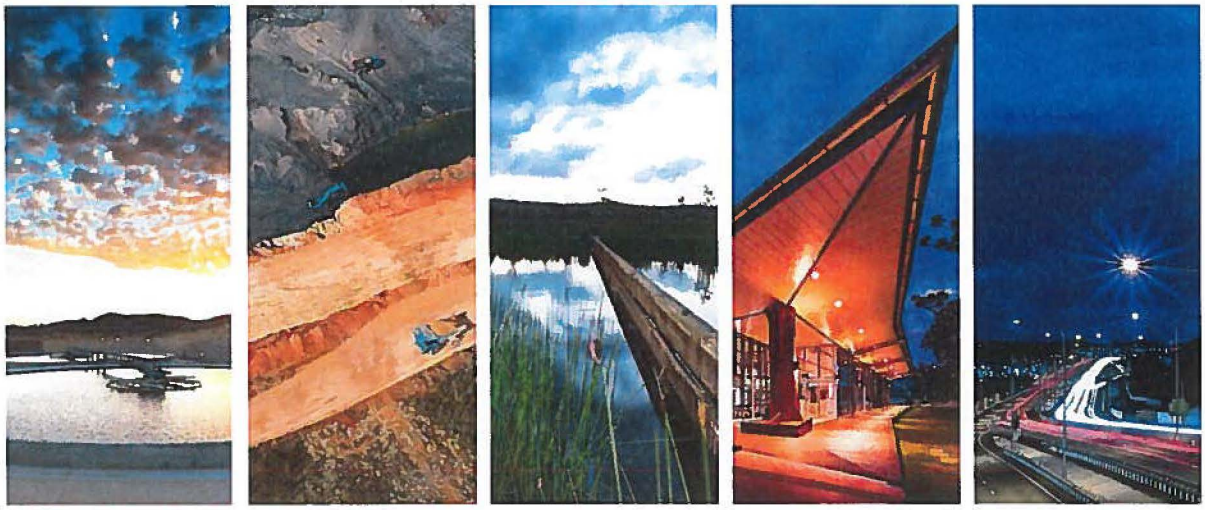


Semi-Annual Groundwater Monitoring Report - Spring 2017

Occidental Chemical Corporation
Wichita, Kansas

Glenn Springs Holding, Inc.

RCRA 7/28/2017
565310

GHD | 1502 SW 41st Street Topeka Kansas 66609-1200 USA

11137148 | D2310F | Report No 04 | July 28 2017

Semi-Annual Groundwater Monitoring Report - Spring 2017

Occidental Chemical Corporation
Wichita, Kansas

Glenn Springs Holding, Inc.

GHD | 1502 SW 41st Street Topeka Kansas 66609-1200 USA

11137148 | D2310F | Report No 04 | July 28 2017

July 31, 2017 Reference No. 11137148 (02)

Mr. Bradley Roberts
U.S. Environmental Protection Agency, Region 7
Air and Waste Management Division
Waste Remediation and Permitting Branch
11201 Renner Boulevard
Lenexa, Kansas 66219

Dear Mr. Bradley Roberts:

Re: Semi-Annual Groundwater Monitoring Report – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas
Glenn Springs Holding, Inc.

On behalf of Glenn Springs Holdings, Inc. and the Occidental Chemical Corporation, Wichita, Kansas Facility, GHD is pleased to present the *Semi-Annual Groundwater Monitoring Report – Spring 2017*. Enclosed are two hard copies and compact disks.

If you have any questions regarding the enclosed report, please do not hesitate to contact me at (713) 734-3090 or Travis Kogl at (785) 783-8982.

Sincerely,

Please feel free to contact me at your convenience if you have any questions regarding this report.

Sincerely,

GHD

CJ/mk/02

Encl.

cc: Miles Stotts, KDHE
David Anderson, Glenn Springs Holdings, Inc.
Lisa Thurman, OCC, Wichita, Kansas
Travis Kogl, GHD
File

Table of Contents

1. Introduction 1
2. Field Program 1
3. Groundwater Monitoring Activities 2
   - 3.1 Water Level Monitoring 2
   - 3.2 DNAPL Monitoring 2
   - 3.3 Groundwater Sampling 3
     - 3.3.1 Monitoring Wells 3
     - 3.3.2 Monitoring Well Resampling 4
     - 3.3.3 Off-site Production Wells and Interceptor Wells 4
     - 3.3.4 Well Inspection Activities 4
4. Summary of Findings 6
   - 4.1 Groundwater Elevation Monitoring 6
   - 4.2 Detections/Measurements of Dense Non-Aqueous Phase Liquids 7
   - 4.3 Groundwater Sample Analytical Results 7
     - 4.3.1 Laboratory Analytical Data Assessment 7
5. Discussion 8
6. Certification 9

Figure Index

Figure 1 Site Location Map
Figure 2 Monitoring Well, Interceptor Well and Piezometer Locations
Figure 3 Semi-Annual Groundwater Monitoring Events Monitoring and Interceptor Well Locations
Figure 4 May 2017 Groundwater Contours Deep (S1) Screened Sand Unit Interval
Figure 5 May 2017 Groundwater Contours Intermediate (S2/S3) Screened Sand Unit Interval
Figure 6 May 2017 Beta-BHC Isoconcentration Contours in S1 Groundwater
Figure 7 May 2017 Beta-BHC Isoconcentration Contours in S2/S3 Groundwater
Figure 8 May 2017 Carbon Tetrachloride Isoconcentration Contours in S1 Groundwater
Figure 9 May 2017 Carbon Tetrachloride Isoconcentration Contours in S2/S3 Groundwater
Figure 10 May 2017 Hexachlorobutadiene Isoconcentration Contours in S1 Groundwater
Figure 11 May 2017 Hexachlorobutadiene Isoconcentration Contours in S2/S3 Groundwater
Figure 12 May 2017 Hexachloroethane Isoconcentration Contours in S1 Groundwater
Figure 13 May 2017 Hexachloroethane Isoconcentration Contours in S2/S3 Groundwater
Figure 14 May 2017 Perchloroethylene Isoconcentration Contours in S1 Groundwater
Figure 15 May 2017 Perchloroethylene Isoconcentration Contours in S2/S3 Groundwater

Table Index

Table 1	Groundwater Monitoring Schedule
Table 2	Summary of Monitoring Well Construction Data
Table 3	Summary of Groundwater Elevations – Spring 2017
Table 4	Summary of Monitoring Well Purging Parameters – Spring 2017
Table 5	Groundwater Sample Key – Spring 2017
Table 6	Analytical Results Summary – Spring 2017

Appendices

Appendix A	Equipment Calibration Forms – On accompanied CD
Appendix B	Analytical Reports – On accompanied CD
Appendix C	Data Quality Assessment and Validation Report

1. Introduction

This report presents information and data resulting from the first groundwater monitoring event of 2017 performed at the Occidental Chemical Corporation Wichita property located at 6200 S Ridge Road, Wichita, Sedgwick County, Kansas (Site). This groundwater monitoring event was conducted to fulfill the Part II Hazardous and Solid Waste Amendments (HSWA) Section of the Facility's Resource Conservation and Recovery Act (RCRA) Permit obligations (permit number KSD007482029). Groundwater monitoring has been conducted on a semi-annual basis since 1986 in order to evaluate the groundwater flow and quality conditions around the Site and to assess the effects of historical releases on the local groundwater regime.

Groundwater monitoring reports are submitted to the United States Environmental Protection Agency (USEPA) and the Kansas Department of Health & Environment (KDHE) on a semi-annual basis. The Spring 2017 semi-annual groundwater monitoring event was performed in accordance with the procedures outlined in the USEPA approved *Quality Assurance Project Plan* (QAPP) (Conestoga-Rovers & Associates [CRA] 2009) and S*ampling and Analysis Plan* (SAP)(CRA 2009). The Spring 2017 groundwater monitoring event was a semi-annual monitoring event performed in accordance with the schedule provided in the SAP and presented in Table 1.

Interceptor wells/extraction wells operate to maintain capture zones within the aquifers to prevent migration of impacted groundwater. Measuring analyte concentrations and water levels on a regular periodic basis is a component of monitoring the effectiveness of the system.

2. Field Program

Field activities were conducted from May 1, 2017 through May 22, 2017 and consisted of the following:

- Collection of water level measurements and gauging for the presence of dense non-aqueous phase liquids (DNAPLs) at 138 monitoring wells and 26 piezometers.
- Collection of groundwater samples from 132 monitoring wells, 14 interceptor wells, one neighboring commercial property water well, and four neighboring production wells.
- Submittal of collected groundwater samples for laboratory analysis of the contaminants of concern (COCs).

The COC list consists of the parameters summarized in the following table:

Table 2.1 Contaminants of Concern Parameters

Volatile Organic Compounds	General Chemistry
1,1,1 Trichloroethane	Chloride
1,2 Dichloroethane	Hardness Calculation
Benzene	
Carbon tetrachloride	
Chloroform	
Chloromethane (methyl chloride)	
Methylene chloride	

Volatile Organic Compounds	General Chemistry
Perchloroethylene	
Trichloroethene	
Vinyl chloride	
1,2 Dichloropropane (1,2 DCP)	
Semivolatile Organic Compounds/Pesticides/Herbicides	
2,3,4,5 Tetrachlorophenol	3/4 Chlorophenol
2,3,4,6 Tetrachlorophenol	alpha BHC
2,4,5 Trichlorophenol	beta BHC
2,4,6 Trichlorophenol	delta BHC
2,4 Dichlorophenol	gamma BHC (lindane)
2,5 Dichlorophenol	Hexachlorobenzene
2,6 Dichlorophenol	Hexachlorobutadiene
2 Chlorophenol	Hexachloroethane
2,4 Dichlorophenoxyacetic acid (2,4 D)2	Pentachlorophenol

A Site location map is presented on Figure 1. A Site plan depicting the monitoring wells, interceptor wells, and piezometer locations is shown on Figure 2. Figure 3 illustrates the monitoring wells and interceptor wells included in the Spring 2017 semi-annual monitoring program.

3. Groundwater Monitoring Activities

Activities completed during the Spring 2017 groundwater monitoring event included water level elevation monitoring, DNAPL monitoring, groundwater monitoring well sampling, neighboring production well and water well sampling, and well inspection activities. Copies of the sampling equipment calibration forms are provided as Appendix A in CD format. Table 2 provides a summary of interceptor well, monitoring well, and piezometer construction details for the entire monitoring network.

3.1 Water Level Monitoring

GHD obtained water level measurements from all monitoring wells from May 1, 2017 through May 3, 2017. The water level measurements were collected in as short a time period as possible to obtain a representative data set of contemporaneous groundwater elevations in order to accurately evaluate groundwater flow conditions beneath the Site and the surrounding area. The water level and DNAPL measurements were collected first from wells with historically non-detect laboratory results and progressed to wells with higher parameter concentrations. Water level data collected in May 2017 (in conjunction with reference point elevation data) were used to calculate the groundwater elevations and were recorded electronically. A summary of the May 2017 groundwater elevations is provided in Table 3.

3.2 DNAPL Monitoring

GHD gauged each well for the presence of dense non-aqueous phase liquid (DNAPL) using an open-reel fiberglass weighted tape measure with an indicator paste applied to the surface of the tape measure. In the event that DNAPL was encountered, the thickness was documented in the

field logbook and/or the sample collection form. The weighted tape measure was decontaminated following the procedures outlined in the QAPP.

Historically, DNAPL was detected or suspected in several on-site monitoring wells. DNAPL measurements from this recent gauging and sampling event are detailed in Section 4.2.

3.3 Groundwater Sampling

GHD obtained groundwater samples from May 3, 2017 through May 22, 2017. Groundwater purging and sampling are described in the following sections.

3.3.1 Monitoring Wells

The procedures used for groundwater sampling were performed as outlined in the SAP. GHD utilized low flow/minimal drawdown sampling techniques for the collection of groundwater samples with the exception of the following eight wells that were bailed.

Table 3.1 Wells Not Sampled by Low Flow Techniques

Well ID
MW15S4
MW027S1
MW027S2
MW24S4
MW10S3
MW144S2/S3
MW137S2
AMW101S

GHD utilized dedicated bladder pumps to sample 107 monitoring wells, stainless steel submersible pumps to sample 17 monitoring wells and bailers to sample eight monitoring wells. During the low flow/minimal drawdown purging process, field parameters consisting of pH, dissolved oxygen, turbidity, conductivity, temperature and oxidation reduction potential (ORP) were measured to determine stabilization. When a bailer was used to purge a monitoring well, pH, conductivity and temperature were used to determine stabilization. Field parameter data collected during the Spring 2017 event were recorded electronically.

Table 4 provides a summary of monitoring well purging parameters. Groundwater samples were collected from 132 monitoring wells, 14 interceptor wells, four neighboring industrial wells and one neighboring water well. Table 5 provides a sample key.

Groundwater samples were not collected from six monitoring wells for the reasons noted in Table 3.2 below.

Table 3.2 Monitoring Wells Un-sampled

Well ID	Comment
MW05S4	Well was dry
MW08S4	Pump obstruction
MW09S4	Well was dry
MW18S4	Well was dry
MW21S4R	Well was dry
MW19S3	Pump obstruction

3.3.2 Monitoring Well Resampling

Upon receipt of the laboratory analytical results, the data for some semi-volatile organic compounds (SVOC) from monitoring wells MW10S1 and MW21S1 appeared anomalous and were inconsistent with historical results. In particular, hexachlorobutadiene (HCBE) was reported in the samples from MW10S1 and MW21S1 at higher concentrations than historically observed, and benzene hexachlorides (BHC) and hexachloroethane (HCE) were reported in the samples from MW21S1 which historically have been below their respective reporting limits. Field decontamination and sample collection procedures were reviewed as well as the laboratory quality control results (including method blanks and field equipment blanks) and no evidence of cross-contamination was identified. Consequently, MW10S1 and MW21S1 were resampled on July 19, 2017.

3.3.3 Off-site Production Wells and Interceptor Wells

GHD collected groundwater samples from four off-site industrial production wells (DW-5, DW-6, DW-7 and AP2800), one off-site water well (Builders well) and from 14 interceptor wells (IW29 through IW32, IW35A, IW35B, IW36 and IW40 through IW46). Each well was purged prior to sample collection using the existing pump system installed within each well. Each industrial well or water well was allowed to purge for a minimum of 15 minutes prior to sample collection. The interceptor wells are continually in operation and therefore stagnant water is not present in the wells. Samples were collected from the interceptor wells through sample ports installed for sampling purposes.

3.3.4 Well Inspection Activities

Each of the monitoring wells, piezometers, and interceptor/extraction wells were inspected in accordance with the SAP. The inspection included an assessment of the well cover, lock, concrete pad, surface casing, protective bollards and pump operation. The inspection for each well was documented electronically. Fifty-five wells were identified for maintenance (well painting, well cover replacement, obstruction or pump repair/replacement). Details are presented in Table 3.3 below.

Table 3.3 Well Maintenance Summary

Well ID	Repaint	Evaluate Pump	Replace Pump	Replace Well Cover	Replace Tubing/ Fitting	Obstruction
AMW1	X					
AMW101I		X				
AMW102D	X	X	X		X	
AMW102S	X	X	X		X	
AMW104	X	X				
AMW105D	X					
AMW105S	X					
AMW106D	X					
AMW106S	X					
AMW107D	X					
AMW107S	X				X	
AMW108D	X	X	X		X	X
AMW108S	X	X	X		X	
AMW3	X					
AMW5D	X					
AMW5S	X					
AMW8S	X					
APMW302S1	X				X	
APMW302S2	X					
APMW302S3	X			X		
MW02S1	X					
MW02S2	X					
MW07S1	X					
MW07S2	X					
MW07S3	X					
MW08S1					X	
MW08S4			X			X
MW09S1	X					
MW09S3	X					
MW10S2				X		
MW10S3				X		
MW11S3A					X	
MW12S1A	X					
MW12S3	X					
MW14S1	X					
MW14S3	X					
MW15S1	X					
MW15S2	X					
MW15S4	X	X	X			
MW16BR		X			X	
MW19S3						X
MW21S4R		X				
MW22S1				X		
MW22S2		X	X	X		
MW22S4				X	X	
MW23BR	X					
MW26S1	X					
MW26S3	X	X	X		X	
MW28S3					X	
MW133S2S3				X		

Well ID	Repaint	Evaluate Pump	Replace Pump	Replace Well Cover	Replace Tubing/ Fitting	Obstruction
MW136S2S3	X					
MW138S1	X					
MW138S2S3	X					X
MW139S2S3	X					
MW141S2S3	X					
Total	**41**	**11**	**8**	**7**	**12**	**4**

Based on inspections performed during the Fall 2016 event, 14 wells were repainted and/or fitted with a new well cover. Issues identified during this event will also be addressed.

Prior to the Spring 2017 groundwater monitoring event, a down-hole camera was used to evaluate the following wells for stuck bladder pumps: MW08S4, MW17S1, MW19S3, MW21S1, MW-22S2 and MW29S2. All were dislodged with the exception of MW19S3 and MW08S4. The top of the tubing in MW19S3 is 32.5 feet below ground surface (bgs). GHD was able to grasp hold of the tubing but the pump would not dislodge. GHD observed vegetation roots in MW08S4 and removed a portion of the roots, but the tubing separated from the pump and the pump could not be recovered.

4. Summary of Findings

The following sections present the data obtained during the Spring 2017 groundwater monitoring.

4.1 Groundwater Elevation Monitoring

GHD prepared groundwater elevation contour maps using May 2017 water level data for the S1 aquifer (deeper water-bearing unit) and the S2/S3 aquifer (shallower water-bearing unit) which are presented on Figures 4 and 5, respectively. Interceptor wells/extraction wells operate in both the S1 and S2/S3 aquifers as part of the Interim Corrective Measure (ICM) which maintains a capture zone to prevent migration of impacted groundwater. Two interceptor wells, IW29 and IW36, extract groundwater from the S1 aquifer and the groundwater contours associated with water level measurements in nearby monitoring wells and piezometers indicate radial flow toward these two interceptor wells (Figure 4).

The S2/S3 extraction system is comprised of 12 interceptor wells: IW30, IW31, IW32, IW35A, IW35B and IW40 though IW46. The groundwater contours associated with water level measurements in nearby monitoring wells and piezometers indicate radial flow toward the interceptor wells (Figure 5).

Based on a review of the previous and the most recent semi-annual groundwater elevation contour and sampling data, the existing ICM appears to maintain substantially effective groundwater capture.

4.2 Detections/Measurements of Dense Non-Aqueous Phase Liquids

DNAPL measurements and observations were recorded prior to purging the wells and collecting groundwater samples. All monitoring wells and piezometers were evaluated for the presence of DNAPL using a weighted tape measure and an indicator paste that has been found to be sensitive to DNAPL at this Site. The presence of DNAPL was confirmed in monitoring wells MW27S1 (2.96 feet) and MW27S2 (3.32 feet). DNAPL has been observed in MW19S3 in previous monitoring events, but an obstruction in the well prevented the weighted tape from reaching the previously observed DNAPL elevation. DNAPL was not detected in any other monitoring wells or piezometers.

4.3 Groundwater Sample Analytical Results

All of the COCs, with the exception of chloromethane (methyl chloride), 2,4,5-trichlorophenol, and 2,5-dichlorophenol, were detected during this monitoring event. The resultant data are summarized in Table 6, with the specific detections that exceeded the Maximum Contaminant Level (MCL)[1] or Regional Screening Level (RSL) highlighted.

Isoconcentration contour maps have been developed for several compounds, including beta-BHC, carbon tetrachloride, hexachlorobutadiene, hexachloroethane and perchloroethylene. Detections of remaining Site COCs are co-located with these compounds and generally well within the areal distribution shown on the maps.

- Beta-BHC isoconcentration maps for the S1 and S2/S3 sand layers are presented on Figures 6 and 7, respectively.
- Carbon tetrachloride isoconcentration maps for the S1 and S2/S3 sand layers are presented on Figures 8 and 9, respectively.
- Hexachlorobutadiene isoconcentration maps for the S1 and S2/S3 sand layers are presented on Figures 10 and 11, respectively.
- Hexachloroethane isoconcentration maps for the S1 and S2/S3 sand layers are presented on Figures 12 and 13, respectively.
- Perchloroethylene isoconcentration maps for the S1 and S2/S3 sand layers are presented on Figures 14 and 15, respectively.

Copies of the original laboratory analytical reports are provided in CD format as Appendix B. Pace Analytical Services[2] (Pace) performed the analyses of the groundwater samples. Pace is accredited by the National Environmental Laboratory Accreditation Program.

4.3.1 Laboratory Analytical Data Assessment

Data validation was conducted in accordance with methods and techniques detailed within the USEPA-approved QAPP. The data assessment included a review of all technical holding times and all batch and matrix quality control (QC) information including rinse blanks, trip blanks, field duplicates, matrix spike/matrix spike duplicates (MS/MSD), matrix duplicates, surrogate recoveries, method blanks and laboratory control sample (LCS) results. The assessment of analytical data

[1] In the case of chloroform and chloride, reported concentrations were compared to the Maximum Contaminant Level Goal (MCLG) and secondary MCL, respectively.

[2] Formerly Continental Analytical Services, which was acquired by Pace on December 1, 2015.

included checks on data consistency by looking for the comparability of field duplicate analyses and adherence to laboratory accuracy and precision control criteria.

The data validation report, provided as Appendix C, summarizes the samples reviewed, parameters reviewed, any non-conformances with the established criteria and validation actions (including the use of data qualifiers).

5. Discussion

The Spring 2017 groundwater elevation, DNAPL and laboratory analytical data collected for the groundwater monitoring event is generally consistent with data collected in previous monitoring events:

- The groundwater elevation data for the S1 and S2/S3 aquifers indicates radial inward flow toward the respective interceptor/extraction well.
- The extent of DNAPL in monitoring wells appears to be consistent with historical evaluations.
- Maintenance is recommended for 55 of the 138 monitoring wells inspected.
- The extent and concentration of COCs appears to be consistent with historical evaluations.
- The groundwater elevation and laboratory analytical data indicate the ICMs in the S1 and S2/S3 aquifers are effective.

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possibility of fine and imprisonment for knowing violations.

MICHAEL ANDERSON

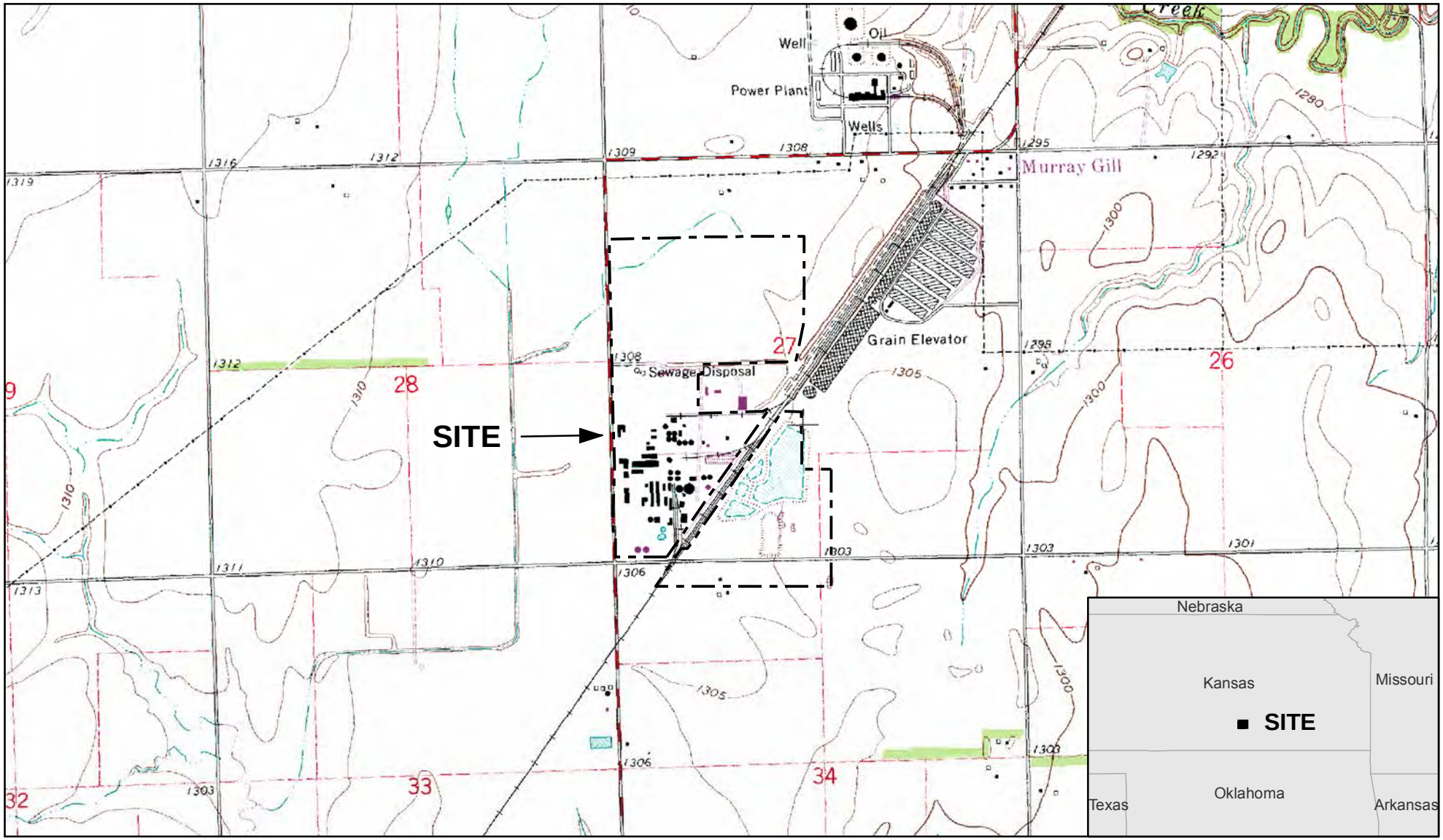
Printed Name

Signature

7/28/17

Date

Figures



Source: United States Geological Survey Bayneville Topographic Map; Photorevised 1970.

0 200 400 600
Meters

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

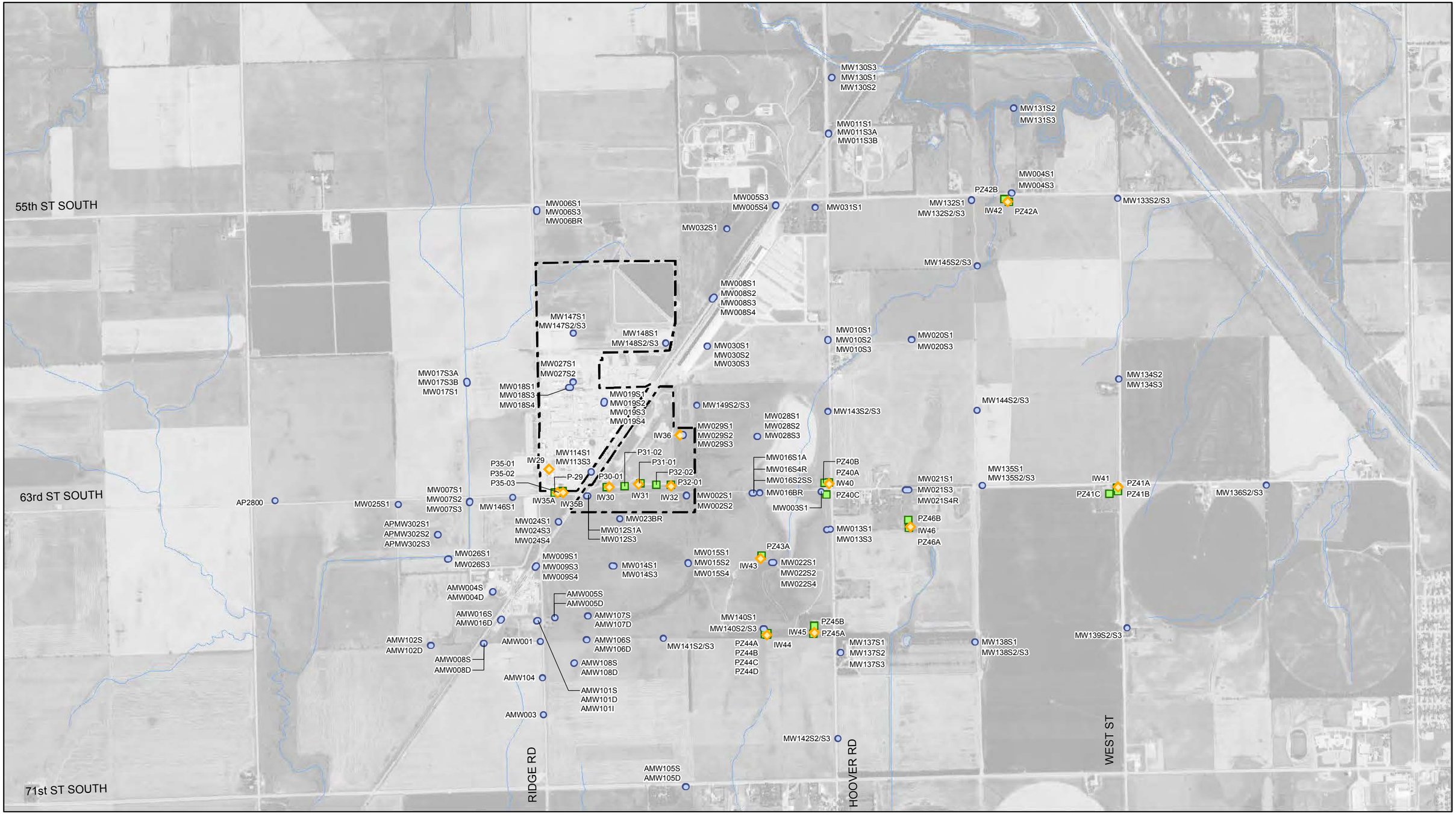
OCCIDENTIAL CHEMICAL CORPORATION
WICHITA, KANSAS

11137148-D2310F
Jul 7, 2017

SITE LOCATION MAP

FIGURE 1

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA016.mxd



Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Piezometer
- Approximate Site Boundary

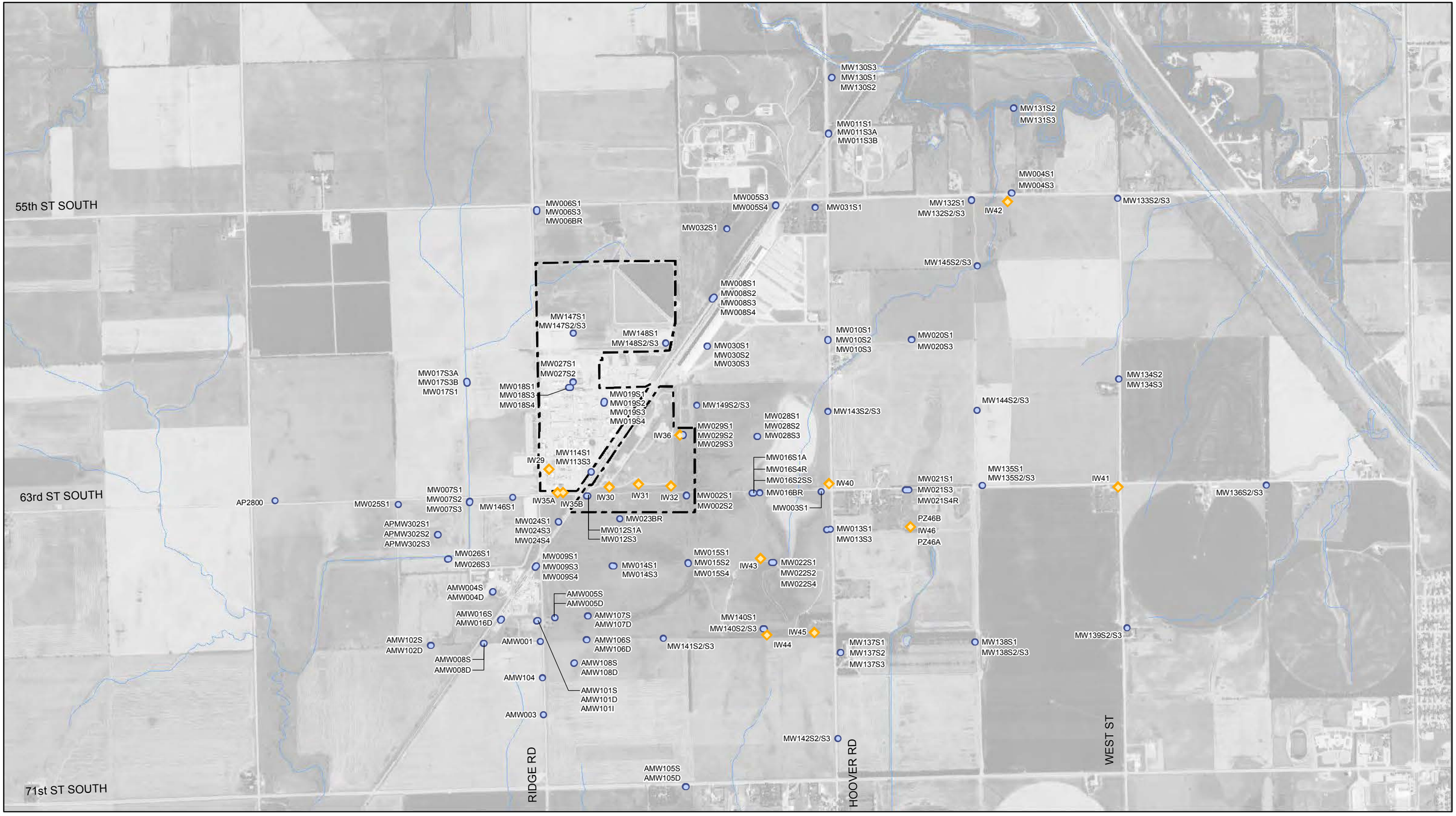
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

MONITORING WELL, INTERCEPTOR WELL, AND PIEZOMETER LOCATIONS

11137148-D2310F
Jul 7, 2017

FIGURE 2

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA017.mxd



Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Approximate Site Boundary

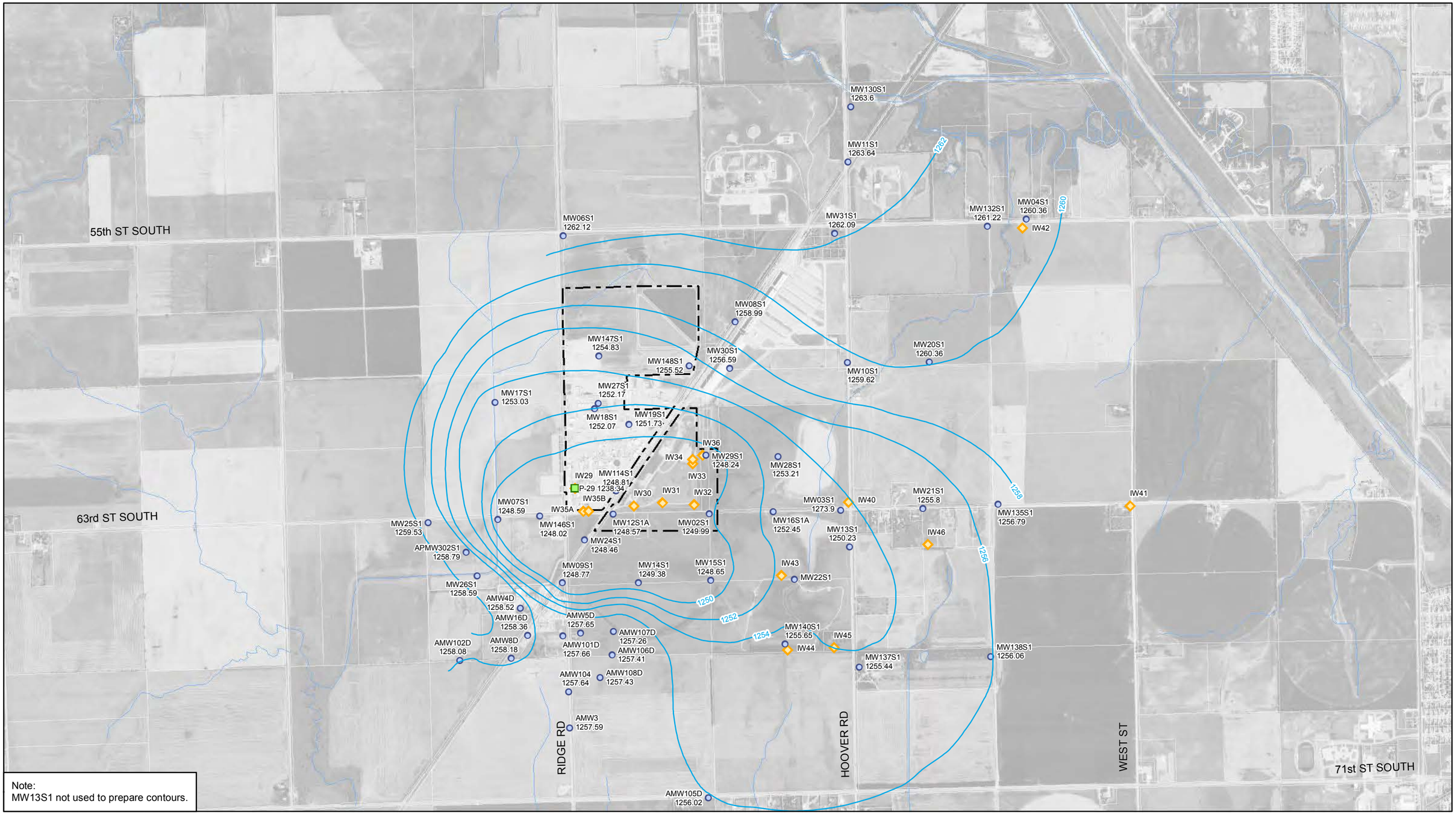
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

SEMI-ANNUAL GROUNDWATER MONITORING EVENT MONITORING AND INTERCEPTOR WELL LOCATIONS

11137148-D2310F
Jul 7, 2017

FIGURE 3

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA018.mxd



Note:
MW13S1 not used to prepare contours.

Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

Legend

- Monitoring Well
- Piezometer
- Interceptor Well
- Groundwater Contours - Deep (S1) Screened Sand Unit Interval
- Approximate Site Boundary

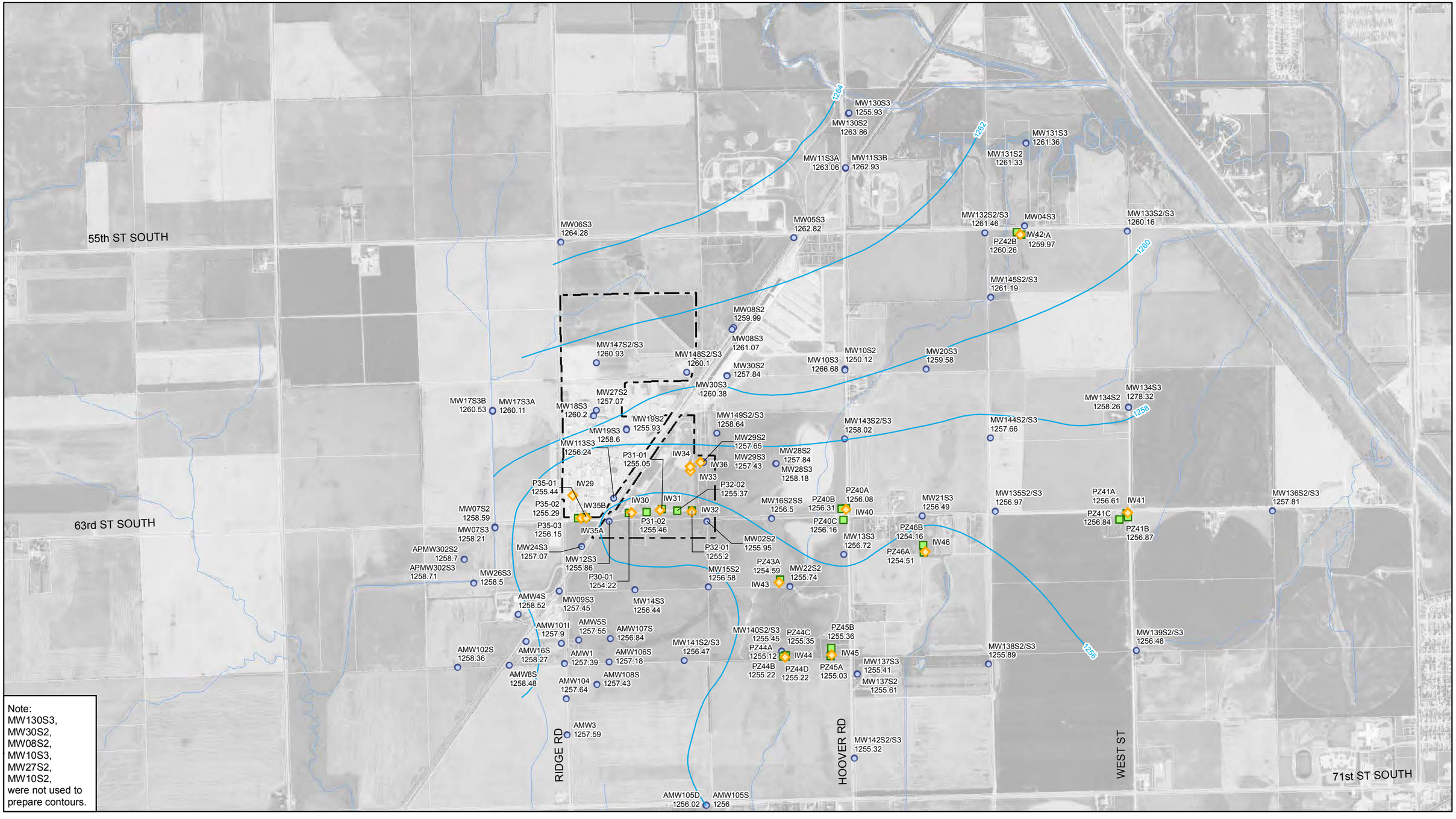
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

11137148-D2310F
Jul 7, 2017

MAY 2017 GROUNDWATER CONTOURS DEEP (S1) SCREENED SAND UNIT INTERVAL

FIGURE 4

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA004.mxd



Note:
MW130S3,
MW30S2,
MW08S2,
MW10S3,
MW27S2,
MW10S2,
were not used to prepare contours.

Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

Legend

- Monitoring Well
- Piezometer
- Interceptor Well
- Groundwater Contours - Intermediate (S2/S3) Screened Sand Unit Interval
- Approximate Site Boundary

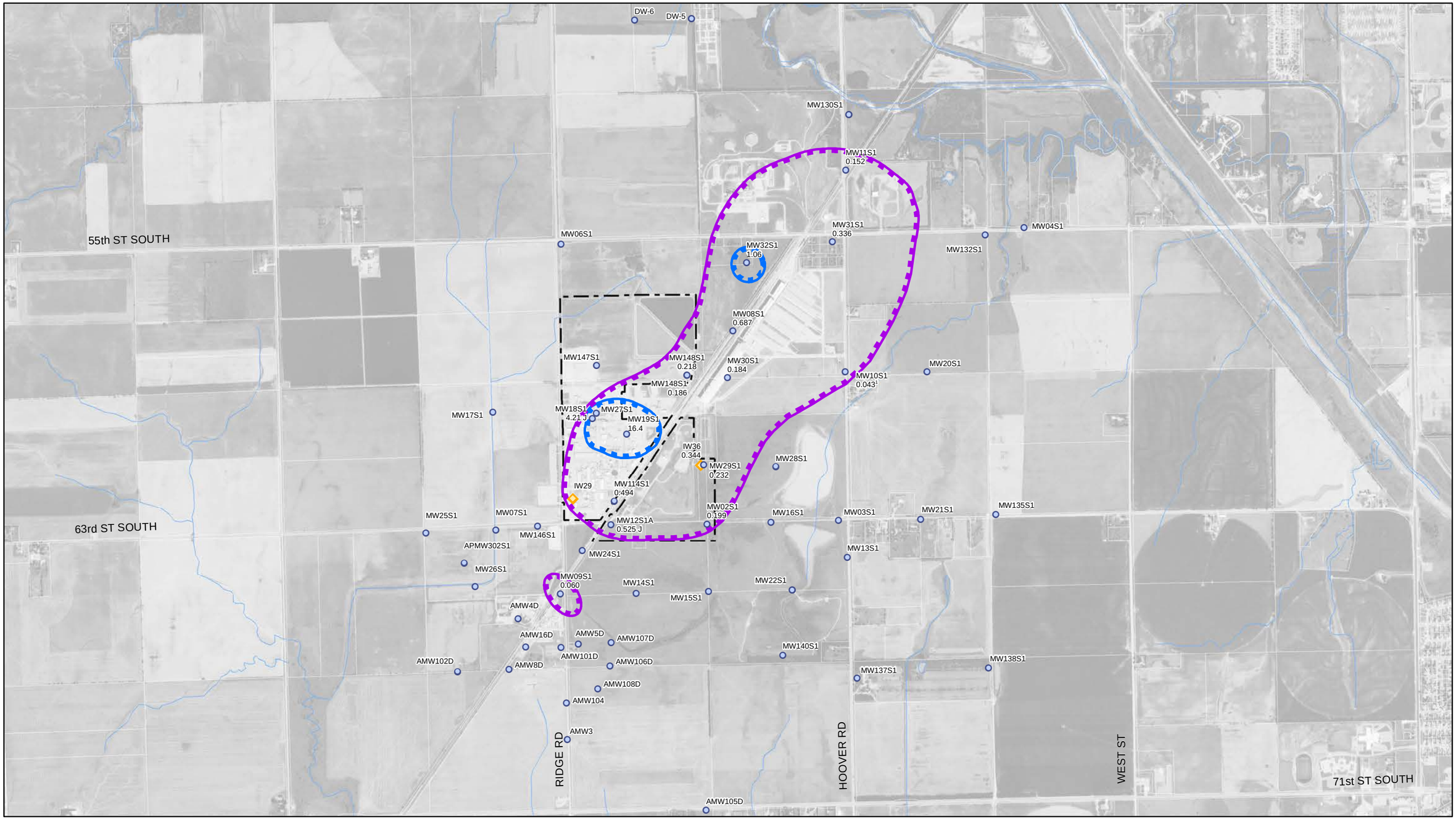
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

MAY 2017 GROUNDWATER CONTOURS INTERMEDIATE (S2/S3) SCREENED SAND UNIT INTERVAL

11137148-D2310F
Jul 7, 2017

FIGURE 5

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA005.mxd



Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas
South FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Approximate Site Boundary

Isoconcentration (ug/l) *Only detected concentrations are shown

0.025 1.0

[1] Sample Collected on 7-19-17

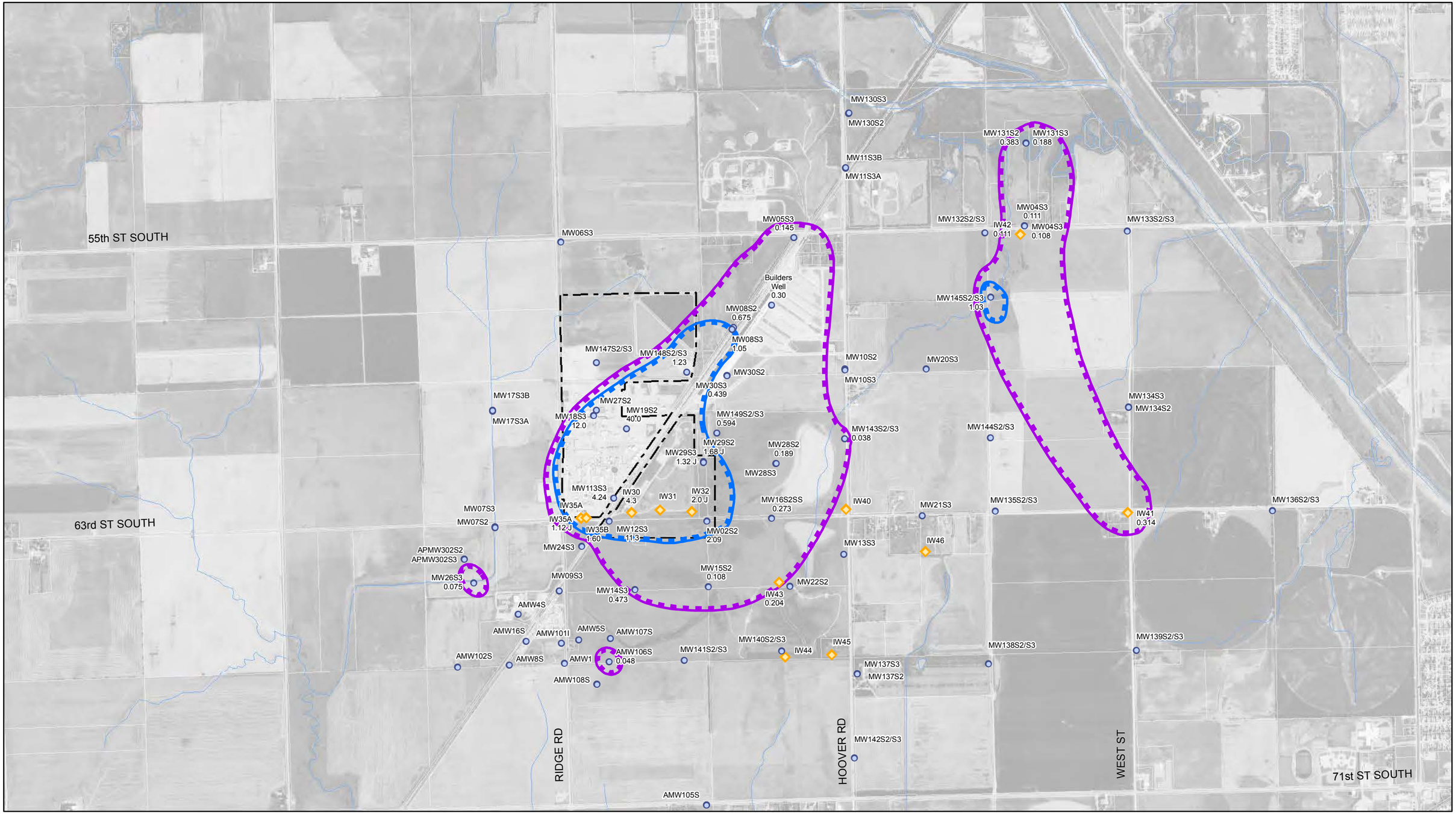
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

MAY 2017 BETA BHC ISOCONCENTRATION CONTOURS IN S1 GROUNDWATER

11137148-D2310F
Jul 24, 2017

FIGURE 6

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA006.mxd



Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Approximate Site Boundary
- Isoconcentration (ug/l) *Only detected concentrations are shown
- 0.025
- 1.0

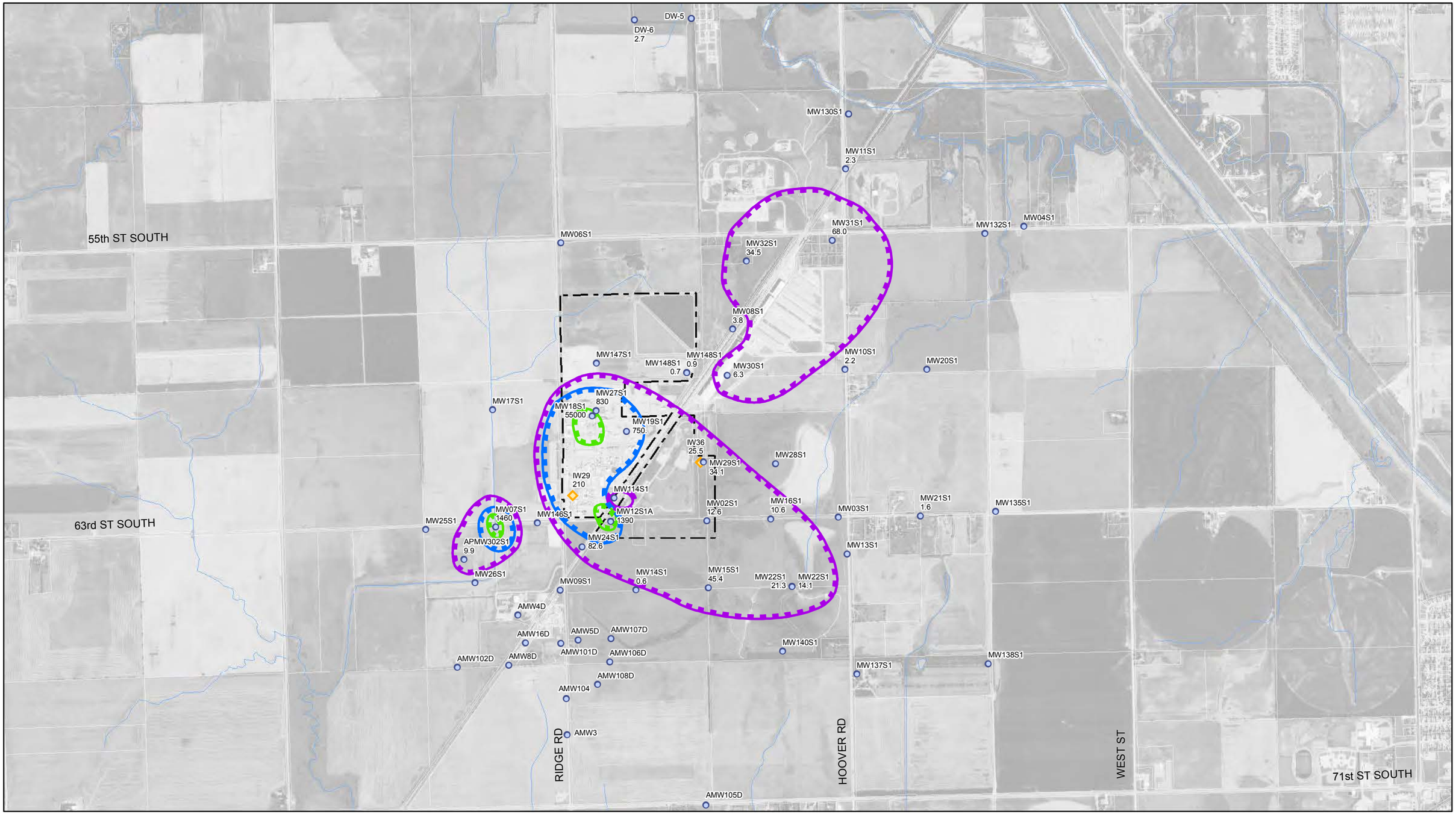
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

MAY 2017 BETA BHC ISOCONCENTRATION CONTOURS IN S2/S3 GROUNDWATER

11137148-D2310F
Jul 13, 2017

FIGURE 7

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA007.mxd



Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Approximate Site Boundary

Isoconcentration (ug/l) *Only detected concentrations are shown

5.0 100 1000

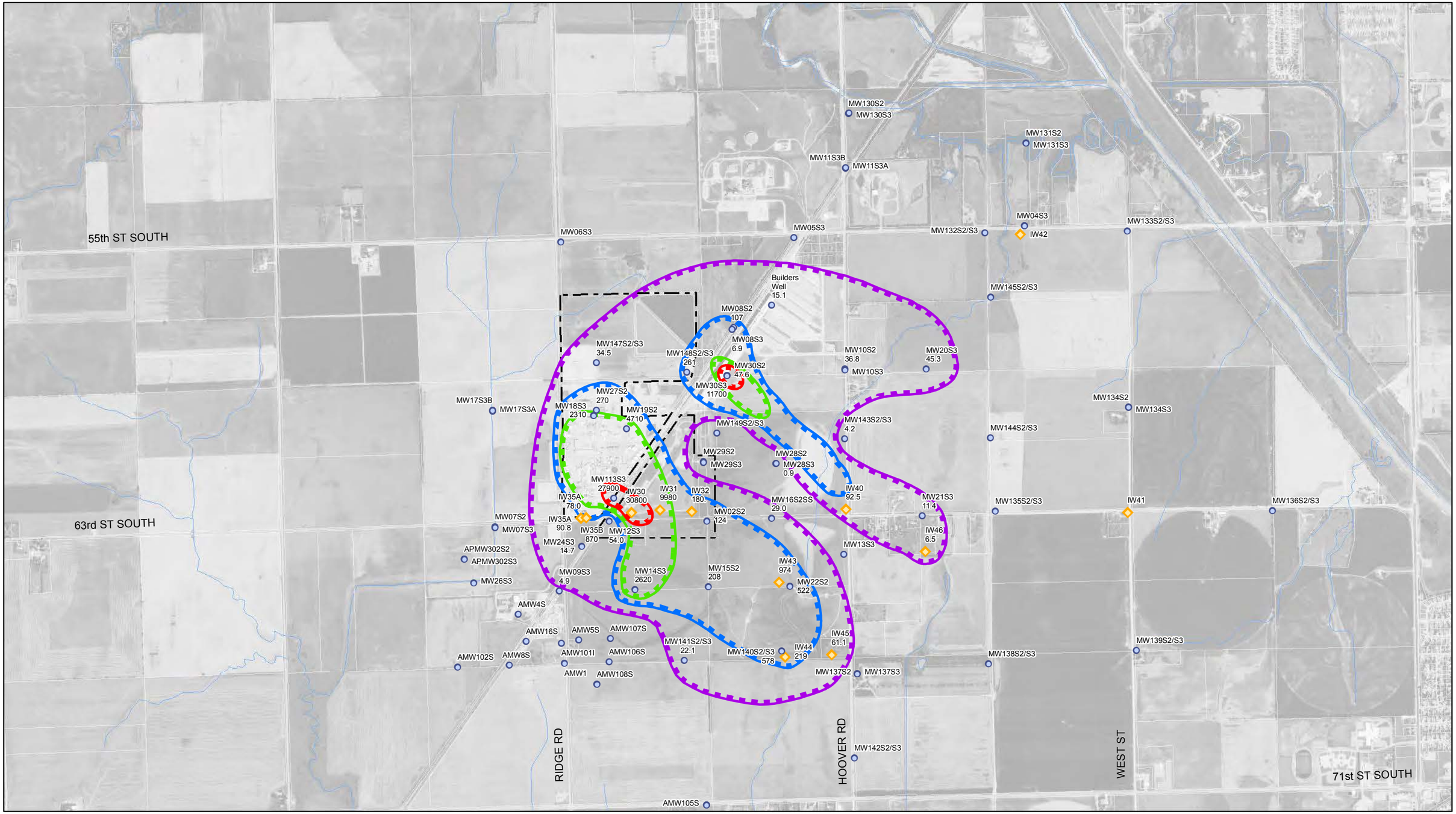
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

11137148-D2310F
Jul 13, 2017

MAY 2017 CARBON TETRACHLORIDE ISOCONCENTRATION CONTOURS IN S1 GROUNDWATER

FIGURE 8

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA008.mxd



Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Approximate Site Boundary

Isoconcentration (ug/l) *Only detected concentrations are shown

5.0 100 1,000 10,000

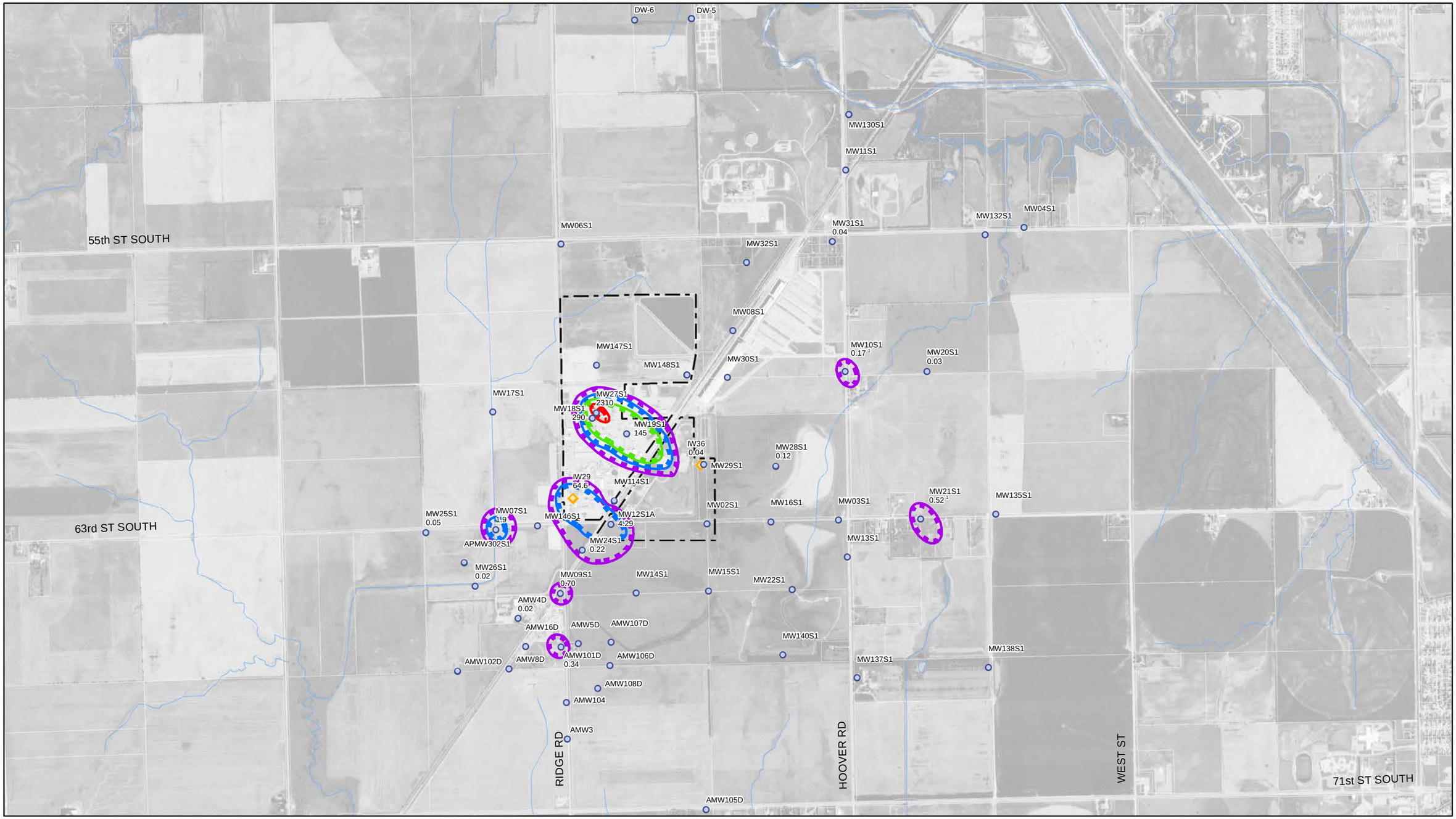
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

MAY 2017 CARBON TETRACHLORIDE ISOCONCENTRATION CONTOURS IN S2/S3 GROUNDWATER

11137148-D2310F
Jul 13, 2017

FIGURE 9

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA009.mxd



Source: USA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas
South FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Approximate Site Boundary

[1] Sample Collected on 7-19-17

Isoconcentration (ug/l) *Only detected concentrations are shown

0.14 1.0 100 1000

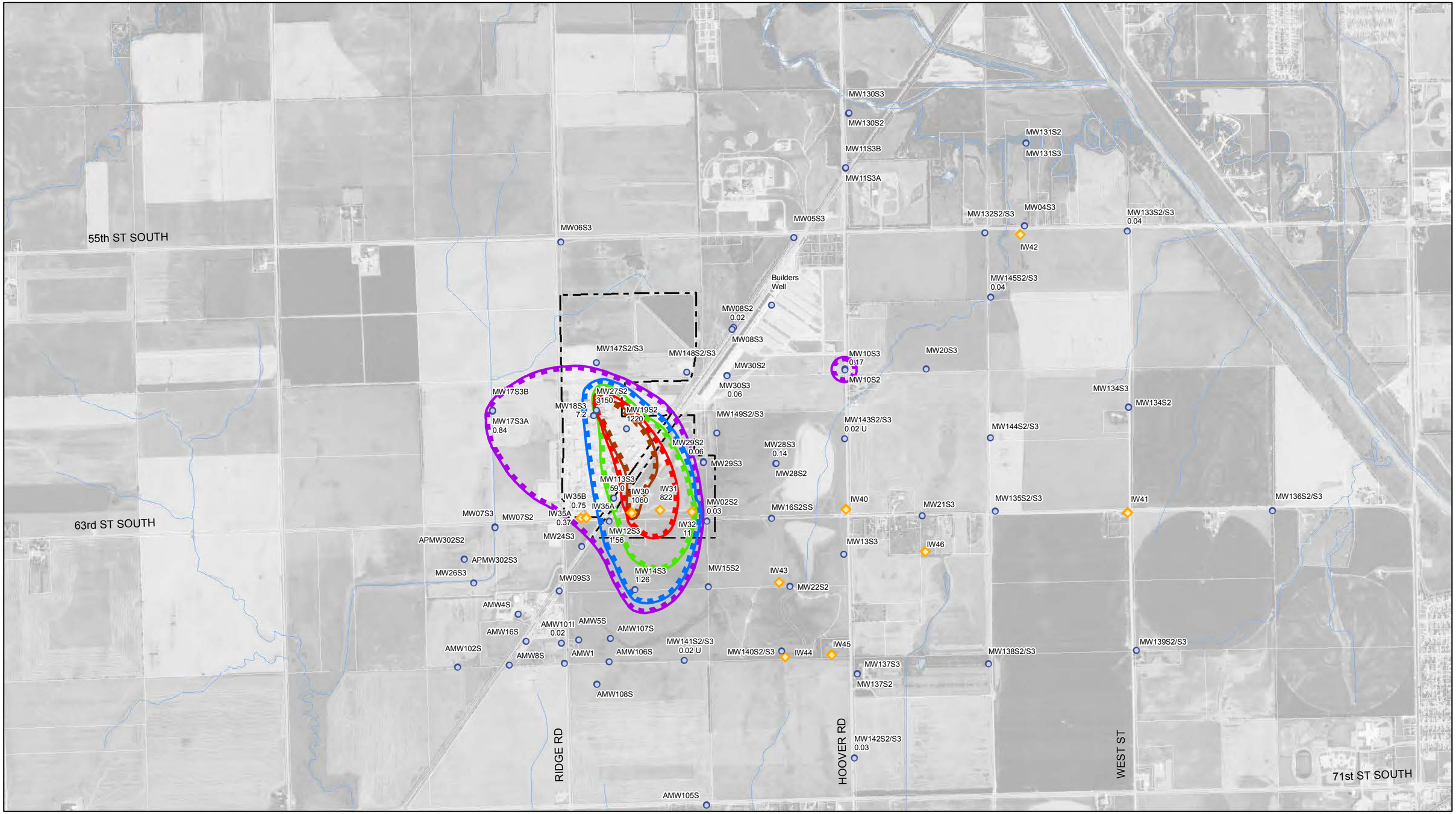
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

MAY 2017 HEXACHLOROBUTADIENE ISOCONCENTRATION CONTOURS IN S1 GROUNDWATER

11137148-D2310F
Jul 24, 2017

FIGURE 10

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA010.mxd



Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Approximate Site Boundary

Isoconcentration (ug/l) *Only detected concentrations are shown

0.14 1.0 10 100 1000

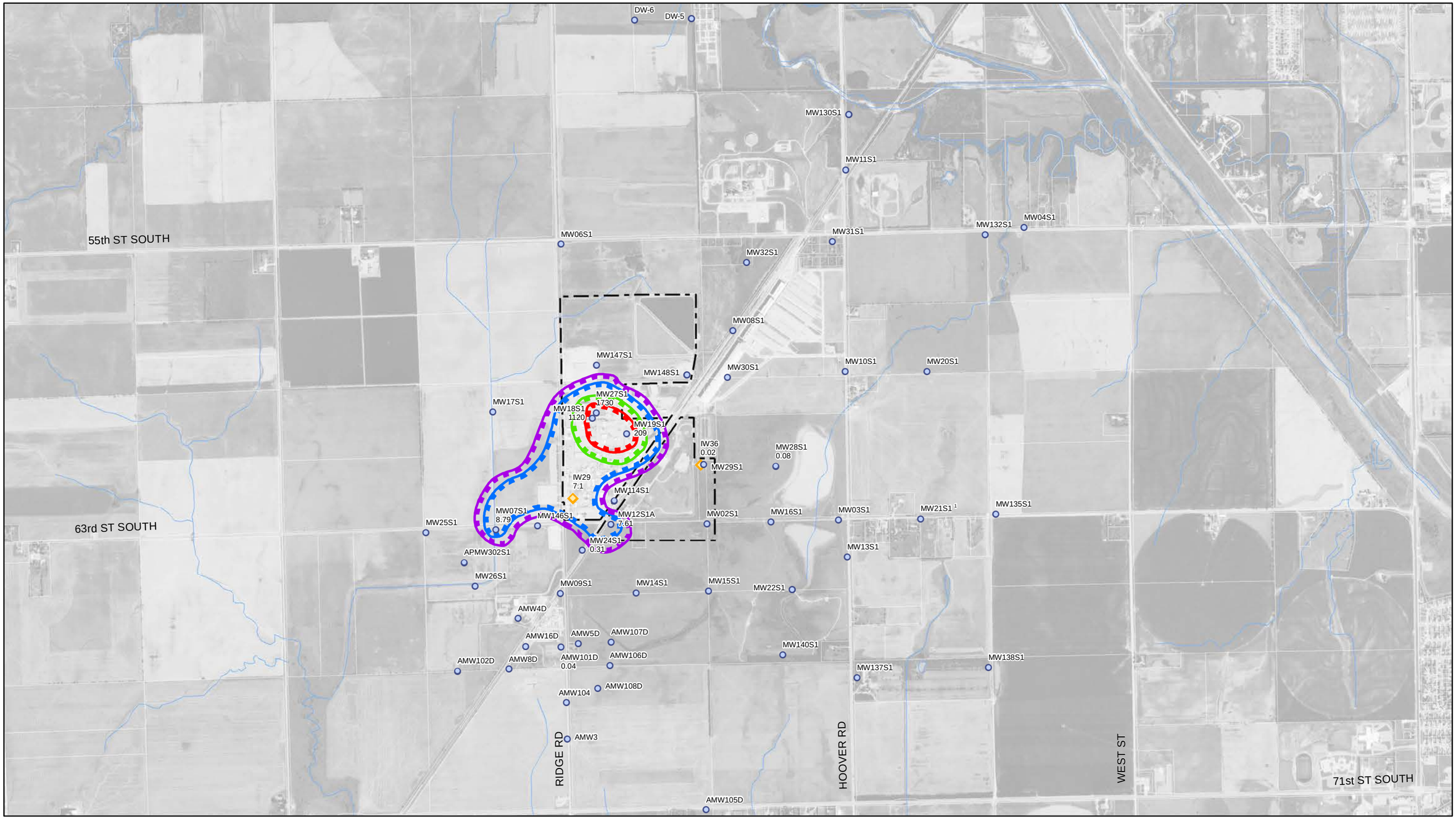
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

MAY 2017 HEXACHLOROBUTADIENE ISOCONCENTRATION CONTOURS IN S2/S3 GROUNDWATER

11137148-D2310F
Jul 13, 2017

FIGURE 11

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA011.mxd



Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas
South FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Approximate Site Boundary

[1] Sample Collected on 7-19-17

Isoconcentration (ug/l) *Only detected concentrations are shown

0.33 1.0 10 100

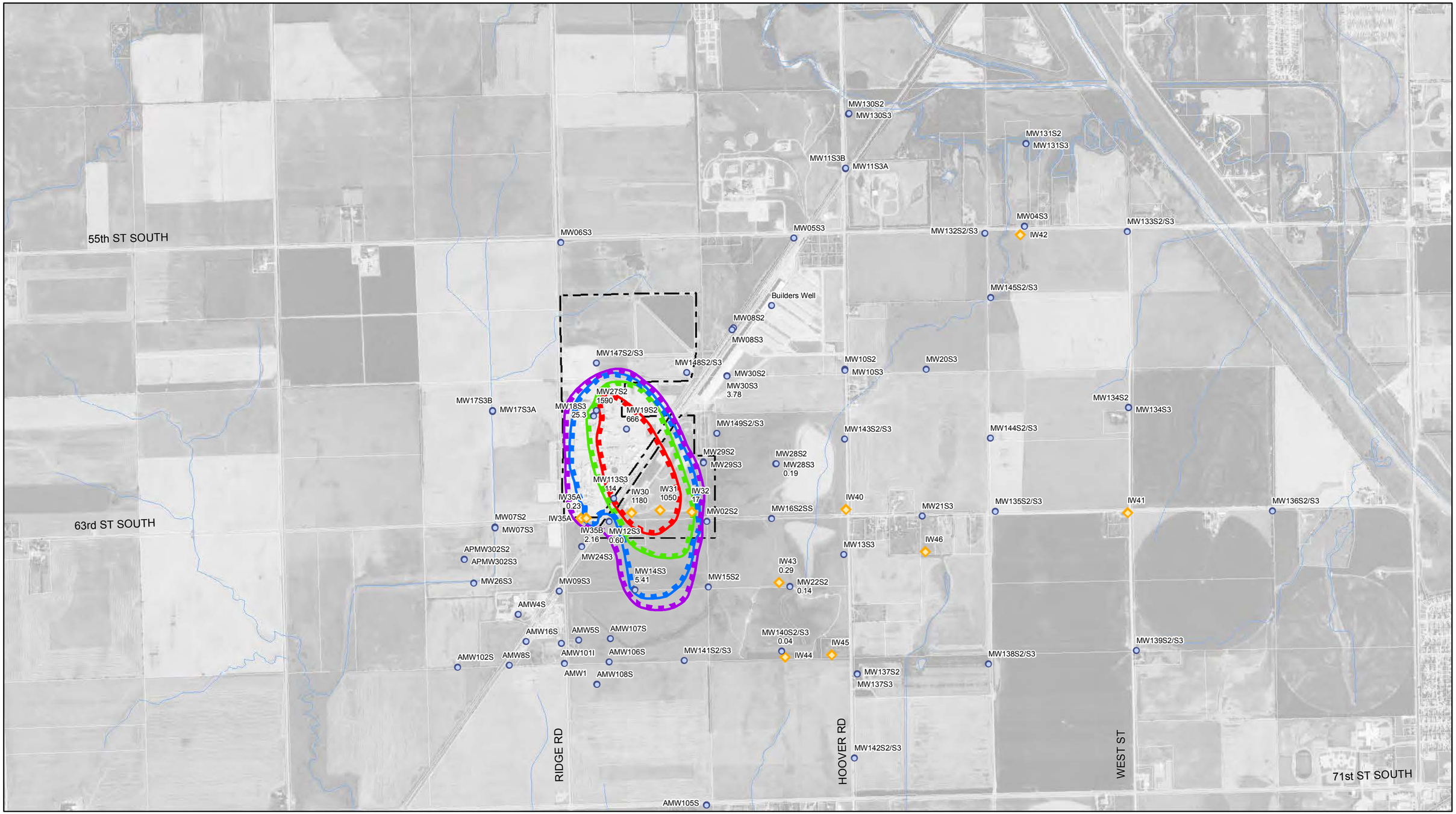
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

MAY 2017 HEXACHLOROETHANE ISOCONCENTRATION CONTOURS IN S1 GROUNDWATER

11137148-D2310F
Jul 24, 2017

FIGURE 12

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA012.mxd



Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Approximate Site Boundary

Isoconcentration (ug/l) *Only detected concentrations are shown

0.33 1.0 10 100

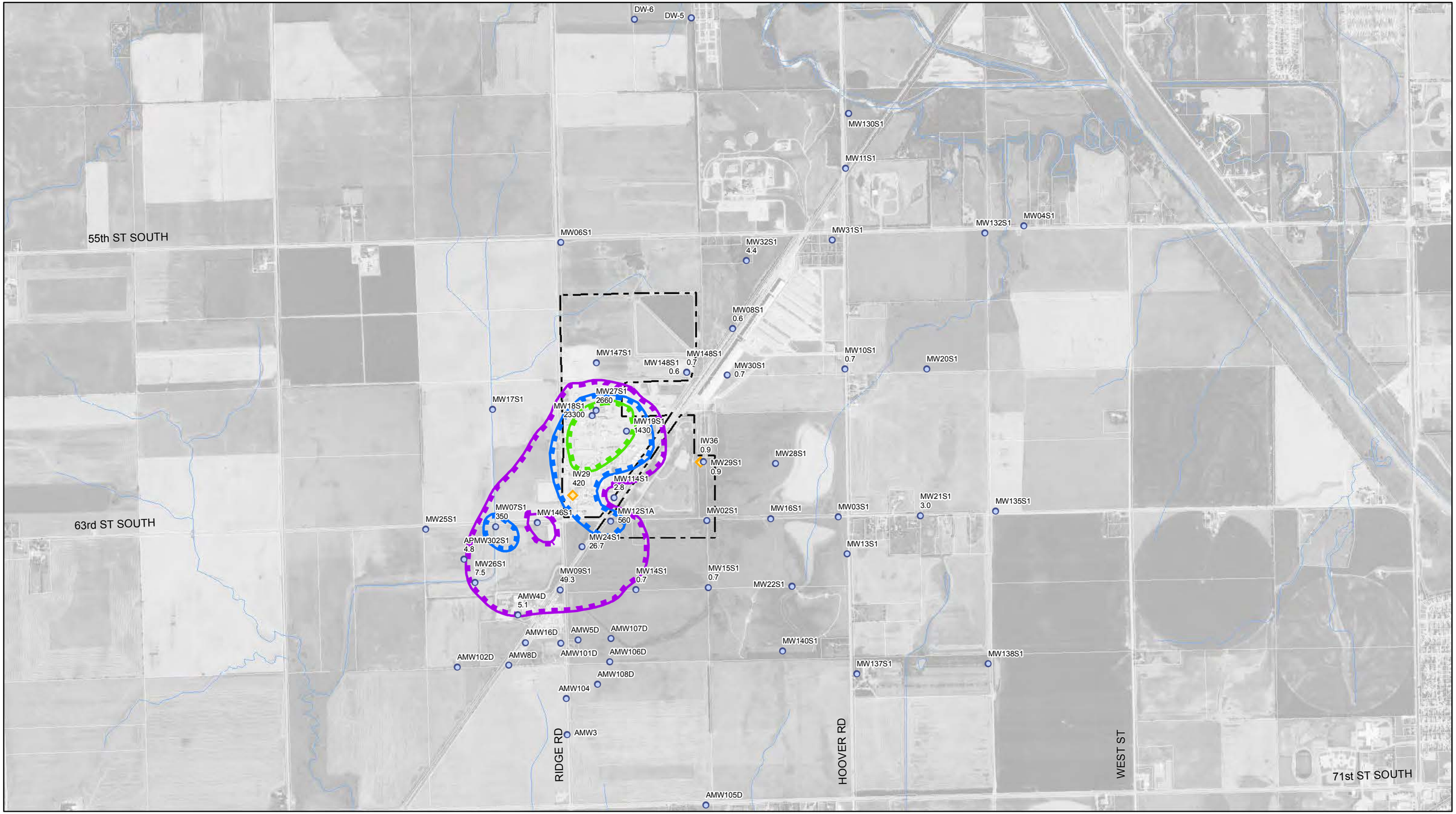
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

MAY 2017 HEXACHLOROETHANE ISOCONCENTRATION CONTOURS IN S2/S3 GROUNDWATER

11137148-D2310F
Jul 13, 2017

FIGURE 13

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA013.mxd



Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Approximate Site Boundary

Isoconcentration (ug/l) *Only detected concentrations are shown

5.0 100 1000

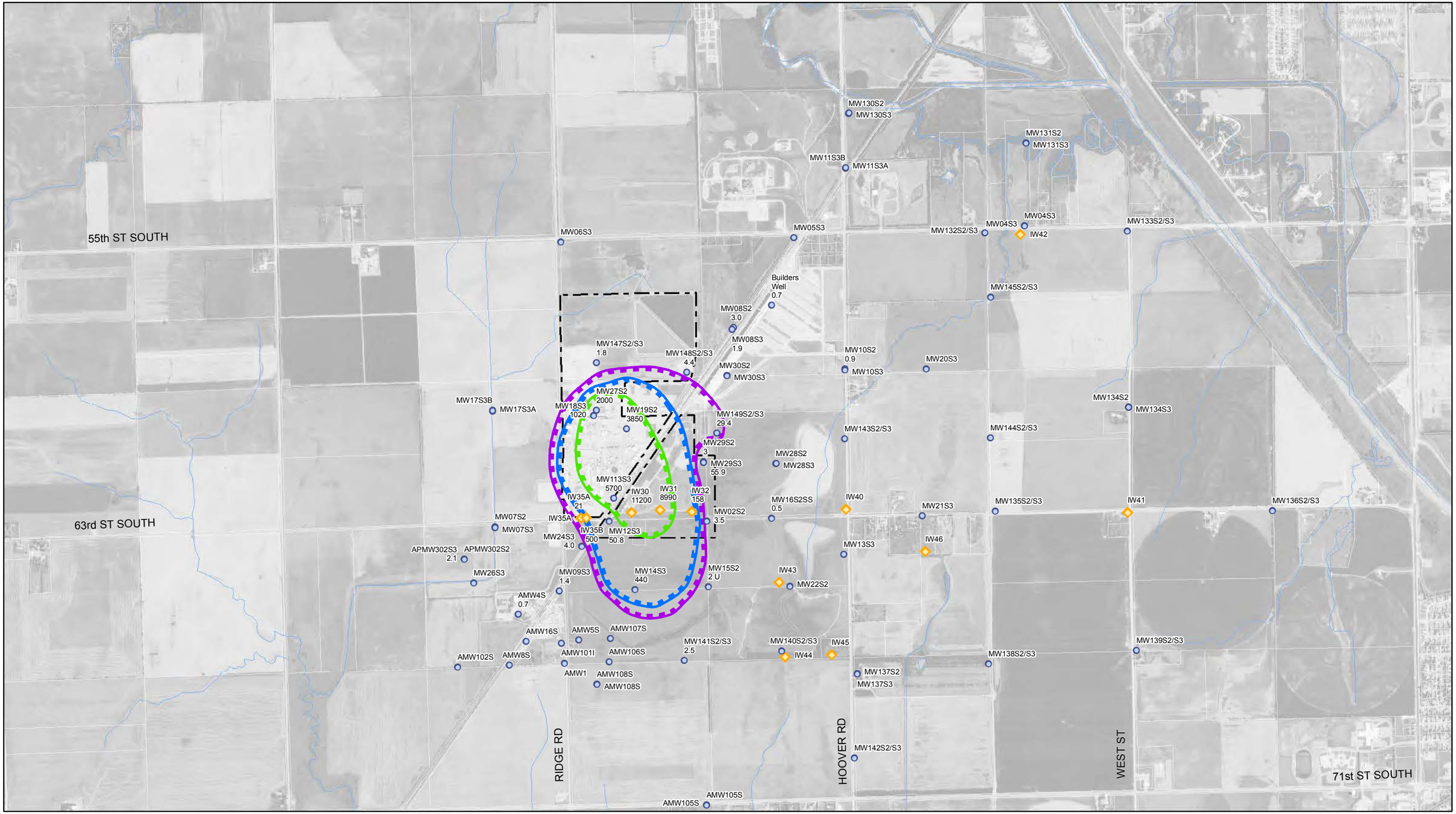
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

MAY 2017 PERCHLOROETHYLENE ISOCONCENTRATION CONTOURS IN S1 GROUNDWATER

11137148-D2310F
Jul 13, 2017

FIGURE 14

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA014.mxd



Source: USDA NAIP 2010

0 500 1,000 1,500
Feet

Coordinate System:
NAD 1983 StatePlane Kansas South
FIPS 1502 Feet

Legend

- Monitoring Well
- Interceptor Well
- Approximate Site Boundary

Isoconcentration (ug/l) *Only detected concentrations are shown

5.0 100 1000

OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS

MAY 2017 PERCHLOROETHYLENE ISOCONCENTRATION CONTOURS IN S2/S3 GROUNDWATER

11137148-D2310F
Jul 13, 2017

FIGURE 15

GIS File: Q:\GIS\PROJECTS\11137000s\11137148\Layouts\004\11137148-D2310F(004)GIS-WA015.mxd

Tables

Table 1
Groundwater Monitoring Schedule
Occidental Chemical Corporation
Wichita, Kansas

Year	Spring	Fall
2015	Biennial[1]	Semi-Annual[2]
2016	Annual[3]	Semi-Annual
2017	Biennial	Semi-Annual
2018	Annual	Semi-Annual
2019	Biennial	Semi-Annual

Notes:

1 A "Bienniel Event" as set out by “Sampling and Analysis Plan Routine Groundwater Sampling Plan RCRA Corrective Action Program” March 9, 2012.
2 A "Semi-Annual Event" as set out by “Sampling and Analysis Plan Routine Groundwater Sampling Plan RCRA Corrective Action Program” March 9, 2012.
3 An "Annual Event" as set out by “Sampling and Analysis Plan Routine Groundwater Sampling Plan RCRA Corrective Action Program” March 9, 2012.

