

- None

QA/QC Batch Summary

Laboratory Reagent Blanks

A laboratory reagent blank (LRB) was analyzed with each QA/QC batch. The LRB's met the acceptance criteria with the following exceptions:

- None

Laboratory Fortified Blanks and Matrix Spikes

A laboratory fortified blank (LFB) / laboratory control sample (LCS) was analyzed with each QA/QC batch. The LCS/LFB's met the acceptance criteria with the following exceptions:

- None

A matrix spike (MS) and matrix spike duplicate (MSD) was analyzed with each QA/QC batch. The MS/MSD met the acceptance criteria with the following exceptions:

- None

Matrix Duplicates

A replicate analysis was analyzed with each QA/QC batch. All replicates met the acceptance criteria with the following exceptions:

- None

Sample Dilutions

Samples containing compounds at concentrations above the initial calibration curve were diluted and reanalyzed for those compounds. The following samples were diluted:

- MW-7S 10/16/18
- MW-8S 10/23/18
- MW-9s 10/25/18
- MW-1 Rep 10/25/18
- TW-9 10/30/18
- MW-10d 10/22/18
- MW-85 10/23/18
- MW-81 10/25/18
- Red Pond 10/29/18
- TW-1 10/30/18
- MW-79s 10/23/18
- MW-106s 10/24/18
- 465 Dupont 10/25/18
- TW-10 10/30/18
- MW-46 10/30/18
- MW-11S 10/23/18
- MW-17 10/25/18
- MW-77 10/25/18
- TW-17 10/30/18

Mark T. DeLong

/November 8, 2018

Mark T. DeLong (Quality Assurance Coordinator)

/November 8, 2018

Phillip B. Simon (Laboratory Director)

ATS
200 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/975-0883 Fax. 734/995-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-7S

Sample Date:	10/16/18
Sample Time:	11:36 AM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.85	0.02	11/1/18	16:23	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

ATS
200 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0883 Fax. 734/995-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-134I

Sample Date:	10/22/18
Sample Time:	10:14 AM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.009	0.001	11/1/18	17:07	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0915 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998021720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031161

Sample Identification: MW-10d

Sample Date:	10/22/18
Sample Time:	2:34 PM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.46	0.01	11/1/18	17:51	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

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290 South Wagner Road
Ann Arbor, Michigan 48103
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Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998021720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031161

Sample Identification: MW-79s

Sample Date:	10/23/18
Sample Time:	11:04 AM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.43	0.01	11/1/18	18:36	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

X:\G001-002_1031161 rev. 11/8/18

290 South Wagner Road
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Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998021720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031161

Sample Identification: MW-115

Sample Date:	10/23/18
Sample Time:	12:23 PM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.58	0.01	11/1/18	19:20	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0915 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998021720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031161

Sample Identification: MW-88

Sample Date:	10/23/18
Sample Time:	1:47 PM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.34	0.01	11/1/18	20:03	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
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Michigan Laboratory ID: 9404
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-8S

Sample Date:	10/23/18
Sample Time:	3:20 PM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.73	0.02	11/1/18	20:47	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

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290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9404
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-33d

Sample Date:	10/24/18
Sample Time:	1:16 PM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.027	0.001	11/1/18	21:31	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

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290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9404
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-106s

Sample Date:	10/24/18
Sample Time:	4:00 PM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.21	0.01	11/1/18	22:15	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9404
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-17

Sample Date:	10/25/18
Sample Time:	8:53 AM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.31	0.01	11/1/18	22:59	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-94s

Sample Date: 10/25/18
Sample Time: 10:19 AM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.69	0.01	11/1/18	23:43	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-81

Sample Date: 10/25/18
Sample Time: 11:54 AM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.24	0.01	11/2/18	0:26	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: 465 Dupont

Sample Date: 10/25/18
Sample Time: 1:28 PM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	1.1	0.02	11/2/18	1:10	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-77

Sample Date: 10/25/18
Sample Time: 2:51 PM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	1.5	0.04	11/2/18	1:54	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

250 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/975-0993 Fax. 734/975-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-1 Replacement

Sample Date: 10/25/18
Sample Time: 4:16 PM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	2.4	0.1	11/2/18	2:38	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

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250 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/975-0993 Fax. 734/975-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: Outfall

Sample Date: 10/29/18
Sample Time: na
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Treated Water

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.006	0.001	11/2/18	3:22	JEB

Comments
All methods reference USEPA methods unless otherwise noted.
na - Indicates not available / not applicable.
Sample analyzed at native pH.

