RECEIVED

JUL 26 2021

Transmittal

July 20, 2021

To: Robert Aston
US EPA Region 7
11201 Renner Boulevard
Lenexa, KS 66219

Ref. No.: 11204375

From: Robyn Hansen

GHD Tel: 402 778 4801

Subject: Various
See Below

No. of Copies	Description/Title	Drawing No./ Document Ref.	Issue
1	Mr. Gary Guillory cc: Robert Aston Re: 2020 Second SemiAnnual- Discharge Report UPRR Sedalia, MO – Former MP Shops	Guillory 04	7/20/2021
1	Jalal El-Jayyousi, P.E. cc: Robert Aston Re: 2020 Second Semi-Annual Progress Report July 2020 through December 2020 Docket No. RCRA-07-2004-0034 Sedalia, Missouri – Former MP Shops	Jayyousi06	7/20/2021

Issued for: ☒ Your information ☐ As requested ☐ Construction ☐ Quotation
☒ Your approval/comments ☐ Returned to you ☐ For re-submission

Sent by: ☐ Overnight courier ☐ Same day courier ☐ Other: USPS Priority 9405503699300449598426

Remarks:

Copy to: Robyn Hansen

Completed by: Mary Ketner
[Please Print]

Signed: Mary Ketner

Filing: Correspondence File

GHD
1502 Southwest 41st Street Topeka Kansas 66609 1200 USA
T 785 783 8982 W www.ghd.com

RCRA

600953

REGISTERED COMPANY FOR ISO 9001 ENGINEERING DESIGN

3807 South 148th Street
Omaha, Nebraska 68144
United States
www.ghd.com

Our ref: 11204375-LTR-JAYYOUSI-6

July 20, 2021

Jalal El-Jayyousi, P.E.
MDNR – Hazardous Waste Program
1730 Elm Street
PO Box 176
Jefferson City, MO 65102-0176

2021 First Semi-Annual Progress Report
Sedalia, Missouri
Former MP Shops
Docket No. RCRA-07-2004-0034

Dear Mr. El-Jayyousi:

This letter presents the 2021 First Semi-Annual Progress Report of activities completed for the Union Pacific Railroad (UPRR) Sedalia Facility pursuant to the Administrative Order on Consent between UPRR and the United States Environmental Protection Agency (USEPA) effective on March 4, 2004. The period for this report is January 2021 through June 2021.

1. Work Performed

1. The following work was performed during this reporting period:
2. The Annual Environmental Covenant Compliance Report was submitted to MDNR on January 18, 2021.
3. The 2020 Second Semi-Annual Progress Report was submitted to MDNR on January 18, 2021.
4. The 2020 Second Semi-Annual RS-1 Discharge Report was submitted to the City of Sedalia on January 18, 2021.
5. The 2020 Annual Groundwater Monitoring Report was submitted to MDNR and USEPA on February 17, 2021.
6. A sitewide asbestos-containing material (ACM) inspection and abatement was performed on March 29, 2021 and March 30, 2021.
7. The annual inspection of the Consolidation Area vegetative cover was performed on April 19, 2021.
8. The 2021 annual groundwater monitoring event was performed from April 20, 2021 to April 22, 2021. The laboratory reports, chains of custody, and data validation memo from the annual groundwater monitoring event are attached. Below is a summary of the results.

– Upper limestone interval well results summary:
  - PCE was detected above the corresponding MCL of 5 micrograms (µg/L) in groundwater samples collected from MW 16B (55.8 µg/L) and MW 20B (133 µg/L).
  - TCE was detected above the corresponding MCL of 5 µg/L in the groundwater sample collected from MW-16B (37.9 µg/L).

- VC was detected above the corresponding MCL of 2 µg/L in the groundwater sample collected from MW-9BR (2.9 µg/L) and MW-16B (63.9 µg/L).
- All other constituents were either below MCLs, where available, or below laboratory reporting limits.

– Clay interval well results summary:
  - PCE was detected above the corresponding MCL of 5 µg/L in the groundwater samples collected from MW-14A (19.3 µg/L), MW-16A (11.0 µg/L), and MW-20A (6,150 µg/L).
  - TCE was detected above the corresponding MCL of 5 µg/L in the groundwater samples collected from MW-16A (16.9 µg/L) and MW-20A (2,990 µg/L).
  - Cis 1,2-DCE was detected above the corresponding MCL of 70 µg/L in the groundwater samples collected from MW-16A (72.6 µg/L) and MW-20A (433 µg/L).
  - Trans-1,2-DCE was detected above the corresponding MCL of 100 µg/L in the groundwater sample collected from MW-20A (129 µg/L).
  - VC was detected above the corresponding MCL of 2 µg/L in the groundwater sample collected from MW-16A (8.0 µg/L) and MW-20A (15.2 µg/L with a J flag qualifier, which indicates this is an estimated concentration above the adjusted laboratory method detection limit and below the adjusted laboratory reporting limit).

– All other constituents were either below MCLs, where available, or below laboratory reporting limits.

9. The RS-1 recovery system was sampled on June 16, 2021. VOC detections from this sampling event were summed to determine a total toxic organic (TTO) discharge concentration of 0.0504 mg/L, which is well-below the City of Sedalia's discharge limit of 2.13 mg/L.

2. Project Work for the Next Reporting Period

The following work is anticipated to be performed during the next reporting period.

1. The RS-1 July 2021 recovery system sampling results will be submitted to the City of Sedalia and MDNR in a report in July 2021.
2. The annual ACM report will be submitted to MDNR in July 2021.
3. The RS-1 recovery system will be sampled in December 2021, and a semi-annual report to the City of Sedalia will be prepared.

Please contact me at (402) 598-8595 or robyn.hansen@ghd.com if you have any questions or comments.

Regards

Robyn Hansen
Scientist

+1 402 210-3031
robyn.hansen@ghd.com

RH/mk/LTR-JAYYOUSI-6

Encl. Attachment 1: Analytical Report
Attachment 2: Data Validation Memo

cc: Jim Brannen (Union Pacific Railroad)
Robert Aston, U.S. EPA (1 copy; RCRA Docket No. VII-90-H-0024

Attachment 1

Analytical Report

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

May 04, 2021

Robyn Hansen
GHD
3807 South 148th St
Omaha, NE 68144

RE: Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Dear Robyn Hansen:

Enclosed are the analytical results for sample(s) received by the laboratory on April 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angie Brown
angie.brown@pacelabs.com
1(913)563-1402
Project Manager

Enclosures

cc: Jeffrey Cloud, GHD

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 20-020-0
Arkansas Drinking Water
Illinois Certification #: 200030
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212020-2
Oklahoma Certification #: 9205/9935
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-19-12
Utah Certification #: KS000212019-9
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60367559001	WG-2365-MW8-210421	Water	04/21/21 15:30	04/23/21 08:44
60367559002	WG-2365-MW9A-210421	Water	04/21/21 11:30	04/23/21 08:44
60367559003	WG-2365-MW9B-210422	Water	04/22/21 09:40	04/23/21 08:44
60367559004	WG-2365-MW11A-210421	Water	04/21/21 09:35	04/23/21 08:44
60367559005	WG-2365-MW11B-210421	Water	04/21/21 09:20	04/23/21 08:44
60367559006	WG-2365-MW14A-210422	Water	04/22/21 12:15	04/23/21 08:44
60367559007	WG-2365-MW14B-210422	Water	04/22/21 12:50	04/23/21 08:44
60367559008	WG-2365-MW15A-210421	Water	04/21/21 14:40	04/23/21 08:44
60367559009	WG-2365-MW15C-210422	Water	04/22/21 09:20	04/23/21 08:44
60367559010	WG-2365-MW16A-210421	Water	04/21/21 09:50	04/23/21 08:44
60367559011	WG-2365-MW16B-210421	Water	04/21/21 14:00	04/23/21 08:44
60367559012	WG-2365-MW17A-210422	Water	04/22/21 11:30	04/23/21 08:44
60367559013	WG-2365-MW18A-210421	Water	04/21/21 16:00	04/23/21 08:44
60367559014	WG-2365-MW19AR-210420	Water	04/20/21 14:15	04/23/21 08:44
60367559015	WG-2365-MW19B-210421	Water	04/21/21 14:55	04/23/21 08:44
60367559016	WG-2365-MW20A-210422	Water	04/22/21 13:05	04/23/21 08:44
60367559017	WG-2365-MW20B-210422	Water	04/22/21 11:00	04/23/21 08:44
60367559018	WG-2365-MW21R-210421	Water	04/21/21 10:10	04/23/21 08:44
60367559019	WG-2365-MW22A-210420	Water	04/20/21 15:10	04/23/21 08:44
60367559020	WG-2365-MW23A-210420	Water	04/20/21 14:40	04/23/21 08:44
60367559021	WG-2365-MW24A-210421	Water	04/21/21 10:35	04/23/21 08:44
60367559022	WG-2365-MW25A-210421	Water	04/21/21 15:00	04/23/21 08:44
60367559023	WG-2365-DUP1-210421	Water	04/21/21 09:35	04/23/21 08:44
60367559024	WG-2365-FB01-210422	Water	04/22/21 12:40	04/23/21 08:44
60367559025	WG-2365-EB01-210422	Water	04/22/21 12:55	04/23/21 08:44
60367559026	WG-2365-TB01-210422	Water	04/22/21 08:00	04/23/21 08:44

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60367559001	WG-2365-MW8-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559002	WG-2365-MW9A-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559003	WG-2365-MW9B-210422	EPA 5030B/8260	PGH	69	PASI-K
60367559004	WG-2365-MW11A-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559005	WG-2365-MW11B-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559006	WG-2365-MW14A-210422	EPA 5030B/8260	PGH	69	PASI-K
60367559007	WG-2365-MW14B-210422	EPA 5030B/8260	PGH	69	PASI-K
60367559008	WG-2365-MW15A-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559009	WG-2365-MW15C-210422	EPA 5030B/8260	PGH	69	PASI-K
60367559010	WG-2365-MW16A-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559011	WG-2365-MW16B-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559012	WG-2365-MW17A-210422	EPA 5030B/8260	PGH	69	PASI-K
60367559013	WG-2365-MW18A-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559014	WG-2365-MW19AR-210420	EPA 5030B/8260	PGH	69	PASI-K
60367559015	WG-2365-MW19B-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559016	WG-2365-MW20A-210422	EPA 5030B/8260	PGH	69	PASI-K
60367559017	WG-2365-MW20B-210422	EPA 5030B/8260	PGH	69	PASI-K
60367559018	WG-2365-MW21R-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559019	WG-2365-MW22A-210420	EPA 5030B/8260	PGH	69	PASI-K
60367559020	WG-2365-MW23A-210420	EPA 5030B/8260	PGH	69	PASI-K
60367559021	WG-2365-MW24A-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559022	WG-2365-MW25A-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559023	WG-2365-DUP1-210421	EPA 5030B/8260	PGH	69	PASI-K
60367559024	WG-2365-FB01-210422	EPA 5030B/8260	PGH	69	PASI-K
60367559025	WG-2365-EB01-210422	EPA 5030B/8260	PGH	69	PASI-K
60367559026	WG-2365-TB01-210422	EPA 5030B/8260	PGH	69	PASI-K

PASI-K = Pace Analytical Services - Kansas City

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SUMMARY OF DETECTION

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
60367559001	**WG-2365-MW8-210421**					
EPA 5030B/8260	1,2-Dichlorobenzene	0.15J	ug/L	1.0	04/28/21 12:51	B
EPA 5030B/8260	cis-1,2-Dichloroethene	0.15J	ug/L	1.0	04/28/21 12:51	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 12:51	
60367559002	**WG-2365-MW9A-210421**					
EPA 5030B/8260	1,2-Dichloroethene (Total)	0.61J	ug/L	1.0	04/28/21 13:06	
EPA 5030B/8260	cis-1,2-Dichloroethene	0.44J	ug/L	1.0	04/28/21 13:06	
EPA 5030B/8260	trans-1,2-Dichloroethene	0.17J	ug/L	1.0	04/28/21 13:06	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 13:06	
60367559003	**WG-2365-MW9B-210422**					
EPA 5030B/8260	1,2-Dichloroethene (Total)	8.3	ug/L	1.0	04/28/21 15:00	
EPA 5030B/8260	cis-1,2-Dichloroethene	6.0	ug/L	1.0	04/28/21 15:00	
EPA 5030B/8260	trans-1,2-Dichloroethene	2.3	ug/L	1.0	04/28/21 15:00	
EPA 5030B/8260	Tetrachloroethene	2.0	ug/L	1.0	04/28/21 15:00	
EPA 5030B/8260	Trichloroethene	2.5	ug/L	1.0	04/28/21 15:00	
EPA 5030B/8260	Vinyl chloride	2.9	ug/L	1.0	04/28/21 15:00	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 15:00	
60367559004	**WG-2365-MW11A-210421**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 13:20	
60367559005	**WG-2365-MW11B-210421**					
EPA 5030B/8260	Chloroform	0.27J	ug/L	1.0	04/28/21 13:34	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 13:34	
60367559006	**WG-2365-MW14A-210422**					
EPA 5030B/8260	1,2-Dichloroethene (Total)	1.5	ug/L	1.0	04/28/21 15:14	
EPA 5030B/8260	cis-1,2-Dichloroethene	0.92J	ug/L	1.0	04/28/21 15:14	
EPA 5030B/8260	trans-1,2-Dichloroethene	0.59J	ug/L	1.0	04/28/21 15:14	
EPA 5030B/8260	Tetrachloroethene	19.3	ug/L	1.0	04/28/21 15:14	
EPA 5030B/8260	Trichloroethene	2.1	ug/L	1.0	04/28/21 15:14	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 15:14	
60367559007	**WG-2365-MW14B-210422**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/30/21 08:48	
60367559008	**WG-2365-MW15A-210421**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 13:49	
60367559009	**WG-2365-MW15C-210422**					
EPA 5030B/8260	Benzene	0.42J	ug/L	1.0	04/30/21 09:02	
EPA 5030B/8260	1,2-Dichloroethene (Total)	0.23J	ug/L	1.0	04/30/21 09:02	
EPA 5030B/8260	cis-1,2-Dichloroethene	0.23J	ug/L	1.0	04/30/21 09:02	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/30/21 09:02	
60367559010	**WG-2365-MW16A-210421**					
EPA 5030B/8260	1,2-Dichlorobenzene	0.23J	ug/L	1.0	04/28/21 15:28	B
EPA 5030B/8260	1,2-Dichloroethene (Total)	101	ug/L	1.0	04/28/21 15:28	
EPA 5030B/8260	cis-1,2-Dichloroethene	72.6	ug/L	1.0	04/28/21 15:28	
EPA 5030B/8260	trans-1,2-Dichloroethene	28.3	ug/L	1.0	04/28/21 15:28	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SUMMARY OF DETECTION

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
60367559010	**WG-2365-MW16A-210421**					
EPA 5030B/8260	Tetrachloroethene	11.0	ug/L	1.0	04/28/21 15:28	
EPA 5030B/8260	Trichloroethene	16.9	ug/L	1.0	04/28/21 15:28	
EPA 5030B/8260	Vinyl chloride	8.0	ug/L	1.0	04/28/21 15:28	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 15:28	
60367559011	**WG-2365-MW16B-210421**					
EPA 5030B/8260	1,2-Dichlorobenzene	0.14J	ug/L	1.0	04/28/21 16:11	B
EPA 5030B/8260	1,2-Dichloroethene (Total)	49.4	ug/L	1.0	04/28/21 16:11	
EPA 5030B/8260	1,1-Dichloroethene	0.35J	ug/L	1.0	04/28/21 16:11	
EPA 5030B/8260	cis-1,2-Dichloroethene	43.3	ug/L	1.0	04/28/21 16:11	
EPA 5030B/8260	trans-1,2-Dichloroethene	6.1	ug/L	1.0	04/28/21 16:11	
EPA 5030B/8260	Tetrachloroethene	55.8	ug/L	1.0	04/28/21 16:11	
EPA 5030B/8260	Trichloroethene	37.9	ug/L	1.0	04/28/21 16:11	
EPA 5030B/8260	Vinyl chloride	63.9	ug/L	1.0	04/28/21 16:11	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 16:11	
60367559012	**WG-2365-MW17A-210422**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/30/21 09:17	
60367559013	**WG-2365-MW18A-210421**					
EPA 5030B/8260	1,2-Dichloroethene (Total)	3.1	ug/L	1.0	04/28/21 14:03	
EPA 5030B/8260	cis-1,2-Dichloroethene	3.1	ug/L	1.0	04/28/21 14:03	
EPA 5030B/8260	Tetrachloroethene	0.75J	ug/L	1.0	04/28/21 14:03	
EPA 5030B/8260	Trichloroethene	0.28J	ug/L	1.0	04/28/21 14:03	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 14:03	
60367559014	**WG-2365-MW19AR-210420**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 12:08	
60367559015	**WG-2365-MW19B-210421**					
EPA 5030B/8260	Benzene	0.45J	ug/L	1.0	04/28/21 15:43	
EPA 5030B/8260	1,2-Dichloroethene (Total)	0.26J	ug/L	1.0	04/28/21 15:43	
EPA 5030B/8260	cis-1,2-Dichloroethene	0.16J	ug/L	1.0	04/28/21 15:43	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 15:43	
60367559016	**WG-2365-MW20A-210422**					
EPA 5030B/8260	1,2-Dichloroethene (Total)	561	ug/L	50.0	04/30/21 09:45	
EPA 5030B/8260	cis-1,2-Dichloroethene	433	ug/L	50.0	04/30/21 09:45	
EPA 5030B/8260	trans-1,2-Dichloroethene	129	ug/L	50.0	04/30/21 09:45	
EPA 5030B/8260	Methylene Chloride	42.3J	ug/L	50.0	04/30/21 09:45	
EPA 5030B/8260	Tetrachloroethene	6150	ug/L	50.0	04/30/21 09:45	
EPA 5030B/8260	Trichloroethene	2990	ug/L	50.0	04/30/21 09:45	
EPA 5030B/8260	Vinyl chloride	15.2J	ug/L	50.0	04/30/21 09:45	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/30/21 09:45	
60367559017	**WG-2365-MW20B-210422**					
EPA 5030B/8260	1,2-Dichloroethene (Total)	0.45J	ug/L	1.0	04/30/21 09:31	
EPA 5030B/8260	cis-1,2-Dichloroethene	0.45J	ug/L	1.0	04/30/21 09:31	
EPA 5030B/8260	Tetrachloroethene	133	ug/L	1.0	04/30/21 09:31	
EPA 5030B/8260	Trichloroethene	1.5	ug/L	1.0	04/30/21 09:31	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SUMMARY OF DETECTION

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
60367559017	**WG-2365-MW20B-210422**					
EPA 5030B/8260	Vinyl chloride	0.24J	ug/L	1.0	04/30/21 09:31	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/30/21 09:31	
60367559018	**WG-2365-MW21R-210421**					
EPA 5030B/8260	1,2-Dichloroethene (Total)	0.25J	ug/L	1.0	04/28/21 14:17	
EPA 5030B/8260	cis-1,2-Dichloroethene	0.25J	ug/L	1.0	04/28/21 14:17	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 14:17	
60367559019	**WG-2365-MW22A-210420**					
EPA 5030B/8260	1,2-Dichlorobenzene	0.18J	ug/L	1.0	04/28/21 12:23	B
EPA 5030B/8260	1,3-Dichlorobenzene	0.13J	ug/L	1.0	04/28/21 12:23	
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 12:23	
60367559020	**WG-2365-MW23A-210420**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 12:37	
60367559021	**WG-2365-MW24A-210421**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 14:31	
60367559022	**WG-2365-MW25A-210421**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 14:45	
60367559023	**WG-2365-DUP1-210421**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/28/21 15:57	
60367559024	**WG-2365-FB01-210422**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/30/21 08:20	
60367559025	**WG-2365-EB01-210422**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/30/21 08:34	
60367559026	**WG-2365-TB01-210422**					
EPA 5030B/8260	Preservation pH	1.0		0.10	04/30/21 08:06	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: UPRR_GHD NE office
Date: May 04, 2021

General Information:
26 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 716786

B: Analyte was detected in the associated method blank.