Table 2
Summary of Monitoring Well Construction Data
Occidental Chemical Corporation
Wichita, Kansas

Well Identifier	Installation Date	Sand Unit	Northing	Easting	Top of Casing Elevation (ft AMSL)[1]	Total Depth (ft BGS)[2]	Diameter (inches)	Top of Screen (ft BGS)	Base of Screen (ft BGS)
IW29[3]	12/23/1991	S1	1646614.5773	1623873.5307	1309.48	111.00	16.00	95.0	105.0
IW30	11/2/2011	S2/S3	1646288.5656	1624972.7905	1315.25	74.00	16.00	61.0	71.0
IW31	10/11/1977	S2/S3	1646341.5296	1625508.7554	1315.47	77.00	16.00	58.0	74.0
IW32	1/6/2011	S2/S3	1646307.7216	1626100.5395	1313.78	77.00	16.00	61.0	76.0
IW35A	6/28/1983	S2/S3	1646187.1026	1624027.9391	1309.06	74.00	16.00	52.5	72.5
IW35B	12/3/1996	S2/S3	1646190.9950	1624126.9233	1309.08	70.00	16.00	46.0	66.0
IW36	6/23/2003	S1	1647232.5176	1626263.8998	1309.15	101.00	12.00	91.0	101.0
IW40	3/4/2003	S2/S3	1646522.7287	1629150.9634	1306.77	83.00	12.00	73.0	83.0
IW41	2/18/2003	S2/S3	1646289.0136	1634262.7012	1303.07	58.00	12.00	48.0	58.0
IW42	2/20/2003	S2/S3	1651492.9999	1632247.8862	1295.27	54.00	12.00	39.0	54.0
IW43	3/23/2011	S2/S3	1644982.4160	1627737.0289	1305.93	82.50	16.00	62.0	82.0
IW44	3/30/2011	S2/S3	1643587.8118	1627849.1557	1304.84	80.00	16.00	59.0	79.0
IW45	7/23/2013	S2/S3	1643632.5476	1628718.2241	1306.22	76.00	16.00	56.0	71.0
IW46	7/23/2013	S2/S3	1645561.5328	1630475.1832	1300.26	71.00	16.00	53.5	66.0
MW02S1	10/5/1983	S1	1646139.1092	1626385.8231	1306.54	101.20	2.00	85.0	95.0
MW02S2	10/5/1983	S2/S3	1646131.7673	1626385.0749	1306.93	65.00	2.00	45.0	65.0
MW03S1	3/3/1977	S1	1646209.7470	1628847.2777	1306.87	105.33	6.00	89.7	99.7
MW04S1	2/21/1991	S2/S3	1651654.5063	1632319.5291	1290.96	65.80	2.00	51.5	61.5
MW04S3	3/3/1977	S2/S3	1651653.8914	1632330.3734	1291.17	35.00	2.00	25.0	35.0
MW05S3	3/3/1977	S2/S3	1651434.4841	1628016.5404	1302.42	47.60	6.00	37.5	47.5
MW05S4	2/15/1991	S4	1651423.9004	1628011.8282	1301.37	24.00	2.00	17.0	24.0
MW06BR	NA[4]	BR	1651319.0266	1623652.8980	1310.34	NA	6.00	NA	NA
MW06S1	3/3/1977	S1	1651343.5609	1623650.5457	1310.88	100.00	6.00	76.0	86.0
MW06S3	3/3/1977	S2/S3	1651353.9237	1623649.2436	1310.77	60.00	6.00	50.0	60.0
MW07S1	2/15/1991	S1	1646029.1244	1622430.9461	1307.52	114.00	2.00	106.0	111.0
MW07S2	3/3/1977	S2/S3	1646020.2484	1622422.0335	1306.33	86.50	6.00	76.5	86.5
MW07S3	3/3/1977	S2/S3	1646008.4935	1622423.1202	1306.39	61.00	6.00	51.0	61.0
MW08S1	9/28/1983	S1	1649732.9124	1626869.4397	1307.43	106.00	2.00	97.0	102.0
MW08S2	2/14/1991	S2/S3	1649758.7278	1626888.7447	1307.71	84.00	2.00	72.0	82.0
MW08S3	3/3/1977	S2/S3	1649715.5916	1626857.1997	1308.44	58.40	6.00	48.3	58.3
MW08S4	1/8/1990	S4	1649744.7673	1626877.2577	1307.50	35.00	2.00	24.7	34.7
MW09S1	9/29/1983	S1	1644843.9759	1623638.6623	1307.15	115.00	2.00	100.0	110.0
MW09S3	3/3/1977	S2/S3	1644826.3195	1623625.6479	1307.04	82.60	6.00	72.5	82.5
MW09S4	4/28/1988	S4	1644854.2437	1623645.9475	1308.57	41.50	2.00	36.5	41.5

Table 2
Summary of Monitoring Well Construction Data
Occidental Chemical Corporation
Wichita, Kansas

Well Identifier	Installation Date	Sand Unit	Northing	Easting	Top of Casing Elevation (ft AMSL)[1]	Total Depth (ft BGS)[2]	Diameter (inches)	Top of Screen (ft BGS)	Base of Screen (ft BGS)
MW10S1	2/9/1991	S1	1648975.7830	1628969.7898	1299.25	107.00	2.00	93.0	107.0
MW10S2	3/3/1977	S2/S3	1648985.4337	1628970.4195	1298.59	68.00	2.00	58.0	68.0
MW10S3	3/3/1977	S2/S3	1648962.4567	1628968.2457	1298.84	45.70	2.00	35.7	45.7
MW11S1	2/6/1991	S1	1652728.0849	1628981.0026	1290.94	84.80	2.00	70.5	80.5
MW11S3A	3/3/1977	S2/S3	1652735.6273	1628980.5640	1291.35	55.00	6.00	45.0	55.0
MW11S3B	3/3/1977	S4	1652746.6358	1628981.1088	1290.82	35.00	6.00	25.0	35.0
MW12S1A	3/3/1977	S1	1646131.0019	1624584.3919	1310.00	100.00	2.00	81.9	91.9
MW12S3	10/4/1983	S2/S3	1646130.5595	1624560.0619	1308.26	70.00	6.00	46.0	66.0
MW13S1	1/9/1990	S1	1645518.7911	162010.0824	1304.34	111.50	2.00	99.0	109.0
MW13S3	3/3/1977	S2/S3	1645509.9341	1628974.9501	1308.01	68.73	6.00	54.1	64.1
MW14S1	10/28/1987	S1	1644848.7658	1625061.3014	1310.46	102.00	2.00	92.0	102.0
MW14S3	10/28/1987	S2/S3	1644847.9489	1625040.7124	1308.54	72.00	2.00	62.0	72.0
MW15S1	10/28/1987	S1	1644891.0400	1626416.3200	1306.48	100.00	2.00	88.0	98.0
MW15S2	10/28/1987	S2/S3	1644899.7421	1626415.4886	1305.98	74.00	2.00	64.0	74.0
MW15S4	4/28/1988	S4	1644909.7566	1626415.2803	1307.97	40.00	2.00	33.0	38.0
MW16BR	2/9/1990	BR	1646182.1112	1627725.6715	1305.07	148.00	2.00	123.0	138.0
MW16S1A	1/11/2002	S1	1646177.5404	1627582.1846	1306.67	100.00	2.00	92.0	97.0
MW16S2SS	10/28/1987	S2/S3	1646179.5445	1627598.1963	1305.95	80.00	2.00	70.0	80.0
MW16S4R	3/19/2013	S4	1646180.2694	1627611.4298	1306.89	40.00	2.00	35.0	40.0
MW17S1	12/19/1989	S1	1648220.7403	1622376.1826	1307.16	119.00	2.00	101.0	118.0
MW17S3A	12/20/1989	S2/S3	1648184.2818	1622376.6061	1307.31	83.00	2.00	67.5	80.0
MW17S3B	12/19/1989	S2/S3	1648202.9058	1622377.2311	1307.08	58.00	2.00	38.0	55.0
MW18S1	1/23/1990	S1	1648105.7148	1624237.4907	1308.25	103.00	2.00	93.0	103.0
MW18S3	1/26/1990	S2/S3	1648105.1881	1624265.6371	1309.17	66.00	2.00	54.3	64.3
MW18S4	1/24/1990	S4	1648105.7518	1624252.0773	1309.20	34.30	2.00	29.3	34.3
MW19S1	1/13/1990	S1	1647815.7833	1624880.7948	1310.34	104.00	2.00	89.0	104.0
MW19S2	1/15/1990	S2/S3	1647859.3862	1624883.6544	1310.26	83.00	2.00	73.0	83.0
MW19S3	1/16/1990	S2/S3	1647843.7556	1624882.2868	1310.54	55.00	2.00	45.0	55.0
MW19S4	1/14/1990	S4	1647828.7725	1624881.2817	1310.01	35.74	2.00	30.7	35.7
MW20S1	1/28/1990	S1	1648978.2720	1630500.9935	1305.81	101.00	2.00	84.5	99.5
MW20S3	1/28/1990	S2/S3	1648977.7447	1630490.8299	1305.45	67.00	2.00	57.0	67.0
MW21S1	1/14/1990	S1	1646234.9591	1630382.1006	1299.58	108.00	2.00	98.2	108.2
MW21S3	1/15/1990	S2/S3	1646234.5347	1630417.1166	1299.26	58.25	2.00	48.3	58.3
MW21S4R	3/20/2013	S4	1646236.1340	1630443.1464	1299.99	37.50	2.00	27.5	37.5

Table 2
Summary of Monitoring Well Construction Data
Occidental Chemical Corporation
Wichita, Kansas

Well Identifier	Installation Date	Sand Unit	Northing	Easting	Top of Casing Elevation (ft AMSL)[1]	Total Depth (ft BGS)[2]	Diameter (inches)	Top of Screen (ft BGS)	Base of Screen (ft BGS)
MW22S1	1/5/1990	S1	1644911.0683	1627980.2105	1304.12	111.00	2.00	96.0	111.0
MW22S2	1/6/1990	S2/S3	1644912.2625	1627942.2812	1304.55	85.00	2.00	70.0	85.0
MW22S4	1/5/1990	S4	1644911.9911	1627960.3841	1304.16	36.00	2.00	26.0	36.0
MW23BR	NA	BR	1645711.4736	1625167.8070	1309.67	NA	2.00	NA	NA
MW24S1	6/3/1990	S1	1645650.6212	1624052.7606	1309.32	100.00	2.00	87.3	97.3
MW24S3	6/4/1990	S2/S3	1645659.2857	1624044.5251	1308.22	67.50	2.00	56.0	66.0
MW24S4	6/5/1990	S4	1645658.9513	1624056.3458	1308.73	40.40	2.00	31.5	36.5
MW25S1	4/13/1993	S1	1645974.6016	1621124.8449	1311.63	120.00	2.00	107.0	117.0
MW26S1	4/16/1993	S1	1644978.9381	1622044.1862	1308.74	116.00	2.00	101.0	111.0
MW26S3	5/27/1993	S2/S3	1644976.3579	1622025.5931	1308.93	60.00	2.00	49.0	59.0
MW27S1	8/16/1977	S1	1648205.2650	1624309.9120	1309.23	109.00	6.00	97.0	107.0
MW27S2	10/6/1977	S2/S3	1648206.8451	1624317.3679	1309.49	87.00	6.00	77.0	83.0
MW28S1	11/20/1996	S1	1647212.2402	1627674.8180	1309.34	108.50	2.00	93.0	108.0
MW28S2	11/20/1996	S2/S3	1647211.9419	1627679.5075	1309.44	84.00	2.00	74.0	84.0
MW28S3	11/20/1996	S2/S3	1647211.6087	1627684.4502	1309.51	63.00	2.00	53.0	63.0
MW29S1	11/20/1996	S1	1647239.8234	1626323.4393	1305.39	99.00	2.00	88.0	98.0
MW29S2	11/20/1996	S2/S3	1647244.7544	1626322.7595	1305.46	72.00	2.00	57.0	72.0
MW29S3	11/20/1996	S2/S3	164227.0676	1626325.1920	1306.58	55.50	2.00	44.0	54.0
MW30S1	11/20/1996	S1	1648862.2343	1626767.2155	1310.00	108.00	2.00	98.0	108.0
MW30S2	1/9/1997	S2/S3	1648858.1780	1626764.4302	1309.95	80.00	2.00	70.0	80.0
MW30S3	1/9/1997	S2/S3	1648854.3753	1626761.5076	1310.05	54.00	2.00	44.0	54.0
MW31S1	11/20/1996	S1	1651390.6746	1628731.9635	1298.06	92.00	2.00	77.0	92.0
MW32S1	11/20/1996	S1	1651001.7550	1627126.1190	1307.08	95.00	2.00	85.0	95.0
MW113S3	7/15/1971	S2/S3	1646564.4390	1624643.2299	1309.26	68.50	5.00	63.5	68.5
MW114S1	NA	S1	1646569.6097	1624646.5667	1308.98	NA	5.00	NA	NA
MW130S1	1/10/2002	S1	1653757.5609	1629036.0906	1284.92	73.00	2.00	55.0	70.0
MW130S2	1/10/2002	S2/S3	1653762.6188	1629039.5427	1284.95	44.00	2.00	38.0	43.0
MW130S3	1/10/2002	S2/S3	1653767.6449	1629042.4803	1284.89	35.00	2.00	25.0	35.0
MW131S2	12/12/2001	S2/S3	1653205.5649	1632360.1384	1281.73	55.00	2.00	47.5	51.5
MW131S3	12/13/2001	S2/S3	1653203.6153	1632357.5178	1281.49	45.00	2.00	40.0	45.0
MW132S1	12/10/2001	S1	1651520.6921	1631591.2567	1295.75	84.00	2.00	66.0	76.0
MW132S2/S3	12/12/2001	S2/S3	1651526.7527	1631591.8445	1295.87	50.50	2.00	35.0	50.0
MW133S2/S3	1/7/2002	S2/S3	1651557.5176	1634254.9850	1284.05	42.00	2.00	26.0	36.0
MW134S2	12/19/2001	S2/S3	1648258.3774	1634277.3954	1302.31	59.00	2.00	47.0	50.0

Table 2
Summary of Monitoring Well Construction Data
Occidental Chemical Corporation
Wichita, Kansas

Well Identifier	Installation Date	Sand Unit	Northing	Easting	Top of Casing Elevation (ft AMSL)[1]	Total Depth (ft BGS)[2]	Diameter (inches)	Top of Screen (ft BGS)	Base of Screen (ft BGS)
MW134S3	12/19/2001	S2/S3	1648264.6729	1634277.0804	1302.29	45.00	2.00	35.0	45.0
MW135S1	12/17/2001	S1	1646318.2233	1631790.5887	1302.60	104.00	2.00	95.0	100.0
MW135S2/S3	12/17/2001	S2/S3	1646317.6866	1631782.2204	1302.62	58.00	2.00	41.5	56.5
MW136S2/S3	1/8/2002	S2/S3	1646322.9370	1636971.8586	1287.43	51.00	2.00	30.0	45.0
MW137S1	12/31/2001	S1	1643270.2892	1629194.7957	1304.99	117.50	2.00	109.0	112.0
MW137S2	12/14/2001	S1	1643270.6855	1629198.5363	1304.92	103.00	2.00	95.0	102.0
MW137S3	12/14/2001	S2/S3	1643271.5196	1629202.8418	1304.88	81.00	2.00	60.0	80.0
MW138S1	12/16/2001	S2/S3	1643464.7015	1631653.7121	1298.82	89.00	2.00	74.5	84.5
MW138S2/S3	12/16/2001	S2/S3	1643458.2501	1631655.6947	1298.83	61.00	2.00	50.0	60.0
MW139S2/S3	1/9/2002	S2/S3	1643717.4133	1634428.0369	1299.13	63.00	2.00	38.5	53.5
MW140S1	4/13/2010	S2/S3	1643699.7696	1627805.3267	1304.95	98.50	2.00	87.5	93.5
MW140S2/S3	4/15/2010	S2/S3	1643699.4730	1627787.0997	1304.76	79.00	2.00	69.0	79.0
MW141S2/S3	3/18/2011	S2/S3	1643528.2929	1625965.0799	1307.86	90.00	2.00	79.0	89.0
MW142S2/S3	3/20/2011	S2/S3	1641701.6139	1629148.8546	1297.03	90.00	2.00	72.0	82.0
MW143S2/S3	3/20/2011	S2/S3	1647670.1598	1628967.4074	1300.32	75.00	2.00	63.0	68.0
MW144S2/S3	3/22/2011	S2/S3	1647692.5703	1631690.1246	1303.64	65.00	2.00	47.0	57.0
MW145S2/S3	3/21/2011	S2/S3	1650322.9712	1631696.7776	1291.12	60.00	2.00	48.0	53.0
MW146S1	9/25/2014	S1	1646099.1200	1623215.3800	1306.30	108.00	2.00	91.0	101.0
MW147S1	9/22/2014	S1	1649092.3000	1624318.6700	1309.96	105.00	2.00	96.0	101.0
MW147S2/S3	9/22/2014	S2/S3	1649098.6900	1624318.7600	1310.11	55.00	2.00	42.0	52.0
MW148S1	9/23/2014	S1	1648914.9300	1626008.2400	1309.94	105.00	2.00	91.0	101.0
MW148S2/S3	9/23/2014	S2/S3	1648920.7600	1626007.2800	1309.96	60.00	2.00	50.0	60.0
MW149S2/S3	9/22/2014	S2/S3	1647781.6100	1626575.8800	1305.53	55.00	2.00	41.0	51.0
Abbott Monitoring Wells									
AMW1	9/26/1979	S2/S3	1643473.2174	1623720.6995	1307.77	82.00	5.26	63.0	78.0
AMW3	9/27/1979	S1/S2	1642132.4650	1623772.8753	1308.25	128.00	5.00	64.0	124.0
AMW4D	9/27/1979	S1	1644375.0091	1622848.6438	1309.27	107.00	5.26	83.0	103.0
AMW4S	9/27/1979	S2/S3	1644385.0229	1622852.0093	1309.17	75.92	5.26	52.0	72.0
AMW5D	9/28/1979	S1	1643908.4946	1623976.6203	1307.57	97.50	5.26	84.0	97.0
AMW5S	9/28/1979	S2/S3	1643908.6536	1623986.4754	1307.50	79.80	5.26	NA	NA
AMW8D	9/26/1979	S1	1643433.8532	1622679.7084	1307.74	123.00	5.26	99.0	119.0
AMW8S	9/26/1979	S2/S3	1643434.9098	1622690.2400	1307.70	83.00	5.26	58.0	78.0
AMW16D	9/25/1979	S1	1643859.7111	1622989.4302	1308.97	109.49	6.00	NA	NA

Table 2
Summary of Monitoring Well Construction Data
Occidental Chemical Corporation
Wichita, Kansas

Well Identifier	Installation Date	Sand Unit	Northing	Easting	Top of Casing Elevation (ft AMSL)[1]	Total Depth (ft BGS)[2]	Diameter (inches)	Top of Screen (ft BGS)	Base of Screen (ft BGS)
AMW16S	9/25/1979	S2/S3	1643878.9725	1623005.1842	1309.02	76.20	6.00	NA	NA
AMW101D	10/25/1983	S2/S3	1643848.2130	1623649.3170	1306.17	108.00	4.25	71.0	92.0
AMW101I	10/25/1983	S2/S3	1643849.1330	1623662.1740	1306.26	60.18	4.25	NA	NA
AMW101S	10/25/1983	S4	1643849.7540	1623675.5450	1306.31	46.20	4.25	NA	NA
AMW102D	10/28/1983	S1	1643395.1918	1621714.7922	1310.40	147.00	4.25	96.0	110.0
AMW102S	10/28/1983	S2/S3	1643395.5966	1621722.1890	1310.31	NA	4.25	44.0	58.0
AMW104	11/20/1983	S1/S2/S3	1642807.4030	1623754.9999	1306.09	114.50	4.25	49.0	106.0
AMW105D	12/5/1983	S1/S2	1640818.1214	1626369.6145	1300.31	113.00	5.26	80.0	111.0
AMW105S	12/5/1983	S2/S3	1640818.1818	1626379.9679	1300.10	55.00	5.26	NA	NA
AMW106D	5/6/1991	S1	1643499.5249	1624567.5992	1307.16	100.00	2.00	83.3	98.3
AMW106S	5/7/1991	S2/S3	1643499.8552	1624556.6769	1306.93	75.00	2.00	47.9	72.9
AMW107D	5/11/1991	S1	1643936.3312	1624590.2942	1305.66	103.00	2.00	91.9	101.9
AMW107S	5/14/1991	S2/S3	1643936.3870	1624579.4246	1305.64	72.00	2.00	46.3	71.3
AMW108D	9/26/1991	S1	1643076.9529	1624341.3298	1307.13	106.00	2.00	84.0	104.0
AMW108S	9/27/1991	S2/S3	1643076.0621	1624330.3861	1307.34	70.00	2.00	47.0	67.0
APMW302S1	9/12/1997	S1	1645416.7424	1621838.5251	1307.93	124.00	6.00	114.0	124.0
APMW302S2	9/12/1997	S2/S3	1645423.9800	1621844.7084	1307.98	105.50	6.00	95.5	105.5
APMW302S3	9/12/1997	S2/S3	1645415.8025	1621849.2904	1307.74	85.00	6.00	75.0	85.0
Piezometers									
PZ40A	4/12/2010	S2/S3	1646372.2820	1628985.5631	1305.68	78.00	1.00	73.0	78.0
PZ40B	4/13/2010	S2/S3	1646363.6676	1628905.8973	1305.36	78.00	1.00	73.0	78.0
PZ40C	4/13/2010	S2/S3	1646152.4257	1628942.4778	1305.81	74.00	1.00	69.0	74.0
PZ41A	4/14/2010	S2/S3	1646273.1772	1634243.9014	1301.91	56.00	1.00	51.0	56.0
PZ41B	4/14/2010	S2/S3	1646211.2672	1634263.4534	1301.74	56.00	1.00	51.0	56.0
PZ41C	4/14/2010	S2/S3	1646164.9105	1634106.9346	1303.67	55.00	1.00	50.0	55.0
PZ42A	4/15/2010	S2/S3	1651492.6366	1632272.3917	1294.95	48.00	1.00	43.0	48.0
PZ42B	4/15/2010	S2/S3	1651537.6451	1632188.7724	1292.29	50.00	1.00	45.0	50.0
PZ43A	3/15/2011	S2/S3	1645037.3334	1627757.1290	1306.00	85.00	2.00	69.0	79.0
PZ44A	3/15/2011	S2/S3	1643595.3890	1627857.2728	1303.57	75.00	2.00	63.0	73.0
PZ44B	3/18/2011	S2/S3	1643607.8916	1627850.5864	1303.93	75.00	2.00	63.0	73.0
PZ44C	3/17/2011	S2/S3	1643623.2075	1627860.9680	1303.75	75.00	2.00	63.0	73.0
PZ44D	3/17/2011	S2/S3	1643603.7984	1627817.1685	1303.38	75.00	2.00	63.0	73.0
PZ45A	7/25/2013	S2/S3	1643605.6002	1628703.7746	1306.68	76.00	1.00	65.0	70.0

Table 2
Summary of Monitoring Well Construction Data
Occidental Chemical Corporation
Wichita, Kansas

Well Identifier	Installation Date	Sand Unit	Northing	Easting	Top of Casing Elevation (ft AMSL)[1]	Total Depth (ft BGS)[2]	Diameter (inches)	Top of Screen (ft BGS)	Base of Screen (ft BGS)
PZ45B	7/25/2013	S2/S3	1643759.1020	1628716.0399	1306.81	76.00	1.00	65.0	70.0
PZ46A	7/25/2013	S2/S3	1645547.3525	1630447.8928	1300.75	71.00	1.00	60.0	65.0
PZ46B	7/25/2013	S2/S3	1645682.3903	1630432.8191	1300.26	71.00	1.00	56.0	61.0

Notes:

Top of casing elevations resurveyed in 2010.

The following wells were surveyed and/or resurveyed in October 2013: AMW101D, AMW101I, AMW101S, MW16S4R, MW21S4R, PZ45A, PZ45B, PZ46A, PZ46B, IW45, and IW46.

The following wells were surveyed and/or resurveyed in November 2014: MW146S1, MW147S1, MW147S2/S3, MW148S1, MW148S2/S3, MW149S2/S3, and MW15S1.

[1] ft AMSL - feet above mean sea level

[2] ft BGS - feet below ground surface

[3] IW - interceptor well

[4] NA - not available

Table 3
Summary of Groundwater Elevations - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Well Identifier	Sand Unit	Date	Time	Reference Elevation (Ft AMSL)[1]	Depth to Water (ft BTOC)[2]	Groundwater Elelvation (ft AMSL)
AMW1	S2/S3	5/2/2017	9:50	1307.77	50.38	1257.39
AMW101D	S2/S3	5/2/2017	11:05	1306.17	48.51	1257.66
AMW101I	S2/S3	5/2/2017	11:15	1306.26	48.36	1257.9
AMW101S	S4	5/2/2017	11:25	1306.31	34.39	1271.92
AMW102D	S1	5/2/2017	8:20	1310.4	52.32	1258.08
AMW102S	S2/S3	5/2/2017	8:10	1310.31	51.95	1258.36
AMW104	S1/S2/S3	5/2/2017	12:50	1306.09	48.45	1257.64
AMW105D	S1/S2	5/2/2017	13:50	1300.31	44.29	1256.02
AMW105S	S2/S3	5/2/2017	14:20	1300.1	44.1	1256
AMW106D	S1	5/2/2017	16:40	1307.16	49.75	1257.41
AMW106S	S2/S3	5/2/2017	16:10	1306.93	49.75	1257.18
AMW107D	S1	5/1/2017	17:15	1305.66	48.4	1257.26
AMW107S	S2/S3	5/1/2017	17:10	1305.64	48.8	1256.84
AMW108D	S1	5/3/2017	10:10	1307.13	49.7	1257.43
AMW108S	S2/S3	5/3/2017	10:05	1307.34	49.91	1257.43
AMW16D	S1	5/3/2017	9:25	1308.97	50.61	1258.36
AMW16S	S2/S3	5/3/2017	9:10	1309.02	50.75	1258.27
AMW3	S1/S2	5/2/2017	12:35	1308.25	50.66	1257.59
AMW4D	S1	5/3/2017	8:55	1309.27	50.75	1258.52
AMW4S	S2/S3	5/3/2017	8:45	1309.17	50.65	1258.52
AMW5D	S1	5/1/2017	16:45	1307.57	49.92	1257.65
AMW5S	S2/S3	5/1/2017	16:15	1307.5	49.95	1257.55
AMW8D	S1	5/3/2017	9:55	1307.74	49.56	1258.18
AMW8S	S2/S3	5/3/2017	9:45	1307.7	49.22	1258.48
APMW302S1	S1	5/1/2017	15:05	1307.93	49.14	1258.79
APMW302S2	S2/S3	5/1/2017	15:10	1307.98	49.28	1258.7
APMW302S3	S2/S3	5/1/2017	15:20	1307.74	49.03	1258.71
IW29	S1	1309.48	--	--	--	--
IW30	S2/S3	1315.25	--	--	--	--
IW31	S2/S3	1315.47	--	--	--	--
IW32	S2/S3	1313.78	--	--	--	--
IW35A	S2/S3	1309.06	--	--	--	--
IW35B	S2/S3	1309.08	--	--	--	--
IW36	S1	1309.15	--	--	--	--
IW40	S2/S3	1306.77	--	--	--	--
IW41	S2/S3	1303.07	--	--	--	--
IW42	S2/S3	1295.27	--	--	--	--
IW43	S2/S3	1305.93	--	--	--	--
IW44	S2/S3	1304.84	--	--	--	--
IW45	S2/S3	1306.22	--	--	--	--
IW46	S2/S3	1300.26	--	--	--	--
MW02S1	S1	5/2/2017	17:00	1306.54	56.55	1249.99

Table 3
Summary of Groundwater Elevations - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Well Identifier	Sand Unit	Date	Time	Reference Elevation (Ft AMSL)[1]	Depth to Water (ft BTOC)[2]	Groundwater Elelvation (ft AMSL)
MW02S2	S2/S3	5/2/2017	17:30	1306.93	50.98	1255.95
MW03S1	S1	5/1/2017	14:45	1306.87	32.97	1273.9
MW04S1	S2/S3	5/1/2017	14:05	1290.96	30.6	1260.36
MW04S3	S2/S3	5/1/2017	14:15	1291.18	NA	--
MW05S3	S2/S3	5/2/2017	13:05	1302.43	39.61	1262.82
MW05S4	S4	5/2/2017	13:00	1301.38	DRY	--
MW06BR	BR	5/1/2017	15:36	1310.34	47.89	1262.45
MW06S1	S1	5/1/2017	15:34	1310.88	48.76	1262.12
MW06S3	S2/S3	5/1/2017	15:30	1310.78	46.5	1264.28
MW07S1	S1	5/2/2017	9:00	1307.52	58.93	1248.59
MW07S2	S2/S3	5/2/2017	8:50	1306.33	47.74	1258.59
MW07S3	S2/S3	5/2/2017	8:30	1306.39	48.18	1258.21
MW08S1	S1	5/2/2017	12:45	1307.44	48.45	1258.99
MW08S2	S2/S3	5/2/2017	12:30	1307.71	47.72	1259.99
MW08S3	S2/S3	5/2/2017	12:55	1308.44	47.37	1261.07
MW08S4	S4	5/2/2017	12:35	1307.51	Obstructed	--
MW09S1	S1	5/2/2017	9:15	1307.15	58.38	1248.77
MW09S3	S2/S3	5/2/2017	9:25	1307.04	49.59	1257.45
MW09S4	S4	5/2/2017	9:35	--	DRY	--
MW10S1	S1	5/1/2017	14:55	1299.25	39.63	1259.62
MW10S2	S2/S3	5/1/2017	15:10	1298.59	48.47	1250.12
MW10S3	S2/S3	5/1/2017	15:18	1298.84	32.16	1266.68
MW113S3	S2/S3	5/2/2017	13:55	1309.26	53.02	1256.24
MW114S1	S1	5/2/2017	14:10	1308.98	60.17	1248.81
MW11S1	S1	5/1/2017	15:45	1290.94	27.3	1263.64
MW11S3A	S2/S3	5/1/2017	15:55	1291.35	28.29	1263.06
MW11S3B	S2/S3	5/1/2017	16:05	1290.82	27.89	1262.93
MW12S1A	S1	7/1/2017	17:45	1310	61.43	1248.57
MW12S3	S2/S3	7/1/2017	18:20	1308.26	52.4	1255.86
MW130S1	S1	5/2/2017	8:10	1284.93	21.33	1263.6
MW130S2	S2/S3	5/2/2017	8:20	1284.95	21.09	1263.86
MW130S3	S2/S3	5/2/2017	8:28	1284.89	28.96	1255.93
MW131S2	S2/S3	5/2/2017	8:45	1281.73	20.4	1261.33
MW131S3	S2/S3	5/2/2017	8:55	1281.49	20.13	1261.36
MW132S1	S1	5/1/2017	16:30	1295.75	34.53	1261.22
MW132S2/S3	S2/S3	5/1/2017	16:45	1295.87	34.41	1261.46
MW133S2/S3	S2/S3	7/1/2017	14:25	1284.05	23.89	1260.16
MW134S2	S2/S3	5/2/2017	9:30	1302.31	44.05	1258.26
MW134S3	S2/S3	5/2/2017	9:42	1302.29	23.97	1278.32
MW135S1	S1	5/2/2017	9:55	1302.61	45.82	1256.79
MW135S2/S3	S2/S3	5/2/2017	10:00	1302.62	45.65	1256.97
MW136S2/S3	S2/S3	5/1/2017	14:35	1287.43	29.62	1257.81

Table 3
Summary of Groundwater Elevations - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Well Identifier	Sand Unit	Date	Time	Reference Elevation (Ft AMSL)[1]	Depth to Water (ft BTOC)[2]	Groundwater Elelvation (ft AMSL)
MW137S1	S1	5/2/2017	10:05	1304.99	49.55	1255.44
MW137S2	S2/S3	5/2/2017	10:10	1304.93	49.32	1255.61
MW137S3	S2/S3	5/2/2017	10:15	1304.88	49.47	1255.41
MW138S1	S2/S3	5/2/2017	10:20	1298.82	42.76	1256.06
MW138S2/S3	S2/S3	5/2/2017	10:25	1298.83	42.94	1255.89
MW139S2/S3	S2/S3	5/2/2017	10:30	1299.13	42.65	1256.48
MW13S1	S1	5/2/2017	10:35	1304.34	54.11	1250.23
MW13S3	S2/S3	5/2/2017	10:40	1308.01	51.29	1256.72
MW140S1	S1	5/2/2017	10:45	1304.95	49.3	1255.65
MW140S2/S3	S2/S3	5/2/2017	10:50	1304.76	49.31	1255.45
MW141S2/S3	S2/S3	5/2/2017	17:25	1307.86	51.39	1256.47
MW142S2/S3	S2/S3	5/1/2017	17:35	1297.03	41.71	1255.32
MW143S2/S3	S2/S3	5/2/2017	11:20	1300.32	42.3	1258.02
MW144S2/S3	S2/S3	5/3/2017	8:45	1303.64	45.98	1257.66
MW145S2/S3	S2/S3	5/1/2017	17:15	1291.12	29.93	1261.19
MW146S1	S1	5/2/2017	15:40	1306.3	58.28	1248.02
MW147S1	S1	5/1/2017	16:31	1309.96	55.13	1254.83
MW147S2/S3	S2/S3	5/1/2017	16:33	1310.11	49.18	1260.93
MW148S1	S1	5/1/2017	16:16	1309.94	54.42	1255.52
MW148S2/S3	S2/S3	5/1/2017	16:23	1309.96	49.86	1260.1
MW149S2/S3	S2/S3	5/2/2017	9:45	1305.53	46.89	1258.64
MW14S1	S1	5/2/2017	16:00	1310.46	61.08	1249.38
MW14S3	S2/S3	5/2/2017	16:20	1308.54	52.1	1256.44
MW15S1	S1	5/2/2017	17:40	1306.48	57.83	1248.65
MW15S2	S2/S3	5/2/2017	17:45	1305.98	49.4	1256.58
MW15S4	S4	5/2/2017	17:55	1307.97	33.32	1274.65
MW16BR	BR	5/2/2017	13:00	1305.07	52.4	1252.67
MW16S1A	S1	5/2/2017	13:05	1306.67	54.22	1252.45
MW16S2SS	S2/S3	5/2/2017	13:10	1305.95	49.45	1256.5
MW16S4R	S4	5/2/2017	13:15	1306.89	31.94	1274.95
MW17S1	S1	5/2/2017	8:00	1307.16	54.13	1253.03
MW17S3A	S2/S3	5/2/2017	8:15	1307.31	47.2	1260.11
MW17S3B	S2/S3	5/2/2017	8:10	1307.08	46.55	1260.53
MW18S1	S1	5/2/2017	15:20	1308.25	56.18	1252.07
MW18S3	S2/S3	5/2/2017	15:05	1309.17	48.97	1260.2
MW18S4	S4	5/2/2017	15:10	1309.2	DRY	--
MW19S1	S1	5/2/2017	14:20	1310.34	58.61	1251.73
MW19S2	S2/S3	5/2/2017	14:40	1310.26	54.33	1255.93
MW19S3	S2/S3	5/2/2017	14:50	1310.54	51.94	1258.6
MW19S4	S4	5/2/2017	14:30	1310.01	32.18	1277.83
MW20S1	S1	5/2/2017	13:20	1305.81	45.45	1260.36
MW20S3	S2/S3	5/2/2017	13:25	1305.45	45.87	1259.58

Table 3
Summary of Groundwater Elevations - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Well Identifier	Sand Unit	Date	Time	Reference Elevation (Ft AMSL)[1]	Depth to Water (ft BTOC)[2]	Groundwater Elelvation (ft AMSL)
MW21S1	S1	5/2/2017	13:30	1299.58	43.78	1255.8
MW21S3	S2/S3	5/2/2017	13:35	1299.26	42.77	1256.49
MW21S4R	S4	5/2/2017	13:40	1299.99	DRY	--
MW22S1	S1	5/2/2017	13:45	1304.12	Obstructed	--
MW22S2	S2/S3	5/2/2017	13:50	1304.55	48.81	1255.74
MW22S4	S4	5/2/2017	13:55	1304.16	33.03	1271.13
MW23BR	BR	5/2/2017	16:35	1309.68	59.45	1250.23
MW24S1	S1	5/2/2017	15:05	1309.32	60.86	1248.46
MW24S3	S2/S3	5/2/2017	15:15	1308.22	51.15	1257.07
MW24S4	S4	5/2/2017	15:25	1308.73	32.72	1276.01
MW25S1	S1	5/1/2017	14:00	1311.63	52.1	1259.53
MW26S1	S1	5/3/2017	8:00	1308.74	50.15	1258.59
MW26S3	S2/S3	5/3/2017	8:15	1308.93	50.43	1258.5
MW27S1	S1	5/2/2017	15:40	1309.23	57.06	1252.17
MW27S2	S2/S3	5/2/2017	15:30	1309.49	52.42	1257.07
MW28S1	S1	5/2/2017	11:30	1309.34	56.13	1253.21
MW28S2	S2/S3	5/2/2017	11:35	1309.44	51.6	1257.84
MW28S3	S2/S3	5/2/2017	11:45	1309.51	51.33	1258.18
MW29S1	S1	5/2/2017	10:00	1305.39	57.15	1248.24
MW29S2	S2/S3	5/2/2017	10:10	1305.46	47.81	1257.65
MW29S3	S2/S3	5/2/2017	9:55	1306.58	49.15	1257.43
MW30S1	S1	5/2/2017	9:10	1310.01	53.42	1256.59
MW30S2	S2/S3	5/2/2017	9:20	1309.95	52.11	1257.84
MW30S3	S2/S3	5/2/2017	9:32	1310.06	49.68	1260.38
MW31S1	S1	5/2/2017	14:00	1298.06	35.97	1262.09
MW32S1	S1	5/1/2017	15:56	1307.09	44.8	1262.29
P-29	S2/S3	5/2/2017	13:20	1309.3	70.96	1238.34
P30-01	S2/S3	5/2/2017	10:50	1315.59	61.37	1254.22
P31-01	S2/S3	5/2/2017	10:30	1316.01	60.96	1255.05
P31-02	S2/S3	5/2/2017	10:40	1315.94	60.48	1255.46
P32-01	S2/S3	5/2/2017	10:12	1313.03	57.83	1255.2
P32-02	S2/S3	5/2/2017	10:20	1313.61	58.24	1255.37
P35-01	S2/S3	5/2/2017	13:40	1310.41	54.97	1255.44
P35-02	S2/S3	5/2/2017	13.35	1308.32	53.03	1255.29
P35-03	S2/S3	5/2/2017	13:25	1308.27	52.12	1256.15
PZ40A	S2/S3	5/2/2017	11:00	1305.68	49.6	1256.08
PZ40B	S2/S3	5/2/2017	11:05	1305.36	49.05	1256.31
PZ40C	S2/S3	5/2/2017	11:10	1305.81	49.65	1256.16
PZ41A	S2/S3	5/2/2017	11:15	1301.91	45.3	1256.61
PZ41B	S2/S3	5/2/2017	11:20	1301.74	44.87	1256.87
PZ41C	S2/S3	5/2/2017	11:25	1303.67	46.83	1256.84
PZ42A	S2/S3	5/2/2017	11:30	1294.95	34.98	1259.97

Table 3
Summary of Groundwater Elevations - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Well Identifier	Sand Unit	Date	Time	Reference Elevation (Ft AMSL)[1]	Depth to Water (ft BTOC)[2]	Groundwater Elelvation (ft AMSL)
PZ42B	S2/S3	5/2/2017	11:35	1292.3	32.04	1260.26
PZ43A	S2/S3	5/2/2017	11:40	1306	51.41	1254.59
PZ44A	S2/S3	5/2/2017	11:45	1303.57	48.45	1255.12
PZ44B	S2/S3	5/2/2017	11:50	1303.93	48.71	1255.22
PZ44C	S2/S3	5/2/2017	11:55	1303.75	48.4	1255.35
PZ44D	S2/S3	5/2/2017	12:00	1303.38	48.16	1255.22
PZ45A	S2/S3	5/2/2017	13:13	1306.68	51.65	1255.03
PZ45B	S2/S3	5/2/2017	12:05	1306.81	51.45	1255.36
PZ46A	S2/S3	5/2/2017	12:10	1300.75	46.24	1254.51
PZ46B	S2/S3	5/2/2017	12:15	1300.26	46.1	1254.16

Notes:

Top of casing reference elevations resurveyed in 2010.

The following wells were surveyed and/or resurveyed in October 2013: AMW101D, AMW101I, AMW101S MW147S2/S3, MW16S4R, MW21S4R, PZ45A, PZ45B, PZ46A, PZ46B, IW45, and IW46.

The following wells were surveyed and/or resurveyed in November 2014: MW146S1, MW147S1, MW148S1, MW148S2/S3, MW149S2/S3, and MW15S1.

[1] ft AMSL - feet above mean sea level (2010 reference elevation)
[2] ft BTOC - feet below top of casing
[3] NM - not measured
[4] NA - water level not available due to pump stuck in well, water level below pump, or well was dry

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
AMW1	5/4/2017	15:53	50.38	50.38	0.00	350	6.60	0.853	3.62	5.02	16.88	54.3
AMW1	5/4/2017	15:58		50.40	0.02	350	6.54	0.882	4.08	2.67	17.38	11.7
AMW1	5/4/2017	16:03		50.41	0.03	350	6.54	0.880	3.57	2.66	17.29	10.6
AMW1	5/4/2017	16:08		50.40	0.02	350	6.56	0.893	4.21	2.85	17.90	-2.0
AMW1	5/4/2017	16:13		50.40	0.02	350	6.56	0.893	3.30	2.80	17.90	-1.8
AMW1	5/4/2017	16:18		50.40	0.02	350	6.56	0.889	4.17	2.78	17.87	-2.2
AMW101D	5/12/2017	9:50	48.42	48.42	0.00	250	7.51	0.515	5.83	8.13	18.48	-11.1
AMW101D	5/12/2017	9:55		48.42	0.00	250	7.55	0.493	4.97	8.69	18.33	-4.7
AMW101D	5/12/2017	10:00		48.43	0.01	250	7.53	0.489	5.24	9.28	18.25	5.6
AMW101D	5/12/2017	10:05		48.44	0.02	250	7.53	0.490	5.16	9.27	18.23	6.7
AMW101D	5/12/2017	10:10		48.44	0.02	250	7.53	0.490	5.18	9.29	18.22	7.5
AMW101I	5/12/2017	10:15	48.50	48.61	0.11	350	4.55	0.690	1.98	10.71	18.08	-21.1
AMW101I	5/12/2017	10:20		48.62	0.12	350	3.40	0.765	2.04	2.36	18.17	-12.0
AMW101I	5/12/2017	10:25		48.63	0.13	350	7.05	1.003	1.83	2.65	18.19	-52.7
AMW101I	5/12/2017	10:30		48.64	0.14	350	7.03	1.004	1.75	2.81	18.16	-59.4
AMW101I	5/12/2017	10:35		48.64	0.14	350	7.01	1.002	1.79	2.70	18.15	-58.9
AMW101S	5/12/2017	1039	33.58	33.58	0.00	250	7.13	1.585	29.0	2.85	18.59	-212.4
AMW101S	5/12/2017	1044		34.12	0.54	200	7.13	1.589	12.4	2.81	18.68	-210.8
AMW101S	5/12/2017	1049		34.79	1.21	150	7.12	1.589	6.71	2.74	18.70	-210.0
AMW102D	5/9/2017	850	52.24	52.24	0.00	300	7.40	0.776	6.39	5.42	16.03	16.0
AMW102D	5/9/2017	855		52.33	0.09	300	7.47	0.766	5.47	3.79	15.93	16.2
AMW102D	5/9/2017	860		52.34	0.10	300	7.47	0.763	5.91	3.85	15.90	6.1
AMW102D	5/9/2017	865		52.33	0.09	300	7.47	0.762	5.34	3.87	15.90	6.5
AMW102D	5/9/2017	870		52.33	0.09	300	7.47	0.763	4.11	3.84	15.90	6.4

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
AMW102S	5/9/2017	850	52.24	52.24	0.00	300	7.40	0.776	6.39	5.42	16.03	16.0
AMW102S	5/9/2017	855		52.33	0.09	300	7.47	0.766	5.47	3.79	15.93	16.2
AMW102S	5/9/2017	900		52.34	0.10	300	7.47	0.763	5.91	3.85	15.90	6.1
AMW102S	5/9/2017	905		52.33	0.09	300	7.47	0.762	5.34	3.87	15.90	6.5
AMW102S	5/9/2017	910		52.33	0.09	300	7.47	0.763	4.11	3.84	15.90	6.4
AMW104	5/11/2017	1150	48.28	48.31	0.03	300	6.47	0.773	--	11.84	16.09	-230.6
AMW104	5/11/2017	1155		48.33	0.05	300	6.40	0.893	--	11.23	15.93	-232.3
AMW104	5/11/2017	1160		48.33	0.05	300	6.38	0.911	--	6.42	15.87	-235.0
AMW104	5/11/2017	1165		48.33	0.05	300	6.39	0.913	--	6.97	15.86	-220.0
AMW104	5/11/2017	1170		48.33	0.05	300	6.39	0.910	--	4.05	15.83	-234.0
AMW104	5/11/2017	1175		48.33	0.05	300	6.39	0.910	--	4.24	15.82	-235.0
AMW104	5/11/2017	1180		48.33	0.05	300	6.39	0.910	--	3.99	15.82	-235.0
AMW105D	5/4/2017	1015	44.21	44.21	0.00	250	7.00	0.629	12.8	6.19	15.74	33.6
AMW105D	5/4/2017	1020		44.29	0.08	250	7.02	0.626	5.72	6.02	15.67	36.9
AMW105D	5/4/2017	1025		44.31	0.10	250	7.03	0.628	5.19	3.42	15.58	43.7
AMW105D	5/4/2017	1030		44.32	0.11	250	7.01	0.628	5.03	2.73	15.57	45.7
AMW105D	5/4/2017	1035		44.33	0.12	250	7.01	0.630	5.09	2.31	15.56	46.3
AMW105D	5/4/2017	1040		44.35	0.14	250	7.01	0.630	4.87	2.26	15.55	47.1
AMW105D	5/4/2017	1045		44.37	0.16	250	7.00	0.629	4.92	2.26	15.55	47.7
AMW105S	5/4/2017	1105	44.10	44.03	-0.07	250	6.79	0.474	10.7	8.24	15.32	-193.2
AMW105S	5/4/2017	1110		44.03	-0.07	250	6.80	0.473	7.20	8.14	15.33	-193.5
AMW105S	5/4/2017	1115		44.03	-0.07	250	6.82	0.474	7.19	8.09	15.35	-191.5
AMW105S	5/4/2017	1120		44.03	-0.07	250	6.80	0.475	7.17	8.11	15.35	-192.3
AMW106D	5/6/2017	1037	49.69	49.69	0.00	450	--	1.049	28.2	5.24	15.96	-247.1
AMW106D	5/6/2017	1042		49.73	0.04	450	--	1.048	21.4	3.27	15.89	-242.7
AMW106D	5/6/2017	1047		49.73	0.04	450	--	1.051	18.6	1.49	15.94	-240.6

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
AMW106D	5/6/2017	1052		49.73	0.04	450	--	1.048	14.5	0.93	16.03	-245.5
AMW106D	5/6/2017	1057		49.73	0.04	450	--	1.049	14.8	0.92	16.05	-244.5
AMW106D	5/6/2017	1102		49.73	0.04	450	--	1.047	13.5	0.87	16.01	-244.3
AMW106S	5/4/2017	1405	49.75	49.73	-0.02	350	6.53	1.082	86.0	3.70	15.41	79.7
AMW106S	5/4/2017	1410		49.73	-0.02	350	6.43	1.072	16.8	2.57	15.42	78.3
AMW106S	5/4/2017	1415		49.74	-0.01	350	6.44	1.080	15.1	2.45	15.38	76.7
AMW106S	5/4/2017	1420		49.74	-0.01	350	6.43	1.086	15.4	2.32	15.41	75.0
AMW107D	5/4/2017	1355	48.35	48.35	0.00	250	6.68	0.759	4.89	10.00	15.50	-195.6
AMW107D	5/4/2017	1400		48.46	0.11	250	6.63	0.769	5.78	1.32	15.44	-217.1
AMW107D	5/4/2017	1405		48.50	0.15	250	6.66	0.771	5.32	1.19	15.39	-207.1
AMW107D	5/4/2017	1410		48.52	0.17	250	6.68	0.774	4.96	0.92	15.44	-214.5
AMW107D	5/4/2017	1415		48.50	0.15	250	6.70	0.774	5.31	0.94	15.34	-230.1
AMW107D	5/4/2017	1420		48.50	0.15	250	6.72	0.779	5.19	0.89	15.48	-234.9
AMW107S	5/4/2017	1312	48.80	48.60	-0.20	380	7.29	0.787	11.2	9.75	17.65	34.2
AMW107S	5/4/2017	1317		48.62	-0.18	380	6.50	0.995	9.14	7.49	15.69	52.6
AMW107S	5/4/2017	1322		48.62	-0.18	380	6.39	1.088	7.63	4.28	15.64	57.2
AMW107S	5/4/2017	1327		48.62	-0.18	380	6.35	1.146	4.91	2.78	15.39	53.4
AMW107S	5/4/2017	1332		48.62	-0.18	380	6.37	1.143	4.86	2.80	15.53	49.9
AMW107S	5/4/2017	1337		48.62	-0.18	380	6.38	1.142	5.83	2.83	15.49	48.8
AMW108D	5/11/2017	904	49.70	49.70	0.00	300	6.30	0.925	42.5	4.13	15.60	-282.1
AMW108D	5/11/2017	909		49.72	0.02	300	6.19	0.923	19.4	2.49	15.59	-288.0
AMW108D	5/11/2017	914		49.71	0.01	300	6.25	0.921	12.7	1.49	15.64	-290.0
AMW108D	5/11/2017	919		49.71	0.01	300	6.32	0.919	9.25	1.2	15.65	-271.0
AMW108D	5/11/2017	924		49.71	0.01	300	6.38	0.917	9.42	1.18	15.69	-278.0
AMW108D	5/11/2017	929		49.71	0.01	300	6.40	0.917	8.71	1.12	15.71	-280.0