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250 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/975-0993 Fax. 734/975-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: Red Pond

Sample Date: 10/29/18
Sample Time: 8:45 AM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.42	0.01	11/2/18	4:05	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

250 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/975-0993 Fax. 734/975-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: Outfall

Sample Date: 10/29/18
Sample Time: na
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Treated Water

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.005	0.001	11/2/18	4:49	JEB

Comments
All methods reference USEPA methods unless otherwise noted.
na - Indicates not available / not applicable.
Sample analyzed at native pH.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0916 Fax. 734/995-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-136d

Sample Date:	10/29/18
Sample Time:	9:21 AM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	<0.001	0.001	11/2/18	9:29	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

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290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0916 Fax. 734/995-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-136s

Sample Date:	10/29/18
Sample Time:	11:49 AM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	<0.001	0.001	11/1/18	12:46	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

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290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0916 Fax. 734/995-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-136i

Sample Date:	10/29/18
Sample Time:	10:36 AM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	<0.001	0.001	11/2/18	13:19	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0916 Fax. 734/995-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-136d

Sample Date:	10/29/18
Sample Time:	11:49 AM
Sampled By:	Client
Laboratory Receipt Date:	10/31/18
Sample Matrix:	Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	<0.001	0.001	11/2/18	14:03	JEB

Comments
All methods reference USEPA methods unless otherwise noted.
Sampling time taken from COC, sample label indicates 13:27.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-138s

Sample Date: 10/29/18
Sample Time: 2:41 PM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	<0.001	0.001	11/2/18	14:41	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-138I

Sample Date: 10/29/18
Sample Time: 3:52 PM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.008	0.001	11/2/18	15:31	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: TW-10

Sample Date: 10/30/18
Sample Time: 9:08 AM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.22	0.01	11/2/18	16:15	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9004
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: TW-17

Sample Date: 10/30/18
Sample Time: 9:14 AM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.37	0.01	11/2/18	16:58	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0955 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: TW-9

Sample Date: 10/30/18
Sample Time: 9:23 AM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.63	0.01	11/2/18	17:42	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0955 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: TW-4

Sample Date: 10/30/18
Sample Time: 11:20 AM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.050	0.001	11/2/18	18:26	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0955 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: TW-1

Sample Date: 10/30/18
Sample Time: 2:24 PM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.058	0.002	11/2/18	19:10	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

290 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0955 Fax. 734/995-3731
Michigan Laboratory ID: 9604
Wisconsin Laboratory ID: 998321720

Organic Analysis
Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: MW-46

Sample Date: 10/30/18
Sample Time: 2:34 PM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.15	0.01	11/2/18	19:54	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

ATS

250 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9404
Wisconsin Laboratory ID: 998321720

Organic Analysis Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: TW-14

Sample Date: 10/31/18
Sample Time: 1:40 PM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.033	0.001	11/2/18	20:38	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

X:\G001-002_18\SRF_1031181 rev. 11/8/18

ATS

250 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9404
Wisconsin Laboratory ID: 998321720

Organic Analysis Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: TW-12

Sample Date: 10/31/18
Sample Time: 2:24 PM
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Groundwater

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.017	0.001	11/2/18	21:22	JEB

Comments
All methods reference USEPA methods unless otherwise noted.

X:\G001-002_18\SRF_1031181 rev. 11/8/18

ATS

250 South Wagner Road
Ann Arbor, Michigan 48103
Tel. 734/995-0995 Fax. 734/995-3731
Michigan Laboratory ID: 9404
Wisconsin Laboratory ID: 998321720

Organic Analysis Data Summary Sheet

For: Ms. Sue Peters
Pall Corporation
642 South Wagner Road
Ann Arbor, MI 48103

ATS Project: Pall Corporation #G001-002
Report Date: 11/8/18
ATS SRF: 1031181

Sample Identification: Outfall

Sample Date: 10/30/18
Sample Time: na
Sampled By: Client
Laboratory Receipt Date: 10/31/18
Sample Matrix: Treated Water

Parameter	Method	Units	Result	Reporting Limit	Analysis Date	Analysis Time	Analyzed By
Organic Analysis							
1,4-Dioxane	EPA 1624	mg/L	0.006	0.001	11/2/18	22:06	JEB

Comments
All methods reference USEPA methods unless otherwise noted.
na - Indicates not available / not applicable.
Sample analyzed at native pH.