- BLANK for HBN 716786 [MSV/1136 (Lab ID: 2883686)
  - 1,2-Dichlorobenzene

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 717623

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW8-210421 **Lab ID: 60367559001** Collected: 04/21/21 15:30 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 12:51	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 12:51	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 12:51	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 12:51	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 12:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 12:51	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 12:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 12:51	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 12:51	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 12:51	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:51	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 12:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 12:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 12:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 12:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 12:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 12:51	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 12:51	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 12:51	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 12:51	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 12:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 12:51	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 12:51	74-95-3	
1,2-Dichlorobenzene	**0.15J**	ug/L	1.0	0.12	1		04/28/21 12:51	95-50-1	B
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 12:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 12:51	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 12:51	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 12:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 12:51	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/28/21 12:51	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 12:51	75-35-4	
cis-1,2-Dichloroethene	**0.15J**	ug/L	1.0	0.13	1		04/28/21 12:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 12:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 12:51	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 12:51	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 12:51	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 12:51	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 12:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 12:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:51	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 12:51	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 12:51	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 12:51	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 12:51	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 12:51	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW8-210421 **Lab ID: 60367559001** Collected: 04/21/21 15:30 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 12:51	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 12:51	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 12:51	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:51	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 12:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 12:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 12:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 12:51	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 12:51	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 12:51	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 12:51	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 12:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 12:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 12:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 12:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 12:51	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 12:51	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 12:51	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 12:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 12:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/28/21 12:51	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		04/28/21 12:51	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/28/21 12:51	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 12:51		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW9A-210421 **Lab ID: 60367559002** Collected: 04/21/21 11:30 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 13:06	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 13:06	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 13:06	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 13:06	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 13:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 13:06	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 13:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 13:06	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 13:06	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 13:06	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:06	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 13:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 13:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 13:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 13:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 13:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 13:06	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 13:06	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 13:06	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 13:06	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 13:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 13:06	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 13:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 13:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 13:06	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 13:06	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 13:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 13:06	107-06-2	
1,2-Dichloroethene (Total)	**0.61J**	ug/L	1.0	0.22	1		04/28/21 13:06	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 13:06	75-35-4	
cis-1,2-Dichloroethene	**0.44J**	ug/L	1.0	0.13	1		04/28/21 13:06	156-59-2	
trans-1,2-Dichloroethene	**0.17J**	ug/L	1.0	0.10	1		04/28/21 13:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 13:06	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 13:06	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 13:06	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 13:06	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 13:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 13:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:06	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 13:06	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 13:06	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 13:06	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 13:06	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 13:06	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW9A-210421 **Lab ID: 60367559002** Collected: 04/21/21 11:30 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 13:06	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 13:06	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 13:06	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:06	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 13:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 13:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 13:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 13:06	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 13:06	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 13:06	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 13:06	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 13:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 13:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 13:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 13:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 13:06	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 13:06	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 13:06	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 13:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 13:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/28/21 13:06	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		04/28/21 13:06	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		04/28/21 13:06	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 13:06		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW9B-210422 **Lab ID: 60367559003** Collected: 04/22/21 09:40 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 15:00	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 15:00	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 15:00	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 15:00	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 15:00	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 15:00	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 15:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 15:00	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 15:00	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 15:00	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:00	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 15:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 15:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 15:00	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 15:00	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 15:00	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 15:00	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 15:00	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 15:00	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 15:00	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 15:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 15:00	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 15:00	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 15:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 15:00	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 15:00	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 15:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 15:00	107-06-2	
1,2-Dichloroethene (Total)	**8.3**	ug/L	1.0	0.22	1		04/28/21 15:00	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 15:00	75-35-4	
cis-1,2-Dichloroethene	**6.0**	ug/L	1.0	0.13	1		04/28/21 15:00	156-59-2	
trans-1,2-Dichloroethene	**2.3**	ug/L	1.0	0.10	1		04/28/21 15:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 15:00	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 15:00	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 15:00	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 15:00	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 15:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 15:00	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:00	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 15:00	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 15:00	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 15:00	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 15:00	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 15:00	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW9B-210422 **Lab ID: 60367559003** Collected: 04/22/21 09:40 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 15:00	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 15:00	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 15:00	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:00	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 15:00	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 15:00	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 15:00	79-34-5	
Tetrachloroethene	**2.0**	ug/L	1.0	0.33	1		04/28/21 15:00	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 15:00	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 15:00	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 15:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 15:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 15:00	79-00-5	
Trichloroethene	**2.5**	ug/L	1.0	0.21	1		04/28/21 15:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 15:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 15:00	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 15:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 15:00	108-67-8	
Vinyl chloride	**2.9**	ug/L	1.0	0.17	1		04/28/21 15:00	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 15:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/28/21 15:00	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		04/28/21 15:00	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/28/21 15:00	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 15:00		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW11A-210421 **Lab ID: 60367559004** Collected: 04/21/21 09:35 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 13:20	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 13:20	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 13:20	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 13:20	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 13:20	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 13:20	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 13:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 13:20	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 13:20	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 13:20	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:20	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 13:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 13:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 13:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 13:20	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 13:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 13:20	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 13:20	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 13:20	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 13:20	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 13:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 13:20	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 13:20	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 13:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 13:20	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 13:20	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 13:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 13:20	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/28/21 13:20	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 13:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/28/21 13:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 13:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 13:20	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 13:20	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 13:20	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 13:20	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 13:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 13:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:20	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 13:20	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 13:20	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 13:20	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 13:20	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 13:20	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW11A-210421 **Lab ID: 60367559004** Collected: 04/21/21 09:35 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 13:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 13:20	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 13:20	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:20	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 13:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 13:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 13:20	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 13:20	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 13:20	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 13:20	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 13:20	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 13:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 13:20	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 13:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 13:20	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 13:20	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 13:20	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 13:20	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 13:20	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 13:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/28/21 13:20	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		04/28/21 13:20	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		04/28/21 13:20	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 13:20		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW11B-210421 **Lab ID: 60367559005** Collected: 04/21/21 09:20 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 13:34	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 13:34	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 13:34	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 13:34	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 13:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 13:34	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 13:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 13:34	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 13:34	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 13:34	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:34	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 13:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 13:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 13:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 13:34	75-00-3	
Chloroform	**0.27J**	ug/L	1.0	0.22	1		04/28/21 13:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 13:34	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 13:34	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 13:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 13:34	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 13:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 13:34	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 13:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 13:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 13:34	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 13:34	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 13:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 13:34	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/28/21 13:34	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 13:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/28/21 13:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 13:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 13:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 13:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 13:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 13:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 13:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 13:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 13:34	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 13:34	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 13:34	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 13:34	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 13:34	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW11B-210421 **Lab ID: 60367559005** Collected: 04/21/21 09:20 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 13:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 13:34	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 13:34	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:34	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 13:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 13:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 13:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 13:34	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 13:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 13:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 13:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 13:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 13:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 13:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 13:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 13:34	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 13:34	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 13:34	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 13:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 13:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/28/21 13:34	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		04/28/21 13:34	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		04/28/21 13:34	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 13:34		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW14A-210422 **Lab ID: 60367559006** Collected: 04/22/21 12:15 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 15:14	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 15:14	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 15:14	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 15:14	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 15:14	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 15:14	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 15:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 15:14	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 15:14	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 15:14	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:14	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 15:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 15:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 15:14	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 15:14	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 15:14	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 15:14	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 15:14	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 15:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 15:14	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 15:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 15:14	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 15:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 15:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 15:14	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 15:14	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 15:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 15:14	107-06-2	
1,2-Dichloroethene (Total)	**1.5**	ug/L	1.0	0.22	1		04/28/21 15:14	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 15:14	75-35-4	
cis-1,2-Dichloroethene	**0.92J**	ug/L	1.0	0.13	1		04/28/21 15:14	156-59-2	
trans-1,2-Dichloroethene	**0.59J**	ug/L	1.0	0.10	1		04/28/21 15:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 15:14	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 15:14	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 15:14	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 15:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 15:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 15:14	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 15:14	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 15:14	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 15:14	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 15:14	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 15:14	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW14A-210422 **Lab ID: 60367559006** Collected: 04/22/21 12:15 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 15:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 15:14	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 15:14	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:14	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 15:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 15:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 15:14	79-34-5	
Tetrachloroethene	**19.3**	ug/L	1.0	0.33	1		04/28/21 15:14	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 15:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 15:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 15:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 15:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 15:14	79-00-5	
Trichloroethene	**2.1**	ug/L	1.0	0.21	1		04/28/21 15:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 15:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 15:14	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 15:14	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 15:14	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 15:14	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 15:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/28/21 15:14	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		04/28/21 15:14	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		04/28/21 15:14	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 15:14		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW14B-210422 **Lab ID: 60367559007** Collected: 04/22/21 12:50 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/30/21 08:48	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/30/21 08:48	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/30/21 08:48	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/30/21 08:48	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/30/21 08:48	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/30/21 08:48	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/30/21 08:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/30/21 08:48	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/30/21 08:48	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/30/21 08:48	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:48	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/30/21 08:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/30/21 08:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/30/21 08:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/30/21 08:48	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/30/21 08:48	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/30/21 08:48	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/30/21 08:48	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/30/21 08:48	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/30/21 08:48	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/30/21 08:48	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/30/21 08:48	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/30/21 08:48	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 08:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 08:48	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/30/21 08:48	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/30/21 08:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/30/21 08:48	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/30/21 08:48	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/30/21 08:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/30/21 08:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/30/21 08:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/30/21 08:48	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/30/21 08:48	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/30/21 08:48	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/30/21 08:48	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/30/21 08:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/30/21 08:48	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:48	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/30/21 08:48	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/30/21 08:48	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/30/21 08:48	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/30/21 08:48	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/30/21 08:48	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW14B-210422 **Lab ID: 60367559007** Collected: 04/22/21 12:50 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/30/21 08:48	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/30/21 08:48	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/30/21 08:48	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:48	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/30/21 08:48	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/30/21 08:48	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/30/21 08:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/30/21 08:48	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/30/21 08:48	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/30/21 08:48	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/30/21 08:48	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/30/21 08:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/30/21 08:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/30/21 08:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/30/21 08:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/30/21 08:48	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/30/21 08:48	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/30/21 08:48	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/30/21 08:48	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/30/21 08:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/30/21 08:48	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		04/30/21 08:48	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/30/21 08:48	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/30/21 08:48		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW15A-210421 **Lab ID: 60367559008** Collected: 04/21/21 14:40 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 13:49	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 13:49	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 13:49	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 13:49	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 13:49	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 13:49	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 13:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 13:49	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 13:49	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 13:49	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:49	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 13:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 13:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 13:49	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 13:49	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 13:49	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 13:49	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 13:49	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 13:49	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 13:49	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 13:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 13:49	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 13:49	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 13:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 13:49	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 13:49	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 13:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 13:49	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/28/21 13:49	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 13:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/28/21 13:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 13:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 13:49	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 13:49	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 13:49	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 13:49	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 13:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 13:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:49	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 13:49	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 13:49	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 13:49	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 13:49	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 13:49	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW15A-210421 **Lab ID: 60367559008** Collected: 04/21/21 14:40 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 13:49	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 13:49	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 13:49	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 13:49	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 13:49	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 13:49	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 13:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 13:49	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 13:49	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 13:49	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 13:49	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 13:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 13:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 13:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 13:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 13:49	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 13:49	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 13:49	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 13:49	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 13:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/28/21 13:49	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		04/28/21 13:49	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		04/28/21 13:49	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 13:49		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW15C-210422 **Lab ID: 60367559009** Collected: 04/22/21 09:20 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/30/21 09:02	67-64-1	
Benzene	**0.42J**	ug/L	1.0	0.14	1		04/30/21 09:02	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/30/21 09:02	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/30/21 09:02	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/30/21 09:02	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/30/21 09:02	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/30/21 09:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/30/21 09:02	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/30/21 09:02	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/30/21 09:02	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:02	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/30/21 09:02	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/30/21 09:02	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/30/21 09:02	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/30/21 09:02	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/30/21 09:02	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/30/21 09:02	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/30/21 09:02	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/30/21 09:02	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/30/21 09:02	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/30/21 09:02	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/30/21 09:02	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/30/21 09:02	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 09:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 09:02	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/30/21 09:02	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/30/21 09:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/30/21 09:02	107-06-2	
1,2-Dichloroethene (Total)	**0.23J**	ug/L	1.0	0.22	1		04/30/21 09:02	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/30/21 09:02	75-35-4	
cis-1,2-Dichloroethene	**0.23J**	ug/L	1.0	0.13	1		04/30/21 09:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/30/21 09:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/30/21 09:02	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/30/21 09:02	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/30/21 09:02	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/30/21 09:02	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/30/21 09:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/30/21 09:02	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:02	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/30/21 09:02	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/30/21 09:02	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/30/21 09:02	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/30/21 09:02	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/30/21 09:02	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW15C-210422 **Lab ID: 60367559009** Collected: 04/22/21 09:20 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/30/21 09:02	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/30/21 09:02	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/30/21 09:02	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:02	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/30/21 09:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/30/21 09:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/30/21 09:02	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/30/21 09:02	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/30/21 09:02	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/30/21 09:02	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/30/21 09:02	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/30/21 09:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/30/21 09:02	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/30/21 09:02	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/30/21 09:02	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/30/21 09:02	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/30/21 09:02	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/30/21 09:02	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/30/21 09:02	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/30/21 09:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/30/21 09:02	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		04/30/21 09:02	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		04/30/21 09:02	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/30/21 09:02		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW16A-210421 **Lab ID: 60367559010** Collected: 04/21/21 09:50 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 15:28	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 15:28	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 15:28	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 15:28	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 15:28	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 15:28	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 15:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 15:28	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 15:28	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 15:28	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:28	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 15:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 15:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 15:28	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 15:28	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 15:28	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 15:28	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 15:28	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 15:28	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 15:28	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 15:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 15:28	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 15:28	74-95-3	
1,2-Dichlorobenzene	**0.23J**	ug/L	1.0	0.12	1		04/28/21 15:28	95-50-1	B
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 15:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 15:28	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 15:28	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 15:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 15:28	107-06-2	
1,2-Dichloroethene (Total)	**101**	ug/L	1.0	0.22	1		04/28/21 15:28	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 15:28	75-35-4	
cis-1,2-Dichloroethene	**72.6**	ug/L	1.0	0.13	1		04/28/21 15:28	156-59-2	
trans-1,2-Dichloroethene	**28.3**	ug/L	1.0	0.10	1		04/28/21 15:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 15:28	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 15:28	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 15:28	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 15:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 15:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 15:28	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:28	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 15:28	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 15:28	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 15:28	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 15:28	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 15:28	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW16A-210421 **Lab ID: 60367559010** Collected: 04/21/21 09:50 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 15:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 15:28	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 15:28	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:28	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 15:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 15:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 15:28	79-34-5	
Tetrachloroethene	**11.0**	ug/L	1.0	0.33	1		04/28/21 15:28	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 15:28	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 15:28	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 15:28	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 15:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 15:28	79-00-5	
Trichloroethene	**16.9**	ug/L	1.0	0.21	1		04/28/21 15:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 15:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 15:28	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 15:28	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 15:28	108-67-8	
Vinyl chloride	**8.0**	ug/L	1.0	0.17	1		04/28/21 15:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 15:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/28/21 15:28	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		04/28/21 15:28	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		04/28/21 15:28	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 15:28		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW16B-210421 **Lab ID: 60367559011** Collected: 04/21/21 14:00 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 16:11	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 16:11	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 16:11	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 16:11	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 16:11	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 16:11	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 16:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 16:11	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 16:11	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 16:11	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 16:11	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 16:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 16:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 16:11	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 16:11	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 16:11	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 16:11	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 16:11	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 16:11	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 16:11	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 16:11	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 16:11	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 16:11	74-95-3	
1,2-Dichlorobenzene	**0.14J**	ug/L	1.0	0.12	1		04/28/21 16:11	95-50-1	B
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 16:11	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 16:11	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 16:11	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 16:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 16:11	107-06-2	
1,2-Dichloroethene (Total)	**49.4**	ug/L	1.0	0.22	1		04/28/21 16:11	540-59-0	
1,1-Dichloroethene	**0.35J**	ug/L	1.0	0.22	1		04/28/21 16:11	75-35-4	
cis-1,2-Dichloroethene	**43.3**	ug/L	1.0	0.13	1		04/28/21 16:11	156-59-2	
trans-1,2-Dichloroethene	**6.1**	ug/L	1.0	0.10	1		04/28/21 16:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 16:11	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 16:11	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 16:11	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 16:11	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 16:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 16:11	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 16:11	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 16:11	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 16:11	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 16:11	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 16:11	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 16:11	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW16B-210421 **Lab ID: 60367559011** Collected: 04/21/21 14:00 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 16:11	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 16:11	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 16:11	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 16:11	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 16:11	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 16:11	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 16:11	79-34-5	
Tetrachloroethene	**55.8**	ug/L	1.0	0.33	1		04/28/21 16:11	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 16:11	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 16:11	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 16:11	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 16:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 16:11	79-00-5	
Trichloroethene	**37.9**	ug/L	1.0	0.21	1		04/28/21 16:11	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 16:11	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 16:11	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 16:11	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 16:11	108-67-8	
Vinyl chloride	**63.9**	ug/L	1.0	0.17	1		04/28/21 16:11	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 16:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		04/28/21 16:11	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		04/28/21 16:11	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		04/28/21 16:11	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 16:11		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW17A-210422 **Lab ID: 60367559012** Collected: 04/22/21 11:30 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/30/21 09:17	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/30/21 09:17	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/30/21 09:17	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/30/21 09:17	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/30/21 09:17	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/30/21 09:17	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/30/21 09:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/30/21 09:17	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/30/21 09:17	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/30/21 09:17	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:17	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/30/21 09:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/30/21 09:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/30/21 09:17	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/30/21 09:17	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/30/21 09:17	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/30/21 09:17	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/30/21 09:17	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/30/21 09:17	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/30/21 09:17	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/30/21 09:17	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/30/21 09:17	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/30/21 09:17	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 09:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 09:17	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/30/21 09:17	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/30/21 09:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/30/21 09:17	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/30/21 09:17	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/30/21 09:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/30/21 09:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/30/21 09:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/30/21 09:17	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/30/21 09:17	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/30/21 09:17	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/30/21 09:17	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/30/21 09:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/30/21 09:17	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:17	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/30/21 09:17	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/30/21 09:17	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/30/21 09:17	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/30/21 09:17	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/30/21 09:17	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW17A-210422 **Lab ID: 60367559012** Collected: 04/22/21 11:30 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/30/21 09:17	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/30/21 09:17	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/30/21 09:17	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:17	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/30/21 09:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/30/21 09:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/30/21 09:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/30/21 09:17	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/30/21 09:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/30/21 09:17	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/30/21 09:17	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/30/21 09:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/30/21 09:17	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/30/21 09:17	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/30/21 09:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/30/21 09:17	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/30/21 09:17	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/30/21 09:17	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/30/21 09:17	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/30/21 09:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/30/21 09:17	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		04/30/21 09:17	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		04/30/21 09:17	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/30/21 09:17		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW18A-210421 **Lab ID: 60367559013** Collected: 04/21/21 16:00 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 14:03	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 14:03	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 14:03	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 14:03	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 14:03	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 14:03	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 14:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 14:03	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 14:03	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 14:03	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:03	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 14:03	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 14:03	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 14:03	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 14:03	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 14:03	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 14:03	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 14:03	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 14:03	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 14:03	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 14:03	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 14:03	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 14:03	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 14:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 14:03	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 14:03	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 14:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 14:03	107-06-2	
1,2-Dichloroethene (Total)	**3.1**	ug/L	1.0	0.22	1		04/28/21 14:03	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 14:03	75-35-4	
cis-1,2-Dichloroethene	**3.1**	ug/L	1.0	0.13	1		04/28/21 14:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 14:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 14:03	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 14:03	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 14:03	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 14:03	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 14:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 14:03	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:03	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 14:03	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 14:03	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 14:03	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 14:03	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 14:03	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW18A-210421 **Lab ID: 60367559013** Collected: 04/21/21 16:00 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 14:03	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 14:03	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 14:03	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:03	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 14:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 14:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 14:03	79-34-5	
Tetrachloroethene	**0.75J**	ug/L	1.0	0.33	1		04/28/21 14:03	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 14:03	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 14:03	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 14:03	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 14:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 14:03	79-00-5	