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
AMW108S	5/11/2017	1453	49.91	49.91	0.00	300	6.69	0.744	29.00	9.81	16.50	-251.0
AMW108S	5/11/2017	1458		49.95	0.04	300	6.30	0.785	11.40	6.89	15.78	-241.0
AMW108S	5/11/2017	1503		49.96	0.05	300	6.31	0.789	9.72	0.97	15.74	-240.0
AMW108S	5/11/2017	1518		49.97	0.06	300	6.31	0.789	8.36	0.99	15.73	-239.0
AMW108S	5/11/2017	1523		49.98	0.07	300	6.29	0.793	8.23	0.95	15.71	-239.0
AMW16D	5/3/2017	1410	50.61	50.61	0.00	250	7.17	0.760	1.37	2.90	18.91	73.4
AMW16D	5/3/2017	1415		50.61	0.00	250	6.99	0.780	1.40	1.80	18.12	48.3
AMW16D	5/3/2017	1420		50.61	0.00	250	6.98	0.782	1.36	1.70	18.07	49.2
AMW16D	5/3/2017	1425		50.61	0.00	250	6.98	0.784	1.50	1.64	18.08	51.3
AMW16S	5/3/2017	1340	50.75	50.75	0.00	250	6.70	0.311	2.04	4.09	17.16	137.0
AMW16S	5/3/2017	1345		50.85	0.10	250	6.65	0.311	2.10	3.63	17.07	135.0
AMW16S	5/3/2017	1350		50.80	0.05	250	6.62	0.310	2.21	3.47	17.10	131.6
AMW16S	5/3/2017	1355		50.80	0.05	250	6.62	0.314	2.13	3.48	17.17	129.7
AMW3	5/12/2017	1235	50.52	50.53	0.01	250	6.72	0.758	--	7.58	16.03	-253.0
AMW3	5/12/2017	1240		50.53	0.01	250	6.66	0.737	--	6.52	16.05	-249.0
AMW3	5/12/2017	1245		50.53	0.01	250	6.62	0.713	--	6.23	16.05	-243.0
AMW3	5/12/2017	1250		50.53	0.01	250	6.62	0.706	--	6.17	16.03	-242.0
AMW3	5/12/2017	1255		50.53	0.01	250	6.63	0.706	--	5.61	16.12	-242.0
AMW3	5/12/2017	1300		50.53	0.01	250	6.64	0.706	--	5.75	16.15	-243.0
AMW3	5/12/2017	1305		50.53	0.01	250	6.64	0.706	--	6.19	16.16	-243.0
AMW3	5/12/2017	1310		50.53	0.01	250	6.65	0.706	--	6.04	16.14	-243.0
AMW4D	5/3/2017	1430	50.75	50.75	0.00	300	7.80	0.870	0.72	8.55	15.79	94.5
AMW4D	5/3/2017	1435		50.75	0.00	300	7.53	0.944	0.67	6.20	16.34	95.2
AMW4D	5/3/2017	1440		50.75	0.00	300	6.95	1.298	0.61	1.75	16.13	97.7
AMW4D	5/3/2017	1445		50.75	0.00	300	6.94	1.354	0.53	1.60	16.03	96.8
AMW4D	5/3/2017	1450		50.75	0.00	300	6.94	1.362	0.51	1.62	16.07	96.1

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
AMW4S	5/3/2017	1515	50.65	50.65	0.00	350	6.69	1.576	1.97	4.84	15.97	103.7
AMW4S	5/3/2017	1520		50.67	0.02	350	6.68	1.587	1.81	4.68	15.97	104.0
AMW4S	5/3/2017	1525		50.68	0.03	350	6.67	1.589	1.62	4.66	15.97	104.1
AMW4S	5/3/2017	1530		50.69	0.04	350	6.67	1.588	1.64	4.50	15.97	104.0
AMW5D	5/6/2017	1114	49.95	49.95	0.00	300	6.63	0.999	2.65	1.79	16.59	-252.4
AMW5D	5/6/2017	1119		49.95	0.00	300	6.61	0.983	2.17	1.76	16.69	-250.7
AMW5D	5/6/2017	1124		49.95	0.00	300	6.50	0.982	2.03	1.01	16.67	-250.0
AMW5D	5/6/2017	1129		49.95	0.00	300	6.50	0.981	1.87	0.98	16.69	-250.1
AMW5D	5/6/2017	1134		49.95	0.00	300	6.51	0.979	1.73	0.97	16.72	-251.4
AMW5S	5/4/2017	11:05	44.03	44.03	0.00	250	6.79	0.474	10.7	8.24	15.32	-193.2
AMW5S	5/4/2017	11:10		44.03	0.00	250	6.80	0.473	7.20	8.14	15.33	-193.5
AMW5S	5/4/2017	11:15		44.03	0.00	250	6.82	0.474	7.19	8.09	15.35	-191.5
AMW5S	5/4/2017	11:20		44.03	0.00	250	6.81	0.475	7.17	8.11	15.35	-192.3
AMW8D	5/12/2017	1004	49.56	49.56	0.00	375	7.70	0.979	19.4	4.53	14.89	-186.0
AMW8D	5/12/2017	1009		49.57	0.01	375	7.21	1.101	12.7	2.19	15.31	-254.0
AMW8D	5/12/2017	1014		49.56	0.00	375	7.20	1.103	11.2	2.13	15.48	-253.0
AMW8D	5/12/2017	1019		49.56	0.00	375	6.57	1.209	10.0	1.84	15.57	-308.0
AMW8D	5/12/2017	1024		49.56	0.00	375	6.55	1.210	9.47	1.85	15.63	-310.0
AMW8D	5/12/2017	1029		49.56	0.00	375	6.54	1.212	7.63	1.83	15.65	-305.0
AMW8S	5/12/2017	1047	49.22	49.22	0.00	275	6.63	0.991	12.4	4.46	15.65	-283.0
AMW8S	5/12/2017	1052		49.37	0.15	275	6.61	1.046	9.19	2.85	15.66	-286.0
AMW8S	5/12/2017	1057		49.42	0.20	275	6.65	0.968	7.82	2.08	15.74	-285.0
AMW8S	5/12/2017	1062		49.46	0.24	275	6.68	0.909	7.23	2.57	15.72	-276.0
AMW8S	5/12/2017	1067		49.47	0.25	275	6.68	0.905	8.11	2.55	15.72	-271.0
AMW8S	5/12/2017	1072		49.47	0.25	275	6.68	0.903	7.74	2.55	15.72	-269.0

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
APMW302S1	5/10/2017	820	49.01	49.02	0.01	150	7.06	0.602	4.98	40.01	16.28	-19.8
APMW302S1	5/10/2017	825		49.02	0.01	150	6.98	0.603	3.07	15.06	16.31	-9.1
APMW302S1	5/10/2017	830		49.02	0.01	150	6.98	0.604	3.62	10.45	16.14	4.3
APMW302S1	5/10/2017	835		49.02	0.01	150	6.98	0.603	3.54	6.97	16.10	6.9
APMW302S1	5/10/2017	840		49.02	0.01	150	6.98	0.602	3.13	6.43	16.07	7.0
APMW302S1	5/10/2017	845		49.02	0.01	150	6.98	0.603	2.99	6.38	16.14	7.2
APMW302S2	5/9/2017	825	49.16	49.16	0.00	300	6.97	0.648	21.8	8.76	16.33	-121.1
APMW302S2	5/9/2017	830		49.22	0.06	300	6.18	0.637	22.6	6.91	15.53	-101.7
APMW302S2	5/9/2017	835		49.21	0.05	300	6.59	0.632	15.3	4.21	15.44	-97.0
APMW302S2	5/9/2017	840		49.22	0.06	300	6.58	0.632	12.4	4.16	15.42	-90.0
APMW302S2	5/9/2017	845		49.22	0.06	300	6.55	0.632	6.01	4.13	15.41	-88.0
APMW302S3	5/10/2017	913	48.85	48.85	0.00	300	6.88	0.561	13.5	1.03	15.75	-28.3
APMW302S3	5/10/2017	918		48.88	0.03	300	7.02	0.583	11.3	0.82	15.67	-63.4
APMW302S3	5/10/2017	923		48.90	0.05	300	7.02	0.586	10.5	0.82	15.65	-65.1
APMW302S3	5/10/2017	928		48.89	0.04	300	7.05	0.588	9.94	0.83	15.66	-68.4
MW02S1	5/5/2017	1115	56.54	56.54	0.00	200	6.99	0.965	4.71	8.60	15.56	27.8
MW02S1	5/5/2017	1120		56.56	0.02	200	7.07	0.876	4.57	6.04	15.44	36.9
MW02S1	5/5/2017	1125		56.57	0.03	200	7.06	0.870	4.23	5.78	15.44	37.6
MW02S1	5/5/2017	1130		56.57	0.03	200	7.06	0.868	4.25	5.61	15.44	37.8
MW02S2	5/5/2017	1045	50.92	50.78	-0.14	350	6.53	2.989	16.2	5.98	15.62	-71.6
MW02S2	5/5/2017	1050		50.80	-0.12	350	6.50	3.222	11.8	1.62	15.60	-80.4
MW02S2	5/5/2017	1055		50.80	-0.12	350	6.54	3.393	12.6	1.35	15.57	-85.9
MW02S2	5/5/2017	1060		50.78	-0.14	350	6.56	3.407	10.2	1.31	15.57	-87.3
MW02S2	5/5/2017	1065		50.79	-0.13	350	6.58	3.406	8.79	1.29	15.59	-90.7
MW02S2	5/5/2017	1070		50.79	-0.13	350	6.64	3.410	9.24	1.28	15.62	-91.3

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW03S1	5/4/2017	1340	52.97	52.72	-0.25	400	6.70	0.253	6.63	4.50	16.00	104.5
MW03S1	5/4/2017	1345		52.77	-0.20	400	6.71	0.252	5.94	4.27	16.00	104.4
MW03S1	5/4/2017	1350		52.78	-0.19	400	6.73	0.253	4.10	4.02	16.04	104.2
MW04S1	5/11/2017	1015	30.29	30.31	0.02	200	6.76	0.336	37.6	2.83	17.30	168.5
MW04S1	5/11/2017	1020		30.31	0.02	200	6.78	0.337	35.1	2.84	17.24	166.8
MW04S1	5/11/2017	1025		30.31	0.02	200	6.84	0.339	31.4	2.81	17.32	162.6
MW04S3	5/11/2017	930	30.55	30.58	0.03	200	6.45	0.300	9.47	8.24	16.16	148.9
MW04S3	5/11/2017	935		30.58	0.03	200	6.47	0.301	6.78	7.11	16.19	149.8
MW04S3	5/11/2017	940		30.58	0.03	200	6.47	0.302	5.16	6.73	16.21	151.2
MW04S3	5/11/2017	945		30.58	0.03	200	6.49	0.302	--	6.65	16.18	151.8
MW05S3	5/12/2017	1025	39.45	39.45	0.00	400	7.08	0.704	87.3	5.22	13.45	105.2
MW05S3	5/12/2017	1030		39.45	0.00	400	7.01	0.693	62.1	4.88	13.30	102.2
MW05S3	5/12/2017	1035		39.45	0.00	400	6.95	0.688	20.4	4.95	13.30	107.7
MW05S3	5/12/2017	1040		39.50	0.05	400	6.93	0.686	18.7	5.00	13.26	111.6
MW05S3	5/12/2017	1045		39.45	0.00	400	6.92	0.685	17.4	5.05	13.29	112.6
MW07S1	5/9/2017	1329	58.99	58.99	0.00	175	6.41	2.503	26.3	5.21	19.83	-13.4
MW07S1	5/9/2017	1334		59.04	0.05	175	6.37	2.491	26.8	4.75	19.57	-11.8
MW07S1	5/9/2017	1339		59.04	0.05	175	6.31	2.440	21.8	3.10	19.30	-5.6
MW07S1	5/9/2017	1344		59.09	0.10	175	6.28	2.375	18.8	2.33	18.48	0.4
MW07S1	5/9/2017	1349		59.14	0.15	175	6.27	2.377	19.6	1.99	17.60	4.8
MW07S1	5/9/2017	1354		59.18	0.19	175	6.27	2.374	20.1	1.96	17.48	4.5
MW07S1	5/9/2017	1359		59.19	0.20	175	6.27	2.373	19.4	1.93	17.49	5.0
MW07S2	5/9/2017	1430	47.74	47.85	0.11	350	6.83	1.016	6.80	8.07	17.32	32.1
MW07S2	5/9/2017	1435		47.85	0.11	350	6.84	1.008	5.37	7.67	16.39	26.1
MW07S2	5/9/2017	1440		47.85	0.11	350	6.84	1.007	5.42	7.70	16.33	25.9

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW07S2	5/9/2017	1445		47.85	0.11	350	6.84	1.009	5.84	7.75	16.29	27.8
MW07S3	5/9/2017	15.47	48.18	47.93	-0.25	375	6.87	1.017	9.14	8.07	16.27	43.7
MW07S3	5/9/2017	20.47		47.95	-0.23	375	6.84	1.005	3.43	8.07	15.82	42.1
MW07S3	5/9/2017	25.47		47.95	-0.23	375	6.84	1.010	3.28	8.09	16.02	42.0
MW07S3	5/9/2017	30.47		47.95	-0.23	375	6.83	1.006	3.87	8.11	16.03	41.2
MW08S1	5/5/2017	1105	48.37	48.52	0.15	500	7.13	3.188	74.3	1.28	13.48	32.1
MW08S1	5/5/2017	1110		48.53	0.16	500	6.95	3.273	8.92	0.67	13.41	61.8
MW08S1	5/5/2017	1115		48.53	0.16	500	6.92	3.127	4.12	1.60	13.42	69.9
MW08S1	5/5/2017	1120		48.53	0.16	500	6.90	3.080	4.33	1.66	13.41	82.9
MW08S1	5/5/2017	1125		48.53	0.16	500	6.88	3.069	3.20	1.64	13.42	86.8
MW08S1	5/5/2017	1130		48.53	0.16	500	6.89	3.063	2.80	1.58	13.42	89.7
MW08S2	5/5/2017	1000	47.79	47.90	0.11	500	7.19	1.290	8.74	5.08	13.19	113.2
MW08S2	5/5/2017	1005		47.90	0.11	500	7.22	1.283	11.5	4.47	13.11	113.7
MW08S2	5/5/2017	1010		47.90	0.11	500	7.19	1.326	8.98	4.34	13.09	114.8
MW08S2	5/5/2017	1015		47.90	0.11	500	7.15	1.348	7.89	4.61	13.12	116.4
MW08S3	5/5/2017	1200	47.27	47.27	0.00	350	7.07	1.120	3.07	3.09	13.93	98.0
MW08S3	5/5/2017	1205		47.27	0.00	350	6.95	1.088	4.80	2.33	14.88	104.5
MW08S3	5/5/2017	1210		47.27	0.00	350	7.00	0.985	6.70	7.80	13.45	105.0
MW08S3	5/5/2017	1220		47.27	0.00	500	7.05	0.924	13.5	8.10	13.12	105.9
MW08S3	5/5/2017	1225		47.27	0.00	500	7.08	0.946	12.9	7.61	12.98	108.0
MW08S3	5/5/2017	1230		47.27	0.00	500	7.02	0.959	11.8	7.85	12.93	106.6
MW08S3	5/5/2017	1235		47.27	0.00	500	7.06	0.948	10.9	7.73	12.99	109.4
MW09S1	5/5/2017	950	58.38	58.53	0.15	210	6.86	1.980	6.61	7.39	16.32	40.2
MW09S1	5/5/2017	955		58.54	0.16	210	6.81	1.770	8.89	4.96	15.96	-13.0
MW09S1	5/5/2017	1000		58.54	0.16	210	6.79	1.710	5.41	2.40	16.00	-45.5

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW09S1	5/5/2017	1005		58.54	0.16	210	6.78	1.800	5.46	1.54	16.00	-53.4
MW09S1	5/5/2017	1010		58.54	0.16	210	6.77	1.900	4.38	1.35	16.08	-45.5
MW09S1	5/5/2017	1015		58.54	0.16	210	6.77	1.920	4.34	1.33	16.05	-44.1
MW09S1	5/5/2017	1020		58.54	0.16	210	6.77	1.930	4.23	1.30	16.01	-43.4
MW09S3	5/5/2017	825	49.58	49.73	0.15	400	6.59	0.600	4.34	5.80	15.83	-192.6
MW09S3	5/5/2017	830		49.74	0.16	400	6.32	0.783	5.11	4.10	17.72	-217.9
MW09S3	5/5/2017	835		49.74	0.16	400	6.34	0.781	5.06	4.46	15.79	-209.9
MW09S3	5/5/2017	840		49.74	0.16	400	6.33	0.781	3.97	4.47	15.80	-210.2
MW09S3	5/5/2017	845		49.74	0.16	400	6.35	0.780	4.38	4.45	15.81	-212.9
MW10S1	5/12/2017	925	40.23	40.38	0.15	450	7.49	0.676	133	5.45	13.93	121.2
MW10S1	5/12/2017	930		40.38	0.15	450	7.36	0.746	121	5.04	14.04	128.2
MW10S1	5/12/2017	935		40.38	0.15	450	7.33	0.760	115	4.78	14.14	130.0
MW10S1	5/12/2017	940		40.38	0.15	450	7.31	0.764	110	4.53	14.15	131.8
MW10S1	5/12/2017	945		40.38	0.15	450	7.30	0.776	108	4.42	14.19	131.7
MW10S2	5/10/2017	915	38.46	38.46	0.00	300	7.12	0.717	50.0	7.10	16.56	103.2
MW10S2	5/10/2017	920		38.46	0.00	300	7.12	0.717	46.1	6.41	16.56	103.8
MW10S2	5/10/2017	925		38.46	0.00	300	7.13	0.717	44.2	6.29	16.55	105.2
MW10S3	5/11/2017	1405	48.47	48.73	0.26	--	7.26	0.319	27.6	4.31	17.45	120.9
MW10S3	5/11/2017	1410		48.75	0.28	--	7.25	0.320	26.6	3.89	17.43	120.1
MW113S3	5/11/2017	945	52.65	52.65	0.00	450	9.80	13.01	9.80	1.88	15.82	70.1
MW113S3	5/11/2017	950		52.65	0.00	450	10.25	13.53	8.70	0.54	16.50	60.3
MW113S3	5/11/2017	955		52.65	0.00	450	10.20	13.47	8.87	0.57	16.29	61.1
MW113S3	5/11/2017	1000		52.65	0.00	450	10.08	13.35	8.88	0.72	16.29	65.2
MW113S3	5/11/2017	1005		52.65	0.00	450	10.08	13.28	7.98	0.78	16.22	68.4
MW113S3	5/11/2017	1010		52.65	0.00	450	10.00	13.25	7.32	0.77	16.25	69.1

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW114S1	5/11/2017	915	60.16	60.16	0.00	400	7.76	3.315	9.80	1.46	15.67	81.8
MW114S1	5/11/2017	935		60.16	0.00	400	7.67	3.384	6.21	0.37	15.64	83.1
MW114S1	5/11/2017	920		60.16	0.00	400	7.71	3.377	8.96	0.50	15.56	80.6
MW114S1	5/11/2017	925		60.16	0.00	400	7.69	3.371	7.89	0.42	15.57	83.8
MW114S1	5/11/2017	930		60.16	0.00	400	7.68	3.380	6.55	0.40	15.63	83.8
MW11S1	5/5/2017	1445	27.12	27.10	-0.02	200	6.60	0.990	20.4	1.37	17.29	130.4
MW11S1	5/5/2017	1450		27.10	-0.02	200	6.68	0.984	16.0	1.14	17.05	120.9
MW11S1	5/5/2017	1455		27.11	-0.01	200	6.70	0.983	12.6	1.00	16.86	98.4
MW11S1	5/5/2017	1500		27.11	-0.01	200	6.74	0.985	11.0	0.87	16.95	79.7
MW11S1	5/5/2017	1505		27.11	-0.01	200	6.96	0.992	9.80	0.45	17.10	55.7
MW11S1	5/5/2017	1510		27.11	-0.01	200	7.01	0.998	8.80	0.42	17.54	50.1
MW11S1	5/5/2017	1515		27.11	-0.01	200	7.03	1.010	8.70	0.41	17.55	47.5
MW11S3A	5/5/2017	1545	28.09	28.10	0.01	200	6.69	0.837	3.86	1.90	18.75	87.3
MW11S3A	5/5/2017	1550		28.10	0.01	200	6.74	0.827	3.42	1.64	18.65	86.1
MW11S3A	5/5/2017	1555		28.10	0.01	200	6.72	0.827	2.10	1.43	18.68	86.2
MW11S3A	5/5/2017	1600		28.10	0.01	200	6.74	0.833	2.00	1.30	18.89	85.7
MW11S3A	5/5/2017	1605		28.10	0.01	200	6.75	0.835	1.60	1.21	18.94	84.2
MW11S3B	5/5/2017	1400	27.69	27.69	0.00	200	6.03	0.483	8.58	6.80	17.28	132.0
MW11S3B	5/5/2017	1405		27.69	0.00	200	6.07	0.487	4.08	6.45	18.00	130.3
MW11S3B	5/5/2017	1410		27.69	0.00	200	6.12	0.489	3.10	7.56	17.37	125.2
MW12S1A	5/5/2017	1610	61.43	61.43	0.00	300	6.64	3.060	9.92	4.55	16.63	4.1
MW12S1A	5/5/2017	1615		61.44	0.01	300	6.57	3.070	8.30	1.91	16.42	2.0
MW12S1A	5/5/2017	1620		61.44	0.01	300	6.57	3.060	7.00	1.62	16.38	0.1
MW12S1A	5/5/2017	1625		61.44	0.01	300	6.51	3.060	6.38	1.50	16.42	2.5
MW12S1A	5/5/2017	1630		61.44	0.01	300	6.56	3.020	6.48	1.47	16.42	2.0

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW12S1A	5/5/2017	1635		61.44	0.01	300	6.54	3.044.1	7.02	1.45	16.42	2.1
MW12S3	5/5/2017	1604	52.40	52.27	-0.13	325	7.29	0.739	2.82	8.94	16.81	-68.0
MW12S3	5/5/2017	1609		52.30	-0.10	325	7.16	0.720	2.54	9.88	16.09	-66.1
MW12S3	5/5/2017	1614		52.29	-0.11	325	7.16	0.726	2.76	9.89	15.95	-69.3
MW12S3	5/5/2017	1619		52.30	-0.10	325	7.20	0.766	2.33	10.85	15.88	-94.5
MW12S3	5/5/2017	1624		52.30	-0.10	325	7.28	0.770	2.54	9.08	15.87	-94.8
MW12S3	5/5/2017	1629		52.30	-0.10	325	7.30	0.774	2.18	9.01	15.84	-95.9
MW12S3	5/5/2017	1634		52.30	-0.10	325	7.27	0.775	2.25	8.97	15.84	-96.1
MW130S1	5/9/2017	840	21.44	21.44	0.00	300	6.96	0.547	15.9	0.74	16.22	37.3
MW130S1	5/9/2017	845		21.44	0.00	300	6.99	0.547	13.1	0.57	16.15	38.9
MW130S1	5/9/2017	850		21.44	0.00	300	7.02	0.547	8.12	0.43	16.16	41.9
MW130S1	5/9/2017	855		21.44	0.00	300	7.06	0.549	4.26	0.34	16.25	46.5
MW130S1	5/9/2017	900		21.44	0.00	300	7.08	0.552	3.90	0.31	16.42	49.2
MW130S1	5/9/2017	905		21.44	0.00	300	7.09	0.552	2.72	0.29	16.44	51.0
MW130S2	5/9/2017	945	21.51	21.54	0.03	200	6.77	0.460	14.6	1.87	16.77	119.2
MW130S2	5/9/2017	950		21.54	0.03	200	6.77	0.458	11.4	1.89	16.78	119.0
MW130S2	5/9/2017	955		21.54	0.03	200	6.81	0.450	10.7	1.60	16.72	115.6
MW130S2	5/9/2017	1000		21.54	0.03	200	6.86	0.445	9.54	1.19	16.81	114.0
MW130S2	5/9/2017	1005		21.54	0.03	200	6.89	0.444	7.43	1.15	16.81	111.2
MW130S2	5/9/2017	1010		21.54	0.03	200	6.92	0.443	7.18	1.06	16.87	109.4
MW130S3	5/9/2017	1020	21.43	21.42	-0.01	250	7.03	0.568	15.2	0.38	17.30	120.1
MW130S3	5/9/2017	1025		21.42	-0.01	250	7.03	0.568	16.7	0.36	17.28	119.3
MW130S3	5/9/2017	1030		21.42	-0.01	250	7.04	0.568	18.2	0.35	17.34	118.8
MW131S2	5/8/2017	1330	20.16	20.19	0.03	300	6.90	0.749	8.07	1.44	15.06	114.0
MW131S2	5/8/2017	1335		20.20	0.04	300	6.92	0.751	6.63	1.18	15.12	112.9

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW131S2	5/8/2017	1340		20.20	0.04	300	6.97	0.771	5.12	0.67	15.07	110.6
MW131S2	5/8/2017	1345		20.20	0.04	300	6.99	0.775	4.32	0.55	15.05	109.5
MW131S2	5/8/2017	1350		20.20	0.04	300	6.99	0.776	2.16	0.53	15.02	109.2
MW131S2	5/8/2017	1355		20.20	0.04	300	7.00	0.778	2.26	0.50	15.09	109.0
MW131S3	5/8/2017	1245	19.89	19.90	0.01	300	6.20	0.548	23.6	0.74	15.04	96.1
MW131S3	5/8/2017	1250		19.90	0.01	300	6.22	0.548	22.1	0.66	15.00	93.9
MW131S3	5/8/2017	1255		19.90	0.01	300	6.24	0.547	19.4	0.64	14.99	91.9
MW131S3	5/8/2017	1300		19.90	0.01	300	6.36	0.548	19.6	0.44	14.99	81.8
MW131S3	5/8/2017	1305		19.90	0.01	300	6.38	0.549	19.6	0.42	15.01	81.2
MW131S3	5/8/2017	1310		19.90	0.01	300	6.40	0.550	19.7	0.39	14.98	80.5
MW132S1	5/9/2017	1225	34.21	34.23	0.02	300	7.15	0.656	18.1	1.26	16.56	139.3
MW132S1	5/9/2017	1230		34.23	0.02	300	7.14	0.658	15.5	1.05	16.52	138.5
MW132S1	5/9/2017	1235		34.23	0.02	300	7.20	0.661	10.6	0.78	16.41	127.6
MW132S1	5/9/2017	1240		34.23	0.02	300	7.28	0.662	6.69	0.40	16.39	124.5
MW132S1	5/9/2017	1245		34.23	0.02	300	7.31	0.662	6.11	0.37	16.35	122.1
MW132S1	5/9/2017	1250		34.24	0.03	300	7.32	0.663	4.81	0.32	16.38	119.4
MW132S1	5/9/2017	1255		34.24	0.03	300	7.34	0.663	2.09	0.27	16.36	116.7
MW132S1	5/9/2017	1300		34.24	0.03	300	7.37	0.663	1.43	0.25	16.35	112.4
MW132S1	5/9/2017	1305		34.24	0.03	300	7.38	0.663	1.53	0.24	16.48	111.0
MW132S2/S3	5/9/2017	1145	34.10	34.10	0.00	300	6.80	0.375	81.3	7.97	16.73	121.3
MW132S2/S3	5/9/2017	1150		34.10	0.00	300	6.82	0.375	78.8	7.77	16.71	121.2
MW132S2/S3	5/9/2017	1155		34.10	0.00	300	6.85	0.376	72.8	7.54	16.65	121.0
MW133S2/S3	5/11/2017	835	23.93	23.98	0.05	300	7.28	0.486	16.7	5.97	16.05	100.2
MW133S2/S3	5/11/2017	840		23.98	0.05	300	7.29	0.486	15.2	5.89	16.10	101.5
MW133S2/S3	5/11/2017	845		23.98	0.05	300	7.31	0.486	14.2	5.89	16.13	101.9

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW134S2	5/3/2017	1104	44.05	44.05	0.00	300	6.71	0.537	3.13	5.80	15.36	232.9
MW134S2	5/3/2017	1109		44.07	0.02	300	6.73	0.550	3.02	5.08	15.51	230.4
MW134S2	5/3/2017	1114		44.08	0.03	300	6.75	0.554	2.96	4.88	15.50	228.7
MW134S2	5/3/2017	1119		44.08	0.03	300	6.77	0.557	2.91	4.75	15.49	226.8
MW134S3	5/3/2017	1142	23.95	23.97	0.02	100	6.55	0.517	2.52	7.35	14.74	227.1
MW134S3	5/3/2017	1147		23.97	0.02	100	6.54	0.520	2.45	7.22	14.75	227.6
MW134S3	5/3/2017	1152		23.98	0.03	100	6.53	0.522	2.41	7.30	14.78	228.2
MW136S2/S3	5/5/2017	1005	29.60	29.60	0.00	250	6.67	0.665	3.33	5.22	16.23	89.4
MW136S2/S3	5/5/2017	1010		29.60	0.00	250	6.67	0.664	3.21	4.88	16.18	99.5
MW136S2/S3	5/5/2017	1015		29.60	0.00	250	6.71	0.655	2.41	4.82	16.17	100.7
MW136S2/S3	5/5/2017	1020		29.60	0.00	250	6.72	0.654	2.04	4.77	16.20	100.7
MW137S1	5/3/2017	1505	49.40	49.50	0.10	200	6.69	0.341	8.40	4.74	14.75	221.5
MW137S1	5/3/2017	1510		49.50	0.10	200	6.50	0.283	7.20	3.70	14.97	225.5
MW137S1	5/3/2017	1515		49.50	0.10	200	6.46	0.270	6.72	2.58	15.03	228.3
MW137S1	5/3/2017	1520		49.50	0.10	200	6.47	0.281	4.85	1.74	15.05	228.7
MW137S1	5/3/2017	1525		49.50	0.10	200	6.54	0.281	4.41	1.09	15.08	215.2
MW137S1	5/3/2017	1530		49.50	0.10	200	6.61	0.280	4.20	0.82	15.09	173.0
MW137S1	5/3/2017	1535		49.50	0.10	200	6.86	0.396	2.10	0.43	15.07	51.2
MW137S1	5/3/2017	1540		49.50	0.10	200	6.96	0.419	2.00	0.40	15.11	42.1
MW137S1	5/3/2017	1545		49.50	0.10	200	6.98	0.424	2.00	0.40	15.12	20.5
MW137S1	5/3/2017	1550		49.50	0.10	200	7.00	0.429	1.96	0.39	15.13	19.2
MW137S1	5/3/2017	1555		49.50	0.10	200	7.01	0.434	1.90	0.36	15.16	18.0
MW137S2	5/5/2017	1231	50.11	52.15	2.04	300	6.75	0.525	38.0	1.55	16.83	57.8
MW137S2	5/5/2017	1236		52.58	2.47	300	6.75	0.526	9.00	1.29	16.89	58.9
MW137S2	5/5/2017	1241		55.48	5.37	300	6.78	0.516	8.00	1.46	16.50	61.1
MW137S2	5/5/2017	1246		56.86	6.75	300	6.79	0.519	5.00	1.40	16.93	61.3

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW137S2	5/5/2017	1251		58.10	7.99	300	6.83	0.518	3.00	1.52	16.67	62.0
MW137S2	5/5/2017	1256		60.40	10.29	300	6.96	0.519	3.00	0.97	16.70	63.0
MW137S2	5/5/2017	1301		61.10	10.99	300	7.03	0.519	3.00	0.82	16.72	64.4
MW137S2	5/5/2017	1306		61.12	11.01	300	7.03	0.519	3.00	0.78	16.79	64.2
MW137S2	5/5/2017	1311		61.23	11.12	300	7.04	0.519	3.00	0.74	16.87	63.9
MW137S2	5/5/2017	1316		61.24	11.13	300	7.04	0.519	3.00	0.73	16.90	63.6
MW137S2	5/5/2017	1321		61.26	11.15	300	7.05	0.519	3.00	0.69	16.89	63.0
MW137S2	5/5/2017	1326		61.27	11.16	300	7.07	0.519	3.00	0.63	16.86	61.0
MW137S2	5/5/2017	1331		61.27	11.16	300	7.07	0.519	3.00	0.61	16.85	60.4
MW137S2	5/5/2017	1336		61.27	11.16	300	7.07	0.519	3.00	0.61	16.91	59.6
MW137S3	5/3/2017	1405	49.40	49.40	0.00	300	6.68	0.643	87.7	6.99	15.24	224.0
MW137S3	5/3/2017	1410		49.44	0.04	300	6.72	0.642	73.8	7.08	15.21	223.8
MW137S3	5/3/2017	1415		49.44	0.04	300	6.75	0.638	48.6	7.10	15.20	223.2
MW137S3	5/3/2017	1420		49.44	0.04	300	6.80	0.639	22.0	7.01	15.21	221.7
MW137S3	5/3/2017	1425		49.44	0.04	300	6.82	0.638	15.3	6.90	15.19	221.4
MW137S3	5/3/2017	1430		49.44	0.04	300	6.84	0.635	11.3	6.69	15.19	221.1
MW137S3	5/3/2017	1435		49.44	0.04	300	6.84	0.632	7.28	6.64	15.19	220.9
MW138S1	5/8/2017	1500	42.90	42.92	0.02	175	7.58	0.575	18.6	5.05	17.32	134.3
MW138S1	5/8/2017	1525		42.93	0.03	175	7.73	0.564	9.14	3.73	16.72	80.5
MW138S1	5/8/2017	1505		42.92	0.02	175	7.64	0.570	16.1	4.59	17.07	129.3
MW138S2/S3	5/8/2017	1430	42.83	42.84	0.01	200	6.73	0.582	5.43	5.10	16.71	137.0
MW138S2/S3	5/8/2017	1435		42.84	0.01	200	6.76	0.580	5.24	5.17	16.65	135.2
MW138S2/S3	5/8/2017	1440		42.85	0.02	200	6.81	0.579	4.86	5.16	16.53	131.4
MW138S2/S3	5/8/2017	1510		42.92	0.02	175	7.70	0.564	14.2	3.89	17.70	97.3
MW138S2/S3	5/8/2017	1515		42.92	0.02	175	7.71	0.564	12.0	3.88	16.77	89.3
MW138S2/S3	5/8/2017	1520		42.93	0.03	175	7.73	0.564	10.5	3.74	16.78	83.2

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW139S2/S3	5/11/2017	1305	42.56	42.56	0.00	300	6.97	1.090	31.2	7.55	16.09	170.4
MW139S2/S3	5/11/2017	1310		42.56	0.00	300	6.99	1.055	9.42	7.48	16.03	170.4
MW139S2/S3	5/11/2017	1315		42.56	0.00	300	7.01	1.054	8.63	7.47	16.01	170.3
MW13S1	5/11/2017	1205	48.22	50.02	1.80	200	7.37	0.650	6.68	1.55	16.24	175.0
MW13S1	5/11/2017	1210		50.42	2.20	200	7.36	0.651	6.54	1.45	16.23	174.0
MW13S1	5/11/2017	1215		50.46	2.24	200	7.42	0.654	18.7	1.26	16.39	166.9
MW13S1	5/11/2017	1220		50.47	2.25	200	7.43	0.654	20.2	1.22	16.39	168.2
MW13S1	5/11/2017	1225		50.47	2.25	200	7.44	0.655	21.3	1.21	16.40	168.7
MW13S3	5/11/2017	1125	50.85	50.85	0.00	400	6.27	0.180	2.23	6.67	16.03	168.2
MW13S3	5/11/2017	1130		50.85	0.00	400	6.28	0.180	2.12	6.64	16.04	169.2
MW13S3	5/11/2017	1135		50.86	0.01	400	6.29	0.180	2.08	6.66	16.01	169.7
MW140S1	5/6/2017	1210	49.08	49.11	0.03	250	6.77	0.509	28.8	2.14	17.01	78.6
MW140S1	5/6/2017	1215		49.11	0.03	250	6.98	0.512	30.2	1.63	17.21	39.0
MW140S1	5/6/2017	1220		49.11	0.03	250	7.08	0.511	34.8	1.58	17.26	37.6
MW140S1	5/6/2017	1225		49.11	0.03	250	7.09	0.510	37.6	1.58	17.23	35.4
MW140S1	5/6/2017	1230		49.12	0.04	250	7.10	0.510	38.3	1.51	17.23	33.6
MW140S2/S3	5/6/2017	1255	48.97	48.99	0.02	150	6.71	1.716	8.34	5.82	17.99	128.3
MW140S2/S3	5/6/2017	1300		49.00	0.03	150	6.71	1.737	8.26	5.62	17.96	129.0
MW140S2/S3	5/6/2017	1305		49.00	0.03	150	6.71	1.783	7.65	5.38	18.02	130.7
MW141S2/S3	5/4/2017	1443	51.46	51.45	-0.01	400	7.44	0.555	5.71	9.17	16.79	73.4
MW141S2/S3	5/4/2017	1448		51.45	-0.01	400	7.29	0.538	5.34	8.34	16.90	74.6
MW141S2/S3	5/4/2017	1453		51.48	0.02	400	6.98	0.494	4.18	7.84	16.64	77.9
MW141S2/S3	5/4/2017	1458		51.49	0.03	400	6.85	0.485	4.57	6.18	16.92	79.2
MW141S2/S3	5/4/2017	1503		51.47	0.01	400	6.83	0.486	4.91	6.19	16.96	80.8
MW141S2/S3	5/4/2017	1508		51.49	0.03	400	6.81	0.481	4.06	6.04	16.75	82.5

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW142S2/S3	5/9/2017	945	41.5	41.60	0.10	400	7.31	0.371	13.6	2.21	14.29	147.9
MW142S2/S3	5/9/2017	950		41.60	0.10	400	7.24	0.369	46.2	2.21	14.01	144.5
MW142S2/S3	5/9/2017	955		41.60	0.10	400	7.22	0.372	20.6	1.56	13.99	142.3
MW142S2/S3	5/9/2017	1000		41.60	0.10	400	7.19	0.374	19.5	1.43	13.94	138.9
MW142S2/S3	5/9/2017	1005		41.60	0.10	400	7.19	0.374	17.6	1.47	13.98	137.7
MW143S2/S3	5/5/2017	1505	42.64	42.72	0.08	500	7.14	0.785	23.4	4.43	13.94	100.7
MW143S2/S3	5/5/2017	1510		42.72	0.08	500	7.03	0.782	10.1	2.76	13.72	101.2
MW143S2/S3	5/5/2017	1515		42.72	0.08	500	6.98	0.839	33.6	1.84	13.56	101.2
MW143S2/S3	5/5/2017	1520		42.72	0.08	500	6.95	0.856	35.8	1.63	13.59	103.1
MW143S2/S3	5/5/2017	1525		42.72	0.08	500	6.93	0.859	38.9	1.54	13.50	104.7
MW143S2/S3	5/5/2017	1530		42.72	0.08	500	6.89	0.855	40.6	1.51	13.55	107.2
MW145S2/S3	5/9/2017	1330	29.56	29.60	0.04	150	6.89	0.674	29.7	3.70	17.13	140.3
MW145S2/S3	5/9/2017	1335		29.60	0.04	150	6.88	0.675	32.4	3.70	17.19	140.1
MW145S2/S3	5/9/2017	1340		29.60	0.04	150	6.96	0.678	34.2	3.80	17.26	139.3
MW146S1	5/10/2017	1405	58.02	58.02	0.00	275	7.13	0.527	4.99	4.15	16.61	-30.4
MW146S1	5/10/2017	1410		58.14	0.12	275	7.12	0.530	4.73	3.00	16.81	-30.4
MW146S1	5/10/2017	1415		58.20	0.18	275	7.08	0.532	4.61	1.09	16.84	-29.7
MW146S1	5/10/2017	1420		58.24	0.22	275	7.08	0.534	4.02	1.80	16.86	-29.3
MW146S1	5/10/2017	1425		58.24	0.22	275	7.07	0.534	4.71	1.73	16.70	-29.6
MW146S1	5/10/2017	1430		58.24	0.22	275	7.08	0.534	4.29	1.62	16.70	-30.1
MW147S1	5/8/2017	1345	53.56	53.80	0.24	400	7.23	0.683	11.6	2.23	14.77	129.8
MW147S1	5/8/2017	1350		53.80	0.24	400	7.20	0.688	2.36	1.48	14.22	135.0
MW147S1	5/8/2017	1355		53.80	0.24	400	7.17	0.685	2.15	1.40	14.23	137.2
MW147S1	5/8/2017	1400		53.80	0.24	400	7.15	0.687	1.98	1.28	14.15	128.8

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW147S2/S3	5/8/2017	1440	49.49	49.56	0.07	400	6.84	0.664	13.0	8.43	15.57	146.0
MW147S2/S3	5/8/2017	1445		49.56	0.07	400	6.80	0.662	13.2	7.84	15.59	144.6
MW147S2/S3	5/8/2017	1450		49.56	0.07	450	6.78	0.649	13.3	7.98	14.48	144.0
MW147S2/S3	5/8/2017	1455		49.56	0.07	450	6.78	0.645	13.1	8.02	14.27	143.7
MW148S1	5/8/2017	1520	52.57	52.61	0.04	400	6.90	2.532	11.8	4.98	15.56	140.7
MW148S1	5/8/2017	1525		52.61	0.04	400	6.80	2.548	11.2	5.48	14.81	142.9
MW148S1	5/8/2017	1530		52.61	0.04	400	6.79	2.568	10.1	5.81	14.79	142.8
MW148S1	5/8/2017	1535		52.61	0.04	400	6.80	2.623	9.43	5.71	14.79	144.4
MW148S2/S3	5/8/2017	1600	49.67	49.91	0.24	450	6.91	2.923	50.1	3.21	15.03	144.4
MW148S2/S3	5/8/2017	1605		49.91	0.24	450	6.81	2.933	24.9	3.14	14.72	144.7
MW148S2/S3	5/8/2017	1610		49.91	0.24	450	6.81	2.850	13.5	3.00	14.59	144.2
MW148S2/S3	5/8/2017	1615		49.91	0.24	450	6.81	2.832	14.1	2.94	14.55	143.6
MW148S2/S3	5/8/2017	1620		49.91	0.24	450	6.83	2.826	12.4	2.96	14.54	143.4
MW149S2/S3	5/11/2017	1430	46.96	46.96	0.00	400	7.49	2.729	65.4	1.60	13.60	30.7
MW149S2/S3	5/11/2017	1435		46.96	0.00	400	7.56	2.733	36.4	0.80	13.38	10.1
MW149S2/S3	5/11/2017	1440		46.96	0.00	400	7.57	2.720	28.4	0.40	13.30	-18.8
MW149S2/S3	5/11/2017	1445		46.96	0.00	400	7.56	2.715	14.9	0.39	13.25	-15.1
MW149S2/S3	5/11/2017	1450		46.96	0.00	400	7.58	2.710	9.12	0.35	13.21	-16.5
MW14S1	5/5/2017	1503	61.08	61.11	0.03	275	6.90	0.732	2.57	9.84	18.03	-93.2
MW14S1	5/5/2017	1508		61.19	0.11	275	6.21	0.731	3.14	4.37	16.79	-86.2
MW14S1	5/5/2017	1513		61.20	0.12	275	6.18	0.734	2.73	2.79	16.71	-82.7
MW14S1	5/5/2017	1518		61.21	0.13	275	6.18	0.734	2.52	2.75	16.74	-82.0
MW14S1	5/5/2017	1523		61.21	0.13	275	6.19	0.735	3.28	2.77	16.69	-84.5
MW14S3	5/5/2017	1510	52.10	51.82	-0.28	200	6.78	1.510	8.57	3.46	16.40	-31.0
MW14S3	5/5/2017	1515		51.82	-0.28	200	6.67	1.740	8.13	1.86	16.07	-26.4