ATS

CHAIN OF CUSTODY RECORD

Page 1

October Samples

Sue Peters, Pall Corporation, 642 S. Wagner Rd., Ann Arbor, MI.

Relinquished by: Susan E.D.Peters / Susan E.D.Peters — 10-31-18 15:00 — Received by: Mark DeLong

Line	Date	Time	Comp.	Grab	Sample Identification	No. of Containers	1,4-Dioxane	Notes
1	[illegible]	11:36		X	MW-75 ✓	1	X	<950ppb
2	[illegible]	10:14		X	MW-134i ✓✓	2	X	<10
3	[illegible]	14:34		X	MW-10d ✓	1	X	<500
4	[illegible]	11:04		X	MW-79s ✓	1	X	<500
5	[illegible]	12:23		X	MW-115 ✓	1	X	<500
6	[illegible]	13:47		X	MW-88 ✓	1	X	<300
7	[illegible]	15:20		X	MW-85 ✓	1	X	<800
8	[illegible]	13:16		X	MW-39d ✓	1	X	<30
9	[illegible]	16:00		X	MW-106s ✓	1	X	<250
10	[illegible]	08:53		X	MW-17 ✓	1	X	<400
11	[illegible]	10:19		X	MW-94s ✓	1	X	<700
12	[illegible]	11:54		X	MW-81 ✓	1	X	<300
13	[illegible]	13:28		X	465 Dupont ✓	1	X	<1000
14	[illegible]	14:51		X	MW-77 ✓	1	X	<2000
15	[illegible]	16:16		X	MW-1 Replacement ✓	1	X	<4000
16	[illegible]	-	X		Outfall ✓✓	2	X	<7ppb
17	[illegible]	08:45		X	Red Pond ✓	1	X	450ppb
18	[illegible]	-	X		Outfall ✓✓	2	X	<7ppb
19	[illegible]	09:21		X	MW-136d ✓✓	2	X	nd
20	[illegible]	11:49		X	MW-136s ✓✓	2	X	nd

CHAIN OF CUSTODY RECORD

October Samples

Sue Peters, Pall Corporation, 642 S. Wagner Rd., Ann Arbor, Mi.

Relinquished by: Susan E. Peters (signature)
Date/Time: 10-31-18 13:50
Received by: (signature)

Line No.	Lab Code	Date	Time	Comp	Grab	Sample Identification	No. of Containers	Priority	1,4-dioxane	Limit
1.		[illegible]	10:36		X	MW-136I ✓✓	2		X	nd
2.	(ATS) 13:27	[illegible]	(11:49)		X	MW-136d ✓✓	2		X	nd
3.		[illegible]	14:41		X	MW-138s ✓✓	2		X	nd
4.		[illegible]	16:52		X	MW-138I ✓✓	2		X	<10
5.		[illegible]	09:03		X	TW-10 ✓	1		X	<400
6.		[illegible]	09:14		X	TW-17 ✓	1		X	<500
7.		[illegible]	09:23		X	TW-9 ✓	1		X	<700
8.		[illegible]	11:20		X	TW-4 ✓	1		X	<50
9.		[illegible]	14:24		X	TW-1 ✓	1		X	<100
10.		[illegible]	14:34		X	MW-46 ✓	1		X	<250
11.		[illegible]	13:40		X	TW-14 ✓	1		X	<60
12.		[illegible]	14:24		X	TW-12 ✓	1		X	<30
13.		[illegible]		X		Outfall ✓✓	2		X	<7
14.					X				X	
15.					X				X	
16.					X				X	
17.					X				X	
18.					X				X	
19.					X				X	
20.					X				X	

ANN ARBOR TECHNICAL SERVICES, INC.
SAMPLE RECEIPT ANOMALY FORM (rev 072610)

ATS Project Number: G001-0031
SRF Number: 1031181
Page 1 of 1
Analyst: MTO

Sample Identification Discrepancy

Sample Identification per COC	Sample Identification per Sample Label	Proposed Corrective Action	QA Approval (name and date)
MW-138d 10/25/18 @ 11:49	MW-138d 10/29/18 @ 13:27	Report per COC 11/1/18	11/1/18

Sample Integrity Issues

Problem Identified	Proposed Corrective Action	QA Approval (name and date)

Sample Preservation Issues

Problem Identified	Proposed Corrective Action	QA Approval (name and date)