Trichloroethene	**0.28J**	ug/L	1.0	0.21	1		04/28/21 14:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 14:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 14:03	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 14:03	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 14:03	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 14:03	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 14:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/28/21 14:03	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		04/28/21 14:03	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/28/21 14:03	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 14:03		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW19AR-210420 **Lab ID: 60367559014** Collected: 04/20/21 14:15 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 12:08	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 12:08	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 12:08	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 12:08	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 12:08	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 12:08	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 12:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 12:08	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 12:08	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 12:08	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:08	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 12:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 12:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 12:08	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 12:08	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 12:08	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 12:08	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 12:08	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 12:08	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 12:08	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 12:08	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 12:08	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 12:08	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:08	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 12:08	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 12:08	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 12:08	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 12:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 12:08	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/28/21 12:08	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 12:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/28/21 12:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 12:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 12:08	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 12:08	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 12:08	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 12:08	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 12:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 12:08	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:08	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 12:08	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 12:08	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 12:08	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 12:08	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 12:08	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW19AR-210420 **Lab ID: 60367559014** Collected: 04/20/21 14:15 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 12:08	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 12:08	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 12:08	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:08	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 12:08	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 12:08	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 12:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 12:08	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 12:08	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 12:08	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 12:08	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 12:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 12:08	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 12:08	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 12:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 12:08	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 12:08	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 12:08	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 12:08	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 12:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		04/28/21 12:08	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		04/28/21 12:08	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		04/28/21 12:08	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 12:08		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW19B-210421 **Lab ID: 60367559015** Collected: 04/21/21 14:55 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 15:43	67-64-1	
Benzene	**0.45J**	ug/L	1.0	0.14	1		04/28/21 15:43	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 15:43	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 15:43	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 15:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 15:43	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 15:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 15:43	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 15:43	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 15:43	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:43	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 15:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 15:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 15:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 15:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 15:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 15:43	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 15:43	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 15:43	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 15:43	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 15:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 15:43	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 15:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 15:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 15:43	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 15:43	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 15:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 15:43	107-06-2	
1,2-Dichloroethene (Total)	**0.26J**	ug/L	1.0	0.22	1		04/28/21 15:43	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 15:43	75-35-4	
cis-1,2-Dichloroethene	**0.16J**	ug/L	1.0	0.13	1		04/28/21 15:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 15:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 15:43	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 15:43	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 15:43	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 15:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 15:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 15:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:43	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 15:43	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 15:43	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 15:43	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 15:43	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 15:43	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW19B-210421 **Lab ID: 60367559015** Collected: 04/21/21 14:55 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 15:43	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 15:43	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 15:43	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:43	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 15:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 15:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 15:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 15:43	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 15:43	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 15:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 15:43	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 15:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 15:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 15:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 15:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 15:43	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 15:43	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 15:43	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 15:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 15:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/28/21 15:43	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		04/28/21 15:43	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/28/21 15:43	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 15:43		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW20A-210422 **Lab ID: 60367559016** Collected: 04/22/21 13:05 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	500	127	50		04/30/21 09:45	67-64-1	
Benzene	ND	ug/L	50.0	6.8	50		04/30/21 09:45	71-43-2	
Bromobenzene	ND	ug/L	50.0	4.4	50		04/30/21 09:45	108-86-1	
Bromochloromethane	ND	ug/L	50.0	10.1	50		04/30/21 09:45	74-97-5	
Bromodichloromethane	ND	ug/L	50.0	7.8	50		04/30/21 09:45	75-27-4	
Bromoform	ND	ug/L	50.0	33.8	50		04/30/21 09:45	75-25-2	
Bromomethane	ND	ug/L	250	23.0	50		04/30/21 09:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	500	48.8	50		04/30/21 09:45	78-93-3	
n-Butylbenzene	ND	ug/L	50.0	7.6	50		04/30/21 09:45	104-51-8	
sec-Butylbenzene	ND	ug/L	50.0	5.5	50		04/30/21 09:45	135-98-8	
tert-Butylbenzene	ND	ug/L	50.0	6.0	50		04/30/21 09:45	98-06-6	
Carbon disulfide	ND	ug/L	250	48.9	50		04/30/21 09:45	75-15-0	
Carbon tetrachloride	ND	ug/L	50.0	8.6	50		04/30/21 09:45	56-23-5	
Chlorobenzene	ND	ug/L	50.0	4.4	50		04/30/21 09:45	108-90-7	
Chloroethane	ND	ug/L	50.0	18.7	50		04/30/21 09:45	75-00-3	
Chloroform	ND	ug/L	50.0	11.0	50		04/30/21 09:45	67-66-3	
Chloromethane	ND	ug/L	50.0	14.2	50		04/30/21 09:45	74-87-3	
2-Chlorotoluene	ND	ug/L	50.0	5.4	50		04/30/21 09:45	95-49-8	
4-Chlorotoluene	ND	ug/L	50.0	7.4	50		04/30/21 09:45	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	125	39.0	50		04/30/21 09:45	96-12-8	
Dibromochloromethane	ND	ug/L	50.0	15.2	50		04/30/21 09:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	50.0	9.8	50		04/30/21 09:45	106-93-4	
Dibromomethane	ND	ug/L	50.0	5.4	50		04/30/21 09:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	50.0	6.2	50		04/30/21 09:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	50.0	6.6	50		04/30/21 09:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	50.0	6.6	50		04/30/21 09:45	106-46-7	
Dichlorodifluoromethane	ND	ug/L	50.0	10	50		04/30/21 09:45	75-71-8	
1,1-Dichloroethane	ND	ug/L	50.0	6.1	50		04/30/21 09:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	50.0	10.6	50		04/30/21 09:45	107-06-2	
1,2-Dichloroethene (Total)	**561**	ug/L	50.0	11.1	50		04/30/21 09:45	540-59-0	
1,1-Dichloroethene	ND	ug/L	50.0	11.0	50		04/30/21 09:45	75-35-4	
cis-1,2-Dichloroethene	**433**	ug/L	50.0	6.4	50		04/30/21 09:45	156-59-2	
trans-1,2-Dichloroethene	**129**	ug/L	50.0	5.1	50		04/30/21 09:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	50.0	7.0	50		04/30/21 09:45	78-87-5	
1,3-Dichloropropane	ND	ug/L	50.0	5.2	50		04/30/21 09:45	142-28-9	
2,2-Dichloropropane	ND	ug/L	50.0	8.1	50		04/30/21 09:45	594-20-7	
1,1-Dichloropropene	ND	ug/L	50.0	6.8	50		04/30/21 09:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	50.0	3.9	50		04/30/21 09:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	50.0	9.1	50		04/30/21 09:45	10061-02-6	
Ethylbenzene	ND	ug/L	50.0	6.0	50		04/30/21 09:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	20.8	50		04/30/21 09:45	87-68-3	
2-Hexanone	ND	ug/L	500	55.0	50		04/30/21 09:45	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	50.0	4.8	50		04/30/21 09:45	98-82-8	
p-Isopropyltoluene	ND	ug/L	50.0	6.4	50		04/30/21 09:45	99-87-6	
Methylene Chloride	**42.3J**	ug/L	50.0	19.6	50		04/30/21 09:45	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW20A-210422 **Lab ID: 60367559016** Collected: 04/22/21 13:05 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	500	36.8	50		04/30/21 09:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	50.0	6.4	50		04/30/21 09:45	1634-04-4	
Naphthalene	ND	ug/L	500	41.1	50		04/30/21 09:45	91-20-3	
n-Propylbenzene	ND	ug/L	50.0	6.0	50		04/30/21 09:45	103-65-1	
Styrene	ND	ug/L	50.0	6.2	50		04/30/21 09:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	50.0	4.2	50		04/30/21 09:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	50.0	7.7	50		04/30/21 09:45	79-34-5	
Tetrachloroethene	**6150**	ug/L	50.0	16.5	50		04/30/21 09:45	127-18-4	
Toluene	ND	ug/L	50.0	12.6	50		04/30/21 09:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	50.0	46.4	50		04/30/21 09:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	50.0	36.6	50		04/30/21 09:45	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	50.0	5.4	50		04/30/21 09:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	50.0	7.1	50		04/30/21 09:45	79-00-5	
Trichloroethene	**2990**	ug/L	50.0	10.5	50		04/30/21 09:45	79-01-6	
Trichlorofluoromethane	ND	ug/L	50.0	8.2	50		04/30/21 09:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	125	20.4	50		04/30/21 09:45	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	50.0	16.2	50		04/30/21 09:45	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	50.0	4.5	50		04/30/21 09:45	108-67-8	
Vinyl chloride	**15.2J**	ug/L	50.0	8.4	50		04/30/21 09:45	75-01-4	
Xylene (Total)	ND	ug/L	150	14.1	50		04/30/21 09:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		50		04/30/21 09:45	460-00-4	
Toluene-d8 (S)	100	%	80-120		50		04/30/21 09:45	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		50		04/30/21 09:45	2199-69-1	
Preservation pH	**1.0**		0.10		50		04/30/21 09:45		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW20B-210422 **Lab ID: 60367559017** Collected: 04/22/21 11:00 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/30/21 09:31	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/30/21 09:31	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/30/21 09:31	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/30/21 09:31	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/30/21 09:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/30/21 09:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/30/21 09:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/30/21 09:31	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/30/21 09:31	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/30/21 09:31	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:31	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/30/21 09:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/30/21 09:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/30/21 09:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/30/21 09:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/30/21 09:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/30/21 09:31	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/30/21 09:31	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/30/21 09:31	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/30/21 09:31	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/30/21 09:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/30/21 09:31	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/30/21 09:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 09:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 09:31	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/30/21 09:31	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/30/21 09:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/30/21 09:31	107-06-2	
1,2-Dichloroethene (Total)	**0.45J**	ug/L	1.0	0.22	1		04/30/21 09:31	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/30/21 09:31	75-35-4	
cis-1,2-Dichloroethene	**0.45J**	ug/L	1.0	0.13	1		04/30/21 09:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/30/21 09:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/30/21 09:31	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/30/21 09:31	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/30/21 09:31	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/30/21 09:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/30/21 09:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/30/21 09:31	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:31	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/30/21 09:31	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/30/21 09:31	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/30/21 09:31	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/30/21 09:31	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/30/21 09:31	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW20B-210422 **Lab ID: 60367559017** Collected: 04/22/21 11:00 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/30/21 09:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/30/21 09:31	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/30/21 09:31	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 09:31	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/30/21 09:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/30/21 09:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/30/21 09:31	79-34-5	
Tetrachloroethene	**133**	ug/L	1.0	0.33	1		04/30/21 09:31	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/30/21 09:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/30/21 09:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/30/21 09:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/30/21 09:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/30/21 09:31	79-00-5	
Trichloroethene	**1.5**	ug/L	1.0	0.21	1		04/30/21 09:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/30/21 09:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/30/21 09:31	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/30/21 09:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/30/21 09:31	108-67-8	
Vinyl chloride	**0.24J**	ug/L	1.0	0.17	1		04/30/21 09:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/30/21 09:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/30/21 09:31	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		04/30/21 09:31	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		04/30/21 09:31	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/30/21 09:31		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW21R-210421 **Lab ID: 60367559018** Collected: 04/21/21 10:10 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 14:17	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 14:17	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 14:17	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 14:17	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 14:17	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 14:17	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 14:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 14:17	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 14:17	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 14:17	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:17	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 14:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 14:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 14:17	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 14:17	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 14:17	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 14:17	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 14:17	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 14:17	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 14:17	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 14:17	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 14:17	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 14:17	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 14:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 14:17	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 14:17	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 14:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 14:17	107-06-2	
1,2-Dichloroethene (Total)	**0.25J**	ug/L	1.0	0.22	1		04/28/21 14:17	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 14:17	75-35-4	
cis-1,2-Dichloroethene	**0.25J**	ug/L	1.0	0.13	1		04/28/21 14:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 14:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 14:17	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 14:17	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 14:17	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 14:17	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 14:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 14:17	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:17	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 14:17	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 14:17	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 14:17	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 14:17	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 14:17	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW21R-210421 **Lab ID: 60367559018** Collected: 04/21/21 10:10 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 14:17	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 14:17	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 14:17	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:17	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 14:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 14:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 14:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 14:17	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 14:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 14:17	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 14:17	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 14:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 14:17	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 14:17	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 14:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 14:17	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 14:17	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 14:17	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 14:17	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 14:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%	80-120		1		04/28/21 14:17	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		04/28/21 14:17	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		04/28/21 14:17	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 14:17		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW22A-210420 **Lab ID: 60367559019** Collected: 04/20/21 15:10 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 12:23	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 12:23	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 12:23	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 12:23	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 12:23	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 12:23	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 12:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 12:23	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 12:23	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 12:23	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:23	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 12:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 12:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 12:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 12:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 12:23	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 12:23	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 12:23	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 12:23	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 12:23	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 12:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 12:23	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 12:23	74-95-3	
1,2-Dichlorobenzene	**0.18J**	ug/L	1.0	0.12	1		04/28/21 12:23	95-50-1	B
1,3-Dichlorobenzene	**0.13J**	ug/L	1.0	0.13	1		04/28/21 12:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 12:23	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 12:23	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 12:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 12:23	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/28/21 12:23	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 12:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/28/21 12:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 12:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 12:23	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 12:23	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 12:23	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 12:23	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 12:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 12:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:23	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 12:23	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 12:23	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 12:23	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 12:23	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 12:23	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW22A-210420 **Lab ID: 60367559019** Collected: 04/20/21 15:10 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 12:23	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 12:23	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 12:23	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:23	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 12:23	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 12:23	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 12:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 12:23	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 12:23	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 12:23	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 12:23	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 12:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 12:23	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 12:23	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 12:23	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 12:23	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 12:23	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 12:23	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 12:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 12:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/28/21 12:23	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		04/28/21 12:23	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		04/28/21 12:23	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 12:23		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW23A-210420 **Lab ID: 60367559020** Collected: 04/20/21 14:40 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 12:37	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 12:37	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 12:37	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 12:37	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 12:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 12:37	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 12:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 12:37	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 12:37	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 12:37	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:37	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 12:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 12:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 12:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 12:37	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 12:37	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 12:37	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 12:37	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 12:37	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 12:37	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 12:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 12:37	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 12:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 12:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 12:37	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 12:37	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 12:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 12:37	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/28/21 12:37	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 12:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/28/21 12:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 12:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 12:37	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 12:37	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 12:37	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 12:37	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 12:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 12:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 12:37	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 12:37	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 12:37	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 12:37	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 12:37	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW23A-210420 **Lab ID: 60367559020** Collected: 04/20/21 14:40 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 12:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 12:37	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 12:37	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 12:37	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 12:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 12:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 12:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 12:37	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 12:37	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 12:37	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 12:37	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 12:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 12:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 12:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 12:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 12:37	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 12:37	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 12:37	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 12:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 12:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/28/21 12:37	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		04/28/21 12:37	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		04/28/21 12:37	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 12:37		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW24A-210421 **Lab ID: 60367559021** Collected: 04/21/21 10:35 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 14:31	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 14:31	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 14:31	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 14:31	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 14:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 14:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 14:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 14:31	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 14:31	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 14:31	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:31	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 14:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 14:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 14:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 14:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 14:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 14:31	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 14:31	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 14:31	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 14:31	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 14:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 14:31	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 14:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 14:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 14:31	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 14:31	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 14:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 14:31	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/28/21 14:31	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 14:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/28/21 14:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 14:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 14:31	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 14:31	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 14:31	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 14:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 14:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 14:31	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:31	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 14:31	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 14:31	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 14:31	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 14:31	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 14:31	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW24A-210421 **Lab ID: 60367559021** Collected: 04/21/21 10:35 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 14:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 14:31	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 14:31	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:31	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 14:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 14:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 14:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 14:31	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 14:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 14:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 14:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 14:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 14:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 14:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 14:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 14:31	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 14:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 14:31	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 14:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 14:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/28/21 14:31	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		04/28/21 14:31	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		04/28/21 14:31	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 14:31		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW25A-210421 **Lab ID: 60367559022** Collected: 04/21/21 15:00 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 14:45	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 14:45	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 14:45	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 14:45	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 14:45	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 14:45	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 14:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 14:45	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 14:45	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 14:45	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:45	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 14:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 14:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 14:45	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 14:45	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 14:45	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 14:45	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 14:45	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 14:45	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 14:45	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 14:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 14:45	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 14:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 14:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 14:45	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 14:45	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 14:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 14:45	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/28/21 14:45	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 14:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/28/21 14:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 14:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 14:45	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 14:45	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 14:45	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 14:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 14:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 14:45	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 14:45	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 14:45	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 14:45	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 14:45	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 14:45	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-MW25A-210421 **Lab ID: 60367559022** Collected: 04/21/21 15:00 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 14:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 14:45	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 14:45	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 14:45	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 14:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 14:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 14:45	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 14:45	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 14:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 14:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 14:45	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 14:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 14:45	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 14:45	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 14:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 14:45	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 14:45	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 14:45	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 14:45	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 14:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		1		04/28/21 14:45	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		04/28/21 14:45	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		04/28/21 14:45	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 14:45		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-DUP1-210421 **Lab ID: 60367559023** Collected: 04/21/21 09:35 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/28/21 15:57	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/28/21 15:57	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/28/21 15:57	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/28/21 15:57	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/28/21 15:57	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/28/21 15:57	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/28/21 15:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/28/21 15:57	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/28/21 15:57	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/28/21 15:57	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:57	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/28/21 15:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/28/21 15:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/28/21 15:57	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/28/21 15:57	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/28/21 15:57	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/28/21 15:57	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/28/21 15:57	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/28/21 15:57	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/28/21 15:57	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/28/21 15:57	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/28/21 15:57	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/28/21 15:57	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 15:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/28/21 15:57	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/28/21 15:57	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/21 15:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/28/21 15:57	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/28/21 15:57	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/28/21 15:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/28/21 15:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/28/21 15:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/28/21 15:57	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/28/21 15:57	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/21 15:57	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/21 15:57	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/28/21 15:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/28/21 15:57	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:57	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/28/21 15:57	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/28/21 15:57	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/28/21 15:57	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/28/21 15:57	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/28/21 15:57	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-DUP1-210421 **Lab ID: 60367559023** Collected: 04/21/21 09:35 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/28/21 15:57	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/28/21 15:57	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/28/21 15:57	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/28/21 15:57	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/21 15:57	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/28/21 15:57	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/21 15:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/28/21 15:57	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/28/21 15:57	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/28/21 15:57	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/28/21 15:57	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/21 15:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/28/21 15:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/28/21 15:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/28/21 15:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/28/21 15:57	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/28/21 15:57	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/28/21 15:57	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/28/21 15:57	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/28/21 15:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/28/21 15:57	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		04/28/21 15:57	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/28/21 15:57	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/28/21 15:57		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-FB01-210422 **Lab ID: 60367559024** Collected: 04/22/21 12:40 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/30/21 08:20	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/30/21 08:20	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/30/21 08:20	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/30/21 08:20	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/30/21 08:20	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/30/21 08:20	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/30/21 08:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/30/21 08:20	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/30/21 08:20	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/30/21 08:20	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:20	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/30/21 08:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/30/21 08:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/30/21 08:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/30/21 08:20	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/30/21 08:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/30/21 08:20	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/30/21 08:20	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/30/21 08:20	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/30/21 08:20	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/30/21 08:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/30/21 08:20	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/30/21 08:20	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 08:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 08:20	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/30/21 08:20	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/30/21 08:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/30/21 08:20	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/30/21 08:20	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/30/21 08:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/30/21 08:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/30/21 08:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/30/21 08:20	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/30/21 08:20	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/30/21 08:20	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/30/21 08:20	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/30/21 08:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/30/21 08:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:20	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/30/21 08:20	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/30/21 08:20	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/30/21 08:20	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/30/21 08:20	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/30/21 08:20	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-FB01-210422 **Lab ID: 60367559024** Collected: 04/22/21 12:40 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/30/21 08:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/30/21 08:20	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/30/21 08:20	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:20	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/30/21 08:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/30/21 08:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/30/21 08:20	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/30/21 08:20	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/30/21 08:20	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/30/21 08:20	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/30/21 08:20	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/30/21 08:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/30/21 08:20	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/30/21 08:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/30/21 08:20	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/30/21 08:20	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/30/21 08:20	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/30/21 08:20	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/30/21 08:20	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/30/21 08:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/30/21 08:20	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		04/30/21 08:20	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		04/30/21 08:20	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/30/21 08:20		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-EB01-210422 **Lab ID: 60367559025** Collected: 04/22/21 12:55 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/30/21 08:34	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/30/21 08:34	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/30/21 08:34	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/30/21 08:34	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/30/21 08:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/30/21 08:34	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/30/21 08:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/30/21 08:34	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/30/21 08:34	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/30/21 08:34	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:34	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/30/21 08:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/30/21 08:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/30/21 08:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/30/21 08:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/30/21 08:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/30/21 08:34	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/30/21 08:34	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/30/21 08:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/30/21 08:34	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/30/21 08:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/30/21 08:34	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/30/21 08:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 08:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 08:34	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/30/21 08:34	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/30/21 08:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/30/21 08:34	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/30/21 08:34	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/30/21 08:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/30/21 08:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/30/21 08:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/30/21 08:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/30/21 08:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/30/21 08:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/30/21 08:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/30/21 08:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/30/21 08:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/30/21 08:34	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/30/21 08:34	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/30/21 08:34	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/30/21 08:34	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/30/21 08:34	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-EB01-210422 **Lab ID: 60367559025** Collected: 04/22/21 12:55 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/30/21 08:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/30/21 08:34	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/30/21 08:34	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:34	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/30/21 08:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/30/21 08:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/30/21 08:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/30/21 08:34	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/30/21 08:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/30/21 08:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/30/21 08:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/30/21 08:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/30/21 08:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/30/21 08:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/30/21 08:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/30/21 08:34	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/30/21 08:34	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/30/21 08:34	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/30/21 08:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/30/21 08:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/30/21 08:34	460-00-4	
Toluene-d8 (S)	104	%	80-120		1		04/30/21 08:34	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		04/30/21 08:34	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/30/21 08:34		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-TB01-210422 **Lab ID: 60367559026** Collected: 04/22/21 08:00 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		04/30/21 08:06	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		04/30/21 08:06	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		04/30/21 08:06	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		04/30/21 08:06	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		04/30/21 08:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		04/30/21 08:06	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		04/30/21 08:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		04/30/21 08:06	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/30/21 08:06	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		04/30/21 08:06	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:06	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		04/30/21 08:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		04/30/21 08:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		04/30/21 08:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		04/30/21 08:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		04/30/21 08:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		04/30/21 08:06	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		04/30/21 08:06	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		04/30/21 08:06	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		04/30/21 08:06	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		04/30/21 08:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		04/30/21 08:06	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		04/30/21 08:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 08:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		04/30/21 08:06	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/30/21 08:06	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		04/30/21 08:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		04/30/21 08:06	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		04/30/21 08:06	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		04/30/21 08:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		04/30/21 08:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		04/30/21 08:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		04/30/21 08:06	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		04/30/21 08:06	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/30/21 08:06	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		04/30/21 08:06	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		04/30/21 08:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		04/30/21 08:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:06	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		04/30/21 08:06	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		04/30/21 08:06	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		04/30/21 08:06	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		04/30/21 08:06	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		04/30/21 08:06	75-09-2	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Sample: WG-2365-TB01-210422 **Lab ID: 60367559026** Collected: 04/22/21 08:00 Received: 04/23/21 08:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		04/30/21 08:06	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		04/30/21 08:06	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		04/30/21 08:06	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		04/30/21 08:06	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		04/30/21 08:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		04/30/21 08:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/30/21 08:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		04/30/21 08:06	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		04/30/21 08:06	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		04/30/21 08:06	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		04/30/21 08:06	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/30/21 08:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		04/30/21 08:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		04/30/21 08:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		04/30/21 08:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		04/30/21 08:06	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		04/30/21 08:06	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		04/30/21 08:06	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		04/30/21 08:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		04/30/21 08:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/30/21 08:06	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		04/30/21 08:06	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		04/30/21 08:06	2199-69-1	
Preservation pH	**1.0**		0.10		1		04/30/21 08:06		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