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW14S3	5/5/2017	1520		51.82	-0.28	200	6.61	1.930	8.26	1.26	16.07	-24.7
MW14S3	5/5/2017	1525		51.82	-0.28	200	6.58	2.170	8.06	1.04	15.86	-21.5
MW14S3	5/5/2017	1530		51.82	-0.28	200	6.59	2.210	8.38	1.04	15.76	-21.7
MW14S3	5/5/2017	1535		51.82	-0.28	200	6.58	2.220	8.35	1.01	15.77	-22.0
MW15S1	5/6/2017	923	57.90	57.83	-0.07	325	6.99	1.205	43.0	2.99	15.82	-244.5
MW15S1	5/6/2017	928		57.92	0.02	350	6.95	1.226	27.0	2.39	15.87	-240.6
MW15S1	5/6/2017	933		57.93	0.03	325	7.05	1.282	15.9	0.95	15.89	-249.4
MW15S1	5/6/2017	938		57.93	0.03	325	7.05	1.282	15.2	0.92	15.93	-249.7
MW15S1	5/6/2017	943		57.93	0.03	325	7.05	1.282	14.8	0.93	15.94	-249.5
MW15S2	5/6/2017	925	49.94	49.50	-0.44	300	7.13	0.524	2.79	5.36	15.67	-16.2
MW15S2	5/6/2017	930		49.56	-0.38	300	7.09	0.519	3.34	4.50	15.58	-0.6
MW15S2	5/6/2017	935		49.60	-0.34	300	7.15	0.520	2.98	3.84	15.54	4.0
MW15S2	5/6/2017	940		49.60	-0.34	300	7.20	0.528	2.69	3.39	15.53	7.2
MW15S2	5/6/2017	945		49.60	-0.34	300	7,18	0.542	2.23	3.64	15.55	9.9
MW15S2	5/6/2017	950		49.60	-0.34	300	6.99	0.564	2.58	4.24	15.57	18.1
MW15S2	5/6/2017	955		49.60	-0.34	300	6.94	0.579	2.71	4.45	15.60	23.2
MW15S2	5/6/2017	1000		49.60	-0.34	300	6.92	0.584	2.39	4.56	15.62	25.8
MW15S2	5/6/2017	1005		49.60	-0.34	300	6.89	0.592	2.23	4.60	15.61	26.1
MW15S4	5/6/2017	1510	33.32	33.32	0.00	--	6.50	0.231	17.1	2.30	15.97	-205.7
MW16BR	5/4/2017	1145	52.40	52.48	0.08	200	7.71	2.678	4.80	1.41	16.55	-28.1
MW16BR	5/4/2017	1150		52.48	0.08	200	7.78	2.253	4.15	1.29	16.50	-46.2
MW16BR	5/4/2017	1155		52.49	0.09	200	7.83	2.263	4.00	0.98	16.48	-69.7
MW16BR	5/4/2017	1200		52.49	0.09	200	7.89	2.271	3.47	0.84	16.48	-87.9
MW16BR	5/4/2017	1205		52.50	0.10	200	7.93	2.277	2.35	0.79	16.49	-101.8
MW16BR	5/4/2017	1210		52.49	0.09	200	7.99	2.283	2.20	0.68	16.47	-123.0
MW16BR	5/4/2017	1215		52.50	0.10	200	8.15	2.288	2.00	0.45	16.49	-171.8

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW16BR	5/4/2017	1220		52.49	0.09	200	8.15	2.289	1.40	0.44	16.50	-174.6
MW16BR	5/4/2017	1225		52.49	0.09	200	8.17	2.289	1.00	0.42	16.49	-177.3
MW16S1A	5/4/2017	1100	54.35	54.40	0.05	200	6.81	0.991	5.05	0.90	16.32	95.1
MW16S1A	5/4/2017	1105		54.40	0.05	200	6.82	0.889	5.00	0.85	16.33	94.5
MW16S1A	5/4/2017	1110		54.40	0.05	200	6.82	0.886	4.91	0.82	16.28	94.1
MW16S1A	5/4/2017	1115		54.40	0.05	200	6.82	0.885	3.10	0.79	16.29	93.7
MW16S2SS	5/4/2017	945	49.45	49.45	0.00	300	7.50	1.024	20.9	0.80	15.92	110.2
MW16S2SS	5/4/2017	950		49.47	0.02	300	7.41	1.018	18.8	0.78	15.95	104.4
MW16S2SS	5/4/2017	955		49.49	0.04	300	7.38	1.041	17.7	0.77	15.95	90.1
MW16S2SS	5/4/2017	1000		49.50	0.05	300	7.27	1.518	13.8	0.96	15.99	49.2
MW16S2SS	5/4/2017	1005		49.35	-0.10	220	7.26	1.318	13.9	1.02	16.23	39.0
MW16S2SS	5/4/2017	1010		49.37	-0.08	220	7.26	1.306	14.0	1.07	16.27	36.0
MW16S2SS	5/4/2017	1015		49.38	-0.07	220	7.26	1.294	14.2	1.08	16.22	34.7
MW16S4R	5/4/2017	900	31.79	31.81	0.02	200	6.78	0.463	39.2	7.14	15.78	166.5
MW16S4R	5/4/2017	905		31.81	0.02	200	6.81	0.438	33	6.80	16.16	170.4
MW16S4R	5/4/2017	910		31.82	0.03	200	6.81	0.436	28.5	6.79	16.09	170.8
MW16S4R	5/4/2017	915		31.82	0.03	200	6.81	0.429	13.2	6.74	16.29	174.7
MW16S4R	5/4/2017	920		31.82	0.03	200	6.79	0.423	7.88	6.74	16.21	180.1
MW17S1	5/8/2017	1120	54.28	54.29	0.01	400	7.13	0.600	4.41	4.86	14.09	106.0
MW17S1	5/8/2017	1125		54.29	0.01	400	7.08	0.598	3.71	4.94	14.30	100.4
MW17S1	5/8/2017	1130		54.29	0.01	400	7.11	0.580	2.80	4.97	14.08	104.3
MW17S1	5/8/2017	1135		54.29	0.01	400	7.14	0.603	3.01	4.83	14.05	106.2
MW17S1	5/8/2017	1140		54.29	0.01	400	7.12	0.604	2.97	4.85	14.04	105.7
MW17S3A	5/8/2017	1245	47.20	47.30	0.10	450	7.08	0.444	10.9	3.23	14.52	141.4
MW17S3A	5/8/2017	1250		47.30	0.10	450	7.06	0.448	5.72	1.09	14.15	141.2

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW17S3A	5/8/2017	1255		47.30	0.10	450	7.04	0.452	4.11	0.82	14.14	134.7
MW17S3A	5/8/2017	1300		47.30	0.10	450	7.06	0.454	4.07	0.81	14.17	136.0
MW17S3A	5/8/2017	1305		47.30	0.10	450	7.09	0.453	3.12	0.78	14.11	129.8
MW17S3B	5/8/2017	1200	46.43	46.44	0.01	200	6.73	1.101	20.0	8.48	16.02	135.5
MW17S3B	5/8/2017	1205		46.44	0.01	200	6.69	1.098	13.4	8.23	15.52	141.5
MW17S3B	5/8/2017	1210		46.44	0.01	200	6.72	1.100	11.9	8.09	15.45	137.8
MW17S3B	5/8/2017	1215		46.44	0.01	200	6.68	1.101	9.92	8.14	15.47	138.5
MW17S3B	5/8/2017	1220		46.44	0.01	200	6.63	1.101	8.78	8.03	15.45	135.1
MW18S1	5/12/2017	1325	57.90	57.90	0.00	300	7.00	0.619	48.6	6.12	15.36	149.6
MW18S1	5/12/2017	1330		57.90	0.00	300	6.90	0.618	31.9	6.86	15.42	149.5
MW18S1	5/12/2017	1335		57.90	0.00	300	6.85	0.637	15.2	7.83	15.17	151.9
MW18S1	5/12/2017	1340		57.90	0.00	300	6.83	0.642	9.70	8.48	15.16	151.7
MW18S1	5/12/2017	1345		57.90	0.00	300	6.82	0.643	9.23	8.53	15.18	152.0
MW18S1	5/12/2017	1350		57.90	0.00	300	6.80	0.645	8.88	8.60	15.19	152.7
MW18S3	5/12/2017	1350	50.20	50.20	0.00	400	7.66	0.362	336	9.85	14.75	137.1
MW18S3	5/12/2017	1355		50.20	0.00	400	7.65	0.363	86.3	5.12	15.01	137.0
MW18S3	5/12/2017	1400		50.20	0.00	400	7.63	0.364	26.7	4.75	15.00	137.5
MW18S3	5/12/2017	1405		50.20	0.00	400	7.61	0.365	24.3	4.50	15.15	136.3
MW18S3	5/12/2017	1410		50.20	0.00	400	7.60	0.365	22.1	4.68	15.17	135.9
MW19S1	5/12/2017	1235	57.42	57.42	0.00	200	7.23	2.069	1000	9.96	18.47	-201.7
MW19S1	5/12/2017	1240		57.43	0.01	175	7.24	2.055	1000	8.19	18.15	-204.8
MW19S1	5/12/2017	1245		57.43	0.01	175	7.31	2.059	1000	4.17	18.00	-213.9
MW19S1	5/12/2017	1250		57.48	0.06	175	7.31	2.078	1000	4.07	17.96	-214.0
MW19S1	5/12/2017	1255		57.50	0.08	175	7.27	2.074	1000	3.96	17.89	-222.8
MW19S1	5/12/2017	1300		57.50	0.08	175	7.25	2.061	1000	3.54	17.88	-239.7
MW19S1	5/12/2017	1305		57.50	0.08	175	7.10	2.068	1000	3.13	17.61	-251.0

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW19S1	5/12/2017	1310		57.63	0.21	175	7.12	2.064	913	2.79	17.60	-243.7
MW19S1	5/12/2017	1315		57.67	0.25	175	7.13	2.064	893	2.83	17.57	-240.2
MW19S1	5/12/2017	1320		57.68	0.26	175	7.13	2.061	890	2.82	17.55	-240.9
MW19S2	5/12/2017	1210	54.78	54.80	0.02	400	7.75	5.867	2000	1.88	15.91	147.1
MW19S2	5/12/2017	1215		54.88	0.10	225	7.78	5.837	188	1.08	15.75	146.7
MW19S2	5/12/2017	1220		55.00	0.22	225	7.75	5.858	123	0.91	15.49	150.7
MW19S2	5/12/2017	1225		55.03	0.25	225	7.69	5.924	119	0.99	15.45	148.8
MW19S2	5/12/2017	1230		55.08	0.30	225	7.65	6.012	118	1.08	15.44	151.7
MW19S2	5/12/2017	1235		55.08	0.30	225	--	--	--	--	--	--
MW19S4	5/12/2017	1207	32.90	32.18	-0.72	175	12.46	5.704	1000	8.56	18.45	89.4
MW19S4	5/12/2017	1212		34.38	1.48	175	12.43	6.476	856	8.11	18.50	90.9
MW19S4	5/12/2017	1217		34.76	1.86	175	12.25	6.808	58.6	6.62	18.21	99.0
MW19S4	5/12/2017	1222		35.81	2.91	175	12.14	6.995	16.8	6.47	18.24	103.8
MW19S4	5/12/2017	1227		hitting top of pu	--	175	12.31	6.149	14.2	6.53	18.21	100.4
MW20S1	5/8/2017	1625	45.27	45.34	0.07	300	6.92	0.495	2.26	0.80	16.62	-39.6
MW20S1	5/8/2017	1630		45.34	0.07	300	6.88	0.495	2.24	0.69	16.64	-43.7
MW20S1	5/8/2017	1635		45.34	0.07	300	7.01	0.495	2.08	0.52	16.60	-52.8
MW20S1	5/8/2017	1640		45.34	0.07	300	6.98	0.496	2.34	0.40	16.65	-60.5
MW20S1	5/8/2017	1645		45.34	0.07	300	7.04	0.496	2.12	0.41	16.61	-61.6
MW20S1	5/8/2017	1650		45.34	0.07	300	7.06	0.495	2.08	0.36	16.57	-64.8
MW20S3	5/8/2017	1705	45.68	45.68	0.00	250	6.91	0.597	6.48	5.33	16.65	76.0
MW20S3	5/8/2017	1710		45.68	0.00	250	6.98	0.597	5.12	5.04	16.66	77.1
MW20S3	5/8/2017	1715		45.68	0.00	250	7.05	0.598	4.71	4.67	16.57	82.1
MW20S3	5/8/2017	1720		45.68	0.00	250	7.08	0.597	4.75	4.61	16.50	82.2

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW21S1	5/5/2017	1110	43.15	43.20	0.05	200	8.12	1.328	4.68	0.25	16.57	41.2
MW21S1	5/5/2017	1115		43.25	0.10	200	8.12	1.328	4.27	0.34	16.63	38.2
MW21S1	5/5/2017	1120		43.25	0.10	250	8.12	1.332	3.10	0.28	16.67	25.1
MW21S1	5/5/2017	1125		43.25	0.10	250	8.13	1.329	2.86	0.24	16.50	-16.4
MW21S1	5/5/2017	1130		43.25	0.10	250	8.05	1.353	2.20	0.15	16.52	-91.8
MW21S1	5/5/2017	1135		43.25	0.10	250	8.07	1.361	1.50	0.17	16.53	-94.0
MW21S1	5/5/2017	1140		43.25	0.10	250	7.99	1.418	1.20	0.18	16.89	-87.8
MW21S3	5/4/2017	1440	42.77	42.75	-0.02	250	6.66	0.615	26.0	6.01	15.82	95.4
MW21S3	5/4/2017	1445		42.78	0.01	250	6.68	0.614	18.1	5.63	15.79	95.4
MW21S3	5/4/2017	1450		42.78	0.01	250	6.70	0.610	16.2	5.45	15.68	95.5
MW21S3	5/4/2017	1455		42.79	0.02	250	6.72	0.611	15.6	5.33	15.97	96.9
MW22S1	5/6/2017	1000	47.98	48.00	0.02	200	7.49	0.690	2.15	0.75	16.77	67.8
MW22S1	5/6/2017	1005		48.00	0.02	200	7.50	0.691	2.00	0.88	16.79	67.8
MW22S1	5/6/2017	1010		48.00	0.02	200	7.72	0.700	1.10	1.11	17.97	64.1
MW22S1	5/6/2017	1015		48.00	0.02	200	7.74	0.714	1.05	1.17	18.01	63.3
MW22S1	5/6/2017	1020		48.00	0.02	200	7.76	0.716	0.96	1.14	18.06	62.2
MW22S2	5/8/2017	1020	48.60	48.62	0.02	300	7.05	0.769	21.3	5.12	17.21	110.7
MW22S2	5/8/2017	1025		48.62	0.02	300	7.07	0.782	15.7	4.21	17.34	110.7
MW22S2	5/8/2017	1030		48.62	0.02	300	7.10	0.802	11.1	4.93	17.28	104.1
MW22S2	5/8/2017	1035		48.62	0.02	300	7.15	0.841	12.1	5.07	17.18	102.8
MW22S2	5/8/2017	1040		48.62	0.02	300	7.15	0.845	12.1	5.08	17.22	102.2
MW22S2	5/8/2017	1045		48.63	0.03	300	7.15	0.856	13.4	5.20	17.27	101.3
MW22S4	5/6/2017	1115	32.80	32.80	0.00	400	6.70	0.348	3.75	7.62	17.30	132.6
MW22S4	5/6/2017	1120		32.80	0.00	400	6.70	0.351	3.12	7.62	17.34	133.8
MW22S4	5/6/2017	1125		32.80	0.00	400	6.71	0.351	2.65	7.58	17.36	133.9

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW23BR	5/5/2017	1720	56.45	56.45	0.00	300	7.45	3.190	37.0	9.14	17.48	43.4
MW23BR	5/5/2017	1725		56.91	0.46	300	7.58	3.142	19.4	8.05	16.90	26.1
MW23BR	5/5/2017	1730		57.73	1.28	300	8.08	3.088	12.8	3.69	16.48	-22.7
MW23BR	5/5/2017	1735		57.81	1.36	300	8.85	3.078	12.2	0.87	15.88	-78.9
MW23BR	5/5/2017	1740		58.00	1.55	300	8.91	3.081	8.73	0.72	15.84	-84.4
MW23BR	5/5/2017	1745		58.10	1.65	300	8.97	3.097	8.47	0.55	15.82	-95.1
MW23BR	5/5/2017	1750		58.17	1.72	300	8.75	3.144	7.83	0.32	15.72	-119.9
MW23BR	5/5/2017	1755		58.31	1.86	300	8.72	3.151	7.16	0.30	15.73	-120.2
MW23BR	5/5/2017	1760		58.42	1.97	300	8.72	3.150	6.47	0.29	15.76	-121.4
MW24S1	5/9/2017	1340	60.88	60.92	0.04	250	7.42	0.585	4.23	2.23	15.28	108.0
MW24S1	5/9/2017	1345		60.88	0.00	250	7.33	0.577	4.06	0.62	15.14	114.1
MW24S1	5/9/2017	1350		60.88	0.00	250	7.32	0.571	3.23	0.44	14.78	114.7
MW24S1	5/9/2017	1355		60.88	0.00	250	7.32	0.568	3.15	0.40	15.14	114.4
MW24S1	5/9/2017	1400		60.88	0.00	250	7.31	0.560	3.10	0.38	15.23	113.8
MW24S3	5/9/2017	1425	50.9	51.15	0.25	500	7.07	0.699	0.69	1.87	14.24	138.6
MW24S3	5/9/2017	1430		50.97	0.07	500	7.07	0.703	0.58	1.89	14.52	136.9
MW24S3	5/9/2017	1435		50.97	0.07	500	7.10	0.702	0.55	2.14	14.74	134.5
MW24S3	5/9/2017	1440		50.97	0.07	500	7.11	0.700	0.43	2.18	14.73	133.7
MW24S4	5/9/2017	1500	32.51	--	--	--	6.60	0.226	--	--	15.22	146.8
MW24S4	5/9/2017	1505		--	--	--	6.55	0.223	--	--	14.96	143.7
MW24S4	5/9/2017	1510		--	--	--	6.59	0.228	--	--	15.12	141.6
MW24S4	5/9/2017	1515		--	--	--	6.54	0.226	--	--	14.91	142.7
MW25S1	5/3/2017	1050	52.00	52.00	0.00	300	7.39	0.671	9.81	11.10	14.71	117.0
MW25S1	5/3/2017	1055		52.05	0.05	300	7.41	0.642	4.30	9.80	14.54	110.8
MW25S1	5/3/2017	1100		52.06	0.06	300	7.40	0.502	14.6	9.61	14.34	109.9
MW25S1	5/3/2017	1105		52.06	0.06	300	7.33	0.350	9.71	8.38	14.45	113.1

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW25S1	5/3/2017	1110		52.07	0.07	300	7.26	0.277	10.0	7.66	14.74	118.1
MW25S1	5/3/2017	1115		52.08	0.08	300	7.24	0.267	8.87	7.53	14.73	120.5
MW25S1	5/3/2017	1120		52.08	0.08	300	7.23	0.267	8.98	7.20	14.65	121.8
MW26S1	5/9/2017	1007	50.15	50.15	0.00	350	7.53	0.636	7.84	7.29	18.93	-6.4
MW26S1	5/9/2017	1012		50.21	0.06	350	7.10	0.557	7.84	8.14	17.37	2.6
MW26S1	5/9/2017	1017		50.24	0.09	350	7.02	0.572	8.26	2.02	16.90	2.5
MW26S1	5/9/2017	1022		50.27	0.12	350	6.89	0.582	7.58	1.60	16.49	2.4
MW26S1	5/9/2017	1027		50.27	0.12	350	6.88	0.587	6.71	1.01	16.47	-4.8
MW26S1	5/9/2017	1032		50.27	0.12	350	6.89	0.615	6.47	0.75	16.47	-19.1
MW26S1	5/9/2017	1037		50.27	0.12	350	6.89	0.615	6.19	0.75	16.46	-19.0
MW26S1	5/9/2017	1042		50.27	0.12	350	6.89	0.616	6.23	0.77	16.47	-19.4
MW26S3	5/9/2017	1015	50.43	50.45	0.02	300	6.27	0.960	1342	15.10	17.00	-224.0
MW26S3	5/9/2017	1020		50.46	0.03	300	6.17	0.980	1116	5.50	16.89	-196.7
MW26S3	5/9/2017	1025		50.46	0.03	300	6.23	0.994	892	5.41	16.84	-196.2
MW26S3	5/9/2017	1030		50.46	0.03	300	6.26	1.005	688	5.58	16.78	-196.4
MW26S3	5/9/2017	1035		50.46	0.03	300	6.27	1.015	634	5.74	16.76	-200.0
MW26S3	5/9/2017	1040		50.46	0.03	300	6.27	1.017	631	5.82	16.69	-198.0
MW27S1	5/12/2017	1230	57.06	--	Grab Sample via Bailer due to DNAPL			--	--	--	--	--
MW27S2	5/12/2017	1245	52.42	--	Grab Sample via Bailer due to DNAPL			--	--	--	--	--
MW28S1	5/4/2017	1440	56.21	56.30	0.09	300	7.29	0.629	3.11	8.04	14.13	8.3
MW28S1	5/4/2017	1445		56.34	0.13	300	7.29	0.640	3.07	7.85	13.74	14.2
MW28S1	5/4/2017	1450		56.34	0.13	300	7.30	0.642	2.42	7.55	13.65	12.1
MW28S1	5/4/2017	1455		56.34	0.13	300	7.38	0.650	2.86	7.37	13.93	11.2
MW28S1	5/4/2017	1500		56.34	0.13	300	7.31	0.649	2.57	7.42	13.73	11.4

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW28S2	5/4/2017	1520	52.18	52.28	0.10	400	7.08	4.454	31.7	4.45	13.77	77.4
MW28S2	5/4/2017	1525	.	52.30	0.12	400	6.87	4.718	53.0	2.42	13.58	60.1
MW28S2	5/4/2017	1530		52.30	0.12	400	7.07	2.881	54.0	1.69	13.62	40.2
MW28S2	5/4/2017	1535		52.30	0.12	400	7.13	2.310	22.4	1.60	13.68	34.0
MW28S2	5/4/2017	1540		52.30	0.12	400	7.14	2.254	12.0	1.40	13.66	27.6
MW28S2	5/4/2017	1545		52.30	0.12	400	7.15	2.263	9.62	1.48	13.69	29.2
MW28S3	5/4/2017	1610	51.80	51.80	0.00	400	7.27	0.162	490	5.64	14.13	8.5
MW28S3	5/4/2017	1615		51.80	0.00	400	7.28	0.161	287	5.46	14.30	7.4
MW28S3	5/4/2017	1620		51.80	0.00	400	7.23	0.147	60.0	5.37	14.10	8.3
MW28S3	5/4/2017	1625		51.80	0.00	400	7.20	0.145	49.5	5.17	14.38	9.6
MW28S3	5/4/2017	1630		51.80	0.00	400	7.19	0.140	32.2	5.23	14.33	10.3
MW28S3	5/4/2017	1635		51.80	0.00	400	7.20	0.139	25.6	5.20	14.38	11.2
MW28S3	5/4/2017	1640		51.80	0.00	400	7.19	0.139	23.3	5.17	14.40	15.2
MW28S3	5/4/2017	1645		51.80	0.00	400	7.18	0.140	23.2	5.18	14.42	16.0
MW29S1	5/11/2017	1335	57.70	57.79	0.09	400	7.19	2.329	75.4	0.74	14.71	69.7
MW29S1	5/11/2017	1340		57.73	0.03	400	7.16	2.280	56.3	0.65	14.71	75.9
MW29S1	5/11/2017	1345		57.73	0.03	400	7.12	2.231	28.7	0.49	14.85	83.8
MW29S1	5/11/2017	1350		57.73	0.03	400	7.10	2.246	22.4	0.44	14.94	88.0
MW29S1	5/11/2017	1355		57.73	0.03	400	7.09	2.256	21.4	0.43	15.10	81.0
MW29S1	5/11/2017	1400		57.73	0.03	400	7.08	2.247	19.8	0.44	15.00	88.9
MW29S2	5/11/2017	1255	48.15	48.23	0.08	400	7.54	9.115	75.4	2.34	15.31	-14.6
MW29S2	5/11/2017	1300		48.23	0.08	400	7.30	9.302	38.4	1.39	14.89	-14.0
MW29S2	5/11/2017	1305		48.23	0.08	400	7.06	9.970	22.3	1.38	14.92	19.9
MW29S2	5/11/2017	1310		48.23	0.08	400	6.96	10.05	15.7	1.45	15.15	23.2
MW29S2	5/11/2017	1315		48.23	0.08	400	6.94	10.08	11.8	1.43	15.21	26.0
MW29S2	5/11/2017	1320		48.23	0.08	400	6.92	10.06	9.12	1.42	15.27	28.0

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW29S3	5/9/2017	1115	48.68	48.68	0.00	450	7.60	3.191	5.39	0.45	14.39	42.1
MW29S3	5/9/2017	1120		48.68	0.00	450	7.58	3.146	4.11	0.34	14.21	27.9
MW29S3	5/9/2017	1125		48.68	0.00	450	7.57	3.114	3.98	0.34	14.16	18.9
MW29S3	5/9/2017	1130		48.68	0.00	450	7.54	3.104	3.21	0.38	14.24	10.5
MW29S3	5/9/2017	1135		48.68	0.00	450	7.53	3.096	2.85	0.39	14.14	9.8
MW30S1	5/6/2017	920	54.08	54.14	0.06	400	6.96	2.017	211.40	3.34	15.23	116.3
MW30S1	5/6/2017	925		54.14	0.06	400	6.98	1.999	183.00	1.97	15.02	116.2
MW30S1	5/6/2017	930		54.14	0.06	400	6.96	1.982	72.60	1.30	14.98	110.7
MW30S1	5/6/2017	935		54.14	0.06	400	6.94	1.983	28.90	1.21	14.95	104.1
MW30S1	5/6/2017	940		54.14	0.06	400	6.96	1.989	22.90	1.24	14.98	100.2
MW30S1	5/6/2017	945		54.14	0.06	400	6.92	1.994	20.10	1.28	14.99	97.5
MW30S1	5/6/2017	950		54.14	0.06	400	6.93	1.999	20.60	1.29	14.98	96.1
MW30S2	5/6/2017	1025	52.74	53.00	0.26	400	7.43	0.476	80.2	7.50	16.29	128.4
MW30S2	5/6/2017	1030		53.00	0.26	400	7.02	0.451	48.4	2.77	15.60	140.0
MW30S2	5/6/2017	1035		53.00	0.26	400	7.17	0.547	31.8	2.00	15.51	139.5
MW30S2	5/6/2017	1040		53.00	0.26	400	7.11	0.561	24.5	1.77	15.29	138.9
MW30S2	5/6/2017	1045		53.00	0.26	400	7.14	0.563	21.6	1.74	15.27	140.3
MW30S2	5/6/2017	1050		53.00	0.26	400	7.11	0.563	23.4	1.80	15.38	141.3
MW30S3	5/6/2017	1110	50.15	50.18	0.03	450	7.02	1.777	68.0	3.78	15.63	140.3
MW30S3	5/6/2017	1115		50.18	0.03	450	6.94	1.741	48.5	3.64	15.53	144.3
MW30S3	5/6/2017	1120		50.18	0.03	450	6.97	1.751	25.6	3.67	15.76	135.5
MW30S3	5/6/2017	1125		50.18	0.03	450	6.94	1.755	16.5	3.70	15.95	140.1
MW30S3	5/6/2017	1130		50.18	0.03	450	6.93	1.759	9.98	3.73	16.00	140.8
MW31S1	5/11/2017	1415	35.63	35.63	0.00	150	7.37	1.095	10.2	0.53	17.24	81.2
MW31S1	5/11/2017	1420		35.63	0.00	150	7.37	1.092	7.83	0.53	17.22	81.7
MW31S1	5/11/2017	1425		35.63	0.00	150	7.37	1.091	4.33	0.52	17.20	82.1

Table 4
Summary of Monitoring Well Purging Parameters - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Sample Location	Date	Time	Static Water Level (ft BTOC)[1]	Water Level (ft BTOC)	Drawdown (feet)	Pumping Rate (L/min)[2]	pH (Std. Units)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	DO (mg/L)[6]	Temperature (°C)[7]	ORP[8] (mV)[9]
MW32S1	5/10/2017	905	45.25	45.28	0.03	400	7.01	2.434	38.9	1.32	13.78	117.8
MW32S1	5/10/2017	910		45.28	0.03	400	7.08	2.494	22.9	0.85	13.58	90.8
MW32S1	5/10/2017	915		45.28	0.03	400	7.14	2.701	13.4	0.97	13.79	109.9
MW32S1	5/10/2017	920		45.28	0.03	400	7.08	2.729	10.7	2.34	14.05	111.4
MW32S1	5/10/2017	925		45.28	0.03	400	7.06	2.732	9.80	2.52	13.77	113.7
MW32S1	5/10/2017	930		45.28	0.03	400	7.06	2.741	8.76	2.64	13.84	114.9
MW144S2/S3	5/22/2017	1305	46.23	--	--	--	6.86	0.541	--	--	16.48	-25.8
MW144S2/S3	5/22/2017	1320		--	--	--	6.73	0.521	--	--	16.59	-29.6
MW144S2/S3	5/22/2017	1335		--	--	--	6.76	0.533	--	--	16.39	-26.5
MW144S2/S3	5/22/2017	1345		--	--	--	6.91	0.516	--	--	16.28	-30.1

Notes:
DO - Dissolved Oxygen
[1] ft BTOC - feet below top of casing
[2] L/min - liters per minute
[3] Std. Units - standard units
[4] mS/cm - microsiemens per centimeter
[5] NTU - nephelometric turbidity units
[7] °C - degrees Celsius
[8] ORP - oxidation-reduction potential
[9] mV - millivolts
[10] N/A - not applicable
[11] Y - Yes, N - No

Table 5
Groundwater Sample Key - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Location	Sample Name	Date & Time		QA/QC
AMW1	WG-05042017-BS-AMW001	5/4/2017	16:25	
AMW101D	WG-05122017-BS-AMW101D	5/12/2017	10:15	
AMW101I	WG-05122017-BS-AMW101I	5/12/2017	10:40	
AMW101S	WG-05122017-BS-AMW101S	5/12/2017	14:05	
AMW102D	WG-05092017-BS-AMW102D	5/9/2017	9:15	
AMW102S	WG-05092017-BS-AMW102S	5/9/2017	17:00	
AMW104	WG-05112017-BS-AMW104	5/11/2017	12:25	
AMW105D	WG-05042017-BS-AMW105D	5/4/2017	10:50	
AMW105S	WG-05042017-BS-AMW105S	5/4/2017	11:25	WG-05042017-BS-FD02
AMW106D	WG-05062017-BS-AMW106D	5/6/2017	11:05	
AMW106S	WG-05042017-BS-AMW106S	5/4/2017	14:25	
AMW107D	WG-05042017-BS-AMW107D	5/4/2017	14:25	
AMW107S	WG-05042017-BS-AMW107S	5/4/2017	13:45	
AMW108D	WG-05112017-BS-AMW108D	5/11/2017	9:35	
AMW108S	WG-05112017-BS-AMW108S	5/12/2017	15:18	WG-05112017-BS-FD009
AMW16D	WG-05032017-BS-AMW16D	5/3/2017	14:30	
AMW16S	WG-05032017-BS-AMW16S	5/3/2017	14:00	
AMW3	WG-05112017-BS-AMW003	5/12/2017	15:18	
AMW4D	WG-05032017-BS-AMW4D	5/3/2017	14:55	
AMW4S	WG-05032017-BS-AMW4S	5/3/2017	15:35	
AMW5D	WG-05062017-BS-AMW005D	5/6/2017	11:40	
AMW5S	WG-05042017-BS-AMW005S	5/4/2017	13:30	
AMW8D	WG-05112017-BS-AMW008D	5/12/2017	10:35	
AMW8S	WG-05112017-BS-AMW008S	5/12/2017	11:15	
APMW302S1	WG-05092017-BS-APMW302S1	5/9/2017	9:00	
APMW302S2	WG-05092017-BS-APMW302S2	5/9/2017	8:50	
APMW302S3	WG-05092017-BS-APMW302S3	5/9/2017	9:30	
MW02S1	WG-05052017-BS-MW02S1	5/5/2017	11:35	
MW02S2	WG-05052017-BS-MW02S2	5/5/2017	11:20	
MW03S1	WG-05042017-DF-MW003S1	5/4/2017	14:00	
MW04S1	WG-05112017-DF-MW004S1	5/11/2017	10:35	
MW04S3	WG-05112017-DF-MW004S3	5/11/2017	9:55	WG-05112017-DF-FD8
MW05S3	WG-05122017-JR-MW005S3	5/12/2017	10:50	
MW05S4	DRY			
MW06S1	WG-05042017-JR-MW06S1	5/4/2017	11:20	
MW06S3	WG-05042017-JR-MW06S3	5/4/2017	10:20	MS/MSD
MW06BR	WG-05082017-JR-MW006BR	5/8/2017	17:00	
MW07S1	WG-05092017-BS-MW007S1	5/9/2017	14:05	
MW07S2	WG-05092017-BS-MW007S2	5/9/2017	14:50	
MW07S3	WG-05092017-BS-MW007S3	5/9/2017	15:15	
MW08S1	WG-05052017-JR-MW008S1	5/5/2017	11:35	

Table 5
Groundwater Sample Key - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Location	Sample Name	Date & Time		QA/QC
MW08S2	WG-05052017-JR-MW008S2	5/5/2017	10:20	MS/MSD
MW08S3	WG-05052017-JR-MW008S3	5/5/2017	12:40	
MW09S1	WG-05052017-BS-MW09S1	5/5/2017	10:25	
MW09S3	WG-05052017-BS-MW09S3	5/5/2017	8:50	
MW09S4	DRY			
MW10S1	WG-05122017-JR-MW010S1	5/12/2017	9:45	
MW10S2	WG-05102017-BS-MW010S2	5/10/2017	9:35	
MW10S3	WG-05122017-DF-MW010S3	5/12/2017	14:15	
MW113S3	WG-05112017-JR-MW113S3	5/11/2017	10:10	
MW114S1	WG-05112017-JR-MW114S1	5/11/2017	9:35	
MW11S1	WG-05052017-DF-MW011S1	5/5/2017	15:25	
MW11S3A	WG-05052017-DF-MW011S3A	5/5/2017	16:15	
MW11S3B	WG-05052017-DF-MW011S3B	5/5/2017	14:20	
MW12S1A	WG-05052017-BS-MW012S1A	5/5/2017	16:40	
MW12S3	WG-05052017-BS-MW012S3	5/5/2017	16:40	
MW130S1	WG-05092017-DF-MW130S1	5/9/2017	9:15	WG-05092017-DF-FD7
MW130S2	WG-05092017-DF-MW130S2	5/9/2017	10:20	
MW130S3	WG-05092017-DF-MW130S3	5/9/2017	10:40	
MW131S2	WG-05082017-DF-MW131S2	5/8/2017	14:05	
MW131S3	WG-05082017-DF-MW131S3	5/8/2017	14:50	
MW132S1	WG-05092017-DF-MW132S1	5/9/2017	13:15	
MW132S2/S3	WG-05092017-DF-MW132S2/S3	5/9/2017	12:05	
MW133S2/S3	WG-05112017-DF-MW133S2/S3	5/11/2017	8:55	
MW134S2	WG-05032017-DF-MW134S2	5/3/2017	11:25	
MW134S3	WG-05032017-DF-MW134S3	5/3/2017	12:00	
MW135S1	WG-05042017-DF-MW135S1	5/4/1947	16:05	
MW135S2/S3	WG-05042017-DF-MW135S2/S3	5/4/2017	16:05	
MW136S2/S3	WG-05052017-DF-MW136S2/S3	5/5/2017	10:30	
MW137S1	WG-05032017-DF-MW137S1	5/3/2017	16:05	
MW137S2	WG-05052017-DF-MW137S2	5/5/2017	13:46	
MW137S3	WG-05032017-DF-MW137S3	5/3/2017	14:25	
MW138S1	WG-05082017-DF-MW138S1	5/8/2017	15:35	
MW138S2/S3	WG-05082017-DF-MW138S2/S3	5/8/2017	14:50	
MW139S2/S3	WG-05112017-DF-MW139S2/S3	5/11/2017	13:25	
MW13S1	WG-05112017-DF-MW013S1	5/11/2017	12:35	
MW13S3	WG-05112017-DF-MW013S3	5/11/2017	11:45	
MW140S1	WG-05062017-DF-MW140S1	5/6/2017	12:40	
MW140S2/S3	WG-05062017-DF-MW140S2/S3	5/6/2017	13:15	
MW141S2/S3	WG-05042017-BS-MW141S2/S3	5/4/2017	15:15	
MW142S2/S3	WG-05092017-JR-MW142S2/S3	5/9/2017	10:10	
MW143S2/S3	WG-05052017-JR-MW143S2/S3	5/5/2017	15:35	

Table 5
Groundwater Sample Key - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Location	Sample Name	Date & Time		QA/QC
MW144S2/S3	WG-05222017-JR-MW144S2/S3	5/22/2017	13:50	
MW145S2/S3	WG-05092017-DF-MW145S2/S3	5/9/2017	13:50	
MW146S1	WG-05102017-BS-MW146S1	5/10/2017	14:35	
MW147S1	WG-05082017-JR-MW147S1	5/5/2017	14:05	
MW147S2/S3	WG-05082017-JR-MW147S2/S3	5/8/2017	15:00	
MW148S1	WG-05082017-JR-MW148S1	5/8/2017	15:40	WG-05082017-JR-FD6
MW148S2/S3	WG-05082017-JR-MW148S2/S3	5/8/2017	16:20	
MW149S2/S3	WG-05112017-JR-MW149S2/S3	5/11/2017	15:00	
MW14S1	WG-05052017-BS-MW014S1	5/5/2017	15:30	
MW14S3	WG-05052017-BS-MW014S3	5/5/2017	15:40	
MW15S1	WG-05062017-BS-MW015S1	5/6/2017	9:50	
MW15S2	WG-05062017-BS-MW015S2	5/6/2017	10:10	
MW15S4	WG-05092017-JR-MW015S4	5/6/2017	11:55	
MW16BR	WG-05042017-DF-MW016BR	5/4/2017	12:25	
MW16S1	WG-05042017-DF-MW016S1	5/4/2017	11:25	
MW16S2	WG-05042017-DF-MW016S2SS	5/4/2017	10:25	
MW17S1	WG-05082017-JR-MW017S1	5/8/2017	11:45	
MW17S3A	WG-05082017-JR-MW017S3A	5/8/2017	13:05	
MW17S3B	WG-05082017-JR-MW017S3B	5/8/2017	12:20	
MW18S1	WG-05122017-JR-MW018S1	5/12/2017	13:50	
MW18S3	WG-05122017-JR-MW018S3	5/12/2017	14:15	
MW18S4	DRY			
MW19S1	WG-05122017-BS-MW019S1	5/12/2017	13:40	
MW19S2	WG-05122017-JR-MW019S2	5/12/2017	12:40	
MW19S3	OBSTRUCTED			
MW19S4	WG-05122017-BS-MW019S4	5/12/2017	13:30	
MW20S1	WG-05082017-DF-MW020S1	5/8/2017	17:00	
MW20S3	WG-05082017-DF-MW020S3	5/8/2017	17:30	
MW21S1	WG-05052017-DF-MW021S1	5/5/2017	11:50	WG-05062017-DF-FD4
MW21S3	WG-05042017-DF-MW021S3	5/4/2017	15:05	
MW21S4R	DRY	5/4/2017		
MW22S1	WG-05062017-DF-MW022S1	5/6/2017	10:30	
MW22S2	WG-05082017-DF-MW022S2	5/8/2017	10:55	
MW22S4	WG-05082017-DF-MW022S4	5/8/2017	11:35	
MW23BR	WG-05052017-BS-MW23BR	5/5/2017	18:10	
MW24S1	WG-05092017-JR-MW024S1	5/9/2017	14:00	
MW24S3	WG-05092017-JR-MW024S3	5/9/2017	14:45	
MW24S4	WG-05092017-JR-MW024S4	5/9/2017	15:20	
MW25S1	WG-05032017-BS-MW25S1	5/3/2017	11:25	
MW26S1	WG-05092017-BS-MW26S1	5/9/2017	10:45	
MW26S3	WG-05092017-BS-MW26S3	5/9/2017	10:55	
MW27S1	WG-05122017-JR-MW027S1	5/12/2017	12:30	

Table 5
Groundwater Sample Key - Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Location	Sample Name	Date & Time		QA/QC
MW27S2	WG-05122017-JR-MW027S2	5/12/2017	12:45	
MW28S1	WG-05042017-JR-MW028S1	5/4/2017	15:05	
MW28S2	WG-05042017-JR-MW028S2	5/4/2017	15:50	
MW28S3	WG-05042017-JR-MW028S3	5/4/2017	16:50	
MW29S1	WG-05112017-JR-MW029S1	5/11/2017	14:00	
MW29S2	WG-05112017-JR-MW029S2	5/11/2017	13:20	
MW29S3	WG-05092017-JR-MW029S3	5/9/2017	11:40	
MW30S1	WG-05062017-JR-MW030S1	5/6/2017	9:55	MS/MSD
MW30S2	WG-05062017-JR-MW030S2	5/6/2017	10:55	
MW30S3	WG-05062017-JR-MW030S3	5/6/2017	11:35	
MW31S1	WG-05112017-DF-MW031S1	5/11/2017	14:35	
MW32S1	WG-05102017-JR-MW032S1	5/10/2017	9:35	
IW29	WG-05122017-DF-IW29	5/12/2017	11:25	
IW30	WG-05122017-DF-IW30	5/12/2017	13:40	
IW31	WG-05122017-DF-IW31	5/12/2017	13:20	
IW32	WG-05122017-DF-IW32	5/12/2017	13:05	
IW35A	WG-05122017-DF-IW35A	5/12/2017	11:45	WG-05122017-DF-FD10
IW35B	WG-05122017-DF-IW35B	5/12/2017	12:00	
IW36	WG-05122017-DF-IW36	5/12/2017	12:40	
IW40	WG-05122017-DF-IW40	5/12/2017	10:30	
IW41	WG-05122017-DF-IW41	5/12/2017	10:05	
IW42	WG-05122017-DF-IW42	5/12/2017	9:45	
IW43	WG-05122017-DF-IW43	5/12/2017	10:40	
IW44	WG-05122017-DF-IW44	5/12/2017	10:50	
IW45	WG-05122017-DF-IW45	5/12/2017	11:00	
IW46	WG-05122017-DF-IW46	5/12/2017	10:20	
Builders Well	WG-05042017-JR-Builders	5/4/2017	11:00	
AP2800	WG-05172017-JR-AP2800	5/17/2017	12:35	MS/MSD
DW5	WG-05172017-JR-DW5	5/17/2017	13:15	WG-05172017-JR-FD11
DW6	WG-05172017-JR-DW6	5/17/2017	13:25	
DW7	WG-05172017-JR-DW7	5/17/2017	13:35	

Notes:

All samples were ananlyzed for:

VOCs by 8121, 8260B

SVOCs by 8270

Herbicides/pesticides by 8151A

Chloride by 300.0/9056A

Hardness (calculated) by 6010B & SM 2340B

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

			Sample Location:	AMW1	AMW3	AMW4D	AMW4S	AMW5D	AMW5S
			Sample ID:	WG-05042017-BS-AMW001	WG-05112017-BS-AMW003	WG-05032017-BS-AMW4D	WG-05032017-BS-AMW4S	WG-05062017-BS-AMW005D	WG-05042017-BS-AMW005S
			Sample Date:	5/4/2017	5/11/2017	5/3/2017	5/3/2017	5/6/2017	5/4/2017
Parameters	**Units**								
Volatile Organic Compounds									
1,1,1-Trichloroethane	ug/L	200	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	1.5	0.5 U
Carbon tetrachloride	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL	0.5 U	0.5 U	**5.1**	0.7	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL	0.5 U	0.5 U	0.8	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL	0.5 U	0.5 U	0.5 U	0.5 U	**20.5**	0.5 U
Semi-volatile Organic Compounds									
2,3,4,5-Tetrachlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL	0.02 U	0.02 U	0.02	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides									
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry									
Chloride	ug/L	250000	MCL	82000	79000	148000	241000	101000	77000
Hardness, calculation	mgCaCO3/L			257	330.	729	539	282	382

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	**AMW8D**	**AMW8S**	**AMW16D**	**AMW16S**	**AMW101D**	**AMW101I**	**AMW101S**
				Sample ID:	**WG-05112017-BS-AMW008D**	**WG-05112017-BS-AMW008S**	**WG-05032017-BS-AMW16D**	**WG-05032017-BS-AMW16S**	**WG-05122017-BS-AMW101D**	**WG-05122017-BS-AMW101I**	**WG-05122017-BS-AMW101S**
				Sample Date:	**5/11/2017**	**5/11/2017**	**5/3/2017**	**5/3/2017**	**5/12/2017**	**5/12/2017**	**5/12/2017**
Parameters	**Units**										
Volatile Organic Compounds											
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL		0.5 U	3.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds											
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	**0.014 J**	**0.012 J**
beta-BHC	ug/L	0.025	RSL		0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		0.02 U	0.02 U	0.02 U	0.02 U	**0.34**	0.02	**0.16**
Hexachloroethane	ug/L	0.33	RSL		0.02 U	0.02 U	0.02 U	0.02 U	0.04	0.02 U	0.04
Herbicides											
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry											
Chloride	ug/L	250000	MCL		213000	132000	60000	26000	1000 U	56000	82000
Hardness, calculation	mgCaCO3/L				564	310.	288	164	203	280.	158

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

			Sample Location:	AMW102D	AMW102S	AMW104	AMW105D	AMW105S	AMW105S	AMW106D
			Sample ID:	WG-05092017-BS-AMW102D	WG-05092017-BS-AMW102S	WG-05112017-BS-AMW104	WG-05042017-BS-AMW105D	WG-05042017-BS-AMW105S	WG-05042017-BS-FD02	WG-05062017-BS-AMW106D
			Sample Date:	5/9/2017	5/9/2017	5/11/2017	5/4/2017	5/4/2017	5/4/2017 (Duplicate)	5/6/2017
Parameters	**Units**									
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3
Vinyl chloride	ug/L	2	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL	0.25	0.10 U	0.10 U	0.10 U	0.14	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL	73000	62000	102000	23800	20700	23700	129000
Hardness, calculation	mgCaCO3/L			263	255	390.	254	211	247	449

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Parameters	Units			Sample Location: AMW106S Sample ID: WG-05042017-BS-AMW106S Sample Date: 5/4/2017	Sample Location: AMW107D Sample ID: WG-05042017-BS-AMW107D Sample Date: 5/4/2017	Sample Location: AMW107S Sample ID: WG-05042017-BS-AMW107S Sample Date: 5/4/2017	Sample Location: AMW108D Sample ID: WG-05112017-BS-AMW108D Sample Date: 5/11/2017	Sample Location: AMW108S Sample ID: WG-05112017-BS-AMW108S Sample Date: 5/11/2017	Sample Location: AMW108S Sample ID: WG-05112017-BS-FD009 Sample Date: 5/11/2017 (Duplicate)	Sample Location: AP2800 Sample ID: WG-05172017-JR-AP2800 Sample Date: 5/17/2017
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL	0.6	0.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG	0.5 U	0.5 U	0.9	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL	0.5 U	0.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL	**0.048**	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL	0.10 U	0.10 U	0.10 U	0.10 U	0.37	0.28	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL	88000	119000	83000	111000	94000	93000	46000
Hardness, calculation	mgCaCO3/L			366	412	423	454	366	376	313

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Parameters	Units			Sample Location: APMW302S1 Sample ID: WG-05102017-BS-APMW302S1 Sample Date: 5/10/2017	Sample Location: APMW302S2 Sample ID: WG-05102017-BS-APMW302S2 Sample Date: 5/10/2017	Sample Location: APMW302S3 Sample ID: WG-05102017-BS-APMW302S3 Sample Date: 5/10/2017	Sample Location: Builders Well Sample ID: WG-05042017-JR-Builders Sample Date: 5/4/2017	Sample Location: DW-5 Sample ID: WG-05172017-JR-DW5 Sample Date: 5/17/2017	Sample Location: DW-5 Sample ID: WG-05172017-JR-FD11 Sample Date: 5/17/2017 (Duplicate)	Sample Location: DW-6 Sample ID: WG-05172017-JR-DW6 Sample Date: 5/17/2017
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL	**9.9**	0.5 U	0.5 U	**15.1**	0.5 U	0.5 U	2.7
Chloroform (Trichloromethane)	ug/L	70	MCLG	17.5	0.5 U	0.5 U	2.1	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL	4.8	0.5 U	2.1	0.7	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL	0.037 U	0.037 U	0.037 U	**0.30**	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL	0.10 U	0.10 U	0.69	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.08 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL	45000	47000	45000	92000	78000	79000	38500
Hardness, calculation	mgCaCO3/L			274	291	280.	267	186	186	215

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Parameters	Units			Sample Location: DW-7 Sample ID: WG-05172017-JR-DW7 Sample Date: 5/17/2017	IW29 WG-05122017-DF-IW29 5/12/2017	IW30 WG-05122017-DF-IW30 5/12/2017	IW31 WG-05122017-DF-IW31 5/12/2017	IW32 WG-05122017-DF-IW32 5/12/2017	IW35A WG-05122017-DF-IW35A 5/12/2017	IW35A WG-05122017-DF-FD10 5/12/2017 (Duplicate)	IW35B WG-05122017-DF-IW35B 5/12/2017
Volatile Organic Compounds											
1,1,1-Trichloroethane	ug/L	200	MCL	0.5 U	50 U	200 U	200 U	2 U	3 U	0.5 U	50 U
1,2-Dichloroethane	ug/L	5	MCL	0.5 U	50 U	**400**	**1300**	**34**	3 U	0.5 U	50 U
1,2-Dichloropropane	ug/L	5	MCL	0.5 U	50 U	**1300**	**1000**	2 U	3 U	0.5 U	50 U
Benzene	ug/L	5	MCL	0.5 U	50 U	200 U	**200**	**151**	3 U	0.5 U	50 U
Carbon tetrachloride	ug/L	5	MCL	0.5 U	**210**	**30800**	**9980**	**180.**	**78.0**	**90.8**	**870**
Chloroform (Trichloromethane)	ug/L	70	MCLG	0.5 U	**670**	**28600**	**10600**	**277**	**93.2**	7.7	**1020**
Chloromethane (Methyl chloride)	ug/L	190	RSL	0.5 U	50 U	200 U	200 U	2 U	3 U	0.5 U	50 U
Methylene chloride	ug/L	5	MCL	0.5 U	**100**	**640**	**2700**	**36**	3 U	0.5 U	50 U
Tetrachloroethene	ug/L	5	MCL	0.5 U	**420**	**11200**	**8990**	**158**	**21**	0.5 U	**500**
Trichloroethene	ug/L	5	MCL	0.5 U	50 U	**620**	**860**	**27**	3 U	0.5 U	50 U
Vinyl chloride	ug/L	2	MCL	0.5 U	50 U	200 U	200 U	2 U	3 U	0.5 U	50 U
Semi-volatile Organic Compounds											
2,3,4,5-Tetrachlorophenol	ug/L			5.0 U	5.0 U	5.0 UJ	5.0 U	43.8	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL	5.0 U	6.4	89.4 J	44.3	43.8	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL	5.0 U	**39.8**	**87.7 J**	**109**	**52.7**	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL	5.0 U	45.9	5.0 UJ	**74.2**	**92.6**	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L			5.0 U	10.7	5.0 UJ	35.9	16.6	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL	5.0 U	5.0 U	6.5 J	8.6	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L			5.0 U	5.0 U	5.0 UJ	7.4	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL	0.011 U	**0.45**	**1.8**	**13**	**3.60**	**0.020**	0.011 U	**0.060**
beta-BHC	ug/L	0.025	RSL	0.037 U	0.74 U	**4.3**	7.4 U	**2.0 J**	**1.12 J**	0.037 U	**1.60**
delta-BHC	ug/L			0.05 U	1 U	5 U	29	1	0.05 U	0.05 U	0.06
gamma-BHC (lindane)	ug/L	0.2	MCL	0.052 U	1.0 U	5.2 U	**24.0**	**3.15**	0.052 U	0.052 U	0.055
Hexachlorobenzene	ug/L	1	MCL	0.10 U	2.0 U	10 U	20 U	2.0 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL	0.60 U	**64.6**	**1060**	**822**	**11**	**0.37**	0.02 U	**0.75**
Hexachloroethane	ug/L	0.33	RSL	0.12 U	**7.1**	**1180**	**1050**	**17**	0.23	0.02 U	**2.16**
Herbicides											
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL	1.0 U	44 J	30. J	**220 J**	39	1.0 UJ	1.0 UJ	1.0 UJ
Pentachlorophenol	ug/L	1	MCL	0.5 U	**11**	**100**	**73**	**140**	0.5 U	0.5 U	0.5 U
General Chemistry											
Chloride	ug/L	250000	MCL	55000	**890000**	**3320000**	**2590000**	**1400000**	185000	139000	**418000**
Hardness, calculation	mgCaCO3/L			201	547	353	752	518	327	301	416

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	**IW36**	**IW40**	**IW41**	**IW42**	**IW43**	**IW44**	**IW45**	**IW46**
				Sample ID:	**WG-05122017-DF-IW36**	**WG-05122017-DF-IW40**	**WG-05122017-DF-IW41**	**WG-05122017-DF-IW42**	**WG-05122017-DF-IW43**	**WG-05122017-DF-IW44**	**WG-05122017-DF-IW45**	**WG-05122017-DF-IW46**
				Sample Date:	**5/12/2017**	**5/12/2017**	**5/12/2017**	**5/12/2017**	**5/12/2017**	**5/12/2017**	**5/12/2017**	**5/12/2017**
Parameters	**Units**											
Volatile Organic Compounds												
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	0.5 U	0.5 U	20 U	5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	20 U	5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	20 U	5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	20 U	5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL		**25.5**	**92.5**	0.5 U	0.5 U	**974**	**219**	**61.1**	**6.5**
Chloroform (Trichloromethane)	ug/L	70	MCLG		6.5	8.4	0.5 U	0.5 U	42	6	1.9	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	0.5 U	0.5 U	20 U	5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	20 U	5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		0.9	0.5 U	0.5 U	0.5 U	20 U	5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	20 U	5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	0.5 U	0.5 U	20 U	5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds												
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	**9.2**	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	5.0 U	18.5	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	6.0	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		**0.021**	0.011 U	0.011 U	0.011 U	**0.032**	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL		**0.344**	0.037 U	**0.314**	**0.111**	**0.204**	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL		0.02	0.02 U	0.02 U	0.02 U	0.29	0.02 U	0.02 U	0.02 U
Herbicides												
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	10. J	1.0 UJ	1.0 U	1.0 UJ
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry												
Chloride	ug/L	250000	MCL		**900000**	136000	88000	71000	**361000**	150000	48000	115000
Hardness, calculation	mgCaCO3/L				685	312	267	178	355	298	223	289

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Parameters	Units			Sample Location: MW02S1 Sample ID: WG-05052017-BS-MW02S1 Sample Date: 5/5/2017	Sample Location: MW02S2 Sample ID: WG-05052017-BS-MW02S2 Sample Date: 5/5/2017	Sample Location: MW03S1 Sample ID: WG-05042017-DF-MW003S1 Sample Date: 5/4/2017	Sample Location: MW04S1 Sample ID: WG-05112017-DF-MW004S1 Sample Date: 5/11/2017	Sample Location: MW04S3 Sample ID: WG-05112017-DF-MW004S3 Sample Date: 5/11/2017	Sample Location: MW04S3 Sample ID: WG-05112017-DF-FD8 Sample Date: 5/11/2017 (Duplicate)	Sample Location: MW05S3 Sample ID: WG-05122017-JR-MW005S3 Sample Date: 5/12/2017
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL	0.5 U	5.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL	0.5 U	**6.9**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL	**12.6**	**124**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG	6.0	18	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL	0.5 U	3.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL	5.0 U	**113**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L			5.0 U	8.8	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL	0.011 U	**0.094**	**0.015**	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL	**0.199**	**2.09**	0.037 U	0.037 U	**0.111**	**0.108**	**0.145**
delta-BHC	ug/L			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL	0.02 U	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Pentachlorophenol	ug/L	1	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL	87000	**970000**	2800	30400	35100	35000	146000
Hardness, calculation	mgCaCO3/L			293	245	117	127	127	125	146

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	MW06BR	MW06S1	MW06S3	MW07S1	MW07S2	MW07S3	MW08S1
				Sample ID:	WG-05082017-JR-MW006BR	WG-05042017-JR-MW06S1	WG-05042017-JR-MW06S3	WG-05092017-BS-MW007S1	WG-05092017-BS-MW007S2	WG-05092017-BS-MW007S3	WG-05052017-JR-MW008S1
				Sample Date:	5/8/2017	5/4/2017	5/4/2017	5/9/2017	5/9/2017	5/9/2017	5/5/2017
Parameters	**Units**										
Volatile Organic Compounds											
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	**190**	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	**80**	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	**1460**	0.5 U	0.5 U	3.8
Chloroform (Trichloromethane)	ug/L	70	MCLG		0.5 U	0.5 U	0.5 U	**1760**	0.7	0.5 U	9.9
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	**770**	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		0.5	0.5 U	0.5 U	**350**	0.5 U	0.5 U	0.6
Trichloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	0.5 U	0.8
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds											
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	**13.4**	5.0 U	5.0 U	**5.1**
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	**96.5**	5.0 U	5.0 U	36.5
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	10.6	5.0 U	5.0 U	21.3
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	6.8	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		**0.013**	0.011 U	0.011 U	**0.38**	0.011 U	0.011 U	**0.036**
beta-BHC	ug/L	0.025	RSL		0.037 U	0.037 U	0.037 U	0.19 U	0.037 U	0.037 U	**0.687**
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.3	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	**0.41**	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.15	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		**0.24**	0.02 U	0.02 U	**1.9**	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL		0.18	0.02 U	0.02 U	**8.79**	0.02 U	0.02 U	0.02 U
Herbicides											
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	1.0 U	**220**	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry											
Chloride	ug/L	250000	MCL		66000	37800	**303000**	**970000**	176000	158000	**1280000**
Hardness, calculation	mgCaCO3/L				1680	226	428	1300	459	421	697

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	MW08S2	MW08S3	MW09S1	MW09S3	MW10S1	MW10S1	MW10S2
				Sample ID:	WG-05052017-JR-MW008S2	WG-05052017-JR-MW008S3	WG-05052017-BS-MW09S1	WG-05052017-BS-MW09S3	WG-05122017-JR-MW010S1	WG-07192017-JR-MW10S1	WG-05102017-DF-MW010S2
				Sample Date:	5/5/2017	5/5/2017	5/5/2017	5/5/2017	5/12/2017	7/19/2017	5/10/2017
Parameters	**Units**										
Volatile Organic Compounds											
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	**113**	0.5 U	0.5 U	-	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	0.5	0.5 U	0.5 U	-	0.5 U
Benzene	ug/L	5	MCL		0.5 U	0.5 U	**21.7**	0.5 U	0.5 U	-	0.5 U
Carbon tetrachloride	ug/L	5	MCL		**107**	**6.9**	0.5 U	4.9	2.2	-	**36.8**
Chloroform (Trichloromethane)	ug/L	70	MCLG		15.1	6.3	0.7	4.8	2.6	-	2.1
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
Tetrachloroethene	ug/L	5	MCL		3.0	1.9	**49.3**	1.4	0.7	-	0.9
Trichloroethene	ug/L	5	MCL		2.9	1.5	**174**	0.5 U	0.5	-	0.5 U
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	1.2	0.5 U	0.5 U	-	0.5 U
Semi-volatile Organic Compounds											
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-	5.0 U
alpha-BHC	ug/L	0.0072	RSL		**0.038**	**0.020**	**0.306**	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL		**0.675**	**1.05**	**0.060**	0.037 U	0.037 U	**0.043**	0.037 U
delta-BHC	ug/L				0.05 U	0.05 U	0.27	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.079	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.68	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		0.02	0.02 U	**0.70**	0.02 U	**0.32**	**0.17**	0.02 U
Hexachloroethane	ug/L	0.33	RSL		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides											
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	-	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
General Chemistry											
Chloride	ug/L	250000	MCL		**500000**	220000	**480000**	91000	231000	-	118000
Hardness, calculation	mgCaCO3/L				567	271	781	298	380.	-	323

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	**MW10S3**	**MW11S1**	**MW11S3A**	**MW11S3B**	**MW12S1A**	**MW12S3**
				Sample ID:	**WG-05122017-DF-MW010S3**	**WG-05052017-DF-MW011S1**	**WG-05052017-DF-MW011S3A**	**WG-05052017-DF-MW011S3B**	**WG-05052017-BS-MW012S1A**	**WG-05052017-BS-MW012S3**
				Sample Date:	**5/12/2017**	**5/5/2017**	**5/5/2017**	**5/5/2017**	**5/5/2017**	**5/5/2017**
Parameters	**Units**									
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	0.5 U	0.5 U	50 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	50 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	50 U	0.5 U
Benzene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	50 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL		0.5 U	2.3	0.5 U	0.5 U	**1390**	**54.0**
Chloroform (Trichloromethane)	ug/L	70	MCLG		0.5 U	1.5	0.5 U	0.5 U	**4260**	19.0
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	0.5 U	0.5 U	50 U	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	50 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	**560**	**50.8**
Trichloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	**50**	0.6
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	0.5 U	0.5 U	50 U	0.5 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	**20.3**	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	5.0 U	**110.**	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	64.2	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	13.8	5.0 U
alpha-BHC	ug/L	0.0072	RSL		0.011 U	**0.025**	0.011 U	0.011 U	**0.636**	**0.025**
beta-BHC	ug/L	0.025	RSL		0.037 U	**0.152**	0.037 U	0.037 U	**0.525 J**	**11.3**
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.05 U	0.71	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	0.052 U	**0.744**	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		**0.17**	0.02 U	0.02 U	0.02 U	**4.29**	**1.56**
Hexachloroethane	ug/L	0.33	RSL		0.02 U	0.02 U	0.02 U	0.02 U	**7.61**	**0.60**
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.9	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL		4000	145000	87000	78000	**830000**	148000
Hardness, calculation	mgCaCO3/L				204	313	260.	153	411	229

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	**MW13S1**	**MW13S3**	**MW14S1**	**MW14S3**	**MW15S1**	**MW15S2**	**MW15S4**
				Sample ID:	**WG-05112017-DF-MW013S1**	**WG-05112017-DF-MW013S3**	**WG-05052017-BS-MW014S1**	**WG-05052017-BS-MW014S3**	**WG-05062017-BS-MW015S1**	**WG-05062017-BS-MW015S2**	**WG-05092017-JR-MW015S4**
				Sample Date:	**5/11/2017**	**5/11/2017**	**5/5/2017**	**5/5/2017**	**5/6/2017**	**5/6/2017**	**5/9/2017**
Parameters	**Units**										
Volatile Organic Compounds											
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	2 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	2 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	2 U	0.5 U
Benzene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	2 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL		0.5 U	0.5 U	0.6	**2620**	**45.4**	**208**	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG		0.5 U	0.5 U	1.4	**4730**	64.1	8.1	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	2 U	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	2 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.7	**440**	0.7	2 U	0.5 U
Trichloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	**50**	0.5 U	2 U	0.5 U
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	0.5 U	50 U	0.5 U	2 U	0.5 U
Semi-volatile Organic Compounds											
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		0.011 U	0.011 U	0.011 U	**0.095**	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL		0.037 U	0.037 U	0.037 U	**0.473**	0.037 U	**0.108**	0.037 U
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.14	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	0.148	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.10 U	0.10 U	0.14	0.10 U	0.12
Hexachlorobutadiene	ug/L	0.14	RSL		0.02 U	0.02 U	0.02 U	**1.26**	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL		0.02 U	0.02 U	0.02 U	**5.41**	0.02 U	0.02 U	0.02 U
Herbicides											
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.9	0.5 U	0.5 U	0.5 U
General Chemistry											
Chloride	ug/L	250000	MCL		34100	1000 U	29400	**720000**	**282000**	229000	4200
Hardness, calculation	mgCaCO3/L				395	98.8	342	724	464	344	53.8

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	**MW16BR**	**MW16S1**	**MW16S2SS**	**MW16S4R**	**MW17S1**	**MW17S3A**
				Sample ID:	**WG-05042017-DF-MW016BR**	**WG-05042017-DF-MW016S1**	**WG-05042017-DF-MW016S2SS**	**WG-05042017-DF-MW016S4R**	**WG-05082017-JR-MW017S1**	**WG-05082017-JR-MW017S3A**
				Sample Date:	**5/4/2017**	**5/4/2017**	**5/4/2017**	**5/4/2017**	**5/8/2017**	**5/8/2017**
Parameters	**Units**									
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL		0.5 U	0.5 U	4.1	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL		0.5 U	**10.6**	**29.0**	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG		0.5 U	5.0	7.4	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	34.0	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	31.8	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	15.4	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		0.011 U	0.011 U	**0.059**	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL		0.037 U	0.037 U	**0.273**	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		0.06	0.02 U	0.02 U	0.02 U	0.02 U	**0.84**
Hexachloroethane	ug/L	0.33	RSL		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL		55000	150000	**375000**	3700	24500	26200
Hardness, calculation	mgCaCO3/L				1450	362	58.8	177	349	241

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	MW17S3B	MW18S1	MW18S3	MW19S1	MW19S2	MW19S4	MW20S1
				Sample ID:	WG-05082017-JR-MW017S3B	WG-05122017-JR-MW018S1	WG-05122017-JR-MW018S3	WG-05122017-BS-MW019S1	WG-05122017-JR-MW019S2	WG-05122017-BS-MW019S4	WG-05082017-DF-MW020S1
				Sample Date:	5/8/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/8/2017
Parameters	**Units**										
Volatile Organic Compounds											
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	1000 U	30 U	43	170	**1200**	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	1000 U	30 U	20 U	50 U	**200**	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	1000 U	30 U	20 U	50 U	200 U	0.5 U
Benzene	ug/L	5	MCL		0.5 U	1000 U	30 U	20 U	50 U	200 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL		0.5 U	**55000**	**2310**	**750.**	**4710**	**24000**	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG		0.5 U	**22200**	**1240**	**470.**	**3860**	**14600**	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	1000 U	30 U	20 U	50 U	200 U	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	1000 U	**30**	20 U	50 U	200 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		0.5 U	**23300**	**1020**	**1430**	**3850**	**8190**	0.5 U
Trichloroethene	ug/L	5	MCL		0.5 U	1000 U	30 U	**30**	**460**	**640**	0.5 U
Vinyl chloride	ug/L	2	MCL		0.5 U	1000 U	30 U	20 U	50 U	200 U	0.5 U
Semi-volatile Organic Compounds											
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	37.3	5.0 U	5.0 U	6.4	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	**44.7**	5.0 U	5.0 U	**88.1**	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	13.4	5.0 U	5.0 U	**64.4**	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	17.2	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		0.011 U	**4.34**	**0.095**	0.55 U	**2.6**	5.5 U	0.011 U
beta-BHC	ug/L	0.025	RSL		0.037 U	**4.21 J**	**12.0**	**16.4**	**40.0**	19 U	0.037 U
delta-BHC	ug/L				0.05 U	1	0.05 U	3 U	10 U	30 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	**1.1**	0.052 U	2.6 U	10 U	26 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	**33.9**	0.20	**17**	**339**	**190**	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		0.02 U	**290**	**7.2**	**145**	**1220**	**3270**	0.03
Hexachloroethane	ug/L	0.33	RSL		0.02 U	**1120**	**25.3**	**209**	**666**	**1690**	0.02 U
Herbicides											
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	3.2 J	1.0 UJ	1.0 U	**410 J**	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	**250**	**3.2**	0.5 U	**17 J**	**1.5**	0.5 U
General Chemistry											
Chloride	ug/L	250000	MCL		**269000**	177000	23000	**716000**	**3220000**	**2930000**	25100
Hardness, calculation	mgCaCO3/L				461	265	130.	475	864	1420	219

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Parameters	Units			Sample Location: MW20S3 Sample ID: WG-05082017-DF-MW020S3 Sample Date: 5/8/2017	Sample Location: MW21S1 Sample ID: WG-05052017-DF-MW021S1 Sample Date: 5/5/2017	Sample Location: MW21S1 Sample ID: WG-07192017-JR-MW21S1 Sample Date: 7/19/2017	Sample Location: MW21S1 Sample ID: WG-07192017-JR-FD1 Sample Date: 7/19/2017 (Duplicate)	Sample Location: MW21S3 Sample ID: WG-05042017-DF-MW021S3 Sample Date: 5/4/2017	Sample Location: MW22S1 Sample ID: WG-05062017-DF-MW022S1 Sample Date: 5/6/2017	Sample Location: MW22S1 Sample ID: WG-05062017-DF-FD4 Sample Date: 5/6/2017 (Duplicate)
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL	0.5 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL	0.5 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL	0.5 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL	0.5 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL	**45.3**	1.6	-	-	**11.4**	**21.3**	**14.1**
Chloroform (Trichloromethane)	ug/L	70	MCLG	1.5	1.5	-	-	0.6	3.0	2.2
Chloromethane (Methyl chloride)	ug/L	190	RSL	0.5 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL	0.5 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL	0.5 U	3.0	-	-	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL	0.5 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL	0.5 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L			5.0 U	5.0 UJ	-	-	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL	5.0 U	5.0 UJ	-	-	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL	5.0 U	5.0 UJ	-	-	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL	5.0 U	5.0 UJ	-	-	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL	5.0 U	5.0 UJ	-	-	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L			5.0 U	5.0 UJ	-	-	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L			5.0 U	5.0 UJ	-	-	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL	5.0 U	5.0 UJ	-	-	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L			5.0 U	5.0 UJ	-	-	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL	0.011 U	**0.015**	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL	0.10 U	0.50	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL	0.02 U	**11.1**	**0.52**	**0.49**	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL	0.02 U	**1.01**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL	1.0 U	1.0 U	-	-	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL	0.5 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL	71000	**590000**	-	-	86000	138000	139000
Hardness, calculation	mgCaCO3/L			247	478	-	-	257	311	311

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	MW22S2	MW22S4	MW23BR	MW24S1	MW24S3	MW24S4	MW25S1
				Sample ID:	WG-05082017-DF-MW022S2	WG-05082017-DF-MW022S4	WG-05052017-BS-MW23BR	WG-05092017-JR-MW024S1	WG-05092017-JR-MW024S3	WG-05092017-JR-MW024S4	WG-05032017-BS-MW25S1
				Sample Date:	5/8/2017	5/8/2017	5/5/2017	5/9/2017	5/9/2017	5/9/2017	5/3/2017
Parameters	**Units**										
Volatile Organic Compounds											
1,1,1-Trichloroethane	ug/L	200	MCL		20 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		20 U	0.5 U	0.5 U	**8.6**	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		20 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL		20 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL		**522**	0.5 U	0.5 U	**82.6**	**14.7**	0.5 U	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG		30	0.5 U	0.5 U	**182**	14.0	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL		20 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL		20 U	0.5 U	0.5 U	1	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		20 U	0.5 U	0.5 U	**26.7**	4.0	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL		20 U	0.5 U	0.5 U	2.7	0.6	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL		20 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds											
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		**0.011**	0.011 U	0.011 U	**0.033**	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL		0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.49
Hexachlorobutadiene	ug/L	0.14	RSL		0.02 U	0.02 U	0.02 U	**0.22**	0.02 U	0.02 U	0.05
Hexachloroethane	ug/L	0.33	RSL		0.14	0.02 U	0.02 U	0.31	0.02 U	0.02 U	0.02 U
Herbicides											
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry											
Chloride	ug/L	250000	MCL		223000	19400	92000	57000	86000	13900	11800
Hardness, calculation	mgCaCO3/L				360.	60.8	1770	298	307	31.1	133

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	MW26S1	MW26S3	MW27S1	MW27S2	MW28S1	MW28S2	MW28S3
				Sample ID:	WG-05092017-BS-MW26S1	WG-05092017-BS-MW26S3	WG-05122017-JR-MW027S1	WG-05122017-JR-MW027S2	WG-05042017-JR-MW028S1	WG-05042017-JR-MW028S2	WG-05042017-JR-MW028S3
				Sample Date:	5/9/2017	5/9/2017	5/12/2017	5/12/2017	5/4/2017	5/4/2017	5/4/2017
Parameters	**Units**										
Volatile Organic Compounds											
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	50 U	50 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	50 U	50 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	50 U	50 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL		0.5 U	0.5 U	50 U	50 U	0.5 U	**9.3**	0.5 U
Carbon tetrachloride	ug/L	5	MCL		0.5 U	0.5 U	**830**	**270**	0.5 U	0.5 U	0.9
Chloroform (Trichloromethane)	ug/L	70	MCLG		0.9	0.5 U	**380**	50 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	50 U	50 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	50 U	50 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		**7.5**	0.5 U	**2660**	**2000**	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL		0.5 U	0.5 U	**370**	50 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	50 U	50 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds											
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		0.011 U	0.011 U	11 U	4.4 U	**0.020**	**0.082**	0.011 U
beta-BHC	ug/L	0.025	RSL		0.037 U	**0.075**	37 U	15 U	0.037 U	**0.189**	0.037 U
delta-BHC	ug/L				0.05 U	0.05 U	50 U	20 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	52 U	21 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	100 U	**570.**	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		0.02	0.02 U	**2310**	**3150**	0.12	0.02 U	0.14
Hexachloroethane	ug/L	0.33	RSL		0.02 U	0.02 U	**1730**	**1590**	0.08	0.02 U	0.19
Herbicides											
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	4 UJ	1.0 UJ	2.0	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	**1.6**	**1.3 J**	0.5 U	0.5 U	0.5 U
General Chemistry											
Chloride	ug/L	250000	MCL		57000	107000	**634000**	**450000**	112000	**672000**	1900
Hardness, calculation	mgCaCO3/L				274	335	699	535	317	391	64.1

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	**MW29S1**	**MW29S2**	**MW29S3**	**MW30S1**	**MW30S2**	**MW30S3**	**MW31S1**
				Sample ID:	**WG-05112017-JR-MW029S1**	**WG-05112017-JR-MW029S2**	**WG-05092017-JR-MW029S3**	**WG-05062017-JR-MW030S1**	**WG-05062017-JR-MW030S2**	**WG-05062017-JR-MW030S3**	**WG-05112017-DF-MW031S1**
				Sample Date:	**5/11/2017**	**5/11/2017**	**5/9/2017**	**5/6/2017**	**5/6/2017**	**5/6/2017**	**5/11/2017**
Parameters	**Units**										
Volatile Organic Compounds											
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	3 U	3.7	0.5 U	0.5 U	100 U	2 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	**48 J**	**133 J**	0.5 U	0.5 U	100 U	2 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	3 U	1 U	0.5 U	0.5 U	100 U	2 U
Benzene	ug/L	5	MCL		0.5 U	**57.4 J**	3.3	0.5 U	0.5 U	100 U	2 U
Carbon tetrachloride	ug/L	5	MCL		**34.1**	3 U	0.5 U	**6.3**	**47.6**	**11700**	**68.0**
Chloroform (Trichloromethane)	ug/L	70	MCLG		8.9	3 U	0.5 U	5.0	1.7	**200**	6.4
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	3 U	0.5 U	0.5 U	0.5 U	100 U	2 U
Methylene chloride	ug/L	5	MCL		0.5 U	3	0.5 U	0.5 U	0.5 U	100 U	2 U
Tetrachloroethene	ug/L	5	MCL		0.9	3	**55.9**	0.7 J	0.5 U	100 U	2 U
Trichloroethene	ug/L	5	MCL		0.9	**14**	**114 J**	0.7 J	0.5 U	100 U	2 U
Vinyl chloride	ug/L	2	MCL		0.5 U	3 U	1.3	0.5 U	0.5 U	100 U	2 U
Semi-volatile Organic Compounds											
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	8.7	5.0 UJ	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.2	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	**8.3**	**10.8**	5.0 UJ	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	28.4	31.1	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	13.3	5.7	5.0 UJ	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	6.8	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		**0.018**	**0.350**	**0.035**	**0.013**	0.011 U	**0.096**	**0.023**
beta-BHC	ug/L	0.025	RSL		**0.232**	**1.68 J**	**1.32 J**	**0.184**	0.037 U	**0.439**	**0.336**
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.075	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		0.02 U	0.06	0.02 U	0.02 U	0.02 U	0.06	0.04
Hexachloroethane	ug/L	0.33	RSL		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**3.78**	0.02 U
Herbicides											
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	4.2 J	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	R	**6.1**	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry											
Chloride	ug/L	250000	MCL		**861000**	**4620000**	**1080000**	**700000**	74000	**521000**	**258000**
Hardness, calculation	mgCaCO3/L				574	1690	424	589	239	539	299

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Parameters	Units			Sample Location: MW32S1 Sample ID: WG-05102017-JR-MW032S1 Sample Date: 5/10/2017	Sample Location: MW113S3 Sample ID: WG-05112017-JR-MW113S3 Sample Date: 5/11/2017	Sample Location: MW114S1 Sample ID: WG-05112017-JR-MW114S1 Sample Date: 5/11/2017	Sample Location: MW130S1 Sample ID: WG-05092017-DF-MW130S1 Sample Date: 5/9/2017	Sample Location: MW130S1 Sample ID: WG-05092017-DF-FD7 Sample Date: 5/9/2017 (Duplicate)	Sample Location: MW130S2 Sample ID: WG-05092017-DF-MW130S2 Sample Date: 5/9/2017	Sample Location: MW130S3 Sample ID: WG-05092017-DF-MW130S3 Sample Date: 5/9/2017
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL	0.5 U	500 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL	0.5 U	500 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL	0.5 U	500 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL	0.5 U	500 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL	**34.5**	**27900**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG	17.2	**25200**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL	0.5 U	500 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL	0.5 U	**1200**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL	4.4	**5700**	2.8	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL	**5.2**	500 U	0.9	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL	0.5 U	500 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L			5.0 U	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL	5.0 U	26.6 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
2,4,5-Trichlorophenol	ug/L	1200	RSL	5.0 U	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
2,4,6-Trichlorophenol	ug/L	4.1	RSL	5.0 U	**95.8 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
2,4-Dichlorophenol	ug/L	46	RSL	5.0 U	34.3 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
2,5-Dichlorophenol	ug/L			5.0 U	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
2,6-Dichlorophenol	ug/L			5.0 U	11.2 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
2-Chlorophenol	ug/L	91	RSL	5.0 U	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
3/4-Chlorophenol	ug/L			5.0 U	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
alpha-BHC	ug/L	0.0072	RSL	**0.033**	0.44 U	**0.014**	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL	**1.06**	**4.24**	**0.494**	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L			0.06	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL	0.052 U	2.1 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL	0.10 U	4.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL	0.02 U	**59.0**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL	0.02 U	**114**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL	1.0 U	42 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL	0.5 U	**31 J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL	**1170000**	**5900000**	**1370000**	51000	50000	61000	59000
Hardness, calculation	mgCaCO3/L			1080	98.3	836	153	161	133	176

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	MW131S2	MW131S3	MW132S1	MW132S2/S3	MW133S2/S3	MW134S2
				Sample ID:	WG-05082017-DF-MW131S2	WG-05082017-DF-MW131S3	WG-05092017-DF-MW132S1	WG-05092017-DF-MW132S2/S3	WG-05112017-DF-MW133S2/S3	WG-05032017-DF-MW134S2
				Sample Date:	5/8/2017	5/8/2017	5/9/2017	5/9/2017	5/11/2017	5/3/2017
Parameters	**Units**									
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL		**0.383**	**0.188**	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		0.02 U	0.02 U	0.02 U	0.02 U	0.04	0.02 U
Hexachloroethane	ug/L	0.33	RSL		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL		77000	96000	56000	24200	30900	54000
Hardness, calculation	mgCaCO3/L				236	204	289	192	253	202

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	MW134S3	MW135S1	MW135S2/S3	MW136S2/S3	MW137S1	MW137S2
				Sample ID:	WG-05032017-DF-MW134S3	WG-05042017-DF-MW135S1	WG-05042017-DF-MW135S2/S3	WG-05052017-DF-MW136S2/S3	WG-05032017-DF-MW137S1	WG-05052017-DF-MW137S2
				Sample Date:	5/3/2017	5/4/2017	5/4/2017	5/5/2017	5/3/2017	5/5/2017
Parameters	**Units**									
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL		0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL		41500	44200	45900	77000	16700	23700
Hardness, calculation	mgCaCO3/L				205	217	230.	229	216	246

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	MW137S3	MW138S1	MW138S2/S3	MW139S2/S3	MW140S1	MW140S2/S3
				Sample ID:	WG-05032017-DF-MW137S3	WG-05082017-DF-MW138S1	WG-05082017-DF-MW138S2/S3	WG-05112017-DF-MW139S2/S3	WG-05062017-DF-MW140S1	WG-05062017-DF-MW140S2/S3
				Sample Date:	5/3/2017	5/8/2017	5/8/2017	5/11/2017	5/6/2017	5/6/2017
Parameters	**Units**									
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U
Benzene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U
Carbon tetrachloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**578**
Chloroform (Trichloromethane)	ug/L	70	MCLG		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U
Tetrachloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U
Trichloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	ug/L	0.025	RSL		0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.04
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL		85000	59000	67000	227000	18100	**613000**
Hardness, calculation	mgCaCO3/L				284	268	268	478	275	757

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

				Sample Location:	MW141S2/S3	MW142S2/S3	MW143S2/S3	MW144S2/S3	MW145S2/S3	MW146S1
				Sample ID:	WG-05042017-BS-MW141S2/S3	WG-05092017-JR-MW142S2/S3	WG-05052017-JR-MW143S2/S3	WG-05222017-JR-MW144S2/S3	WG-05092017-DF-MW145S2/S3	WG-05102017-BS-MW146S1
				Sample Date:	5/4/2017	5/9/2017	5/5/2017	5/22/2017	5/9/2017	5/10/2017
Parameters	**Units**									
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	ug/L	5	MCL		**22.1**	0.5 U	4.2	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG		23.4	0.5 U	2.5	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL		2.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	5	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	2	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds										
2,3,4,5-Tetrachlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L				5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL		0.011 U	0.011 U	0.011 U	0.011 U	**0.013**	0.011 U
beta-BHC	ug/L	0.025	RSL		0.037 U	0.037 U	**0.038**	0.037 U	**1.03**	0.037 U
delta-BHC	ug/L				0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL		0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL		0.02 U	0.03	0.02 U	0.02 U	0.04	0.02 U
Hexachloroethane	ug/L	0.33	RSL		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides										
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry										
Chloride	ug/L	250000	MCL		25200	19900	203000	33700	180000	25000
Hardness, calculation	mgCaCO3/L				157	191	422	325	250.	305

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Table 6
Analytical Results Summary – Spring 2017
Occidental Chemical Corporation
Wichita, Kansas

Parameters	Units			Sample Location: MW147S1 Sample ID: WG-05082017-JR-MW147S1 Sample Date: 5/8/2017	Sample Location: MW147S2/S3 Sample ID: WG-05082017-JR-MW147S2/S3 Sample Date: 5/8/2017	Sample Location: MW148S1 Sample ID: WG-05082017-JR-MW148S1 Sample Date: 5/8/2017	Sample Location: MW148S1 Sample ID: WG-05082017-JR-FD6 Sample Date: 5/8/2017 (Duplicate)	Sample Location: MW148S2/S3 Sample ID: WG-05082017-JR-MW148S2/S3 Sample Date: 5/8/2017	Sample Location: MW149S2/S3 Sample ID: WG-05112017-JR-MW149S2/S3 Sample Date: 5/11/2017
Volatile Organic Compounds									
1,1,1-Trichloroethane	ug/L	200	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	5	MCL	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	**10.1**
1,2-Dichloropropane	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7
Benzene	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.0
Carbon tetrachloride	ug/L	5	MCL	0.5 U	**34.5**	0.7	0.9	**261**	0.5 U
Chloroform (Trichloromethane)	ug/L	70	MCLG	0.5 U	9.3	3.1	3.1	40.1	0.5 U
Chloromethane (Methyl chloride)	ug/L	190	RSL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	ug/L	5	MCL	0.5 U	1.8	0.6	0.7	4.4	**29.4**
Trichloroethene	ug/L	5	MCL	0.5 U	0.5 U	0.5 U	0.5 U	3.0	**12.9**
Vinyl chloride	ug/L	2	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds									
2,3,4,5-Tetrachlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	ug/L	240	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	1200	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	4.1	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	46	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	91	RSL	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	ug/L			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	ug/L	0.0072	RSL	0.011 U	0.011 U	0.011 U	0.011 U	**0.026**	**0.096**
beta-BHC	ug/L	0.025	RSL	0.037 U	0.037 U	**0.186**	**0.218**	**1.23**	**0.594**
delta-BHC	ug/L			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	ug/L	0.2	MCL	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	ug/L	1	MCL	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	ug/L	0.14	RSL	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	ug/L	0.33	RSL	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides									
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L	70	MCL	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	1	MCL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
General Chemistry									
Chloride	ug/L	250000	MCL	51000	62000	**970000**	**980000**	**1130000**	**1060000**
Hardness, calculation	mgCaCO3/L			388	228	753	695	819	741

Notes:
J - Estimated concentration.
R - Rejected.
U - Not detected at the associated reporting limit.
UJ - Not detected; associated reporting limit is estimated.
- Not analyzed.

Appendices

Appendix A
Equipment Calibration Forms

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82538
Date: 5/1/17
User: SE - SD

Project No.: 111371148 - D2310 B
Project Name: Oxy Spring 2017 GWM

Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature:

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82537
Date: 5/1/17
User: DF + SM

Project No.: 1113714B-D23108
Project Name: Ozy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: Joe Murphy

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 61591
Date: 5/1/17
User: BS + BC

Project No.: 113718-D23108
Project Name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

(QSF-483D)

FIELD DATA RECORD FORM
METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 55972 Rental Field Environmental **Project No.:** 1137148
Date: 5/2/17 **Project Name:** OXY Spring 2017 GWM
User: Brian Schwee/Bary Chatham **Location:** Wichita, KS

Additional Equipment Control Numbers and Descriptions:
pH 4 Lot# F069-20, Exp: 3/14/18 pH 7 Lot# F034-09 Exp: 2/8/18
pH 10 Lot# F350-17, Exp 12/20/17 Cond. 1409 Lot# E231-17, Exp 8/27/17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 2.12
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or (10.0).	Reading 4.98
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1409 Reading 1522
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑ or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑ or ↓ to select ORP and press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Brian Schwee

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82538
Date: 5/2/17
User: JR/JSD

Project No.: 1137148-D2310 B
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: JSD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82537
Date: 5/2/17
User: DF + SM

Project No.: 11137148 - D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: Sue Murphy

(QSF-227D)

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

Control No.: 81591
Date: 5/2/17
User: BS + BC

Project No.: 11137148-D23108
Project Name: OXY Spring 2017 GWM
Location: Wichita, Ks

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM

(QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: S1974
Date: 5-3-17
User: JR JD

Project No.: 1137198-023108
Project Name: OXY

Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E331-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.02
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	Reading 4.08 / 9.98
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.420
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Jason Dulp

THIS COMPLETED FORM IS A QUALITY RECORD

(QSF-463D)

FIELD DATA RECORD FORM
METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: YSI 5564A / 65715
Date: 5/3/17
User: S. Murphy D. Fickle

Project No.: 11137148-D23108
Project Name: OXY
Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

Check when completed

- Check kit contents.
- Check pH 7 buffer reading. Calibrate if greater than ±0.2. — Reading 7.23

PH is a two point calibration but always start with the seven standard.

- Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down. — Calibrated Y / N
- Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.
- Use ↓ key to highlight pH symbol and press enter ↵.
- Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.
- Repeat these steps to calibrate your pH value to 4.0 or 10.0. — Reading 4.17
- Press Esc to return to the calibration screen.

Check conductivity standard near the expected range. Calibrate if greater than ±0.5%. — Standard 1.409, Reading 1.422

Conductivity is a one point calibration. — Calibrated Y / N

- Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.
- Press Esc to return to the calibration screen.
- Use the ↑or ↓ to select SpC and press ↵
- Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.

Check ORP standard:

- Press Esc to return to the calibration screen. — Standard 220 mV, Reading 226 mV
- Use the ↑or ↓ to select ORPand press ↵
- Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.

To calibrate DO, see manual for instructions — Calibrated Y / N

Filing: Field File

Signature: S. Murphy

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM (QSF-463D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 55972 Rental Field Environmental
Date: 5/3/17
User: Brian Schauer/Barry Cheatham

Project No.: 1137148
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:
pH 4 Lot# F069-20, Exp: 3/14/18 pH 7 Lot# F034-09 Exp: 2/8/18
pH 10 Lot# F350-17, Exp 12/20/17 Cond. 1409 Lot# F231-17, Exp 8/27/17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.00
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or (10.0).	Reading 10.05
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1409 Reading 1518
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑ or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard _____ mV Reading _____ mV
• Use the ↑ or ↓ to select ORP and press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 66112
Date (mm/dd/yyyy): 5/3/17
User (print name): JR + JD

Project number: 1137148-D23108
Project name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 82139
Date (mm/dd/yyyy): 5/3/17
User (print name): SM + DF

Project number: 111371.48 - D23108
Project name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field File

Signature:

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 79773
Date (mm/dd/yyyy): 5/3/17
User (print name): BS+BC

Project number: 11137148 D23108
Project name: OxY
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The Instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

This completed form is a quality record

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82538
Date: 5/3
User: JK-JD

Project No.: 1113714B-D23108
Project Name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature:

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82537
Date: 5/3/17
User: DF + SM

Project No.: 11137148-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: Joe Murphy

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 81591
Date: 5/5/17
User: BS + BC

Project No.: 1113714-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature:

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM

(QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 51974
Date: 5-4-17
User: SR SD

Project No.: 11137148-D23108
Project Name: OXY
Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 6.94
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated Y / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	Reading 4.02 / 10.08
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.396
Conductivity is a one point calibration.	Calibrated Y / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ___ mV Reading ___ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated Y / N

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM

(QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 55972 Rental Field Equipment
Date: 5/4/17
User: Brad Schwee/Bobby Chatham

Project No.: 1137148
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

pH 4 Lot# F069-20, Exp: 2/14/18 pH 7 Lot# F034-09 Exp: 2/8/18
pH 10 Lot# F350-17, Exp 12/20/17 Cond. 1409 Lot# E231-17, Exp 8/27/17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.08
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to (4.0) or 10.0.	Reading 4.02
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1409 Reading 1501
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑ or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard _____ mV Reading _____ mV
• Use the ↑ or ↓ to select ORP and press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Brad Schwee

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: YSI 65715
Date: 5/4
User: D. Fiala J. Murphy

Project No.: 1137198-023108
Project Name: OXY
Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F178-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.31
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or (10.0)	Reading 9.83
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.391
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: S. Murphy

THIS COMPLETED FORM IS A QUALITY RECORD

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 6612
Date (mm/dd/yyyy): 3/4/17
User (print name): SR + JD

Project number: 11137148-D23108
Project name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 79773
Date (mm/dd/yyyy): 5/4/17
User (print name): BS + BC

Project number: 11137148 D23108
Project name: Oxy
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 82139
Date (mm/dd/yyyy): 5/4/17
User (print name): SM + DF

Project number: 11137148 - D23108
Project name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field File

Signature:

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82538
Date: 5/4/17
User: JK-JD

Project No.: 1113714B-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature:

THIS COMPLETED FORM IS A QUALITY RECORD

(QSF-227D)

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

Control No.: 81591
Date: 5/4/17
User: BS + BC

Project No.: 11137148-D23108
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82537
Date: 5/4/17
User: DF, SM

Project No.: 1113714B-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: Sue Murphy

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM

(QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: S1974
Date: 5-5-17
User: JR JD

Project No.: 11137148-D23108
Project Name: OXY
Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

Check when completed

- Check kit contents. ☑
- Check pH 7 buffer reading. Calibrate if greater than ±0.2. Reading 7.01

PH is a two point calibration but always start with the seven standard.

- Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down. Calibrated (Y) N
- Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ⌟ key to accept.
- Use ↓ key to highlight pH symbol and press enter ⌟.
- Select 2 point calibration and use number pad to enter 7.0 and push ⌟ to accept value. Push ⌟ again to calibrate.
- Repeat these steps to calibrate your pH value to 4.0 or 10.0. Reading 4.07 / 9.91
- Press Esc to return to the calibration screen.

Check conductivity standard near the expected range. Calibrate if greater than ±0.5%. Standard 1.409 Reading 1.44

Conductivity is a one point calibration. Calibrated (Y) N

- Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.
- Press Esc to return to the calibration screen.
- Use the ↑or ↓ to select SpC and press ⌟
- Use the number key pad to enter 1.413 and push ⌟ to accept value. Push ⌟ again to calibrate.

Check ORP standard:

- Press Esc to return to the calibration screen. Standard _____ mV Reading _____ mV
- Use the ↑or ↓ to select ORPand press ⌟
- Use the number key pad to enter the value and push ⌟ to accept. Push ⌟ again to calibrate.

To calibrate DO, see manual for instructions Calibrated (Y) N

Filing: Field File

Signature: Jason Dunlap

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 55972 Rental Field Environmental
Date: 5/5/17
User: Brian Schwee/Barry Chatham

Project No.: 1137148
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:
pH 4 Lot# F069-20, Exp: 3/14/18 pH 7 Lot# F034-09 Exp: 2/8/18
pH 10 Lot# F350-17, Exp 12/20/17 Cond. 1409 Lot# F231-17, Exp 8/27/17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 6.90
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	Reading 10.08
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1409 Reading 1422
Conductivity is a one point calibration.	Calibrated (Y) N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑ or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑ or ↓ to select ORP and press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Brian Schwee

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM

(QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 65715
Date: 5/5/17
User: Sean Murphy Deacon

Project No.: 1137148-D23108
Project Name: OXY

Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	FD39-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 6.77
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated Y / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	Reading 3.91
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.427
Conductivity is a one point calibration.	Calibrated Y / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated Y / N

Filing: Field File

Signature: Murphy

THIS COMPLETED FORM IS A QUALITY RECORD

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 66112
Date (mm/dd/yyyy): 5/5/17
User (print name): JR + JD

Project number: 11137148-D23108
Project name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 79773
Date (mm/dd/yyyy): 5/5/17
User (print name): BS+BC

Project number: 11137148 D23108
Project name: Oxy
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 82139
Date (mm/dd/yyyy): 5/5/17
User (print name): SM + DF

Project number: 11137148 · D23108
Project name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field File

Signature: [signature]

This completed form is a quality record

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82538
Date: 5/5/17
User: JR-JD

Project No.: 1137148-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature:

THIS COMPLETED FORM IS A QUALITY RECORD

(QSF-227D)

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

Control No.: 81591
Date: 5/5/17
User: BS + BC

Project No.: 11137148-D23108
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82537
Date: 5/5/17
User: DF + SM

Project No.: 111371148 - D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: Sean Murphy

THIS COMPLETED FORM IS A QUALITY RECORD

(QSF-483D)

FIELD DATA RECORD FORM
METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 51974
Date: 5-6-17
User: SR SD

Project No.: 11137148-D23108
Project Name: OXY
Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.10
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated Y N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ⌟ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ⌟.	
• Select 2 point calibration and use number pad to enter 7.0 and push ⌟ to accept value. Push ⌟ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	Reading 4.12 / 9.89
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.398
Conductivity is a one point calibration.	Calibrated Y N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ⌟	
• Use the number key pad to enter 1.413 and push ⌟ to accept value. Push ⌟ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____mV Reading ____mV
• Use the ↑or ↓ to select ORPand press ⌟	
• Use the number key pad to enter the value and push ⌟ to accept. Push ⌟ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated Y N

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM

(QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 55972 Rental Field Env. Instrument
Date: 5/6/17
User: Brian Schwee/Bobby Chatham

Project No.: 1137148
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

pH 4 Lot# F069-20, Exp: 3/14/18 pH 7 Lot# F034-09 Exp: 2/8/18
pH 10 Lot# F350-17, Exp 12/20/17 Cond. 1409 Lot# F231-17, Exp 8/27/17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 693
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 & (10.0.)	Reading 4.94
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1409 Reading 1427
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑ or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑ or ↓ to select ORP and press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Brian Schwee

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM

(QSF-463D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 65715
Date: 5/16/2017
User: Murphy Finkle

Project No.: 1137198-023108
Project Name: OXY
Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F039-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 6.84
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or (10.0)	Reading 10.08
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.452
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____mV Reading ____mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Steven Murphy

THIS COMPLETED FORM IS A QUALITY RECORD

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 66112
Date (mm/dd/yyyy): 5/6/17
User (print name): JR + JD

Project number: 111-7148-D23108
Project name: OKV Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 79773
Date (mm/dd/yyyy): 5/6/17
User (print name): BS+BC

Project number: 11137148 D23108
Project name: Oxy
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature: [signature]

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 82139
Date (mm/dd/yyyy): 5/6/17
User (print name): SM + DF

Project number: 1137148 - D23108
Project name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field File

Signature:

This completed form is a quality record

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82538
Date: 5/6/17
User: JB-JD

Project No.: 1137148-D2310 B
Project Name: Oxy Spring 2017 GWM

Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature:

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 81591
Date: 5/6/17
User: BS + BC

Project No.: 11137148-D23108
Project Name: OXY Spring 2017 GWM
Location: Wichita, Ks

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82537
Date: 5/16/17
User: DF, SM

Project No.: 111371/46 - D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: S. Murphy

FIELD DATA RECORD FORM

(QSF-488D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: S1774
Date: 5-8-17
User: JR SD

Project No.: 1137198-D23108
Project Name: OXY
Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	FD39-09	F178-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.04
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated Y/ N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	4.08 Reading 4.00
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.401
Conductivity is a one point calibration.	Calibrated Y/ N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard _____ mV Reading _____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated Y/ N

Filing: Field File

Signature: Jason Dunlap

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM

(QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 55972 Rental Field Equipment
Date: 5/8/17
User: Brian Schwee/Bob Chatham

Project No.: 1137148
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

pH 4 Lot# F069-20, Exp: 2/14/18 pH 7 Lot# F034-09 Exp: 2/8/18
pH 10 Lot# F350-17, Exp 12/20/17 Cond. 1409 Lot# F231-17, Exp 8/27/17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.02
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or (10.0)	Reading 10.01
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1409 Reading 1415
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Brian Schwee

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 65715
Date: 5/8/2017
User: S. Murphy D Fink

Project No.: 1137148-023108
Project Name: OXY
Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	FD39-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☐
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 6.78
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or (10.0).	Reading 10.21
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.393
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑ or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑ or ↓ to select ORP and press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Sean Murphy

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 66112
Date (mm/dd/yyyy): 5/8/18
User (print name): JR + JD

Project number: 11137148-D23108
Project name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 79773
Date (mm/dd/yyyy): 5/8/17
User (print name): BS + BC

Project number: 11137148 D23108
Project name: Oxy
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature: [signature]

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 82139
Date (mm/dd/yyyy): 5/3/17
User (print name): SM + DF

Project number: 11137148 · D23108
Project name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field File

Signature:

This completed form is a quality record

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82538
Date: 5/9/17
User: JR-JD

Project No.: 111371148-D23108
Project Name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature:

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 81591
Date: 5/8/17
User: BS + BC

Project No.: 1113714-D23108
Project Name: 0x4 Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: [signature]

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82537
Date: 5/8/17
User: DF, SM

Project No.: 111137148-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: Sean Murphy

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 51974
Date: 5-9-17
User: JR JD

Project No.: 1137198-023108
Project Name: OXY

Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.01
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	4.03
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	Reading 10.07
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.401
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard _____ mV Reading _____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM

(QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 55972 Rental Field Env. Instrument
Date: 5/9/17
User: Brian Schwee/Bobby Cheatham

Project No.: 1137148
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:
pH 4 Lot# F069-20, Exp: 3/14/18 pH 7 Lot# F034-09 Exp: 2/8/18
pH 10 Lot# F350-17, Exp 12/20/17 Cond. 1409 Lot# F231-17, Exp 8/27/17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.03
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or (10.0)	Reading 10.06
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1409 Reading 1422
Conductivity is a one point calibration.	Calibrated (Y) N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Brian Schwee

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 65715
Date: 5/9/2017
User: Murphy Finkle

Project No.: 1137198-023108
Project Name: OXY
Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☐
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 6.92
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to (4.0) or 10.0.	Reading 3.88
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.419
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Jason Murphy

THIS COMPLETED FORM IS A QUALITY RECORD

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 66112
Date (mm/dd/yyyy): 5/9/17
User (print name): JR + JD

Project number: 11137148-D23108
Project name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 82139
Date (mm/dd/yyyy): 5/9/17
User (print name): SM + DF

Project number: 11137148 · D23108
Project name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field File

Signature: [signature]

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 79773
Date (mm/dd/yyyy): 5/9/17
User (print name): BS+BC

Project number: 11137148 D23108
Project name: Oxy

Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82538
Date: 5/9/17
User: JR-JD

Project No.: 1137148-D23108
Project Name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: JR

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 81591
Date: 5/9/17
User: BS + BC

Project No.: 11137148-D23108
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82537
Date: 5/9/17
User: DF + SM

Project No.: 11137148-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: Sean Murphy

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 51934
Date: 5-10-17
User: JR JO

Project No.: 1137148-023108
Project Name: OXY

Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F039-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.06
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	4.07
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	Reading 9.89
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.396
Conductivity is a one point calibration.	Calibrated (Y) N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 55972 Rental Field Equipment
Date: 5/10/17
User: Brian Schwee/Bony Chatham

Project No.: 1137148
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

pH 4 Lot# F069-20, Exp: 3/14/18 pH 7 Lot# F034-09 Exp: 2/8/18
pH 10 Lot# F350-17, Exp 12/20/17 Cond. 1409 Lot# E231-17, Exp 8/27/17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.05
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or (10.0).	Reading 10.08
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1409 Reading 1432
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Brian Schwee

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.:
Date: 5/10/2017
User: Sean Murphy Weaton Fields

Project No.: 11137198-D23108
Project Name: OXY
Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☐
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 6.87
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to (4.0) or 10.0.	Reading 4.11
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.388
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Sean Murphy

THIS COMPLETED FORM IS A QUALITY RECORD

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 66112
Date (mm/dd/yyyy): 5/10/18
User (print name): JR + JD

Project number: 11137148-D23108
Project name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 82139
Date (mm/dd/yyyy): 5/10/17
User (print name): SM + DF

Project number: 11137148 - D23108
Project name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field File

Signature: [signature]

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 79773
Date (mm/dd/yyyy): 5/10/15
User (print name): BS+BC

Project number: 11137148 D23109
Project name: Oxy

Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature: [signature]

This completed form is a quality record

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82537
Date: 5/10/17
User: DF, SM

Project No.: 111371.48 - D23108
Project Name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: Sue Murphy

(QSF-227D)

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

Control No.: 81591
Date: 5/10/17
User: BS + BC

Project No.: 11137148-D23108
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82538
Date: 5/10/17
User: JR-JD

Project No.: 111371148-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature:

FIELD DATA RECORD FORM
(QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 51974
Date: 5-11-17
User: JRSO

Project No.: 1137198-023108
Project Name: OXY

Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.01
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	4.11
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	Reading 10.01
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.402
Conductivity is a one point calibration.	Calibrated (Y) N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Jason Davis

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 55972 Rental Field Environmental
Date: 5/11/17
User: Brian Schwee/Barry Chatham

Project No.: 1137148
Project Name: OXY Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

pH 4 Lot# F069-20, Exp: 3/14/18 pH 7 Lot# F034-09 Exp: 2/8/18
pH 10 Lot# F350-17, Exp 12/20/17 Cond. 1409 Lot# F231-17, Exp 8/27/17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 6.99
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	Reading 4.03
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1409 Reading 1402
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Brian Schwee

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 65715
Date: 5/11/2017
User: Deacon Finkle

Project No.: 1137198-023108
Project Name: OXY

Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☐
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 6.91
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or (10.0)	Reading 9.93
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.396
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard _____ mV Reading _____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Deacon Finkle

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 66112
Date (mm/dd/yyyy): 5/11/18
User (print name): JR + JD

Project number: 11137148-D23108
Project name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 82139
Date (mm/dd/yyyy): 5/11/17
User (print name): SM + DF

Project number: 11137148 - D23108
Project name: OXY Spring 2017 GWM

Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field File

Signature:

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 79773
Date (mm/dd/yyyy): 5/11/17
User (print name): BS+BC

Project number: 11137148 D23108
Project name: OxY
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature: [signature]

This completed form is a quality record

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82538
Date: 5/11/17
User: JR-JD

Project No.: 1137148-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature:

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 81591
Date: 5/4/17
User: BS + BC

Project No.: 1137148-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: B. J. Moore

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82537
Date: 5/11/17
User: DF + SM

Project No.: 11137148-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: Sue Murphy

FIELD DATA RECORD FORM
(QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 51974
Date: 5-17-17
User: JR JD

Project No.: 1137198-023108
Project Name: OXY

Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.04
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	4.03
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	Reading 9.94
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.425
Conductivity is a one point calibration.	Calibrated (Y) N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Jason Dan

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 65715
Date: 5/8/17
User: S. Murphy D. Fiehe

Project No.: 1137148-D23108
Project Name: OXY

Location: Wichita KS

Additional Equipment Control Numbers and Descriptions:

	pH 7.0	pH 10.0	pH 4.0	Conductivity
Lot #:	F034-09	F175-13	F069-20	E231-17
Exp Date:	2/8/18	6-28-17	3-14-18	8-27-17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☐
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.16
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to (4.0) or 10.0.	Reading 4.22
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.409 Reading 1.425
Conductivity is a one point calibration.	Calibrated (Y) N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ____ mV Reading ____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: Field File

Signature: Sean Murphy

FIELD DATA RECORD FORM (QSF-483D)

METER, PH/COND./TEMP./DO/ORP/ SALINITY/FLOW CELL, YSI 556 MPS

Control No.: 55972 Rental Field Env. Inventory **Project No.:** 1137148
Date: 5/12/17 **Project Name:** OXY Spring 2017 GWM
User: Brian Schwee/Bray Chatham **Location:** Wichita, KS

Additional Equipment Control Numbers and Descriptions:
pH 4 Lot# F069-20, Exp: 3/14/18 pH 7 Lot# F034-09 Exp: 2/8/18
pH 10 Lot# F350-17, Exp 12/20/17 Cond. 1409 Lot# E231-17, Exp 8/27/17

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 7.02
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to 4.0 or 10.0.	Reading 10.03
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1409 Reading 1327
Conductivity is a one point calibration.	Calibrated (Y) / N
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard ___ mV Reading _____ mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions	Calibrated (Y) / N

Filing: ~~Field File~~

Signature: Brian Schwee

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 66112
Date (mm/dd/yyyy): 5/12/18
User (print name): JR + JD

Project number: 11137148-D23108
Project name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature:

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 79773
Date (mm/dd/yyyy): 5/12/17
User (print name): BS+BC

Project number: 11137148 D23109
Project name: Cxy

Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field file

Signature: [signature]

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), Lamotte 2020
(QSF-247D)

Control number: 82139
Date (mm/dd/yyyy): 5/12/17
User (print name): SM + DF

Project number: 11137148 - D23108
Project name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check outside of reference standard bottles for cleanliness and condensation then wipe with lint free cloth.	☑
• Open lid and align arrows.	☑
• Insert the reference standard and index (10 or 1.0 NTU).	Standard used 10 NTU
• Press the READ button. (If the value displayed is not the same as the standard, continue the calibration procedure.)	☑
• Push the CAL button for 5 seconds until CAL is displayed.	
• Release the CAL button and the display will flash.	
• Press the up and /or down arrows until the value of the standard is displayed.	
• Push the CAL button again to store the calibration.	☑
• The instrument is now ready for use.	
• Turn the meter off by pressing the READ button for at least 1 second.	☑
Note: Condensation on outside of sample bottles affects meter readings.	

Filing: Field File

Signature:

This completed form is a quality record

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82538
Date: 5/12/17
User: JR-JD

Project No.: 11137148-D23108
Project Name: Oxy Spring 2017 GWM
Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature:

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 81591
Date: 5/12/17
User: BS + BC

Project No.: 11137148-D23108
Project Name: Oxy Spring 2017 GWM
Location: Wichita, Ks

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: [signature]

THIS COMPLETED FORM IS A QUALITY RECORD

FIELD DATA RECORD FORM
OIL/WATER INTERFACE PROBE

(QSF-227D)

Control No.: 82537
Date: 5/12/17
User: DF, SM

Project No.: 11137148-D23108
Project Name: Oxy Spring 2017 GWM

Location: Wichita, KS

Additional Equipment Control Numbers and Descriptions:

FIELD PROCEDURE BEFORE USE:

	Check when completed
• Check batteries by pushing test button.	☑
• Check probe for damage.	☑
• Check tape for damage.	☑

Filing: Field File

Signature: Sean Murphy

Appendix B
Analytical Reports

Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date and Time Received: 05/03/2017 1735
Pace File No.: 7775
Pace Order No.: 140212
P.O./Project No: 4502201562-11119420
Project ID: OXY WICHITA GWM
Purchase Auth: SSOW251-402-D02-3100

Dear Ms. Thurman:

This laboratory report, containing the samples indicated below, includes 27 pages for the analytical report, 1 page(s) for the chain of custody and/or analysis request, and 4 page(s) for the sample receipt form.

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17050267	WG-05012017-JD-ER1	Liquid	5/1/2017
17050268	WG-05012017-JD-ER2	Liquid	5/1/2017
17050269	WG-05012017-JD-ER3	Liquid	5/1/2017
17050270	WG-05012017-JD-ER4	Liquid	5/1/2017
17050271	WG-05022017-JD-ER5	Liquid	5/2/2017
17050272	WG-05022017-JD-ER6	Liquid	5/2/2017
17050273	WG-05022017-JD-ER7	Liquid	5/2/2017
17050274	WG-05022017-JD-ER8	Liquid	5/2/2017
17050275	TB-01	Liquid	

The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

Samples will be retained for thirty days unless Pace is otherwise notified. Pace is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Pace's Standard Operating Procedures. These procedures are in substantial compliance with the approved methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.

Thank you for choosing Pace for this project.

Gregory J. Groene
Project Manager
Gregory.Groene@pacelabs.com

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Lab Number: 17050267
Sample Description: WG-05012017-JD-ER1

Date Sampled: 05/01/2017
Time Sampled: 1300

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/321
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/10/17 2228	170508-2	1NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/10/17 2228	170508-2	1NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/09/17 1855	170505-3	1EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/10/17 1539	170508-1	1MS6130	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 2224	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1736	170505-3	6IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0523	3IC2125	7IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050267

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Lab Number: 17050268
Sample Description: WG-05012017-JD-ER2

Date Sampled: 05/01/2017
Time Sampled: 1430

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/321
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/10/17 2308	170508-2	1NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/10/17 2308	170508-2	1NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/09/17 1935	170505-3	1EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/10/17 1620	170508-1	1MS6130	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 2249	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1748	170505-3	7IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0536	3IC2125	7IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050268

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Lab Number: 17050269
Sample Description: WG-05012017-JD-ER3

Date Sampled: 05/01/2017
Time Sampled: 1700

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/321
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/10/17 2347	170508-2	1NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/10/17 2347	170508-2	1NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/09/17 2015	170505-3	1EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/10/17 1701	170508-1	1MS6130	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 2314	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1752	170505-3	7IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0548	3IC2125	7IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050269

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Lab Number: 17050270
Sample Description: WG-05012017-JD-ER4

Date Sampled: 05/01/2017
Time Sampled: 1730

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/321
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0026	170508-2	1NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0026	170508-2	1NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/09/17 2055	170505-3	1EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/10/17 1742	170508-1	1MS6130	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 2339	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1757	170505-3	7IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0600	3IC2125	7IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050270

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Lab Number: 17050271
Sample Description: WG-05022017-JD-ER5

Date Sampled: 05/02/2017
Time Sampled: 1230

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/321
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0105	170508-2	1NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0105	170508-2	1NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/09/17 2135	170505-3	1EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/10/17 1822	170508-1	1MS6130	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 1708	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1801	170505-3	7IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0612	3IC2125	7IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050271

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Lab Number: 17050272
Sample Description: WG-05022017-JD-ER6

Date Sampled: 05/02/2017
Time Sampled: 1300

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/321
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0144	170508-2	1NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0144	170508-2	1NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/09/17 2215	170505-3	1EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/10/17 1902	170508-1	1MS6130	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 1733	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1805	170505-3	7IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0625	3IC2125	7IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050272

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Lab Number: 17050273
Sample Description: WG-05022017-JD-ER7

Date Sampled: 05/02/2017
Time Sampled: 1715

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/321
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0223	170508-2	1NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0223	170508-2	1NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/09/17 2255	170505-3	1EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/10/17 1942	170508-1	1MS6130	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 1758	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1809	170505-3	7IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0637	3IC2125	7IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050273

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Lab Number: 17050274
Sample Description: WG-05022017-JD-ER8

Date Sampled: 05/02/2017
Time Sampled: 1720

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/321
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0302	170508-2	1NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0302	170508-2	1NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 0054	170505-3	2EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/10/17 2022	170508-1	1MS6130	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 1823	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1813	170505-3	7IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0649	3IC2125	7IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050274

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Lab Number: 17050275
Sample Description: TB-01

Date Sampled:
Time Sampled:

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/08/17 1848	1MS9128	1MS9128	RKR	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17050275

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Appendix

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

ND indicates not detected with the LOQ (Limit of Quantitation) in parentheses. The LOQ value has been adjusted for the dilution factor and percent solids, as applicable. Due to rounding of significant figures, the LOQ value may vary slightly from the reported concentration. The LOQ is the lowest concentration of the analytical standard that was used for calibrating the instrument. If an analytical standard is analyzed at the LOQ, an error of as much as +/- 50% can be expected. N/A, if present, indicates not applicable.

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

No analysis with a holding time of seventy-two hours or less was performed in this Pace order.

Due to the absence of sampling date and/or time information, the holding time for preparation and/or analysis may not have been qualified correctly for applicable samples within this order number. The data may or may not be useable for compliance purposes.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

QC - QC data qualifiers were noted. See the Quality Control Report.

Following is the full name of each analyst that performed analysis(es) on this Pace order number:

Analyst Initials	Analyst Full Name
JDL	John D. Lamer
JMM	Julie M. McCullough
MLL	Melissa L. Lundgrin
RKR	Rhonda K. Reilly

Accreditation Summary

Client: Occidental Chemical Corporation_Oxy
Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Pace is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Pace is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Pace's full NELAP accreditation status may be viewed at www.kdheks.gov/envlab. Note that unless qualified otherwise in the Laboratory Report, Pace performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

Test	Analysis	Matrix-Regulatory Program	Method	Pace NELAP Accredited in Other Reg. Program
CL351	OXY Chlorinated Hyd.	L-RCRA	8121	
CL351	Hexachloroethane	L-RCRA	8121	No
CL351	Hexachlorobutadiene	L-RCRA	8121	No
MS302	OXY GC/MS Acids	L-RCRA	8270C	
MS302	3-& 4-Chlorophenol	L-RCRA	8270C	No
MS302	2,5-Dichlorophenol	L-RCRA	8270C	No
MS302	2,3,4,5-Tetrachlorophenol	L-RCRA	8270C	No

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170508-2	170508BLK2 05/10/17 2110	170508LCS2 05/10/17 2149	17050410MS 05/11/17 1212
Lab numbers associated with this batch: 17050267 17050268 17050269 17050270 17050271 17050272 17050273 17050274					
CL350	Pentachlorophenol	170508-2	170508BLK2 05/10/17 2110	170508LCS2 05/10/17 2149	17050410MS 05/11/17 1212
Lab numbers associated with this batch: 17050267 17050268 17050269 17050270 17050271 17050272 17050273 17050274					
CL351	OXY Chlorinated Hyd.	170505-3	170505BLK3 05/09/17 1736	170505LCS3 05/09/17 1816	17050410MS 05/10/17 0931
Lab numbers associated with this batch: 17050267 17050268 17050269 17050270 17050271 17050272 17050273 17050274					
MS302	OXY GC/MS Acids	170508-1	170508BLK1 05/10/17 1417	170508LCS1 05/10/17 1458	17050410MS 05/11/17 1525
Lab numbers associated with this batch: 17050267 17050268 17050269 17050270 17050271 17050272 17050273 17050274					
MS350	OXY Volatiles by 8260	1MS9125	BLK1MS9125 05/05/17 1434	LCS1MS9125 05/05/17 1344	17050410MS 05/05/17 2021
Lab numbers associated with this batch: 17050267 17050268 17050269 17050270					
MS350	OXY Volatiles by 8260	1MS9128	BLK1MS9128 05/08/17 1644	LCS1MS9128 05/08/17 1554	
Lab numbers associated with this batch: 17050271 17050272 17050273 17050274 17050275					
SL423	Hardness (Calculated)	170505-3	170505BLK3 05/12/17 1728	170505LCS3 05/12/17 1732	17050410MS 05/12/17 1907
Lab numbers associated with this batch: 17050267 17050268 17050269 17050270 17050271 17050272 17050273 17050274					
GL502	Chloride	3IC2125	BLK3IC2125 05/06/17 0459	LCS3IC2125 05/06/17 0511	17050410MS 05/06/17 0954
Lab numbers associated with this batch: 17050267 17050268 17050269 17050270 17050271 17050272 17050273 17050274					

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170505-3	**For samples prepared on: 05/05/2017 0945**					**Spiked sample: 17050410**						
OXY Chlorinated Hyd.						MN	MN					
A-BHC	ND(0.011)	106	75.0-125	0.50	µg/L			76.1-127	0.50	µg/L	**	16.0
B-BHC	ND(0.037)	108	68.0-125	0.50	µg/L			71.5-125	0.50	µg/L	**	18.0
G-BHC	ND(0.052)	107	72.5-123	0.50	µg/L			73.9-126	0.50	µg/L	**	17.4
Hexachloroethane	ND(0.02)	96.0	55.1-115	0.50	µg/L			45.8-118	0.50	µg/L	**	33.4
Hexachlorobutadiene	ND(0.02)	97.2	35.3-134	0.50	µg/L			36.7-122	0.50	µg/L	**	37.9
Hexachlorobenzene	ND(0.10)	105	63.7-119	0.50	µg/L			62.9-119	0.50	µg/L	**	20.7
D-BHC	ND(0.05)	111	70.6-126	0.50	µg/L			71.7-131	0.50	µg/L	**	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	89.3	93.5	65.9-110	8.0	µg/L	MN	MN	65.9-110	8.0	µg/L	**	
QC Batch: 170505-3	**For samples prepared on: 05/05/2017 0825**					**Spiked sample: 17050410**						
Hardness (Calculated)	ND(5.0)	89.3	80.0-120	357		MN	MN	80.0-120	357		**	20.0
QC Batch: 170508-1	**For samples prepared on: 05/08/2017 0830**					**Spiked sample: 17050410**						
OXY GC/MS Acids						MN	MN					
2-Chlorophenol	ND(5.0)	82.6	75.9-99.3	50.0	µg/L			75.1-100	50.0	µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	74.6	56.0-90.2	50.0	µg/L			58.8-91.2	50.0	µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	87.9	68.2-106	50.0	µg/L			65.6-112	50.0	µg/L	**	21.2
2,5-Dichlorophenol	ND(5.0)	84.6	73.9-103	50.0	µg/L			65.4-106	50.0	µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	85.2	78.3-104	50.0	µg/L			76.7-107	50.0	µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	88.0	75.3-109	50.0	µg/L			72.4-114	50.0	µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	86.3	77.1-110	50.0	µg/L			75.0-116	50.0	µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	87.2 CE	72.5-115	100	µg/L			74.5-120	100	µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	89.4	71.6-118	50.0	µg/L			73.7-122	50.0	µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	38.2	36.5	25.6-44.5	150	µg/L	MN	MN	25.6-44.5	150	µg/L	**	
2-FLUOROPHENOL	59.3	56.0	42.2-68.2	150	µg/L	MN	MN	42.2-68.2	150	µg/L	**	
2,4,6-TRIBROMOPHENOL	80.4	91.4	53.9-131	150	µg/L	MN	MN	53.9-131	150	µg/L	**	
QC Batch: 170508-2	**For samples prepared on: 05/08/2017 1100**					**Spiked sample: 17050410**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	106	58.8-127	4.0	µg/L	MN	MN	64.6-126	4.0	µg/L	**	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	80.8	104	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170508-2	**For samples prepared on: 05/08/2017 1100**					**Spiked sample: 17050410**						
Pentachlorophenol	ND(0.5)	97.2	66.3-127	4.0	µg/L	MN	MN	7.60-144	4.0	µg/L	**	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	80.8	104	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 1MS9125	**For sample analyzed on: 05/05/2017**					**Spiked sample: 17050410**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	88.5	80.0-120	10.0	µg/L			83.0-121	10.0	µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	80.5	75.6-120	10.0	µg/L			77.5-122	10.0	µg/L	**	9.5
Benzene	ND(0.5)	103	80.0-120	10.0	µg/L			82.7-117	10.0	µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	89.1	79.9-125	10.0	µg/L			79.0-125	10.0	µg/L	**	13.6
Chloroform	ND(0.5)	91.8	79.6-120	10.0	µg/L			78.4-117	10.0	µg/L	**	9.2
Chloromethane	ND(0.5)	101	70.2-127	10.0	µg/L			69.7-129	10.0	µg/L	**	15.9
Methylene chloride	ND(0.5)	98.6	77.1-120	10.0	µg/L			76.3-119	10.0	µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	104	80.0-120	10.0	µg/L			82.0-121	10.0	µg/L	**	11.3
Trichloroethylene	ND(0.5)	97.8	80.0-120	10.0	µg/L			79.3-120	10.0	µg/L	**	13.7
Vinyl chloride	ND(0.5)	95.4	76.2-128	10.0	µg/L			78.0-130	10.0	µg/L	**	14.6

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 1MS9125	**For sample analyzed on: 05/05/2017**					**Spiked sample: 17050410**						
1,2-Dichloropropane	ND(0.5)	92.4	79.5-120	10.0	µg/L			81.7-117	10.0	µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	78.8	86.6	76.2-126	10.0	µg/L	MN	MN	76.2-126	10.0	µg/L	**	
TOLUENE-d8	105	102	80.0-120	10.0	µg/L	MN	MN	80.0-120	10.0	µg/L	**	
QC Batch: 1MS9128	**For sample analyzed on: 05/08/2017**					**Spiked sample:**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	98.2	80.0-120	10.0	µg/L			83.0-121		µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	87.6	75.6-120	10.0	µg/L			77.5-122		µg/L	**	9.5
Benzene	ND(0.5)	112	80.0-120	10.0	µg/L			82.7-117		µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	99.2	79.9-125	10.0	µg/L			79.0-125		µg/L	**	13.6
Chloroform	ND(0.5)	102	79.6-120	10.0	µg/L			78.4-117		µg/L	**	9.2
Chloromethane	ND(0.5)	136 LH	70.2-127	10.0	µg/L			69.7-129		µg/L	**	15.9
Methylene chloride	ND(0.5)	113	77.1-120	10.0	µg/L			76.3-119		µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	96.4	80.0-120	10.0	µg/L			82.0-121		µg/L	**	11.3
Trichloroethylene	ND(0.5)	107	80.0-120	10.0	µg/L			79.3-120		µg/L	**	13.7
Vinyl chloride	ND(0.5)	114	76.2-128	10.0	µg/L			78.0-130		µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	101	79.5-120	10.0	µg/L			81.7-117		µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	92.2	91.2	76.2-126	10.0	µg/L	MN	MN	76.2-126		µg/L	**	
TOLUENE-d8	104	104	80.0-120	10.0	µg/L	MN	MN	80.0-120		µg/L	**	
QC Batch: 3IC2125	**For sample analyzed on: 05/06/2017**					**Spiked sample: 17050410**						
Chloride	ND(1.0)	103	90.0-110	4.0	mg/L	MN	MN	68.4-120	80.0	mg/L	**	21.6

Data Qualifiers:
MN - The MS/MSD sample analyses were not performed on a sample from this Pace order number.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

LH - The Laboratory Control Sample (LCS) recovery for this analyte was above the method or laboratory quality control limit. The reported sample concentration may be biased high.

** - RPD calculation not applicable/not available for this analysis.

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050267		**Sample Description: WG-05012017-JD-ER1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/10/2017	5.0	µg/L	92.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/10/2017	5.0	µg/L	92.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/09/2017	8.0	µg/L	88.3	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/10/2017	150	µg/L	36.3	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/10/2017	150	µg/L	58.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/10/2017	150	µg/L	84.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	87.7	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	101	80.0-120
Lab Number: 17050268		**Sample Description: WG-05012017-JD-ER2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/10/2017	5.0	µg/L	92.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/10/2017	5.0	µg/L	92.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/09/2017	8.0	µg/L	93.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/10/2017	150	µg/L	38.3	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/10/2017	150	µg/L	59.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/10/2017	150	µg/L	89.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	89.2	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	101	80.0-120
Lab Number: 17050269		**Sample Description: WG-05012017-JD-ER3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/10/2017	5.0	µg/L	89.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/10/2017	5.0	µg/L	89.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/09/2017	8.0	µg/L	91.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/10/2017	150	µg/L	36.7	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/10/2017	150	µg/L	57.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/10/2017	150	µg/L	81.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	88.5	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	102	80.0-120
Lab Number: 17050270		**Sample Description: WG-05012017-JD-ER4**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	91.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	91.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/09/2017	8.0	µg/L	91.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/10/2017	150	µg/L	34.9	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050270		**Sample Description: WG-05012017-JD-ER4**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/08/2017	05/10/2017	150	µg/L	54.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/10/2017	150	µg/L	74.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	92.3	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	103	80.0-120
Lab Number: 17050271		**Sample Description: WG-05022017-JD-ER5**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	88.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	88.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/09/2017	8.0	µg/L	83.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/10/2017	150	µg/L	33.8	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/10/2017	150	µg/L	52.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/10/2017	150	µg/L	72.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	95.2	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	105	80.0-120
Lab Number: 17050272		**Sample Description: WG-05022017-JD-ER6**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	91.3	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	91.3	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/09/2017	8.0	µg/L	85.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/10/2017	150	µg/L	34.2	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/10/2017	150	µg/L	51.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/10/2017	150	µg/L	74.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	96.3	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	102	80.0-120
Lab Number: 17050273		**Sample Description: WG-05022017-JD-ER7**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	78.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	78.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/09/2017	8.0	µg/L	91.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/10/2017	150	µg/L	36.9	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/10/2017	150	µg/L	57.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/10/2017	150	µg/L	78.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	90.7	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	104	80.0-120
Lab Number: 17050274		**Sample Description: WG-05022017-JD-ER8**				

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050274		**Sample Description: WG-05022017-JD-ER8**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	80.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	80.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	87.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/10/2017	150	µg/L	37.3	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/10/2017	150	µg/L	56.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/10/2017	150	µg/L	72.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	92.3	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	105	80.0-120
Lab Number: 17050275		**Sample Description: TB-01**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	94.1	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	104	80.0-120

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/16/2017
Date Received: 05/03/2017
Pace File No: 7775
Pace Order No: 140212

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
2,4-Dichlorophenoxyacetic Acid	05/10/2017	1NX5130	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/11/2017	2NX5130	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/10/2017	1NX5130	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/11/2017	2NX5130	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/09/2017	1EX3129	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/10/2017	2EX3129	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/10/2017	3EX3129	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/06/2017	7IC2125	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/06/2017	8IC2125	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/10/2017	1MS6130	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/10/2017	2MS6130	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/05/2017	1MS9125	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/06/2017	2MS9125	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/08/2017		CCV recovery acceptable except as qualified below.			
Chloromethane	05/08/2017	1MS9128	10.0	13.6	µg/L	136 CH

Samples associated with this Continuing Calibration Verification:

Laboratory Number	Instrument Batch	Sample Description
17050271	1MS9128	WG-05022017-JD-ER5
17050272	1MS9128	WG-05022017-JD-ER6
17050273	1MS9128	WG-05022017-JD-ER7
17050274	1MS9128	WG-05022017-JD-ER8
17050275	1MS9128	TB-01

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
OXY Volatiles by 8260	05/09/2017	2MS9128	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/12/2017	6IP4132	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/12/2017	7IP4132	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/12/2017	8IP4132	CCV recovery acceptable for this Instrument Batch.			

Data Qualifiers:
CH - The continuing calibration verification (CCV) standard recovery for this analyte was above the method or SOP limit. The reported concentration for this analyte may be biased high.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

140212

Edits made prior to sample receipt 5-3-17

Page: of

2059061

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Kogl	Attention:
Address: 2626 W. Pawnee Ste D Wichita, KS	Copy To: Paul McMahon	Company Name: Discrepancies See C/S RF
		Address:
Email To: Travis Kogl	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Oxy Spring 2017 GWM	Pace Project Manager: Grey Groene
Requested Due Date/TAT:	Project Number: 11137148	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOCs	SVOCs	Pest/Herb	Chloride/Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05012017-JD-ER1	WT	G			5/1/17	1300		8	5		3							X	X	X	X		
2	WG-05012017-JD-ER2						1430		8	5		3							X	X	X	X		
3	WG-05012017-JD-ER3						1700		8	5		3							X	X	X	X		
4	WG-05012017-JD-ER4						1730		8	5		3							X	X	X	X		
5	WG-05022017-JD-ER5					5/2/17	1230		8	5		3							X	X	X	X		
6	WG-05022017-JD-ER6						1300		8	5		3							X	X	X	X		
7	WG-05022017-JD-ER7						1715		8	5		3							X	X	X	X		
8	WG-05022017-JD-ER8						1720		8	5		3							X	X	X	X		
9	TB-01					—	—		3			3							X					
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Jason Dunlop / GHD	5-3-17	1520	[signature]	5-3-17	1520	
	[signature]	5-3-17	1735	[signature]	5-3-17	1735	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeremy Rape

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 5/3/17 1500

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140212 ~~140211~~ 5/31/17

Client Name: Oxy. **Pace File No.:** 7775.

Sample ID's in cooler:

3LTA, L 250P WG050217 JD-ER7
2LTA L 250P " " JD-ER8
1LTA L 250P " " ER-6
3LTA L 250P WG050120 17 JD ER-4
OVOC

Cooler 1 of 4 for this Pace Order No.

Cooler Identification: Pace Cooler #: 3855 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/3/17 17:35

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: _____ Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 4.2 Corrected Reading (°C) 3.8
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): −0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SK **Date Completed:** 5-3-17.

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140212 ~~140211~~ 5/3/17

Client Name: Oxy. **Pace File No.:** 7775.

Sample ID's in cooler:

3LTA, 0 250P WG-050217-JD ER5.
1 LTA 0 250P WG 05020117 JD ER2
2 LTA 0 250P WG 05022017 JD ER6.
4 LTA 0 250P WG 05012017 JD-ER3.
VOC

Cooler 2 **of** 4 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 3027 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/3/17 17:35

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.4 Corrected Reading (°C) 3.9
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 554 ~~585~~ ~~54~~ 5-3-17 Thermo. Correction Factor (°C): ~~0.4~~ 0.5 5-3-17
☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from:
  - Cover Letter ☐ Container ☐
  - PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

No Temp Blank.

Completed by: SK **Date Completed:** 5-3-17.

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140212 ~~140211~~ 5/3/17

Client Name: Oxy. Pace File No.: 7775.

Sample ID's in cooler:

2 LTA 0 250P WG050222017 JP ER8.
1 LTA 0 250P WG050222017 JP ER7
1 LTA 1 250P WG0501 2017 JA ER1
_ LTA 3 250P WG050 12017 JP-ER3, ER5 ER2.
VOC

Cooler 3 of 4 for this Pace Order No.

Cooler Identification: Pace Cooler #: 3670 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/3/17 17:35

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: _____ Seal Date: —
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.2 Corrected Reading (°C) 2.7.
Temperature. By: ~~Temperature Blank~~ Surface Temperature 0.5.
Thermo. ID No.: 554 ~~585~~ Thermo. Correction Factor (°C): ~~-0.4~~
SR 5-3-17 ~~SR 5-3-17~~ SR 5-3-17
☐ Evidence of Cooling and date received = date sampled ✓

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments: NO Temp Blank.

Completed by: SR Date Completed: 5-3-17.

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140212 ~~140211~~ 5/3/17

Client Name: Oxy. **Pace File No.:** 7775.

Sample ID's in cooler:

3 LTA. O 250P WG60 5062017 ER2
1 LTA O 250P " JD-ER5
1 LTA O 250P " JD-ER4.
1 LTA O 250P " JD-ER1
24-VOC 3-TB.

Cooler 4 **of** 4 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 10094 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/3/17 17:35

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: _____ Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A (6)

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.0 Corrected Reading (°C) 2.6.
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): −0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SR **Date Completed:** 5-3-17.

Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date and Time Received: 05/04/2017 1700
Pace File No.: 7775
Pace Order No.: 140260
P.O./Project No: 4502201562-11119420
Project ID: OXY WICHITA GWM
Purchase Auth: SSOW251-402-D02-3100

Dear Ms. Thurman:

This laboratory report, containing the samples indicated below, includes 37 pages for the analytical report, 2 page(s) for the chain of custody and/or analysis request, and 6 page(s) for the sample receipt form.

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17050401	WG-05032017-DF-MW134S2	Liquid	5/3/2017
17050402	WG-05032017-DF-MW134S3	Liquid	5/3/2017
17050403	WG-05032017-DF-MW137S1	Liquid	5/3/2017
17050404	WG-05032017-DF-MW137S3	Liquid	5/3/2017
17050405	WG-05032017-BS-MW25S1	Liquid	5/3/2017
17050406	WG-05032017-BS-AMW16S	Liquid	5/3/2017
17050407	WG-05032017-BS-AMW16D	Liquid	5/3/2017
17050408	WG-05032017-BS-AMW4D	Liquid	5/3/2017
17050409	WG-05032017-BS-AMW4S	Liquid	5/3/2017
17050410	WG-05042017-JR-MW06S3	Liquid	5/4/2017
17050411	WG-05042017-JR-MW06S1	Liquid	5/4/2017
17050412	WG-05042017-JR-Builders	Liquid	5/4/2017
17050413	TB-03	Liquid	5/4/2017

The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

Samples will be retained for thirty days unless Pace is otherwise notified. Pace is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Pace's Standard Operating Procedures. These procedures are in substantial compliance with the approved methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.

Thank you for choosing Pace for this project.