QC Batch: 716786
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60367559001, 60367559002, 60367559003, 60367559004, 60367559005, 60367559006, 60367559008, 60367559010, 60367559011, 60367559013, 60367559014, 60367559015, 60367559018, 60367559019, 60367559020, 60367559021, 60367559022, 60367559023

METHOD BLANK: 2883686
Matrix: Water
Associated Lab Samples: 60367559001, 60367559002, 60367559003, 60367559004, 60367559005, 60367559006, 60367559008, 60367559010, 60367559011, 60367559013, 60367559014, 60367559015, 60367559018, 60367559019, 60367559020, 60367559021, 60367559022, 60367559023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.084	04/28/21 11:54	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	04/28/21 11:54	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	04/28/21 11:54	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	04/28/21 11:54	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	04/28/21 11:54	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	04/28/21 11:54	
1,1-Dichloropropene	ug/L	ND	1.0	0.14	04/28/21 11:54	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.93	04/28/21 11:54	
1,2,3-Trichloropropane	ug/L	ND	2.5	0.41	04/28/21 11:54	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.73	04/28/21 11:54	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.32	04/28/21 11:54	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	0.78	04/28/21 11:54	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	0.20	04/28/21 11:54	
1,2-Dichlorobenzene	ug/L	0.19J	1.0	0.12	04/28/21 11:54	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	04/28/21 11:54	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	0.22	04/28/21 11:54	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	04/28/21 11:54	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.090	04/28/21 11:54	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.13	04/28/21 11:54	
1,3-Dichloropropane	ug/L	ND	1.0	0.10	04/28/21 11:54	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.13	04/28/21 11:54	
2,2-Dichloropropane	ug/L	ND	1.0	0.16	04/28/21 11:54	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	04/28/21 11:54	
2-Chlorotoluene	ug/L	ND	1.0	0.11	04/28/21 11:54	
2-Hexanone	ug/L	ND	10.0	1.1	04/28/21 11:54	
4-Chlorotoluene	ug/L	ND	1.0	0.15	04/28/21 11:54	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	04/28/21 11:54	
Acetone	ug/L	ND	10.0	2.5	04/28/21 11:54	
Benzene	ug/L	ND	1.0	0.14	04/28/21 11:54	
Bromobenzene	ug/L	ND	1.0	0.088	04/28/21 11:54	
Bromochloromethane	ug/L	ND	1.0	0.20	04/28/21 11:54	
Bromodichloromethane	ug/L	ND	1.0	0.16	04/28/21 11:54	
Bromoform	ug/L	ND	1.0	0.68	04/28/21 11:54	
Bromomethane	ug/L	ND	5.0	0.46	04/28/21 11:54	
Carbon disulfide	ug/L	ND	5.0	0.98	04/28/21 11:54	
Carbon tetrachloride	ug/L	ND	1.0	0.17	04/28/21 11:54	
Chlorobenzene	ug/L	ND	1.0	0.089	04/28/21 11:54	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

METHOD BLANK: 2883686 Matrix: Water

Associated Lab Samples: 60367559001, 60367559002, 60367559003, 60367559004, 60367559005, 60367559006, 60367559008, 60367559010, 60367559011, 60367559013, 60367559014, 60367559015, 60367559018, 60367559019, 60367559020, 60367559021, 60367559022, 60367559023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloroethane	ug/L	ND	1.0	0.37	04/28/21 11:54	
Chloroform	ug/L	ND	1.0	0.22	04/28/21 11:54	
Chloromethane	ug/L	ND	1.0	0.28	04/28/21 11:54	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	04/28/21 11:54	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	04/28/21 11:54	
Dibromochloromethane	ug/L	ND	1.0	0.30	04/28/21 11:54	
Dibromomethane	ug/L	ND	1.0	0.11	04/28/21 11:54	
Dichlorodifluoromethane	ug/L	ND	1.0	0.20	04/28/21 11:54	
Ethylbenzene	ug/L	ND	1.0	0.12	04/28/21 11:54	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.42	04/28/21 11:54	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.097	04/28/21 11:54	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.13	04/28/21 11:54	
Methylene Chloride	ug/L	ND	1.0	0.39	04/28/21 11:54	
n-Butylbenzene	ug/L	ND	1.0	0.15	04/28/21 11:54	
n-Propylbenzene	ug/L	ND	1.0	0.12	04/28/21 11:54	
Naphthalene	ug/L	ND	10.0	0.82	04/28/21 11:54	
p-Isopropyltoluene	ug/L	ND	1.0	0.13	04/28/21 11:54	
sec-Butylbenzene	ug/L	ND	1.0	0.11	04/28/21 11:54	
Styrene	ug/L	ND	1.0	0.12	04/28/21 11:54	
tert-Butylbenzene	ug/L	ND	1.0	0.12	04/28/21 11:54	
Tetrachloroethene	ug/L	ND	1.0	0.33	04/28/21 11:54	
Toluene	ug/L	ND	1.0	0.25	04/28/21 11:54	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	04/28/21 11:54	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	04/28/21 11:54	
Trichloroethene	ug/L	ND	1.0	0.21	04/28/21 11:54	
Trichlorofluoromethane	ug/L	ND	1.0	0.16	04/28/21 11:54	
Vinyl chloride	ug/L	ND	1.0	0.17	04/28/21 11:54	
Xylene (Total)	ug/L	ND	3.0	0.28	04/28/21 11:54	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		04/28/21 11:54	
4-Bromofluorobenzene (S)	%	103	80-120		04/28/21 11:54	
Toluene-d8 (S)	%	100	80-120		04/28/21 11:54	

LABORATORY CONTROL SAMPLE: 2883687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.9	99	80-120	
1,1,1-Trichloroethane	ug/L	20	18.6	93	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.1	95	75-125	
1,1,2-Trichloroethane	ug/L	20	19.3	97	80-120	
1,1-Dichloroethane	ug/L	20	19.5	97	75-125	
1,1-Dichloroethene	ug/L	20	20.0	100	80-120	
1,1-Dichloropropene	ug/L	20	19.1	95	80-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

LABORATORY CONTROL SAMPLE: 2883687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,3-Trichlorobenzene	ug/L	20	17.2	86	75-125	
1,2,3-Trichloropropane	ug/L	20	19.6	98	80-125	
1,2,4-Trichlorobenzene	ug/L	20	18.6	93	75-120	
1,2,4-Trimethylbenzene	ug/L	20	20.0	100	80-125	
1,2-Dibromo-3-chloropropane	ug/L	20	16.9	84	70-120	
1,2-Dibromoethane (EDB)	ug/L	20	19.4	97	80-120	
1,2-Dichlorobenzene	ug/L	20	19.6	98	80-120	
1,2-Dichloroethane	ug/L	20	19.2	96	75-120	
1,2-Dichloroethene (Total)	ug/L	40	39.0	97	80-120	
1,2-Dichloropropane	ug/L	20	19.6	98	80-125	
1,3,5-Trimethylbenzene	ug/L	20	19.5	98	80-125	
1,3-Dichlorobenzene	ug/L	20	19.5	97	80-120	
1,3-Dichloropropane	ug/L	20	18.8	94	80-120	
1,4-Dichlorobenzene	ug/L	20	19.3	97	80-120	
2,2-Dichloropropane	ug/L	20	19.1	96	60-130	
2-Butanone (MEK)	ug/L	100	79.4	79	40-150	
2-Chlorotoluene	ug/L	20	19.6	98	80-120	
2-Hexanone	ug/L	100	82.8	83	45-150	
4-Chlorotoluene	ug/L	20	19.8	99	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.5	96	65-140	
Acetone	ug/L	100	94.3	94	20-175	
Benzene	ug/L	20	19.5	97	80-120	
Bromobenzene	ug/L	20	18.8	94	80-120	
Bromochloromethane	ug/L	20	20.0	100	80-125	
Bromodichloromethane	ug/L	20	20.0	100	80-125	
Bromoform	ug/L	20	19.1	95	60-135	
Bromomethane	ug/L	20	19.8	99	10-165	
Carbon disulfide	ug/L	20	20.3	102	75-135	
Carbon tetrachloride	ug/L	20	19.9	100	80-125	
Chlorobenzene	ug/L	20	19.4	97	80-120	
Chloroethane	ug/L	20	18.9	95	70-130	
Chloroform	ug/L	20	19.6	98	80-120	
Chloromethane	ug/L	20	18.3	91	35-155	
cis-1,2-Dichloroethene	ug/L	20	19.3	97	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.7	99	80-125	
Dibromochloromethane	ug/L	20	20.2	101	70-120	
Dibromomethane	ug/L	20	19.6	98	80-120	
Dichlorodifluoromethane	ug/L	20	19.1	95	50-150	
Ethylbenzene	ug/L	20	19.4	97	80-120	
Hexachloro-1,3-butadiene	ug/L	20	18.6	93	65-135	
Isopropylbenzene (Cumene)	ug/L	20	20.2	101	80-125	
Methyl-tert-butyl ether	ug/L	20	20.2	101	65-130	
Methylene Chloride	ug/L	20	19.2	96	75-120	
n-Butylbenzene	ug/L	20	19.1	95	80-125	
n-Propylbenzene	ug/L	20	19.0	95	80-120	
Naphthalene	ug/L	20	17.9	90	70-120	
p-Isopropyltoluene	ug/L	20	19.6	98	80-135	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

LABORATORY CONTROL SAMPLE: 2883687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
sec-Butylbenzene	ug/L	20	19.5	97	80-120	
Styrene	ug/L	20	20.0	100	80-120	
tert-Butylbenzene	ug/L	20	20.0	100	80-120	
Tetrachloroethene	ug/L	20	18.9	95	80-120	
Toluene	ug/L	20	18.9	94	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.7	98	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	75-120	
Trichloroethene	ug/L	20	20.0	100	80-120	
Trichlorofluoromethane	ug/L	20	18.6	93	80-130	
Vinyl chloride	ug/L	20	17.8	89	65-130	
Xylene (Total)	ug/L	60	58.7	98	80-120	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2883688 2883689

Parameter	Units	60367559011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	20.6	20.0	103	100	70-125	3	15	
1,1,1-Trichloroethane	ug/L	ND	20	20	19.6	20.1	98	100	75-130	2	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.9	20.5	99	102	65-130	3	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.1	20.2	101	101	70-120	0	20	
1,1-Dichloroethane	ug/L	ND	20	20	20.3	20.8	102	104	61-130	2	15	
1,1-Dichloroethene	ug/L	0.35J	20	20	21.5	22.5	106	111	60-135	5	25	
1,1-Dichloropropene	ug/L	ND	20	20	20.2	20.7	101	104	55-145	2	20	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	16.9	19.5	85	98	55-120	14	25	
1,2,3-Trichloropropane	ug/L	ND	20	20	21.5	21.5	108	107	60-135	0	20	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	17.5	19.2	88	96	50-125	9	25	
1,2,4-Trimethylbenzene	ug/L	ND	20	20	19.7	20.0	98	100	60-135	1	20	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	17.1	19.6	85	98	55-125	14	25	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	20.1	21.2	100	106	65-125	5	20	
1,2-Dichlorobenzene	ug/L	0.14J	20	20	19.6	20.2	98	100	65-120	3	20	
1,2-Dichloroethane	ug/L	ND	20	20	19.2	19.8	96	99	30-160	3	25	
1,2-Dichloroethene (Total)	ug/L	49.4	40	40	86.8	88.3	93	97	65-125	2	20	
1,2-Dichloropropane	ug/L	ND	20	20	19.8	19.6	99	98	65-130	1	20	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	19.7	19.6	98	98	60-135	0	20	
1,3-Dichlorobenzene	ug/L	ND	20	20	19.3	19.4	96	97	65-120	1	20	
1,3-Dichloropropane	ug/L	ND	20	20	19.9	20.1	100	101	70-120	1	20	
1,4-Dichlorobenzene	ug/L	ND	20	20	18.9	19.7	94	99	60-125	4	20	
2,2-Dichloropropane	ug/L	ND	20	20	10.8	10.4	54	52	40-130	3	30	
2-Butanone (MEK)	ug/L	ND	100	100	57.7	63.8	58	64	30-130	10	25	
2-Chlorotoluene	ug/L	ND	20	20	20.2	20.3	101	102	65-125	1	20	
2-Hexanone	ug/L	ND	100	100	68.4	73.2	68	73	40-135	7	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2883688 2883689

Parameter	Units	60367559011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
4-Chlorotoluene	ug/L	ND	20	20	19.8	19.7	99	99	65-125	0	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	97.2	107	97	107	60-135	10	20	
Acetone	ug/L	ND	100	100	46.6	51.8	47	52	10-150	11	25	
Benzene	ug/L	ND	20	20	20.3	20.3	101	101	20-155	0	25	
Bromobenzene	ug/L	ND	20	20	19.1	19.5	96	98	65-120	2	15	
Bromochloromethane	ug/L	ND	20	20	19.9	20.7	100	103	65-125	4	20	
Bromodichloromethane	ug/L	ND	20	20	19.9	21.1	99	105	70-130	6	15	
Bromoform	ug/L	ND	20	20	19.0	20.2	95	101	50-125	6	20	
Bromomethane	ug/L	ND	20	20	17.3	18.9	86	95	10-155	9	45	
Carbon disulfide	ug/L	ND	20	20	21.8	21.7	109	109	55-140	0	25	
Carbon tetrachloride	ug/L	ND	20	20	21.3	21.2	106	106	70-140	0	20	
Chlorobenzene	ug/L	ND	20	20	20.2	20.3	101	102	65-130	1	20	
Chloroethane	ug/L	ND	20	20	20.5	20.7	103	104	20-180	1	20	
Chloroform	ug/L	ND	20	20	20.0	20.2	100	101	70-125	1	20	
Chloromethane	ug/L	ND	20	20	20.5	22.1	103	111	20-160	7	30	
cis-1,2-Dichloroethene	ug/L	43.3	20	20	62.4	63.0	96	99	55-130	1	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.6	17.6	88	88	60-125	0	20	
Dibromochloromethane	ug/L	ND	20	20	20.4	20.6	102	103	65-120	1	20	
Dibromomethane	ug/L	ND	20	20	19.6	20.4	98	102	65-125	4	20	
Dichlorodifluoromethane	ug/L	ND	20	20	21.1	21.7	106	109	10-175	3	25	
Ethylbenzene	ug/L	ND	20	20	20.7	20.9	104	105	20-160	1	25	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	15.9	17.4	80	87	40-130	9	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	21.1	20.8	105	104	65-140	1	20	
Methyl-tert-butyl ether	ug/L	ND	20	20	19.0	20.1	95	101	25-160	6	30	
Methylene Chloride	ug/L	ND	20	20	19.5	19.5	97	97	60-125	0	25	
n-Butylbenzene	ug/L	ND	20	20	18.8	19.4	94	97	50-140	3	25	
n-Propylbenzene	ug/L	ND	20	20	20.2	19.6	101	98	60-130	3	20	
Naphthalene	ug/L	ND	20	20	18.7	21.3	93	106	30-150	13	25	
p-Isopropyltoluene	ug/L	ND	20	20	20.2	20.1	101	101	50-150	0	20	
sec-Butylbenzene	ug/L	ND	20	20	19.8	20.2	99	101	60-140	2	20	
Styrene	ug/L	ND	20	20	20.1	20.1	100	101	40-145	0	30	
tert-Butylbenzene	ug/L	ND	20	20	20.7	20.6	103	103	60-130	0	20	
Tetrachloroethene	ug/L	55.8	20	20	73.6	72.6	89	84	55-135	1	25	
Toluene	ug/L	ND	20	20	20.3	19.9	102	100	25-150	2	25	
trans-1,2-Dichloroethene	ug/L	6.1	20	20	24.4	25.3	91	96	60-130	4	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	17.8	18.5	89	93	60-120	4	15	
Trichloroethene	ug/L	37.9	20	20	56.9	57.8	95	100	50-145	2	20	
Trichlorofluoromethane	ug/L	ND	20	20	20.5	20.7	103	103	50-155	1	20	
Vinyl chloride	ug/L	63.9	20	20	82.4	84.2	92	102	40-155	2	25	
Xylene (Total)	ug/L	ND	60	60	61.8	61.0	103	102	15-160	1	30	
1,2-Dichlorobenzene-d4 (S)	%						99	101	80-120			
4-Bromofluorobenzene (S)	%						98	100	80-120			
Toluene-d8 (S)	%						102	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

QC Batch: 717623
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60367559007, 60367559009, 60367559012, 60367559016, 60367559017, 60367559024, 60367559025, 60367559026

METHOD BLANK: 2886443
Matrix: Water
Associated Lab Samples: 60367559007, 60367559009, 60367559012, 60367559016, 60367559017, 60367559024, 60367559025, 60367559026

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.084	04/30/21 07:52	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	04/30/21 07:52	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	04/30/21 07:52	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	04/30/21 07:52	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	04/30/21 07:52	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	04/30/21 07:52	
1,1-Dichloropropene	ug/L	ND	1.0	0.14	04/30/21 07:52	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.93	04/30/21 07:52	
1,2,3-Trichloropropane	ug/L	ND	2.5	0.41	04/30/21 07:52	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.73	04/30/21 07:52	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.32	04/30/21 07:52	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	0.78	04/30/21 07:52	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	0.20	04/30/21 07:52	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.12	04/30/21 07:52	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	04/30/21 07:52	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	0.22	04/30/21 07:52	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	04/30/21 07:52	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.090	04/30/21 07:52	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.13	04/30/21 07:52	
1,3-Dichloropropane	ug/L	ND	1.0	0.10	04/30/21 07:52	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.13	04/30/21 07:52	
2,2-Dichloropropane	ug/L	ND	1.0	0.16	04/30/21 07:52	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	04/30/21 07:52	
2-Chlorotoluene	ug/L	ND	1.0	0.11	04/30/21 07:52	
2-Hexanone	ug/L	ND	10.0	1.1	04/30/21 07:52	
4-Chlorotoluene	ug/L	ND	1.0	0.15	04/30/21 07:52	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	04/30/21 07:52	
Acetone	ug/L	ND	10.0	2.5	04/30/21 07:52	
Benzene	ug/L	ND	1.0	0.14	04/30/21 07:52	
Bromobenzene	ug/L	ND	1.0	0.088	04/30/21 07:52	
Bromochloromethane	ug/L	ND	1.0	0.20	04/30/21 07:52	
Bromodichloromethane	ug/L	ND	1.0	0.16	04/30/21 07:52	
Bromoform	ug/L	ND	1.0	0.68	04/30/21 07:52	
Bromomethane	ug/L	ND	5.0	0.46	04/30/21 07:52	
Carbon disulfide	ug/L	ND	5.0	0.98	04/30/21 07:52	
Carbon tetrachloride	ug/L	ND	1.0	0.17	04/30/21 07:52	
Chlorobenzene	ug/L	ND	1.0	0.089	04/30/21 07:52	
Chloroethane	ug/L	ND	1.0	0.37	04/30/21 07:52	
Chloroform	ug/L	ND	1.0	0.22	04/30/21 07:52	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

METHOD BLANK: 2886443 Matrix: Water

Associated Lab Samples: 60367559007, 60367559009, 60367559012, 60367559016, 60367559017, 60367559024, 60367559025, 60367559026

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloromethane	ug/L	ND	1.0	0.28	04/30/21 07:52	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	04/30/21 07:52	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	04/30/21 07:52	
Dibromochloromethane	ug/L	ND	1.0	0.30	04/30/21 07:52	
Dibromomethane	ug/L	ND	1.0	0.11	04/30/21 07:52	
Dichlorodifluoromethane	ug/L	ND	1.0	0.20	04/30/21 07:52	
Ethylbenzene	ug/L	ND	1.0	0.12	04/30/21 07:52	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.42	04/30/21 07:52	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.097	04/30/21 07:52	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.13	04/30/21 07:52	
Methylene Chloride	ug/L	ND	1.0	0.39	04/30/21 07:52	
n-Butylbenzene	ug/L	ND	1.0	0.15	04/30/21 07:52	
n-Propylbenzene	ug/L	ND	1.0	0.12	04/30/21 07:52	
Naphthalene	ug/L	ND	10.0	0.82	04/30/21 07:52	
p-Isopropyltoluene	ug/L	ND	1.0	0.13	04/30/21 07:52	
sec-Butylbenzene	ug/L	ND	1.0	0.11	04/30/21 07:52	
Styrene	ug/L	ND	1.0	0.12	04/30/21 07:52	
tert-Butylbenzene	ug/L	ND	1.0	0.12	04/30/21 07:52	
Tetrachloroethene	ug/L	ND	1.0	0.33	04/30/21 07:52	
Toluene	ug/L	ND	1.0	0.25	04/30/21 07:52	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	04/30/21 07:52	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	04/30/21 07:52	
Trichloroethene	ug/L	ND	1.0	0.21	04/30/21 07:52	
Trichlorofluoromethane	ug/L	ND	1.0	0.16	04/30/21 07:52	
Vinyl chloride	ug/L	ND	1.0	0.17	04/30/21 07:52	
Xylene (Total)	ug/L	ND	3.0	0.28	04/30/21 07:52	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		04/30/21 07:52	
4-Bromofluorobenzene (S)	%	101	80-120		04/30/21 07:52	
Toluene-d8 (S)	%	100	80-120		04/30/21 07:52	

LABORATORY CONTROL SAMPLE: 2886444

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.7	98	80-120	
1,1,1-Trichloroethane	ug/L	20	18.7	93	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.5	103	75-125	
1,1,2-Trichloroethane	ug/L	20	19.8	99	80-120	
1,1-Dichloroethane	ug/L	20	19.3	96	75-125	
1,1-Dichloroethene	ug/L	20	20.4	102	80-120	
1,1-Dichloropropene	ug/L	20	19.2	96	80-125	
1,2,3-Trichlorobenzene	ug/L	20	19.6	98	75-125	
1,2,3-Trichloropropane	ug/L	20	20.7	103	80-125	
1,2,4-Trichlorobenzene	ug/L	20	20.8	104	75-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

LABORATORY CONTROL SAMPLE: 2886444

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	19.8	99	80-125	
1,2-Dibromo-3-chloropropane	ug/L	20	19.6	98	70-120	
1,2-Dibromoethane (EDB)	ug/L	20	20.6	103	80-120	
1,2-Dichlorobenzene	ug/L	20	20.0	100	80-120	
1,2-Dichloroethane	ug/L	20	19.1	95	75-120	
1,2-Dichloroethene (Total)	ug/L	40	39.0	97	80-120	
1,2-Dichloropropane	ug/L	20	19.8	99	80-125	
1,3,5-Trimethylbenzene	ug/L	20	19.1	95	80-125	
1,3-Dichlorobenzene	ug/L	20	19.5	97	80-120	
1,3-Dichloropropane	ug/L	20	18.9	95	80-120	
1,4-Dichlorobenzene	ug/L	20	19.4	97	80-120	
2,2-Dichloropropane	ug/L	20	19.5	97	60-130	
2-Butanone (MEK)	ug/L	100	92.3	92	40-150	
2-Chlorotoluene	ug/L	20	19.0	95	80-120	
2-Hexanone	ug/L	100	92.4	92	45-150	
4-Chlorotoluene	ug/L	20	20.3	101	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	102	102	65-140	
Acetone	ug/L	100	109	109	20-175	
Benzene	ug/L	20	19.0	95	80-120	
Bromobenzene	ug/L	20	19.2	96	80-120	
Bromochloromethane	ug/L	20	20.4	102	80-125	
Bromodichloromethane	ug/L	20	20.5	103	80-125	
Bromoform	ug/L	20	18.4	92	60-135	
Bromomethane	ug/L	20	13.9	70	10-165	
Carbon disulfide	ug/L	20	19.8	99	75-135	
Carbon tetrachloride	ug/L	20	19.4	97	80-125	
Chlorobenzene	ug/L	20	19.8	99	80-120	
Chloroethane	ug/L	20	19.3	96	70-130	
Chloroform	ug/L	20	19.7	98	80-120	
Chloromethane	ug/L	20	17.5	87	35-155	
cis-1,2-Dichloroethene	ug/L	20	19.6	98	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.2	96	80-125	
Dibromochloromethane	ug/L	20	19.9	100	70-120	
Dibromomethane	ug/L	20	19.1	95	80-120	
Dichlorodifluoromethane	ug/L	20	18.2	91	50-150	
Ethylbenzene	ug/L	20	19.6	98	80-120	
Hexachloro-1,3-butadiene	ug/L	20	18.3	91	65-135	
Isopropylbenzene (Cumene)	ug/L	20	20.3	102	80-125	
Methyl-tert-butyl ether	ug/L	20	19.4	97	65-130	
Methylene Chloride	ug/L	20	19.0	95	75-120	
n-Butylbenzene	ug/L	20	19.9	99	80-125	
n-Propylbenzene	ug/L	20	19.5	98	80-120	
Naphthalene	ug/L	20	19.9	100	70-120	
p-Isopropyltoluene	ug/L	20	20.2	101	80-135	
sec-Butylbenzene	ug/L	20	20.1	100	80-120	
Styrene	ug/L	20	20.1	100	80-120	
tert-Butylbenzene	ug/L	20	19.6	98	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

LABORATORY CONTROL SAMPLE: 2886444

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/L	20	20.0	100	80-120	
Toluene	ug/L	20	19.4	97	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.3	97	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.9	100	75-120	
Trichloroethene	ug/L	20	19.3	97	80-120	
Trichlorofluoromethane	ug/L	20	19.1	96	80-130	
Vinyl chloride	ug/L	20	17.4	87	65-130	
Xylene (Total)	ug/L	60	60.3	100	80-120	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			99	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 717623

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60367559

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60367559001	WG-2365-MW8-210421	EPA 5030B/8260	716786		
60367559002	WG-2365-MW9A-210421	EPA 5030B/8260	716786		
60367559003	WG-2365-MW9B-210422	EPA 5030B/8260	716786		
60367559004	WG-2365-MW11A-210421	EPA 5030B/8260	716786		
60367559005	WG-2365-MW11B-210421	EPA 5030B/8260	716786		
60367559006	WG-2365-MW14A-210422	EPA 5030B/8260	716786		
60367559007	WG-2365-MW14B-210422	EPA 5030B/8260	717623		
60367559008	WG-2365-MW15A-210421	EPA 5030B/8260	716786		
60367559009	WG-2365-MW15C-210422	EPA 5030B/8260	717623		
60367559010	WG-2365-MW16A-210421	EPA 5030B/8260	716786		
60367559011	WG-2365-MW16B-210421	EPA 5030B/8260	716786		
60367559012	WG-2365-MW17A-210422	EPA 5030B/8260	717623		
60367559013	WG-2365-MW18A-210421	EPA 5030B/8260	716786		
60367559014	WG-2365-MW19AR-210420	EPA 5030B/8260	716786		
60367559015	WG-2365-MW19B-210421	EPA 5030B/8260	716786		
60367559016	WG-2365-MW20A-210422	EPA 5030B/8260	717623		
60367559017	WG-2365-MW20B-210422	EPA 5030B/8260	717623		
60367559018	WG-2365-MW21R-210421	EPA 5030B/8260	716786		
60367559019	WG-2365-MW22A-210420	EPA 5030B/8260	716786		
60367559020	WG-2365-MW23A-210420	EPA 5030B/8260	716786		
60367559021	WG-2365-MW24A-210421	EPA 5030B/8260	716786		
60367559022	WG-2365-MW25A-210421	EPA 5030B/8260	716786		
60367559023	WG-2365-DUP1-210421	EPA 5030B/8260	716786		
60367559024	WG-2365-FB01-210422	EPA 5030B/8260	717623		
60367559025	WG-2365-EB01-210422	EPA 5030B/8260	717623		
60367559026	WG-2365-TB01-210422	EPA 5030B/8260	717623		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO#: 60367559

60367559

Client Name: UPRR GHD - NE

Courier: FedEx ☑ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: 5002 0645 3686 Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: T298 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 0.0 **Corr. Factor** 0.0 **Corrected** 0.0

Date and initials of person examining contents: 4/23 ML

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#	☐Yes ☐No ☑N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☑Yes ☐No ☐N/A	2 DG9H
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 3

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: UPRR_GHD NE office	Report To: Hansen, Robyn	Attention: Jim Brannen
Address: 3807 South 148th St	Copy To:	Company Name: UPRR Railaways
Omaha, NE 68144		Address: Omaha, NE
Email:	Purchase Order #: 2365-24	Pace Quote:
Phone: Fax:	Project Name: UP 2365 Sedalia MO-Former MP Shops	Pace Project Manager: angie.brown@pacelabs.com,
Requested Due Date:	Project #: Annual GW 2021	Pace Profile #: 12417

Regulatory Agency

State / Location: MO

6036 7559

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260 full list	Residual Chlorine (Y/N)	
1	WG-2365-MW8-210421	WT	G			4/21/21	1530	X	3				3						X		
2	-MW9A-210421					4/21/21	1130														
3	-MW9B-210422					4/22/21	0940														
4	-MW11A-210421					4/21/21	0935														
5	-MW11B-210421					4/21/21	0920														
6	-MW14A-210422					4/22/21	1215														
7	-MW14B-210422					4/22/21	1250														
8	-MW15A-210421					4/21/21	1440														
9	-MW15C-210422					4/22/21	0920														
10	-MW16A-210421					4/21/21	0950														
11	-MW16B-210421					4/21/21	1400		9				9								MS/MSD
12	-MW17A-210422					4/22/21	1130		3				3								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
* MS/MSD on MW16B (item #11)	Kristin Heideman / GHD	4/22/21	1400	M Lang / PACE	4-23-21	0844	0.0	y	y	y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kristin Heideman

SIGNATURE of SAMPLER: [signature] DATE Signed: 4/22/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 3

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	UPRR_GHD NE office	Report To:	Hansen, Robyn	Attention:	Jim Brannen
Address:	3807 South 148th St	Copy To:		Company Name:	UPRR Railaways
	Omaha, NE 68144			Address:	Omaha, NE
Email:		Purchase Order #:	2365-24	Pace Quote:	
Phone:	Fax	Project Name:	UP 2365 Sedalia MO-Former MP Shops	Pace Project Manager:	angie.brown@pacelabs.com,
Requested Due Date:		Project #:	Annual GW 2021	Pace Profile #:	12417

Regulatory Agency	
State / Location	
	MO

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260 full list	Residual Chlorine (Y/N)
1	WG-2365-MW18A-210421	WT	G			4/21/21	1600	X	3				3						X	
2	-MW19AR-210420					4/20/21	1415													
3	-MW19B-210421					4/21/21	1455													
4	-MW20A-210422					4/22/21	1305													
5	-MW20B-210422					4/22/21	1100													
6	-MW21R-210421					4/21/21	1010													
7	-MW22A-210420					4/20/21	1510													
8	-MW23A-210420					4/20/21	1440													
9	-MW24A-210421					4/21/21	1635													
10	-MW25A-210421					4/21/21	1500													
11	-DUP1-210421					4/21/21	0935													
12	-FB01-210422					4/22/21	1240													

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Kristin Heideman/GHD	4/22/21	1400	M Langlin/PACE	4-23-21	0844	0.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Kristin Heideman	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
SIGNATURE of SAMPLER:	DATE Signed: 4/22/21				

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	UPRR_GHD NE office	Report To:	Hansen, Robyn	Attention:	Jim Brannen
Address:	3807 South 148th St	Copy To:		Company Name:	UPRR Railaways
	Omaha, NE 68144			Address:	Omaha, NE
Email:		Purchase Order #:	2365-24	Pace Quote:	
Phone:	Fax:	Project Name:	UP 2365 Sedalia MO-Former MP Shops	Pace Project Manager:	angie.brown@pacelabs.com,
Requested Due Date:		Project #:	Annual GW 2021	Pace Profile #:	12417

Regulatory Agency	
State / Location	
MO	

Requested Analysis Filtered (Y/N): Y/N

Analyses Test: 8260 full list

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Residual Chlorine (Y/N)
1	WG-2365-EB01-210422	WT	G			4/22/21	1255	X	3				3					
2	WG-2365-TB01-210422	↓							2				2					
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Kristin Heideman/GHD	4/22/21	1400	M Lungh / PACE	4-23-21	0844	0.0	y	y	y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kristin Heideman

SIGNATURE of SAMPLER: Kristin Heideman DATE Signed: 4/22/21

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Attachment 2

Data Validation Memo

Memorandum

May 11, 2021
Reissue: June 1, 2021

To:	Robyn Hansen	Ref. No.:	11183954-95-02-2365
From:	Jeffrey Cloud/eew/970-NF	Tel:	206-914-3141
cc:	Kristin Collins, Jesse Orth, Julie Lidstone		

Subject: **Analytical Results and Reduced Validation of Report 60367559**
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) – Former MP Shops
Sedalia, Missouri
April 2021

1. Introduction

This document details a reduced validation of analytical results for groundwater samples collected in support of the Annual Groundwater Monitoring at the Former MP Shops site in Sedalia, Missouri during April 2021. Samples were submitted to Pace Analytical Services, located in Lenexa, Kansas. A sample collection and analysis summary is presented in Table 1. A summary of the analytical methodology is presented in Table 2. The validated analytical results are summarized in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, recovery data from surrogate spikes, laboratory control samples, matrix spikes and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical method referenced in Table 2 and applicable guidance from the document entitled "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540 R 2016 002, September 2016.

2. Sample Holding Time and Preservation

The sample holding time criterion and sample preservation requirements for the analysis are summarized in the method. The sample chain of custody documents and analytical report were used to determine sample holding times. All samples were analyzed within the required holding times.

All sample containers were properly preserved, delivered on ice and stored by the laboratory at the required temperature (0-6°C).

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation with the exception of 1,2-dichlorobenzene present at a low concentration. The associated sample results with concentrations similar to the blank were qualified as non-detect due to contamination as evidenced by the blank (see Table 4).

4. Surrogate Spike Recoveries

In accordance with the method employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile organic compound (VOC) analysis were spiked with the appropriate number of surrogate compounds prior to sample analysis.

Surrogate recoveries were assessed against the control limits. All surrogate recoveries met the associated criteria.

5. Laboratory Control Sample Analyses

Laboratory control samples (LCS) are prepared and analyzed as samples to assess the analytical efficiencies of the method employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

The LCS contained all analytes of interest. All LCS recoveries were within associated control limits, demonstrating acceptable analytical accuracy.

6. Matrix Spike/Matrix Spike Duplicate Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern

and analyzed as matrix spike/matrix spike duplicate (MS/MSD) samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision. MS/MSD analyses were performed as specified in Table 1.

The MS/MSD samples were spiked with the analytes of interest. All percent recoveries and RPD values were within the associated control limits, demonstrating acceptable analytical accuracy and precision.

7. Field QA/QC Samples

The field QA/QC consisted of one trip blank sample, one field blank sample, one equipment blank sample and one field duplicate sample set.

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, one trip blank was submitted to the laboratory for analysis. All results were non-detect for the analytes of interest.

Field Blank Sample Analysis

To assess ambient conditions at the site and cleanliness of sample containers, one field blank was submitted to the laboratory for analysis. All results were non-detect for the analytes of interest.

Equipment Blank Sample Analysis

To assess field decontamination procedures, ambient conditions at the site, and cleanliness of sample containers, one equipment blank was submitted for analysis, as identified in Table 1. All results were non-detect for the analytes of interest.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPD associated with the duplicate sample must be less than 50 percent. If the reported concentration in both the investigative sample and its duplicate are less than five times the reporting limit (RL), the evaluation criterion is one times the RL value.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were reported as estimated (J) in Table 3 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 3.

9. Conclusion

Based on the assessment detailed in the foregoing, the summarized data are acceptable with the specific qualifications noted herein.

Table 1

Sample Collection and Analysis Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: VOCs	Comments
WG-2365-MW8-210421	MW-8	Water	04/21/2021	15:30	X	
WG-2365-MW9A-210421	MW-9A	Water	04/21/2021	11:30	X	
WG-2365-MW9BR-210422	MW-9BR	Water	04/22/2021	09:40	X	
WG-2365-MW11A-210421	MW-11A	Water	04/21/2021	09:35	X	
WG-2365-DUP1-210421	MW-11A	Water	04/21/2021	09:35	X	FD (WG-2365-MW11A-210421)
WG-2365-MW11B-210421	MW-11B	Water	04/21/2021	09:20	X	
WG-2365-MW14A-210422	MW-14A	Water	04/22/2021	12:15	X	
WG-2365-MW14B-210422	MW-14B	Water	04/22/2021	12:50	X	
WG-2365-MW15A-210421	MW-15A	Water	04/21/2021	14:40	X	
WG-2365-MW15C-210422	MW-15C	Water	04/22/2021	09:20	X	
WG-2365-MW16A-210421	MW-16A	Water	04/21/2021	09:50	X	
WG-2365-MW16B-210421	MW-16B	Water	04/21/2021	14:00	X	MS/MSD
WG-2365-MW17A-210422	MW-17A	Water	04/22/2021	11:30	X	
WG-2365-MW18A-210421	MW-18A	Water	04/21/2021	16:00	X	
WG-2365-MW19AR-210420	MW-19AR	Water	04/20/2021	14:15	X	
WG-2365-MW19B-210421	MW-19B	Water	04/21/2021	14:55	X	
WG-2365-MW20A-210422	MW-20A	Water	04/22/2021	13:05	X	

Table 1

Sample Collection and Analysis Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: VOCs	Comments
WG-2365-MW20B-210422	MW-20B	Water	04/22/2021	11:00	X	
WG-2365-MW21R-210421	MW-21R	Water	04/21/2021	10:10	X	
WG-2365-MW22A-210420	MW-22A	Water	04/20/2021	15:10	X	
WG-2365-MW23A-210420	MW-23A	Water	04/20/2021	14:40	X	
WG-2365-MW24A-210421	MW-24A	Water	04/21/2021	10:35	X	
WG-2365-MW25A-210421	MW-25A	Water	04/21/2021	15:00	X	
WG-2365-EB01-210422	--	Water	04/22/2021	12:55	X	Equipment Blank
WG-2365-FB01-210422	--	Water	04/22/2021	12:40	X	Field Blank
WG-2365-TB01-210422	--	Water	04/22/2021	--	X	Trip Blank

Notes:

FD - Field Duplicate sample of sample in parenthesis
MS/MSD - Matrix Spike/Matrix Spike Duplicate
VOCs - Volatile Organic Compounds
"--" - Not Applicable

Table 2

Analytical Methods
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Parameter	Method	Matrix
Volatile Organic Compounds (VOCs)	SW-846 8260[1]	Water

Notes:

(1) - SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-8	MW-9A	MW-9BR	MW-11A	MW-11A	MW-11B
Sample Name:		WG-2365-MW8-210421	WG-2365-MW9A-210421	WG-2365-MW9BR-210422	WG-2365-MW11A-210421	WG-2365-DUP1-210421	WG-2365-MW11B-210421
Sample Date:		04/21/2021	04/21/2021	04/22/2021	04/21/2021	04/21/2021	04/21/2021
						Duplicate	
Parameters	**Unit**						
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	µg/L	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
1,2,4-Trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
1,2-Dibromoethane (Ethylene dibromide)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	µg/L	<1.0	0.61 J	8.3	<1.0	<1.0	<1.0
1,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
2-Chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Hexanone	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
2-Phenylbutane (sec-Butylbenzene)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-8	MW-9A	MW-9BR	MW-11A	MW-11A	MW-11B
Sample Name:		WG-2365-MW8-210421	WG-2365-MW9A-210421	WG-2365-MW9BR-210422	WG-2365-MW11A-210421	WG-2365-DUP1-210421	WG-2365-MW11B-210421
Sample Date:		04/21/2021	04/21/2021	04/22/2021	04/21/2021	04/21/2021	04/21/2021
						Duplicate	
Parameters	**Unit**						
Volatile Organic Compounds (Continued)							
4-Chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetone	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane (Methyl bromide)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobromomethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform (Trichloromethane)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	0.27 J
Chloromethane (Methyl chloride)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	0.15 J	0.44 J	6.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cymene (p-Isopropyltoluene)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromomethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane (CFC-12)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropyl benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert butyl ether (MTBE)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-8	MW-9A	MW-9BR	MW-11A	MW-11A	MW-11B
Sample Name:		WG-2365-MW8-210421	WG-2365-MW9A-210421	WG-2365-MW9BR-210422	WG-2365-MW11A-210421	WG-2365-DUP1-210421	WG-2365-MW11B-210421
Sample Date:		04/21/2021	04/21/2021	04/22/2021	04/21/2021	04/21/2021	04/21/2021
						Duplicate	
Parameters	**Unit**						
Volatile Organic Compounds (Continued)							
N-Butylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
N-Propylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Styrene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	µg/L	<1.0	<1.0	2.0	<1.0	<1.0	<1.0
Toluene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	µg/L	<1.0	0.17 J	2.3	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	µg/L	<1.0	<1.0	2.5	<1.0	<1.0	<1.0
Trichlorofluoromethane (CFC-11)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	µg/L	<1.0	<1.0	2.9	<1.0	<1.0	<1.0
Xylenes (total)	µg/L	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

Notes:

< - Not detected at the associated reporting limit
J - Estimated concentration

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-14A	MW-14B	MW-15A	MW-15C	MW-16A	MW-16B
Sample Name:		WG-2365-MW14A-210422	WG-2365-MW14B-210422	WG-2365-MW15A-210421	WG-2365-MW15C-210422	WG-2365-MW16A-210421	WG-2365-MW16B-210421
Sample Date:		04/22/2021	04/22/2021	04/21/2021	04/22/2021	04/21/2021	04/21/2021
Parameters	**Unit**						
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	0.35 J
1,1-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	µg/L	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
1,2,4-Trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
1,2-Dibromoethane (Ethylene dibromide)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	µg/L	1.5	<1.0	<1.0	0.23 J	101	49.4
1,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
2-Chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Hexanone	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
2-Phenylbutane (sec-Butylbenzene)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-14A	MW-14B	MW-15A	MW-15C	MW-16A	MW-16B
Sample Name:		WG-2365-MW14A-210422	WG-2365-MW14B-210422	WG-2365-MW15A-210421	WG-2365-MW15C-210422	WG-2365-MW16A-210421	WG-2365-MW16B-210421
Sample Date:		04/22/2021	04/22/2021	04/21/2021	04/22/2021	04/21/2021	04/21/2021
Parameters	**Unit**						
Volatile Organic Compounds (Continued)							
4-Chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetone	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	µg/L	<1.0	<1.0	<1.0	0.42 J	<1.0	<1.0
Bromobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane (Methyl bromide)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobromomethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform (Trichloromethane)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane (Methyl chloride)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	0.92 J	<1.0	<1.0	0.23 J	72.6	43.3
cis-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cymene (p-Isopropyltoluene)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromomethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane (CFC-12)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropyl benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert butyl ether (MTBE)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-14A	MW-14B	MW-15A	MW-15C	MW-16A	MW-16B
Sample Name:		WG-2365-MW14A-210422	WG-2365-MW14B-210422	WG-2365-MW15A-210421	WG-2365-MW15C-210422	WG-2365-MW16A-210421	WG-2365-MW16B-210421
Sample Date:		04/22/2021	04/22/2021	04/21/2021	04/22/2021	04/21/2021	04/21/2021
Parameters	**Unit**						
Volatile Organic Compounds (Continued)							
N-Butylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
N-Propylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Styrene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	µg/L	19.3	<1.0	<1.0	<1.0	11.0	55.8
Toluene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	µg/L	0.59 J	<1.0	<1.0	<1.0	28.3	6.1
trans-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	µg/L	2.1	<1.0	<1.0	<1.0	16.9	37.9
Trichlorofluoromethane (CFC-11)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	µg/L	<1.0	<1.0	<1.0	<1.0	8.0	63.9
Xylenes (total)	µg/L	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

Notes:

< - Not detected at the associated reporting limit
J - Estimated concentration

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-17A	MW-18A	MW-19AR	MW-19B	MW-20A	MW-20B
Sample Name:		WG-2365-MW17A-210422	WG-2365-MW18A-210421	WG-2365-MW19AR-210420	WG-2365-MW19B-210421	WG-2365-MW20A-210422	WG-2365-MW20B-210422
Sample Date:		04/22/2021	04/21/2021	04/20/2021	04/21/2021	04/22/2021	04/22/2021
Parameters	**Unit**						
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,1,1-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,1,2-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,1-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,1-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,2,3-Trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,2,3-Trichloropropane	µg/L	<2.5	<2.5	<2.5	<2.5	<125	<2.5
1,2,4-Trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	<2.5	<2.5	<2.5	<2.5	<125	<2.5
1,2-Dibromoethane (Ethylene dibromide)	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,2-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,2-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,2-Dichloroethene (total)	µg/L	<1.0	3.1	<1.0	0.26 J	561	0.45 J
1,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,3-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,3-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
1,4-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
2,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	<10.0	<10.0	<10.0	<10.0	<500	<10.0
2-Chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
2-Hexanone	µg/L	<10.0	<10.0	<10.0	<10.0	<500	<10.0
2-Phenylbutane (sec-Butylbenzene)	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-17A	MW-18A	MW-19AR	MW-19B	MW-20A	MW-20B
Sample Name:		WG-2365-MW17A-210422	WG-2365-MW18A-210421	WG-2365-MW19AR-210420	WG-2365-MW19B-210421	WG-2365-MW20A-210422	WG-2365-MW20B-210422
Sample Date:		04/22/2021	04/21/2021	04/20/2021	04/21/2021	04/22/2021	04/22/2021
Parameters	**Unit**						
Volatile Organic Compounds (Continued)							
4-Chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	<10.0	<10.0	<10.0	<10.0	<500	<10.0
Acetone	µg/L	<10.0	<10.0	<10.0	<10.0	<500	<10.0
Benzene	µg/L	<1.0	<1.0	<1.0	0.45 J	<50.0	<1.0
Bromobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Bromodichloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Bromoform	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Bromomethane (Methyl bromide)	µg/L	<5.0	<5.0	<5.0	<5.0	<250	<5.0
Carbon disulfide	µg/L	<5.0	<5.0	<5.0	<5.0	<250	<5.0
Carbon tetrachloride	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Chlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Chlorobromomethane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Chloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Chloroform (Trichloromethane)	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Chloromethane (Methyl chloride)	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
cis-1,2-Dichloroethene	µg/L	<1.0	3.1	<1.0	0.16 J	433	0.45 J
cis-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Cymene (p-Isopropyltoluene)	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Dibromochloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Dibromomethane	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Dichlorodifluoromethane (CFC-12)	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Ethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Hexachlorobutadiene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Isopropyl benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Methyl tert butyl ether (MTBE)	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Methylene chloride	µg/L	<1.0	<1.0	<1.0	<1.0	42.3 J	<1.0

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-17A	MW-18A	MW-19AR	MW-19B	MW-20A	MW-20B
Sample Name:		WG-2365-MW17A-210422	WG-2365-MW18A-210421	WG-2365-MW19AR-210420	WG-2365-MW19B-210421	WG-2365-MW20A-210422	WG-2365-MW20B-210422
Sample Date:		04/22/2021	04/21/2021	04/20/2021	04/21/2021	04/22/2021	04/22/2021
Parameters	**Unit**						
Volatile Organic Compounds (Continued)							
N-Butylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
N-Propylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Naphthalene	µg/L	<10.0	<10.0	<10.0	<10.0	<500	<10.0
Styrene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
tert-Butylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Tetrachloroethene	µg/L	<1.0	0.75 J	<1.0	<1.0	6150	133
Toluene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
trans-1,2-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	129	<1.0
trans-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Trichloroethene	µg/L	<1.0	0.28 J	<1.0	<1.0	2990	1.5
Trichlorofluoromethane (CFC-11)	µg/L	<1.0	<1.0	<1.0	<1.0	<50.0	<1.0
Vinyl chloride	µg/L	<1.0	<1.0	<1.0	<1.0	15.2 J	0.24 J
Xylenes (total)	µg/L	<3.0	<3.0	<3.0	<3.0	<150	<3.0

Notes:

< - Not detected at the associated reporting limit
J - Estimated concentration

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-21R	MW-22A	MW-23A	MW-24A	MW-25A
Sample Name:		WG-2365-MW21R-210421	WG-2365-MW22A-210420	WG-2365-MW23A-210420	WG-2365-MW24A-210421	WG-2365-MW25A-210421
Sample Date:		04/21/2021	04/20/2021	04/20/2021	04/21/2021	04/21/2021
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	µg/L	<2.5	<2.5	<2.5	<2.5	<2.5
1,2,4-Trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	<2.5	<2.5	<2.5	<2.5	<2.5
1,2-Dibromoethane (Ethylene dibromide)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	µg/L	0.25 J	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	µg/L	<1.0	0.13 J	<1.0	<1.0	<1.0
1,3-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
2,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0
2-Chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
2-Hexanone	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0
2-Phenylbutane (sec-Butylbenzene)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		**MW-21R**	**MW-22A**	**MW-23A**	**MW-24A**	**MW-25A**
Sample Name:		**WG-2365-MW21R-210421**	**WG-2365-MW22A-210420**	**WG-2365-MW23A-210420**	**WG-2365-MW24A-210421**	**WG-2365-MW25A-210421**
Sample Date:		**04/21/2021**	**04/20/2021**	**04/20/2021**	**04/21/2021**	**04/21/2021**
Parameters	**Unit**					
Volatile Organic Compounds (Continued)						
4-Chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0
Acetone	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane (Methyl bromide)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobromomethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform (Trichloromethane)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane (Methyl chloride)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	0.25 J	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Cymene (p-Isopropyltoluene)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromomethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane (CFC-12)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropyl benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert butyl ether (MTBE)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-21R	MW-22A	MW-23A	MW-24A	MW-25A
Sample Name:		WG-2365-MW21R-210421	WG-2365-MW22A-210420	WG-2365-MW23A-210420	WG-2365-MW24A-210421	WG-2365-MW25A-210421
Sample Date:		04/21/2021	04/20/2021	04/20/2021	04/21/2021	04/21/2021
Parameters	**Unit**					
Volatile Organic Compounds (Continued)						
N-Butylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
N-Propylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0
Styrene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane (CFC-11)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (total)	µg/L	<3.0	<3.0	<3.0	<3.0	<3.0

Notes:

< - Not detected at the associated reporting limit
J - Estimated concentration

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-8	MW-9A	MW-9BR	MW-11A	MW-11A	MW-11B
Sample Name:		WG-2365-MW8-210421	WG-2365-MW9A-210421	WG-2365-MW9BR-210422	WG-2365-MW11A-210421	WG-2365-DUP1-210421	WG-2365-MW11B-210421
Sample Date:		04/21/2021	04/21/2021	04/22/2021	04/21/2021	04/21/2021	04/21/2021
						Duplicate	
Parameters	**Unit**						
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	µg/L	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
1,2,4-Trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
1,2-Dibromoethane (Ethylene dibromide)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	µg/L	<1.0	0.61 J	8.3	<1.0	<1.0	<1.0
1,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
2-Chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Hexanone	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
2-Phenylbutane (sec-Butylbenzene)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 3

Analytical Results Summary
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Location ID:		MW-8	MW-9A	MW-9BR	MW-11A	MW-11A	MW-11B
Sample Name:		WG-2365-MW8-210421	WG-2365-MW9A-210421	WG-2365-MW9BR-210422	WG-2365-MW11A-210421	WG-2365-DUP1-210421	WG-2365-MW11B-210421
Sample Date:		04/21/2021	04/21/2021	04/22/2021	04/21/2021	04/21/2021	04/21/2021
						Duplicate	
Parameters	**Unit**						
Volatile Organic Compounds (Continued)							
4-Chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetone	µg/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane (Methyl bromide)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobromomethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform (Trichloromethane)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	0.27 J
Chloromethane (Methyl chloride)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	0.15 J	0.44 J	6.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cymene (p-Isopropyltoluene)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromomethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane (CFC-12)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropyl benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert butyl ether (MTBE)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 4

Qualified Sample Results Due to Analyte Concentrations in the Method Blanks
Annual Groundwater Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
April 2021

Parameter	Analyte	Analysis Date (mm/dd/yyyy)	Blank Result *	Sample ID	Original Result	Qualified Result	Units
VOCs	1,2-Dichlorobenzene	04/28/2021	0.19 J	WG-2365-MW8-210421	0.15 J	<1.0	µg/L
				WG-2365-MW16A-210421	0.23 J	<1.0	µg/L
				WG-2365-MW16B-210421	0.14 J	<1.0	µg/L
				WG-2365-MW22A-210420	0.18 J	<1.0	µg/L

Notes:

* - Blank result adjusted for sample factors where applicable

< - Not detected at the associated reporting limit

J - Estimated concentration

3807 South 148th Street
Omaha, Nebraska 68144
United States
www.ghd.com

Our ref: 11204375-LTR-GUILLORY-4

July 20, 2021

Mr. Gary Guillory
City of Sedalia
Water Pollution Control Program
200 South Osage
Sedalia, MO 65301

2021 First Semi-Annual Discharge Report
UPRR
Sedalia, Missouri
Former MP Shops

Dear Mr. Guillory:

On behalf of Union Pacific Railroad (UPRR), GHD Services Inc. (GHD) has prepared this semi-annual report regarding the water discharge from the Groundwater Recovery System (RS-1 System), located at the UPRR Sedalia Former MP Shops facility in Sedalia, Missouri.

The information presented in this document has been assembled in accordance with the discharge application letter dated February 28, 1995, and the City of Sedalia's response dated March 23, 1995. Analytical results are compared to the City of Sedalia's discharge limit of 2.13 milligrams per liter (mg/L) for Total Toxic Organics (TTO).

In accordance with the March 19, 2009, letter from the City of Sedalia, semi-annual monitoring of the trench began on June 4, 2009, and has continued every June and December thereafter. On June 16, 2021, Gehm Environmental visited the site and the discharge volume was determined. UPRR reports the analytical results and cumulative volume of discharged water to the City of Sedalia Public Works Director on a semi-annual basis.

Table 1 summarizes the June 16, 2021, sampling results. All analytical results are displayed in mg/L.

Table 1 Discharge Sampling Results from June 16, 2021

Date	cis-1,2,-Dichloroethene (cis-1,2-DCE) (mg/L)	trans-1,2-Dichloroethene (trans-1,2-DCE) (mg/L)	Tetrachloroethene (PCE) (mg/L)	Trichloroethene (TCE) (mg/L)	Vinyl Chloride (VC) (mg/L)	Total Toxic Organics (TTO) (mg/L)
6/16/21	0.0140 J	0.00170 J	0.0202 J	0.0126 J	0.0019 J	0.0504 J
ND = not detected J = data was qualified by lab						

Table 2 provides the average discharge flow rate and cumulative volume of water discharged from December 2020 – June 2021 by the RS-1 system.

Table 2 *Discharge Flowrate and Volume from December 2020 – June 2021*

Average Discharge Flow Rate (12/16/2020 – 6/16/2021) (gpm)	Cumulative Volume (07/14/2020 – 6/16/2021) (gallons)
0.25	66,244

Volatile organic compound (VOC) detections for the June 2021 sampling event were summed to determine the TTO discharge, as shown in Table 1. The TTO concentration is well below the City of Sedalia's discharge limit of 2.13 mg/L.

The analytical data provided by Pace Laboratory was reviewed to assess data quality in terms of precision and accuracy. Results from trip blanks, laboratory blanks, method calibrations, surrogate recoveries, and control sample analyses were reviewed by GHD. Sample holding times and preservation were also assessed. Due to the extreme heat during the sampling event, the samples arrived at the laboratory above the specified temperature limit; associated data was qualified. All data quality elements were satisfied.

Historical analytical results and meter readings are attached in Table 3. The laboratory analytical report, chain of custody form, and data validation memo for the June 2021 sampling event are also attached.

If you have any questions, please contact me at (402) 778-4801 or robyn.hansen@ghd.com.

Regards

Robyn Hansen
Scientist

+1 402 210-3031
robyn.hansen@ghd.com

RH/mk/LTR-GUILLORY-4

Encl. Table 3: Cumulative Flow and Analytical Results
Attachment 1: Analytical Report
Attachment 2: Data Validation Memo

cc: Jim Brannen, UPRR
Robert Aston, USEPA (1 copy; RCRA Docket No. VII-90-H-0024)
Jalal El-Jayyousi, MDNR (2 copies)

Table 3
Cumulative Flow and Analytical Results
Former MP Shops
Sedalia, Missouri

Sample Date	Cumulative Volume	Average Flow Rate	cis-1,2-Dichloroethene (cis-1,2-DCE)	trans-1,2-Dichloroethene (trans-1,2-DCE)	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl Chloride (VC)	Total Toxic Organics (TTO)	Period Discharge
	Gallons	GPM	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Gallons
06/28/1995	0	-			System started at 2:00 p.m.				
06/29/1995	5,371	3.7	0.01700	0.00320	0.03400	0.01700	ND	0.1300	
07/18/1995	73,000	2.5	0.01400	0.01100	0.04000	0.03300	0.01300	0.1110	
09/28/1995	253,318	1.7	0.06700	0.01200	0.11000	0.05400	0.01500	0.2600	
12/19/1995	439,419	1.6	0.11000	0.02200	0.12000	0.06500	0.01000	0.3270	
02/13/1996	-	-	0.07300	0.01500	0.11000	0.05800	0.00210	0.2581	
04/25/1996	656,818	1.2	0.05000	0.01200	0.06400	0.03200	0.01100	0.1690	
08/28/1996	1,059,777	2.2	-	0.00700	0.06200	0.04900	0.00450	0.1225	
10/16/1996	1,173,961	1.6	0.06000	0.01000	0.13000	0.06500	0.00290	0.2679	
04/01/1997	1,864,960	2.9	0.04100	0.00880	0.06900	0.03500	0.00100	0.1548	
05/02/1997	2,052,599	4.2	0.03300	0.00690	0.04500	0.02900	ND	0.1139	
08/19/1997	2,321,764	1.7	0.01400	0.00470	0.03200	0.01900	0.00360	0.0733	
10/08/1997	2,458,454	1.9	0.04000	0.00640	0.06900	0.01800	ND	0.1334	
03/30/1998	2,976,273	2.1	0.02300	0.00520	0.04900	0.02500	0.00140	0.1036	
06/29/1998	3,386,071	3.1	0.01850	0.00400	0.02430	0.01950	ND	0.0663	
09/25/1998	3,835,186	3.5	0.01730	0.00400	0.02690	ND	ND	0.0482	
01/18/1999	4,249,989	2.5	0.01670	0.00470	0.02500	0.01640	ND	0.0628	
04/06/1999	4,880,439	5.6	0.02440	0.00490	0.03420	0.02430	ND	0.0878	
06/24/1999	5,350,498	4.1	0.02260	0.00445	0.03380	0.02110	ND	0.0820	
09/28/1999	5,503,302	1.1	0.02140	ND	0.01780	0.01630	0.01020	0.0657	
12/09/1999	5,564,053	0.6	0.02710	0.006470	0.02030	0.01300	ND	0.0669	
04/12/2000	5,866,035	1.7	0.03400	0.006000	0.05400	0.03100	ND	0.1250	
07/21/2000	6,047,025	1.3	0.01700	0.003000	0.02900	0.01400	0.00210	0.0651	
09/26/2000	6,174,103	1.3	0.01400	ND	0.02760	0.01380	ND	0.0554	
12/28/2000	-	-	-	-	-	-	-	-	
03/19/2001	-	0	0.00590	0.00120	0.01400	0.00630	ND	0.0274	
06/06/2001	-	0	0.00180	ND	0.00660	0.00021	ND	0.0086	
09/24/2001	6,176,634	0	0.01700	0.00330	0.03100	0.01500	0.00240	0.0687	
12/03/2001	6,192,107	0.2	0.01180	0.00280	0.03290	0.01370	ND	0.0612	
03/13/2002	6,228,838	0.3	0.01320	0.00270	0.02800	0.01310	ND	0.0570	
06/11/2002	6,301,708	0.6	0.01360	0.00190	0.02240	0.01110	0.00150	0.0505	
10/03/2002	6,321,535	0.1	0.01320	0.00280	0.03380	0.01720	ND	0.0670	
12/02/2002	6,329,756	0.1	0.02020	0.00400	0.04340	0.02050	0.00180	0.0899	

"-" = Information not applicable or not available.
ND = not detected

Table 3
Cumulative Flow and Analytical Results
Former MP Shops
Sedalia, Missouri

Sample Date	Cumulative Volume	Average Flow Rate	cis-1,2-Dichloroethene (cis-1,2-DCE)	trans-1,2-Dichloroethene (trans-1,2-DCE)	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl Chloride (VC)	Total Toxic Organics (TTO)	Period Discharge
	Gallons	GPM	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Gallons
03/20/2003	6,360,787	0.2	0.01020	0.00220	0.01820	0.01310	ND	0.0437	
06/02/2003	6,406,209	0.2	0.00172	ND	0.00524	0.00291	ND	0.0099	
09/24/2003	6,514,341	0.7	0.00738	0.001160	0.01200	0.01120	ND	0.0317	
12/14/2003	6,557,765	0.4	0.00469	ND	0.00491	0.00498	ND	0.0146	
03/31/2004	6,557,770	0	-	-	-	-	-	-	5
06/07/2004	6,564,680	0.1	0.01300	0.00240	0.03360	0.01420	ND	0.0632	6,910
01/10/2005	6,597,100	0.1	-	-	-	-	-	-	32,420
04/04/2005	6,618,095	0.2	0.00998	0.00154	0.01730	0.00832	0.00287	0.0371	20,995
06/15/2005	6,627,592	0.1	0.01580	0.00265	0.02410	0.01370	ND	0.0563	9,497
06/28/2005	6,630,725	0.2	-	-	-	-	-	-	3,133
08/25/2005	6,636,549	0.1	0.00944	0.001840	0.032400	0.01320	ND	0.0569	5,824
12/14/2005	6,657,970	0.1	0.01750	0.002880	0.033500	0.02030	ND	0.0742	21,421
04/04/2006	6,674,418	0.1	0.01540	0.002750	0.031900	0.01670	ND	0.0668	16,448
06/12/2006	6,684,232	0.1	0.01950	0.003370	0.033800	0.01910	ND	0.0758	9,814
09/18/2006	6,688,419	0	0.01340	0.002580	0.033600	0.01740	ND	0.0670	4,187
12/14/2006	6,694,830	0.1	0.00834	0.001810	0.021600	0.00970	ND	0.0415	6,411
03/06/2007	6,705,780	0.1	0.01510	0.002220	0.026100	0.01320	ND	0.0566	10,950
07/06/2007	6,730,522	0.1	0.00961	0.001850	0.021700	0.01150	ND	0.0447	24,742
09/27/2007	6,733,698	0.03	0.01650	0.003670	0.033900	0.01740	ND	0.0715	3,176
12/06/2007	6,735,910	0.02	0.02360	0.004100	0.050100	ND	ND	0.0778	2,212
03/13/2008	6,747,390	0.08	0.01680	0.002760	0.027000	0.01520	ND	0.0618	11,480
06/20/2008	6,793,187	0.32	0.00174	ND	0.008220	0.00329	ND	0.0133	48,797
09/11/2008	6,804,478	0.09	0.01220	0.002040	0.023000	0.01220	ND	0.0474	11,291
12/18/2008	6,823,822	0.14	0.00661	ND	0.013700	0.00651	ND	0.0268	19,344
02/26/2009	6,838,863	0.15	0.01170	0.001850	0.019000	0.01080	ND	0.0434	15,041
06/04/2009	6,893,748	0.39	0.00777	0.001260	0.011200	0.00684	ND	0.0271	54,885
12/29/2009	6,933,824	0.13	0.00249	ND	0.004040	0.00179	ND	0.0083	40,076
06/03/2010	7,033,718	0.44	0.00959	0.00190	0.017000	0.00842	ND	0.0369	99,894
12/15/2010	7,064,515	0.11	0.00945	0.00128	0.017100	0.00908	ND	0.0369	30,797
06/06/2011	7,145,481	0.33	0.00881	0.00160	0.018600	0.00912	ND	0.0381	80,966
12/21/2011	7,157,336	0.04	0.00482	ND	0.004150	0.00308	ND	0.0121	11,855
06/14/2012	7,209,808	0.21	0.0237	0.00274	0.0272	0.0143	0.00907	0.0770	52,472
12/05/2012	7,216,259	0.03	0.0174	0.00221	0.0330	0.0158	ND	0.0684	6,451

"-" = Information not applicable or not available.
ND = not detected

Table 3
Cumulative Flow and Analytical Results
Former MP Shops
Sedalia, Missouri

Sample Date	Cumulative Volume	Average Flow Rate	cis-1,2-Dichloroethene (cis-1,2-DCE)	trans-1,2-Dichloroethene (trans-1,2-DCE)	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl Chloride (VC)	Total Toxic Organics (TTO)	Period Discharge
	Gallons	GPM	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Gallons
06/10/2013	7,273,775	0.21	0.00441	ND	0.00863	0.00379	ND	0.0168	57,516
12/18/2013	7,284,944	0.04	0.00990	0.00148	0.0202	0.0110	ND	0.0426	11,169
06/18/2014	7,303,757	0.07	0.01590	0.00227	0.0220	0.0115	0.0035	0.0552	18,813
12/15/2014	7,321,634	0.07	0.01120	0.00140	0.0159	0.00861	ND	0.0371	17,877
06/23/2015	7,363,281	0.15	0.00749	0.00152	0.0163	0.00874	ND	0.0341	41,647
12/07/2015	7,387,909	0.10	0.00928	0.00117	0.0150	0.00793	ND	0.0334	24,628
06/27/2016	7,437,551	0.17	0.0118	0.00202	0.0225	0.0129	ND	0.0492	49,642
12/27/2016	7,458,677	0.08	0.0084	0.00146	0.0191	0.0105	ND	0.0395	21,126
06/13/2017	7,492,904	0.14	0.0105	0.00202	0.0214	0.0118	ND	0.0457	34,227
12/20/2017	7,506,969	0.05	0.0135	0.00142	0.0266	0.0149	ND	0.0564	14,065
06/27/2018	7,532,684	0.09	0.0129	0.00241	0.0307	0.0189	0.00324	0.0682	25,715
12/11/2018	7,540,326	0.03	0.0142	0.00216	0.0223	0.0130	0.00138	0.0530	7,642
06/13/2019	7,589,412	0.19	0.0106	0.00170	0.0227	0.0111	ND	0.0461	49,086
12/10/2019	7,612,647	0.09	0.0110	0.00140	0.0166	0.0099	0.0013	0.0402	23,235
07/14/2020	7,665,054	0.17	0.0105	0.00190	0.0263	0.0127	0.0002 J	0.0514	52,407
12/16/2020	7,666,329	0.01	0.0036	0.00036 J	0.0038	0.0028	0.0016	0.0118	1,275
06/16/2021	7,732,573	0.25	0.014 J	0.0017 J	0.0202 J	0.0126 J	0.0019 J	0.0504 J	66,244

Notes:

1. On June 23, 2015, the pump and alarm notification system were found to not be properly working. The pump was repaired on June 24, 2015.
2. The recovery trench line was damaged around August 5, 2013 and repaired on April 25, 2014.
3. On December 7, 2009, it was discovered that the RS-1 system was not operating. A faulty surge suppressor was replaced and the system was restarted on December 21, 2009.
4. On June 21, 2006, a power outage occurred shutting off power to the pump. Power was restored on July 6, 2006.
5. On January 18, 2005, the RS-1 System was found vandalized. On March 22, 2005, system was back online with exception to flow meter.
6. On April 22, 2005, the RS-1 System was fully functional.
7. Extensive overhaul of pump and other parts performed during Q1 2004. Trench was restarted on March 31, 2004.
8. On December 14, 2003, the RS-1 System was saturated, pump was off and alarm system found vandalized.
9. On November 13, 2001, a power outage occurred shutting off power to the pump. Power was restored on Nov. 23, 2001.
10. The Accu-Flow meter was recalibrated for a 1-inch pipe on July 24, 2001.
11. The battery in the Accu-Flow meter was replaced and the meter reset to factory settings on April 30, 2001 .
12. The LED display in the control panel was not operating during the March 19, 2001 quarterly sampling event; therefore, Total Flow Volume and Flow Rate could not be read.
13. During the December 28, 2000, event, samples were not collected and the control panel was not operating due to extremely cold weather.
14. J Flag qualifier for estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

"-" = Information not applicable or not available.
ND = not detected

Attachment 1

Analytical Report

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

June 29, 2021

Robyn Hansen
GHD
3807 South 148th St
Omaha, NE 68144

RE: Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

Dear Robyn Hansen:

Enclosed are the analytical results for sample(s) received by the laboratory on June 17, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angie Brown
angie.brown@pacelabs.com
1(913)563-1402
Project Manager

Enclosures

cc: Jeffrey Cloud, GHD

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 20-020-0
Arkansas Drinking Water
Illinois Certification #: 200030
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212020-2
Oklahoma Certification #: 9205/9935
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-19-12
Utah Certification #: KS000212019-9
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60372515001	**WG-2365-RS1-210616**	Water	06/16/21 09:55	06/17/21 07:25
60372515002	**TB**	Water	06/16/21 09:55	06/17/21 07:25

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60372515001	**WG-2365-RS1-210616**	EPA 5030B/8260	PGH	9	PASI-K
60372515002	**TB**	EPA 5030B/8260	PGH	9	PASI-K

PASI-K = Pace Analytical Services - Kansas City

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SUMMARY OF DETECTION

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
60372515001	**WG-2365-RS1-210616**					
EPA 5030B/8260	cis-1,2-Dichloroethene	14.0	ug/L	1.0	06/25/21 16:54	
EPA 5030B/8260	trans-1,2-Dichloroethene	1.7	ug/L	1.0	06/25/21 16:54	
EPA 5030B/8260	Tetrachloroethene	20.2	ug/L	1.0	06/25/21 16:54	
EPA 5030B/8260	Trichloroethene	12.6	ug/L	1.0	06/25/21 16:54	
EPA 5030B/8260	Vinyl chloride	1.9	ug/L	1.0	06/25/21 16:54	
EPA 5030B/8260	Preservation pH	1.0		0.10	06/25/21 16:54	
60372515002	**TB**					
EPA 5030B/8260	Preservation pH	1.0		0.10	06/25/21 15:01	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

Date: June 29, 2021

The samples were received outside of required temperature range. Analysis was completed upon client approval.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: UPRR_GHD NE office
Date: June 29, 2021

General Information:
2 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

Sample: WG-2365-RS1-210616 **Lab ID: 60372515001** Collected: 06/16/21 09:55 Received: 06/17/21 07:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
cis-1,2-Dichloroethene	**14.0**	ug/L	1.0	0.13	1		06/25/21 16:54	156-59-2	
trans-1,2-Dichloroethene	**1.7**	ug/L	1.0	0.10	1		06/25/21 16:54	156-60-5	
Tetrachloroethene	**20.2**	ug/L	1.0	0.33	1		06/25/21 16:54	127-18-4	
Trichloroethene	**12.6**	ug/L	1.0	0.21	1		06/25/21 16:54	79-01-6	
Vinyl chloride	**1.9**	ug/L	1.0	0.17	1		06/25/21 16:54	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	105	%	80-120		1		06/25/21 16:54	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		06/25/21 16:54	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	85	%	80-120		1		06/25/21 16:54	2199-69-1	
Preservation pH	**1.0**		0.10		1		06/25/21 16:54		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

Sample: TB **Lab ID: 60372515002** Collected: 06/16/21 09:55 Received: 06/17/21 07:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		06/25/21 15:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		06/25/21 15:01	156-60-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		06/25/21 15:01	127-18-4	
Trichloroethene	ND	ug/L	1.0	0.21	1		06/25/21 15:01	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		06/25/21 15:01	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		06/25/21 15:01	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		06/25/21 15:01	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		06/25/21 15:01	2199-69-1	
Preservation pH	**1.0**		0.10		1		06/25/21 15:01		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

QC Batch: 728608
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60372515001, 60372515002

METHOD BLANK: 2926625 Matrix: Water
Associated Lab Samples: 60372515001, 60372515002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	06/25/21 13:50	
Tetrachloroethene	ug/L	ND	1.0	0.33	06/25/21 13:50	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	06/25/21 13:50	
Trichloroethene	ug/L	ND	1.0	0.21	06/25/21 13:50	
Vinyl chloride	ug/L	ND	1.0	0.17	06/25/21 13:50	
1,2-Dichlorobenzene-d4 (S)	%	103	80-120		06/25/21 13:50	
4-Bromofluorobenzene (S)	%	103	80-120		06/25/21 13:50	
Toluene-d8 (S)	%	99	80-120		06/25/21 13:50	

LABORATORY CONTROL SAMPLE: 2926626

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	20	18.8	94	80-120	
Tetrachloroethene	ug/L	20	17.6	88	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.1	91	80-120	
Trichloroethene	ug/L	20	18.4	92	80-120	
Vinyl chloride	ug/L	20	19.3	97	65-130	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2926628 2926629

Parameter	Units	60372515001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
cis-1,2-Dichloroethene	ug/L	14.0	20	20	31.0	32.9	85	95	55-130	6	20	
Tetrachloroethene	ug/L	20.2	20	20	37.3	37.7	86	87	55-135	1	25	
trans-1,2-Dichloroethene	ug/L	1.7	20	20	20.3	21.0	93	97	60-130	3	20	
Trichloroethene	ug/L	12.6	20	20	31.7	31.5	96	95	50-145	1	20	
Vinyl chloride	ug/L	1.9	20	20	24.3	24.4	112	113	40-155	1	25	
1,2-Dichlorobenzene-d4 (S)	%						101	100	80-120			
4-Bromofluorobenzene (S)	%						109	105	80-120			
Toluene-d8 (S)	%						100	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: UP 2365 SEDALIA MO-FORMER MP S
Pace Project No.: 60372515

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60372515001	**WG-2365-RS1-210616**	EPA 5030B/8260	728608		
60372515002	**TB**	EPA 5030B/8260	728608		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60372515

60372515

Client Name: UPRR GHD NE Office

Courier: FedEx ☒ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: 5002 0449 0414 Pace Shipping Label Used? Yes ☐ No ☒

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other ☐

Thermometer Used: T298 **Type of Ice:** (Wet) Blue None (Melted)

Cooler Temperature (°C): **As-read** 10.2 **Corr. Factor** 0.0 **Corrected** 10.2

Date and initials of person examining contents 10/17/21 SR

Temperature should be above freezing to 6°C

Chain of Custody present:	☒Yes ☐No ☐N/A	Out of temp - melted Ice
Chain of Custody relinquished:	☐Yes ☒No ☐N/A	
Samples arrived within holding time:	☒Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☒No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	
Sufficient volume:	☒Yes ☐No ☐N/A	
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	
Containers intact:	☒Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☒N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	
Sample labels match COC: Date / time / ID / analyses	☒Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☒No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#	☐Yes ☐No ☒N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☒Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☒N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☒N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A
Required Client Information:
Company: UPRR_GHD NE office
Address: 3807 South 148th St
Omaha, NE 68144
Email:
Phone: (402) 778-4801 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Hansen, Robyn
Copy To:
Purchase Order #: 2365-26
Project Name: UP 2365 Sedalia MO-Former MP Shops
Project #: Recovery Trench Disc Sampling

Section C
Invoice Information:
Attention: Jim Brannen
Company Name: UPRR Railaways
Address: Omaha, NE
Pace Quote:
Pace Project Manager: angie.brown@pacelabs.com,
Pace Profile #: 12417 LINE 3

Regulatory Agency
State / Location
MO

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N)	8260 full list volatiles	TRICHOROETHYLENE N	TETRA CHLORO-ETHYLENE N	VINYL CHOLORIDE N	TRANS-1,2-DICH-LOROH ETHYLENE N	CIS-1,2-DICH LOROH ETHYLENE N		Residual Chlorine (Y/N)	60372515
1	WG-2365-RS1-210616	WT	G	6/16	0945	6/16	0955		9				✓							✓	✓	✓	✓	✓		9-VG9H	
2																										2-VG9HTB	
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
				[signature]	6/17/21	0725	10.2	melted	Y	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: DAVID GEHM
SIGNATURE of SAMPLER: David Gehm
DATE Signed: 6/16/2021

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Attachment 2

Data Validation Memo

Technical Memorandum

July 08, 2021

To	Robyn Hansen	**Tel**	1 206 914 3141
Copy to	Jesse Orth, Julie Lidstone	**Email**	Jeffrey.Cloud@ghd.com
From	Jeffrey Cloud/eew/1016-NF	**Ref. No.**	11183954-95-02-2365
Subject	**Analytical Results and Reduced Validation of Report 60372515 Semiannual Discharge Monitoring Union Pacific Railroad (UPRR) – Former MP Shops Sedalia, Missouri June 2021**		

1. Introduction

This document details a reduced validation of analytical results for a water sample collected in support of the Semiannual Discharge Monitoring at the Former MP Shops site in Sedalia, Missouri during June 2021. The sample was submitted to Pace Analytical Services, located in Lenexa, Kansas. A sample collection and analysis summary is presented in Table 1. A summary of the analytical methodology is presented in Table 2. The validated analytical results are summarized in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody form, finished report forms, method blank data, recovery data from surrogate spikes, laboratory control samples, matrix spikes and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical method referenced in Table 2 and applicable guidance from the document entitled "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540 R 2016 002, September 2016.

2. Sample Holding Time and Preservation

The sample holding time criterion and sample preservation requirements for the analysis are summarized in the method. The sample chain of custody document and analytical report were used to determine sample holding times. The sample was prepared within the required holding time.

All sample containers were properly preserved, delivered on ice and stored by the laboratory at the required temperature (0-6°C). The shipping cooler was received by the laboratory with a temperature outside of the acceptable limit and the associated sample results were qualified as estimated (see Table 4).

3. Laboratory Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

4. Surrogate Spike Recoveries

In accordance with the method employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile organic compound (VOC) analysis were spiked with the appropriate number of surrogate compounds prior to sample analysis.

Surrogate recoveries were assessed against the control limits. All surrogate recoveries met the associated criteria.

5. Laboratory Control Sample Analyses

Laboratory control samples (LCS) are prepared and analyzed as samples to assess the analytical efficiencies of the method employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

The LCS contained all analytes of interest. All LCS recoveries were within associated control limits, demonstrating acceptable analytical accuracy.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as matrix spike/matrix spike duplicate (MS/MSD) samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision. MS/MSD analyses were performed as specified in Table 1.

The MS/MSD samples were spiked with the analytes of interest. All percent recoveries and RPD values were within the associated control limits, demonstrating acceptable analytical accuracy and precision.

7. Field QA/QC Samples

The field QA/QC consisted of one trip blank sample.

To evaluate contamination from sample collection, transportation, storage, and analytical activities, one trip blank was submitted to the laboratory for analysis. All results were non-detect for the analytes of interest.

8. Analyte Reporting

The laboratory did not report any detected concentrations below the laboratory's reporting limit (RL). Non-detect results were presented as non-detect at the RL in Table 3.

9. Conclusion

Based on the assessment detailed in the foregoing, the summarized data are acceptable with the specific qualifications noted herein.

Regards

Jeffrey Cloud
Data Management Team – Data Validator

Table 1

Sample Collection and Analysis Summary
Semiannual Discharge Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
June 2021

					Analysis/Parameters	
Sample Identification	**Location**	**Matrix**	**Collection Date (mm/dd/yyyy)**	**Collection Time (hr:min)**	**VOCs**	**Comments**
WG-2365-RS1-210616	RS-1 Trench Manhole	Water	06/16/2021	09:55	X	MS/MSD
TB	--	Water	06/16/2021	--	X	Trip Blank

Notes:

MS/MSD - Matrix Spike/Matrix Spike Duplicate
VOCs - Volatile Organic Compounds
"--" - Not Applicable

Table 2

Analytical Methods
Semiannual Discharge Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
June 2021

Parameter	Method	Matrix
Volatile Organic Compounds (VOCs)	SW-846 8260[1]	Water

Notes:

(1) - SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions

Table 3

Analytical Results Summary
Semiannual Discharge Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
June 2021

Location ID:	**RS-1 Trench Manhole**
Sample Name:	**WG-2365-RS1-210616**
Sample Date:	**06/16/2021**

Parameters	**Unit**	
Volatile Organic Compounds		
cis-1,2-Dichloroethene	µg/L	14.0 J
Tetrachloroethene	µg/L	20.2 J
trans-1,2-Dichloroethene	µg/L	1.7 J
Trichloroethene	µg/L	12.6 J
Vinyl chloride	µg/L	1.9 J

Notes:

J - Estimated concentration

Table 4

Qualified Sample Data Due to Insufficient Sample Preservation - Temperature
Semiannual Discharge Monitoring
Union Pacific Railroad (UPRR) - Former MP Shops
Sedalia, Missouri
June 2021

Parameter	Sample ID	Temp. Upon Receipt at Laboratory (°C)	Required Temperature (°C)	Analyte	Qualified Result	Units
VOCs	WG-2365-RS1-210616	10.2	0-6	cis-1,2-Dichloroethene	14.0 J	µg/L
				Tetrachloroethene	20.2 J	µg/L
				trans-1,2-Dichloroethene	1.7 J	µg/L
				Trichloroethene	12.6 J	µg/L
				Vinyl chloride	1.9 J	µg/L

Notes:

J - Estimated concentration
VOCs - Volatile Organic Compounds

UNITED STATES POSTAL SERVICE®

Click-N-Ship®

P

usps.com
$7.95
US POSTAGE
Flat Rate Env

9405 5036 9930 0449 5984 26 0079 5000 0016 6219

U.S. POSTAGE PAID
Click-N-Ship®

07/20/2021

Mailed from 66609

PRIORITY MAIL 1-DAY™

MARY KETNER
GHD
1502 SW 41ST ST
TOPEKA KS 66609-1200

Expected Delivery Date: 07/21/21

0006

R086

SHIP
TO: ROBERT ASTON
US EPA REGION 7
11201 RENNER BLVD
LENEXA KS 66219-9601

USPS TRACKING #

9405 5036 9930 0449 5984 26

Electronic Rate Approved #038555749