Gregory J. Groene
Project Manager
Gregory.Groene@pacelabs.com

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050401
Sample Description: WG-05032017-DF-MW134S2

Date Sampled: 05/03/2017
Time Sampled: 1125

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/321
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	202	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	54	mg/L	10	10	7551/246

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0420	170508-2	2NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0420	170508-2	2NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 0134	170505-3	2EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/10/17 2102	170508-1	1MS6130	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 1613	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1818	170505-3	7IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/09/17 1517	1IC2129	2IC2129	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050401

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050402
Sample Description: WG-05032017-DF-MW134S3

Date Sampled: 05/03/2017
Time Sampled: 1200

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/321
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	205	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	41.5	mg/L	1.0	1.0	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0459	170508-2	2NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0459	170508-2	2NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 0214	170505-3	2EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/10/17 2142	170508-1	1MS6130	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 1638	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1822	170505-3	7IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0739	3IC2125	8IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050402

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050403
Sample Description: WG-05032017-DF-MW137S1

Date Sampled: 05/03/2017
Time Sampled: 1605

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/321
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/321
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	216	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	16.7	mg/L	1.0	1.0	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0538	170508-2	2NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0538	170508-2	2NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 0253	170505-3	2EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/10/17 2221	170508-1	1MS6130	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 1702	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1826	170505-3	7IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0751	3IC2125	8IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050403

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050404
Sample Description: WG-05032017-DF-MW137S3

Date Sampled: 05/03/2017
Time Sampled: 1445

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/322
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	284	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	85	mg/L	10	10	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0618	170508-2	2NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0618	170508-2	2NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 0333	170505-3	2EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/11/17 1040	170508-1	1MS6131	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 1727	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1838	170505-3	8IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0803	3IC2125	8IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050404

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050405
Sample Description: WG-05032017-BS-MW25S1

Date Sampled: 05/03/2017
Time Sampled: 1125

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	0.05	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	0.49	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/322
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	133	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	11.8	mg/L	1.0	1.0	7551/246

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0657	170508-2	2NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0657	170508-2	2NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 0413	170505-3	2EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/11/17 1120	170508-1	1MS6131	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 1752	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1842	170505-3	8IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/09/17 1553	1IC2129	2IC2129	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050405

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050406
Sample Description: WG-05032017-BS-AMW16S

Date Sampled: 05/03/2017
Time Sampled: 1400

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/322
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	164	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	26	mg/L	10	10	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0736	170508-2	2NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0736	170508-2	2NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 0453	170505-3	2EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/11/17 1201	170508-1	1MS6131	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 1817	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1846	170505-3	8IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0828	3IC2125	8IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050406

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050407
Sample Description: WG-05032017-BS-AMW16D

Date Sampled: 05/03/2017
Time Sampled: 1430

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/322
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	288	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	60.	mg/L	10	10	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0815	170508-2	2NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0815	170508-2	2NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 0532	170505-3	2EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/11/17 1242	170508-1	1MS6131	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 1841	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1851	170505-3	8IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0840	3IC2125	8IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050407

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050408
Sample Description: WG-05032017-BS-AMW4D

Date Sampled: 05/03/2017
Time Sampled: 1455

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	0.02	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/322
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	5.1	µg/L	1.0	0.5	7465/343
Trichloroethylene	0.8	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	729	mg/L as CaCO3	5.0	25	7443/988
Chloride	148	mg/L	10	10	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0855	170508-2	2NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0855	170508-2	2NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 0612	170505-3	2EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/11/17 1322	170508-1	1MS6131	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 1906	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/16/17 2257	170505-3	9IP4136	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0852	3IC2125	8IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050408

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050409
Sample Description: WG-05032017-BS-AMW4S

Date Sampled: 05/03/2017
Time Sampled: 1535

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/322
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	0.7	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	539	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	241	mg/L	10	10	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 0934	170508-2	2NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 0934	170508-2	2NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 0811	170505-3	3EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/11/17 1403	170508-1	1MS6131	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 1931	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1859	170505-3	8IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0905	3IC2125	8IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050409

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050410
Sample Description: WG-05042017-JR-MW06S3

Date Sampled: 05/04/2017
Time Sampled: 1020

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/322
2,3,4,6-Tetrachlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/322
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	428 QC	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	303	mg/L	20	20	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 1132	170508-2	3NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 1132	170508-2	3NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 0851	170505-3	3EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/11/17 1445	170508-1	1MS6131	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 1956	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1903	170505-3	8IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 0917	3IC2125	8IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050410

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050411
Sample Description: WG-05042017-JR-MW06S1

Date Sampled: 05/04/2017
Time Sampled: 1120

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/322
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343
Hardness (Calculated)	226	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	37.8	mg/L	1.0	1.0	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 1013	170508-2	2NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 1013	170508-2	2NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 1051	170505-3	3EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/11/17 1646	170508-1	1MS6131	JMM	8270C
OXY Volatiles by 8260	N/A	05/05/17 2110	1MS9125	1MS9125	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1928	170505-3	9IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 1018	3IC2125	9IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050411

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050412
Sample Description: WG-05042017-JR-Builders

Date Sampled: 05/04/2017
Time Sampled: 1100

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/177
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/177
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/201
B-BHC	0.30	µg/L	1.0	0.037	7460/201
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/201
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/201
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/201
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/201
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/322
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/322
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	15.1	µg/L	1.0	0.5	7465/344
Chloroform	2.1	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	0.7	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	267	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	92	mg/L	10	10	7551/243

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/08/17 1100	05/11/17 1330	170508-2	3NX5130	JMM	8151A(M)
Pentachlorophenol	05/08/17 1100	05/11/17 1330	170508-2	3NX5130	JMM	8151A(M)
OXY Chlorinated Hyd.	05/05/17 0945	05/10/17 1131	170505-3	3EX3129	JMM	8121
OXY GC/MS Acids	05/08/17 0830	05/11/17 1727	170508-1	1MS6131	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 1912	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/05/17 0825	05/12/17 1932	170505-3	9IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/06/17 1031	3IC2125	9IC2125	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050412

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Lab Number: 17050413
Sample Description: TB-03

Date Sampled: 05/04/2017
Time Sampled:

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/343
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/343
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/343
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/343
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/343
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/343

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/05/17 2200	1MS9125	1MS9125	RKR	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17050413

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Appendix

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

ND indicates not detected with the LOQ (Limit of Quantitation) in parentheses. The LOQ value has been adjusted for the dilution factor and percent solids, as applicable. Due to rounding of significant figures, the LOQ value may vary slightly from the reported concentration. The LOQ is the lowest concentration of the analytical standard that was used for calibrating the instrument. If an analytical standard is analyzed at the LOQ, an error of as much as +/- 50% can be expected. N/A, if present, indicates not applicable.

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

No analysis with a holding time of seventy-two hours or less was performed in this Pace order.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

QC - QC data qualifiers were noted. See the Quality Control Report.

Following is the full name of each analyst that performed analysis(es) on this Pace order number:

Analyst Initials	Analyst Full Name
JDL	John D. Lamer
JMM	Julie M. McCullough
MLL	Melissa L. Lundgrin
RKR	Rhonda K. Reilly

Accreditation Summary

Client: Occidental Chemical Corporation_Oxy
Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Pace is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Pace is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Pace's full NELAP accreditation status may be viewed at www.kdheks.gov/envlab. Note that unless qualified otherwise in the Laboratory Report, Pace performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

Test	Analysis	Matrix-Regulatory Program	Method	Pace NELAP Accredited in Other Reg. Program
CL351	OXY Chlorinated Hyd.	L-RCRA	8121	
CL351	Hexachloroethane	L-RCRA	8121	No
CL351	Hexachlorobutadiene	L-RCRA	8121	No
MS302	OXY GC/MS Acids	L-RCRA	8270C	
MS302	3-& 4-Chlorophenol	L-RCRA	8270C	No
MS302	2,5-Dichlorophenol	L-RCRA	8270C	No
MS302	2,3,4,5-Tetrachlorophenol	L-RCRA	8270C	No

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170508-2	170508BLK2 05/10/17 2110	170508LCS2 05/10/17 2149	17050410MS 05/11/17 1212
Lab numbers associated with this batch: 17050401 17050402 17050403 17050404 17050405 17050406 17050407 17050408 17050409 17050410 17050411 17050412					
CL350	Pentachlorophenol	170508-2	170508BLK2 05/10/17 2110	170508LCS2 05/10/17 2149	17050410MS 05/11/17 1212
Lab numbers associated with this batch: 17050401 17050402 17050403 17050404 17050405 17050406 17050407 17050408 17050409 17050410 17050411 17050412					
CL351	OXY Chlorinated Hyd.	170505-3	170505BLK3 05/09/17 1736	170505LCS3 05/09/17 1816	17050410MS 05/10/17 0931
Lab numbers associated with this batch: 17050401 17050402 17050403 17050404 17050405 17050406 17050407 17050408 17050409 17050410 17050411 17050412					
MS302	OXY GC/MS Acids	170508-1	170508BLK1 05/10/17 1417	170508LCS1 05/10/17 1458	17050410MS 05/11/17 1525
Lab numbers associated with this batch: 17050401 17050402 17050403 17050404 17050405 17050406 17050407 17050408 17050409 17050410 17050411 17050412					
MS350	OXY Volatiles by 8260	1MS9125	BLK1MS9125 05/05/17 1434	LCS1MS9125 05/05/17 1344	17050410MS 05/05/17 2021
Lab numbers associated with this batch: 17050401 17050402 17050403 17050404 17050405 17050406 17050407 17050408 17050409 17050410 17050411 17050413					
MS350	OXY Volatiles by 8260	1MS9128	BLK1MS9128 05/08/17 1644	LCS1MS9128 05/08/17 1554	
Lab numbers associated with this batch: 17050412					
SL423	Hardness (Calculated)	170505-3	170505BLK3 05/12/17 1728	170505LCS3 05/12/17 1732	17050410MS 05/12/17 1907
Lab numbers associated with this batch: 17050401 17050402 17050403 17050404 17050405 17050406 17050407 17050408 17050409 17050410 17050411 17050412					
GL502	Chloride	1IC2129	BLK1IC2129 05/09/17 1237	LCS1IC2129 05/09/17 1249	17050401MS 05/09/17 1529
Lab numbers associated with this batch: 17050401 17050405					
GL502	Chloride	3IC2125	BLK3IC2125 05/06/17 0459	LCS3IC2125 05/06/17 0511	17050410MS 05/06/17 0954
Lab numbers associated with this batch: 17050402 17050403 17050404 17050406 17050407 17050408 17050409 17050410 17050411 17050412					

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170505-3	**For samples prepared on: 05/05/2017 0945**					**Spiked sample: 17050410**						
OXY Chlorinated Hyd.												
A-BHC	ND(0.011)	106	75.0-125	0.50	µg/L	106	101	76.1-127	0.50	µg/L	4.80	16.0
B-BHC	ND(0.037)	108	68.0-125	0.50	µg/L	109	106	71.5-125	0.50	µg/L	2.80	18.0
G-BHC	ND(0.052)	107	72.5-123	0.50	µg/L	107	103	73.9-126	0.50	µg/L	3.80	17.4
Hexachloroethane	ND(0.02)	96.0	55.1-115	0.50	µg/L	98.2	91.0	45.8-118	0.50	µg/L	7.60	33.4
Hexachlorobutadiene	ND(0.02)	97.2	35.3-134	0.50	µg/L	99.8	90.2	36.7-122	0.50	µg/L	10.1	37.9
Hexachlorobenzene	ND(0.10)	105	63.7-119	0.50	µg/L	114	98.8	62.9-119	0.50	µg/L	14.3	20.7
D-BHC	ND(0.05)	111	70.6-126	0.50	µg/L	112	109	71.7-131	0.50	µg/L	2.70	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	89.3	93.5	65.9-110	8.0	µg/L	93.9	92.5	65.9-110	8.0	µg/L		
QC Batch: 170505-3	**For samples prepared on: 05/05/2017 0825**					**Spiked sample: 17050410**						
Hardness (Calculated)	ND(5.0)	89.3	80.0-120	357		74.4 ML	82.6	80.0-120	357		4.1	20.0
QC Batch: 170508-1	**For samples prepared on: 05/08/2017 0830**					**Spiked sample: 17050410**						
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	82.6	75.9-99.3	50.0	µg/L	76.3	85.4	75.1-100	50.0	µg/L	11.3	13.9
3-& 4-Chlorophenol	ND(5.0)	74.6	56.0-90.2	50.0	µg/L	68.1	76.2	58.8-91.2	50.0	µg/L	11.2	14.5
2,4-Dichlorophenol	ND(5.0)	87.9	68.2-106	50.0	µg/L	81.9	85.4	65.6-112	50.0	µg/L	4.20	21.2
2,5-Dichlorophenol	ND(5.0)	84.6	73.9-103	50.0	µg/L	83.6	103	65.4-106	50.0	µg/L	20.8	27.7
2,6-Dichlorophenol	ND(5.0)	85.2	78.3-104	50.0	µg/L	84.1	95.7	76.7-107	50.0	µg/L	12.9	13.4
2,4,5-Trichlorophenol	ND(5.0)	88.0	75.3-109	50.0	µg/L	88.5	99.1	72.4-114	50.0	µg/L	11.3	12.9
2,4,6-Trichlorophenol	ND(5.0)	86.3	77.1-110	50.0	µg/L	84.8	94.9	75.0-116	50.0	µg/L	11.2	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	87.2 CE	72.5-115	100	µg/L	87.1 CE	97.1 CE	74.5-120	100	µg/L	10.9	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	89.4	71.6-118	50.0	µg/L	90.1	105 MP	73.7-122	50.0	µg/L	15.3	13.4
Surrogate Data:												
PHENOL-d6	38.2	36.5	25.6-44.5	150	µg/L	31.1	35.0	25.6-44.5	150	µg/L		
2-FLUOROPHENOL	59.3	56.0	42.2-68.2	150	µg/L	48.2	54.0	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	80.4	91.4	53.9-131	150	µg/L	92.5	105	53.9-131	150	µg/L		
QC Batch: 170508-2	**For samples prepared on: 05/08/2017 1100**					**Spiked sample: 17050410**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	106	58.8-127	4.0	µg/L	94.9	95.1	64.6-126	4.0	µg/L	0.210	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	80.8	104	62.2-119	5.0	µg/L	99.8	103	62.2-119	5.0	µg/L		
QC Batch: 170508-2	**For samples prepared on: 05/08/2017 1100**					**Spiked sample: 17050410**						
Pentachlorophenol	ND(0.5)	97.2	66.3-127	4.0	µg/L	86.4	85.6	7.60-144	4.0	µg/L	0.930	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	80.8	104	62.2-119	5.0	µg/L	99.8	103	62.2-119	5.0	µg/L		
QC Batch: 1IC2129	**For sample analyzed on: 05/09/2017**					**Spiked sample: 17050401**						
Chloride	ND(1.0)	106	90.0-110	4.0	mg/L	98.3	95.9	68.4-120	40.0	mg/L	2.50	21.6
QC Batch: 1MS9125	**For sample analyzed on: 05/05/2017**					**Spiked sample: 17050410**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	88.5	80.0-120	10.0	µg/L	92.0	95.4	83.0-121	10.0	µg/L	3.60	9.8
1,2-Dichloroethane	ND(0.5)	80.5	75.6-120	10.0	µg/L	84.5	85.3	77.5-122	10.0	µg/L	0.940	9.5
Benzene	ND(0.5)	103	80.0-120	10.0	µg/L	107	110.	82.7-117	10.0	µg/L	2.80	8.3
Carbon tetrachloride	ND(0.5)	89.1	79.9-125	10.0	µg/L	89.2	92.5	79.0-125	10.0	µg/L	3.60	13.6
Chloroform	ND(0.5)	91.8	79.6-120	10.0	µg/L	101	96.9	78.4-117	10.0	µg/L	4.10	9.2
Chloromethane	ND(0.5)	101	70.2-127	10.0	µg/L	104	108	69.7-129	10.0	µg/L	3.80	15.9
Methylene chloride	ND(0.5)	98.6	77.1-120	10.0	µg/L	101	103	76.3-119	10.0	µg/L	2.00	9.6

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 1MS9125	**For sample analyzed on: 05/05/2017**					**Spiked sample: 17050410**						
Tetrachloroethylene	ND(0.5)	104	80.0-120	10.0	µg/L	96.0	102	82.0-121	10.0	µg/L	6.10	11.3
Trichloroethylene	ND(0.5)	97.8	80.0-120	10.0	µg/L	99.7	102	79.3-120	10.0	µg/L	2.30	13.7
Vinyl chloride	ND(0.5)	95.4	76.2-128	10.0	µg/L	97.1	96.0	78.0-130	10.0	µg/L	1.10	14.6
1,2-Dichloropropane	ND(0.5)	92.4	79.5-120	10.0	µg/L	99.3	94.4	81.7-117	10.0	µg/L	5.10	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	78.8	86.6	76.2-126	10.0	µg/L	97.6	89.7	76.2-126	10.0	µg/L		
TOLUENE-d8	105	102	80.0-120	10.0	µg/L	105	106	80.0-120	10.0	µg/L		
QC Batch: 1MS9128	**For sample analyzed on: 05/08/2017**					**Spiked sample:**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	98.2	80.0-120	10.0	µg/L			83.0-121		µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	87.6	75.6-120	10.0	µg/L			77.5-122		µg/L	**	9.5
Benzene	ND(0.5)	112	80.0-120	10.0	µg/L			82.7-117		µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	99.2	79.9-125	10.0	µg/L			79.0-125		µg/L	**	13.6
Chloroform	ND(0.5)	102	79.6-120	10.0	µg/L			78.4-117		µg/L	**	9.2
Chloromethane	ND(0.5)	136 LH	70.2-127	10.0	µg/L			69.7-129		µg/L	**	15.9
Methylene chloride	ND(0.5)	113	77.1-120	10.0	µg/L			76.3-119		µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	96.4	80.0-120	10.0	µg/L			82.0-121		µg/L	**	11.3
Trichloroethylene	ND(0.5)	107	80.0-120	10.0	µg/L			79.3-120		µg/L	**	13.7
Vinyl chloride	ND(0.5)	114	76.2-128	10.0	µg/L			78.0-130		µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	101	79.5-120	10.0	µg/L			81.7-117		µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	92.2	91.2	76.2-126	10.0	µg/L	MN	MN	76.2-126		µg/L	**	
TOLUENE-d8	104	104	80.0-120	10.0	µg/L	MN	MN	80.0-120		µg/L	**	
QC Batch: 3IC2125	**For sample analyzed on: 05/06/2017**					**Spiked sample: 17050410**						
Chloride	ND(1.0)	103	90.0-110	4.0	mg/L	92.5	92.1	68.4-120	80.0	mg/L	0.430	21.6

Data Qualifiers:

ML - The matrix spike and/or matrix spike duplicate recovery for this analyte was below the method or laboratory control limit. See LCS data for the basis for acceptance of this sample. The reported sample concentration is estimated.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

MP - The MS/MSD recoveries for this analyte exceeded the method or laboratory precision control limit. The reported sample concentration is estimated.

MN - The MS/MSD sample analyses were not performed on a sample from this Pace order number.

LH - The Laboratory Control Sample (LCS) recovery for this analyte was above the method or laboratory quality control limit. The reported sample concentration may be biased high.

** - RPD calculation not applicable/not available for this analysis.

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050401		**Sample Description: WG-05032017-DF-MW134S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	83.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	83.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	87.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/10/2017	150	µg/L	28.3	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/10/2017	150	µg/L	42.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/10/2017	150	µg/L	61.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	91.5	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	108	80.0-120
Lab Number: 17050402		**Sample Description: WG-05032017-DF-MW134S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	81.7	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	81.7	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	88.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/10/2017	150	µg/L	34.0	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/10/2017	150	µg/L	52.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/10/2017	150	µg/L	70.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	87.4	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	104	80.0-120
Lab Number: 17050403		**Sample Description: WG-05032017-DF-MW137S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	77.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	77.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	91.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/10/2017	150	µg/L	35.1	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/10/2017	150	µg/L	54.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/10/2017	150	µg/L	70.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	91.4	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	103	80.0-120
Lab Number: 17050404		**Sample Description: WG-05032017-DF-MW137S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	80.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	80.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	88.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/11/2017	150	µg/L	35.6	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050404		**Sample Description: WG-05032017-DF-MW137S3**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/08/2017	05/11/2017	150	µg/L	54.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/11/2017	150	µg/L	84.3	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	91.3	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	102	80.0-120
Lab Number: 17050405		**Sample Description: WG-05032017-BS-MW25S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	77.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	77.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	90.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/11/2017	150	µg/L	31.7	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/11/2017	150	µg/L	50.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/11/2017	150	µg/L	84.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	89.4	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	105	80.0-120
Lab Number: 17050406		**Sample Description: WG-05032017-BS-AMW16S**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	89.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	89.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	96.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/11/2017	150	µg/L	34.4	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/11/2017	150	µg/L	54.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/11/2017	150	µg/L	93.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	91.3	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	99.6	80.0-120
Lab Number: 17050407		**Sample Description: WG-05032017-BS-AMW16D**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	82.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	82.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	94.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/11/2017	150	µg/L	32.7	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/11/2017	150	µg/L	52.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/11/2017	150	µg/L	87.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	94.2	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	103	80.0-120
Lab Number: 17050408		**Sample Description: WG-05032017-BS-AMW4D**				

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050408		**Sample Description: WG-05032017-BS-AMW4D**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	84.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	84.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	87.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/11/2017	150	µg/L	30.8	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/11/2017	150	µg/L	48.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/11/2017	150	µg/L	85.3	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	84.8	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	106	80.0-120
Lab Number: 17050409		**Sample Description: WG-05032017-BS-AMW4S**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	82.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	82.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	94.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/11/2017	150	µg/L	34.2	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/11/2017	150	µg/L	53.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/11/2017	150	µg/L	89.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	86.1	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	102	80.0-120
Lab Number: 17050410		**Sample Description: WG-05042017-JR-MW06S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	83.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	83.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	90.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/11/2017	150	µg/L	33.6	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/11/2017	150	µg/L	53.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/11/2017	150	µg/L	84.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	87.1	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	102	80.0-120
Lab Number: 17050411		**Sample Description: WG-05042017-JR-MW06S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	76.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	76.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	93.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/11/2017	150	µg/L	34.9	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050411		**Sample Description: WG-05042017-JR-MW06S1**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/08/2017	05/11/2017	150	µg/L	55.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/11/2017	150	µg/L	87.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	91.8	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	103	80.0-120
Lab Number: 17050412		**Sample Description: WG-05042017-JR-Builders**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	85.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/08/2017	05/11/2017	5.0	µg/L	85.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/05/2017	05/10/2017	8.0	µg/L	91.3	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/08/2017	05/11/2017	150	µg/L	33.5	25.6-44.5
2-FLUOROPHENOL	05/08/2017	05/11/2017	150	µg/L	51.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/08/2017	05/11/2017	150	µg/L	83.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	101	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	104	80.0-120
Lab Number: 17050413		**Sample Description: TB-03**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/05/2017	10	µg/L	95.2	76.2-126
TOLUENE-d8		05/05/2017	10	µg/L	105	80.0-120

Quality Control Report
Continuing Calibration Report

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/17/2017
Date Received: 05/04/2017
Pace File No: 7775
Pace Order No: 140260

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
2,4-Dichlorophenoxyacetic Acid	05/11/2017	2NX5130	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/11/2017	3NX5130	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/11/2017	4NX5130	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/11/2017	2NX5130	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/11/2017	3NX5130	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/11/2017	4NX5130	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/10/2017	2EX3129	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/10/2017	3EX3129	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/10/2017	4EX3129	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/06/2017	8IC2125	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/06/2017	9IC2125	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/06/2017	10IC2125	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/09/2017	2IC2129	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/09/2017	3IC2129	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/10/2017	1MS6130	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/10/2017	2MS6130	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/11/2017	1MS6131	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/11/2017	2MS6131	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/05/2017	1MS9125	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/06/2017	2MS9125	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/08/2017		CCV recovery acceptable except as qualified below.			
Chloromethane	05/08/2017	1MS9128	10.0	13.6	µg/L	136 CH

Samples associated with this Continuing Calibration Verification:

Laboratory Number	Instrument Batch	Sample Description
17050412	1MS9128	WG-05042017-JR-Builders

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
OXY Volatiles by 8260	05/09/2017	2MS9128	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/12/2017	7IP4132	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/12/2017	8IP4132	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/12/2017	9IP4132	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/12/2017	10IP4132	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/16/2017	9IP4136	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/16/2017	10IP4136	CCV recovery acceptable for this Instrument Batch.			

Data Qualifiers:
CH - The continuing calibration verification (CCV) standard recovery for this analyte was above the method or SOP limit. The reported concentration for this analyte may be biased high.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Edits made prior to sample receipt 140260

Discrepancies See C/S RF 5-4-17

Page: 1 of 2

2059062

Section A Required Client Information:

Company:	GHD
Address:	2626 W. Pawnee Ste D. Wichita, KS
Email To:	Travis Kogl
Phone:	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Travis Kogl
Copy To:	Paul McMahon
Purchase Order No.:	
Project Name:	Oxy Spring 2017 GMW
Project Number:	11137148

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Greg Greene
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: KS

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: VOCs	SVOCs	Pest/Herb	Chloride/Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05032017-DF-MW134S2	WT	G			5/3/17	1125		8	5			3					X	X	X	X		
2	WG-05032017-DF-MW134S3						1200		8	5			3					X	X	X	X		
3	WG-05032017-DF-MW137S1						1605		8	5			3					X	X	X	X		
4	WG-05032017-DF-MW137S3						1445		8	5			3					X	X	X	X		
5	WG-05032017-BS-MW25S1						1125		8	5			3					X	X	X	X		
6	WG-05032017-BS-AMW16S						1400		8	5			3					X	X	X	X		
7	WG-05032017-BS-AMW16D						1430		8	5			3					X	X	X	X		
8	WG-05032017-BS-AMW4D						1455		8	5			3					X	X	X	X		
9	WG-05032017-BS-AMW4S						1535		8	5			3					X	X	X	X		
10	WG-05042017-JR-MW06S3					5/4/17	1020		24	15			9					X	X	X	X		MS/MSD
11	WG-05042017-JR-MW06S1						1120		8	5			3					X	X	X	X		
12	WG-05042017-JR-Builders						1100		8	5			3					X	X	X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		5/4/17	1510		5-4-17	1510	
		5/4/17	1650		5/4/17	1650	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: J Kaye

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 5/4/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

140260

Page: 2 of 2

2059066

Section A Required Client Information:

Company: GHD
Address: 2626 W. Pawnee Wichita, KS
Email To: Travis Koyl
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Travis Koyl
Copy To: Paul McMahon
Purchase Order No.:
Project Name: Oxy Spring 2017 GWM
Project Number: ~~11137184~~ or 11137148

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB-03	WT	G			5/4/17	—		3				3						X		
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		5/4/17	1510		5-4-17	1510	
		5/4/17	1650		5/4/17	1650	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeremy Raye
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 5/4/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140260

Client Name: Oxy

Pace File No.: 7775

Sample ID's in cooler:

30 LTA 1 250P WG0503207DF-MW134S3
3 LTA 0 250P WG0503207DF MW134S2
0 LTA 1 250P WG0503207DF MW137S1
0 LTA 0 250P
15 VOC -Sets

Cooler 1 of 6 for this Pace Order No.

Cooler Identification: Pace Cooler #: 3566 / Client's Cooler / Box / Letter / Hand-delivered
Other:

Date/Time Cooler Received: 5/4/17 16:50

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other:

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date:
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other:

Cooler Temperature (°C): Original Reading (°C) 2.4 Corrected Reading (°C) 2.0
Temperature. By: Temperature Blank Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes (See below for discrepancies.)

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from:
  - Cover Letter ☐ Container ☐
  - PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies:

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-4-17

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140260

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LtA 0 250P wG050 32017 DE mw137s1
1 LtA 0 250P wG050 32017 DE mw137s3
4 LtA 1 250P wG050 32017 DE mw137s3
1 LtA 1 250P wG050 32017 DE mw137s2
0 VOC

Cooler 2 of 6 for this Pace Order No.

Cooler Identification: Pace Cooler #: 8665 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/4/17 16:50

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: _____ Seal Date: —
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.5 , Corrected Reading (°C) 2.1
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): −0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes (See below for discrepancies.)

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-4-17

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140260

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P WG-05032017 BS-AMW4D
4 LTA 1 250P WG-05032017 BS-AMW16D
2 LTA 1 250P WG-05032017 BS-~~AMW4~~ AMW45
0 LTA 0 250P
0 VOC

Cooler 3 of 6 for this Pace Order No.

Cooler Identification: Pace Cooler #: 1002 / Client's Cooler / Box / Letter / Hand-delivered
Other:

Date/Time Cooler Received: 5/4/17 16:50

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other:

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No:
Seal Name: Seal Date:
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other:

Cooler Temperature (°C): Original Reading (°C) 2.6 Corrected Reading (°C) 2.2
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 985 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes (See below for discrepancies.)

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies:

Detail to discrepancies/comments:

Missing Label on 250p - LAST ONE Left. P.M called.
WG05032017BS-AMW-45.

Completed by: SKR Date Completed: 5-4-17

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140260

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P WC 05042017 JR - mw651
4 LTA 0 250P WC 05042017 JR Builders
1 LTA 0 250P WC 05042017 JR mw653
0 LTA 0 250P
0 VOC

Cooler 4 of 6 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4119 / Client's Cooler / Box / Letter / Hand-delivered
Other:

Date/Time Cooler Received: 5/4/17 16:50

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other:

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No:
Seal Name: Seal Date:
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other:

Cooler Temperature (°C): Original Reading (°C) 2.0 Corrected Reading (°C) 1.6
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes (See below for discrepancies.)

Note: **If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.**

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies:

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-4-17

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140260

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler: 5-4-17

11 LTA 3F 250P WG050420171R-MW0653

6 LTA 1 250P WG050420171R Builders.

0 LTA 0 250P

6 LTA 0 250P

0 VOC

Cooler 5 of 6 for this Pace Order No.

Cooler Identification: Pace Cooler #: 3408 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/4/17 16:50

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.0 Corrected Reading (°C) 2.6
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: **If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.**

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKP Date Completed: 5-4-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140260

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 1 250P WG 05032017 BS-MW025S1
4 LTA 1 250P WG 05032017 BS-AMW15S
2 LTA 0 250P WG 05032017 BS-AMW4S.
0 LTA 0 250P
0 VOC

Cooler 6 **of** 6. **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4032 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/4/17 16:50

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.4 Corrected Reading (°C) 2.0
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ~~☐ No~~ ☐ Yes **(See below for discrepancies.)**
SKR 5-4-17

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☑ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Labels read 5-4-17 Labels read WG05032017 BS MW025S1
COC reads MW2551

Completed by: SKR **Date Completed:** 5-4-17

Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date and Time Received: 05/05/2017 1620
Pace File No.: 7775
Pace Order No.: 140299
P.O./Project No: 4502201562-11119420
Project ID: OXY WICHITA GWM
Purchase Auth: SSOW251-402-D02-3100

Dear Ms. Thurman:

This laboratory report, containing the samples indicated below, includes 80 pages for the analytical report, 3 page(s) for the chain of custody and/or analysis request, and 13 page(s) for the sample receipt form.

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17050513	WG-05042017-JR-MW028S1	Liquid	5/4/2017
17050514	WG-05042017-JR-MW028S2	Liquid	5/4/2017
17050515	WG-05042017-JR-MW028S3	Liquid	5/4/2017
17050516	WG-05042017-BS-AMW105D	Liquid	5/4/2017
17050517	WG-05042017-BS-AMW105S	Liquid	5/4/2017
17050518	WG-05042017-BS-AMW107S	Liquid	5/4/2017
17050519	WG-05042017-BS-AMW005S	Liquid	5/4/2017
17050520	WG-05042017-BS-MW141S2/S3	Liquid	5/4/2017
17050521	WG-05042017-BS-AMW001	Liquid	5/4/2017
17050522	WG-05042017-BS-AMW107D	Liquid	5/4/2017
17050523	WG-05042017-BS-FD02	Liquid	5/4/2017
17050524	WG-05042017-DF-MW016S4R	Liquid	5/4/2017
17050525	WG-05042017-DF-MW016S1	Liquid	5/4/2017
17050526	WG-05042017-DF-MW016S2SS	Liquid	5/4/2017
17050527	WG-05042017-DF-MW016BR	Liquid	5/4/2017
17050528	WG-05042017-DF-MW003S1	Liquid	5/4/2017
17050529	WG-05042017-DF-MW135S2/S3	Liquid	5/4/2017
17050530	WG-05042017-DF-MW021S3	Liquid	5/4/2017
17050531	WG-05042017-DF-MW135S1	Liquid	5/4/2017
17050532	WG-05052017-JR-MW008S2	Liquid	5/5/2017
17050532R	WG-05052017-JR-MW008S2	Liquid	5/5/2017
17050533	WG-05052017-JR-MW008S1	Liquid	5/5/2017
17050534	WG-05052017-JR-MW008S3	Liquid	5/5/2017
17050535	TB-4	Liquid	5/5/2017
17050536	WG-05052017-BS-MW09S3	Liquid	5/5/2017
17050537	WG-05052017-BS-MW09S1	Liquid	5/5/2017
17050537R	WG-05052017-BS-MW09S1	Liquid	5/5/2017
17050538	WG-05052017-BS-MW02S1	Liquid	5/5/2017
17050539	WG-05052017-BS-MW02S2	Liquid	5/5/2017
17050540	WG-05042017-DF-ER9	Liquid	5/4/2017
17050541	WG-05042017-BS-AMW106S	Liquid	5/4/2017

The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

Samples will be retained for thirty days unless Pace is otherwise notified. Pace is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Pace's Standard Operating Procedures. These procedures are in substantial compliance with the approved methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.

Thank you for choosing Pace for this project.

Gregory J. Groene
Project Manager
Gregory.Groene@pacelabs.com

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050513
Sample Description: WG-05042017-JR-MW028S1

Date Sampled: 05/04/2017
Time Sampled: 1505

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	2.0	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	0.020	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	0.08	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	0.12	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	317	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	112	mg/L	10	10	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/11/17 1951	170509-3	1NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/11/17 1951	170509-3	1NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 1319	170509-1	1EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1051	170509-2	1MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 1937	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 1944	170508-4	9IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 0930	4IC2130	10IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050513

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050514
Sample Description: WG-05042017-JR-MW028S2

Date Sampled: 05/04/2017
Time Sampled: 1550

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	0.082	µg/L	1.0	0.011	7460/203
B-BHC	0.189	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	9.3	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	391	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	672	mg/L	50	50	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/11/17 2030	170509-3	1NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/11/17 2030	170509-3	1NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/13/17 0739	170509-1	3EX3132	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1132	170509-2	1MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2002	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 1948	170508-4	9IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 0942	4IC2130	10IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050514

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050515
Sample Description: WG-05042017-JR-MW028S3

Date Sampled: 05/04/2017
Time Sampled: 1650

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	0.19	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	0.14	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	0.9	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	64.1	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	1.9	mg/L	1.0	1.0	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/11/17 2110	170509-3	1NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/11/17 2110	170509-3	1NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 1439	170509-1	1EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1212	170509-2	1MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2027	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 1953	170508-4	9IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 0955	4IC2130	10IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050515

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050516
Sample Description: WG-05042017-BS-AMW105D

Date Sampled: 05/04/2017
Time Sampled: 1050

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	254	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	23.8	mg/L	1.0	1.0	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/11/17 2149	170509-3	1NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/11/17 2149	170509-3	1NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 1518	170509-1	1EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1252	170509-2	1MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2052	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 1957	170508-4	9IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1007	4IC2130	10IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050516

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050517
Sample Description: WG-05042017-BS-AMW105S

Date Sampled: 05/04/2017
Time Sampled: 1125

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	0.14	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	211	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	20.7	mg/L	1.0	1.0	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/11/17 2228	170509-3	1NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/11/17 2228	170509-3	1NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 1558	170509-1	1EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1332	170509-2	1MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2117	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2001	170508-4	9IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1044	4IC2130	11IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050517

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050518
Sample Description: WG-05042017-BS-AMW107S

Date Sampled: 05/04/2017
Time Sampled: 1345

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	0.9	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	423	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	83	mg/L	10	10	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/11/17 2307	170509-3	1NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/11/17 2307	170509-3	1NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 1638	170509-1	1EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1413	170509-2	1MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2141	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2005	170508-4	9IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1056	4IC2130	11IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050518

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050519
Sample Description: WG-05042017-BS-AMW005S

Date Sampled: 05/04/2017
Time Sampled: 1330

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	382	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	77	mg/L	10	10	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/11/17 2347	170509-3	1NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/11/17 2347	170509-3	1NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 1718	170509-1	1EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1453	170509-2	1MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2206	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2017	170508-4	10IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1108	4IC2130	11IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050519

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050520
Sample Description: WG-05042017-BS-MW141S2/S3

Date Sampled: 05/04/2017
Time Sampled: 1515

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	22.1	µg/L	1.0	0.5	7465/344
Chloroform	23.4	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	2.5	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	157	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	25.2	mg/L	1.0	1.0	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0105	170509-3	2NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0105	170509-3	2NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 1917	170509-1	2EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1534	170509-2	1MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2231	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2021	170508-4	10IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1121	4IC2130	11IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050520

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050521
Sample Description: WG-05042017-BS-AMW001

Date Sampled: 05/04/2017
Time Sampled: 1625

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	257	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	82	mg/L	10	10	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0144	170509-3	2NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0144	170509-3	2NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 1957	170509-1	2EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1614	170509-2	1MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2256	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2026	170508-4	10IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1133	4IC2130	11IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050521

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050522
Sample Description: WG-05042017-BS-AMW107D

Date Sampled: 05/04/2017
Time Sampled: 1425

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	0.8	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	0.8	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	412	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	119	mg/L	10	10	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0224	170509-3	2NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0224	170509-3	2NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 2036	170509-1	2EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1653	170509-2	1MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2321	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2030	170508-4	10IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1145	4IC2130	11IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050522

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050523
Sample Description: WG-05042017-BS-FD02

Date Sampled: 05/04/2017
Time Sampled: 0000

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	247	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	23.7	mg/L	1.0	1.0	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0303	170509-3	2NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0303	170509-3	2NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 2116	170509-1	2EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1734	170509-2	1MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2346	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2034	170508-4	10IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1158	4IC2130	11IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050523

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050524
Sample Description: WG-05042017-DF-MW016S4R

Date Sampled: 05/04/2017
Time Sampled: 0930

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	177	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	3.7	mg/L	1.0	1.0	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0342	170509-3	2NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0342	170509-3	2NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 2156	170509-1	2EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 1947	170509-2	2MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0010	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2038	170508-4	10IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1210	4IC2130	11IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050524

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050525
Sample Description: WG-05042017-DF-MW016S1

Date Sampled: 05/04/2017
Time Sampled: 1125

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/344
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/344
Carbon tetrachloride	10.6	µg/L	1.0	0.5	7465/344
Chloroform	5.0	µg/L	1.0	0.5	7465/344
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/344
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/344
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/344
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/344
Hardness (Calculated)	362	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	150.	mg/L	10	10	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0421	170509-3	2NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0421	170509-3	2NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 2235	170509-1	2EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 2028	170509-2	2MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0035	1MS9128	1MS9128	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2042	170508-4	10IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1222	4IC2130	11IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050525

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050526
Sample Description: WG-05042017-DF-MW016S2SS

Date Sampled: 05/04/2017
Time Sampled: 1025

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	0.059	µg/L	1.0	0.011	7460/202
B-BHC	0.273	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	31.8	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	15.4	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	34.0	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	4.1	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	29.0	µg/L	1.0	0.5	7465/345
Chloroform	7.4	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	0.5 ID	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	58.8	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	375	mg/L	20	20	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0501	170509-3	2NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0501	170509-3	2NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 2315	170509-1	2EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 2109	170509-2	2MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1523	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2046	170508-4	10IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1234	4IC2130	11IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050526

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050527
Sample Description: WG-05042017-DF-MW016BR

Date Sampled: 05/04/2017
Time Sampled: 1225

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	0.06	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	1450	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	55	mg/L	10	10	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0540	170509-3	2NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0540	170509-3	2NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/11/17 2355	170509-1	2EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 2149	170509-2	2MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2053	1MS8128	1MS8128	GMA	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2051	170508-4	10IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1311	4IC2130	13IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050527

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050528
Sample Description: WG-05042017-DF-MW003S1

Date Sampled: 05/04/2017
Time Sampled: 1400

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	0.015	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	117	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	2.8	mg/L	1.0	1.0	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0619	170509-3	2NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0619	170509-3	2NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/12/17 0034	170509-1	2EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 2230	170509-2	2MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2129	1MS8128	1MS8128	GMA	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2055	170508-4	10IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1324	4IC2130	13IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050528

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050529
Sample Description: WG-05042017-DF-MW135S2/S3

Date Sampled: 05/04/2017
Time Sampled: 1605

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	230.	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	45.9	mg/L	1.0	1.0	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0659	170509-3	2NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0659	170509-3	2NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/12/17 0233	170509-1	3EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 2309	170509-2	2MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/08/17 2204	1MS8128	1MS8128	GMA	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2107	170508-4	11IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1336	4IC2130	13IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050529

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050530
Sample Description: WG-05042017-DF-MW021S3

Date Sampled: 05/04/2017
Time Sampled: 1505

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	11.4	µg/L	1.0	0.5	7466/520
Chloroform	0.6	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	257	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	86	mg/L	10	10	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0817	170509-3	3NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0817	170509-3	3NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/12/17 0313	170509-1	3EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/12/17 2350	170509-2	2MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0027	1MS8128	2MS8128	GMA	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2111	170508-4	11IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1348	4IC2130	13IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050530

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050531
Sample Description: WG-05042017-DF-MW135S1

Date Sampled: 05/04/2017
Time Sampled: 1650

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/202
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	217	mg/L as CaCO3	1.0	5.0	7443/987
Chloride	44.2	mg/L	1.0	1.0	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0857	170509-3	3NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0857	170509-3	3NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/12/17 0352	170509-1	3EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/13/17 0030	170509-2	2MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0103	1MS8128	2MS8128	GMA	8260B
Hardness (Calculated)	05/08/17 1124	05/12/17 2116	170508-4	11IP4132	JDL	6010B & SM 2340B
Chloride	N/A	05/11/17 1400	4IC2130	13IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050531

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050532
Sample Description: WG-05052017-JR-MW008S2

Date Sampled: 05/05/2017
Time Sampled: 1020

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/178
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/178
OXY Chlorinated Hyd.					
A-BHC	0.038	µg/L	1.0	0.011	7460/202
B-BHC	0.675	µg/L	1.0	0.037	7460/202
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/202
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/202
Hexachlorobutadiene	0.02	µg/L	1.0	0.02	7460/202
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/202
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/202
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/323
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/323
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	OC	µg/L	1.0	0.5	7466/520
Chloroform	15.1	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	3.0	µg/L	1.0	0.5	7466/520
Trichloroethylene	2.9	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	567	mg/L as CaCO3	5.0	25	7443/991
Chloride	500	mg/L	50	50	7551/247

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/09/17 1400	05/12/17 0936	170509-3	3NX5131	JMM	8151A(M)
Pentachlorophenol	05/09/17 1400	05/12/17 0936	170509-3	3NX5131	JMM	8151A(M)
OXY Chlorinated Hyd.	05/09/17 0800	05/12/17 0432	170509-1	3EX3131	JMM	8121
OXY GC/MS Acids	05/09/17 1100	05/13/17 0110	170509-2	2MS6132	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0625	1MS8128	2MS8128	GMA	8260B
Hardness (Calculated)	05/08/17 1124	05/19/17 1034	170508-4	2IP4139	KMW	6010B & SM 2340B
Chloride	N/A	05/11/17 1413	4IC2130	13IC2130	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050532

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050532R
Sample Description: WG-05052017-JR-MW008S2

Date Sampled: 05/05/2017
Time Sampled: 1020

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(3)	µg/L	5.0	3	7466/521
1,2-Dichloroethane	ND(3)	µg/L	5.0	3	7466/521
Benzene	ND(3)	µg/L	5.0	3	7466/521
Carbon tetrachloride	107	µg/L	5.0	3	7466/521
Chloroform	13	µg/L	5.0	3	7466/521
Chloromethane	ND(3)	µg/L	5.0	3	7466/521
Methylene chloride	ND(3)	µg/L	5.0	3	7466/521
Tetrachloroethylene	3	µg/L	5.0	3	7466/521
Trichloroethylene	ND(3)	µg/L	5.0	3	7466/521
Vinyl chloride	ND(3)	µg/L	5.0	3	7466/521
1,2-Dichloropropane	ND(3)	µg/L	5.0	3	7466/521

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/09/17 2046	1MS8129	1MS8129	GMA	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17050532R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050533
Sample Description: WG-05052017-JR-MW008S1

Date Sampled: 05/05/2017
Time Sampled: 1135

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	0.036	µg/L	1.0	0.011	7460/203
B-BHC	0.687	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	36.5	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	21.3	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	5.1	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	3.8	µg/L	1.0	0.5	7466/520
Chloroform	9.9	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	0.6	µg/L	1.0	0.5	7466/520
Trichloroethylene	0.8	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	697	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	1280	mg/L	100	100	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/12/17 1745	170511-4	1NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/12/17 1745	170511-4	1NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 1428	170510-1	1EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 1119	170511-5	1MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0139	1MS8128	2MS8128	GMA	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2042	170509-2	9IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1110	1IC2132	1IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050533

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050534
Sample Description: WG-05052017-JR-MW008S3

Date Sampled: 05/05/2017
Time Sampled: 1240

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	0.020	µg/L	1.0	0.011	7460/203
B-BHC	1.05	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	6.9	µg/L	1.0	0.5	7466/520
Chloroform	6.3	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	1.9	µg/L	1.0	0.5	7466/520
Trichloroethylene	1.5	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	271	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	220.	mg/L	20	20	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/12/17 1824	170511-4	1NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/12/17 1824	170511-4	1NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 1508	170510-1	1EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 1200	170511-5	1MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0215	1MS8128	2MS8128	GMA	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2046	170509-2	9IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1122	1IC2132	1IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050534

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050535
Sample Description: TB-4

Date Sampled: 05/05/2017
Time Sampled:

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
No Tests Assigned	no sample		1.0		7580/468

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
No Tests Assigned	N/A	05/15/17	N/A	N/A		N/A

Conclusion of Lab Number: 17050535

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050536
Sample Description: WG-05052017-BS-MW09S3

Date Sampled: 05/05/2017
Time Sampled: 0850

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/203
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	4.9	µg/L	1.0	0.5	7466/520
Chloroform	4.8	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	1.4	µg/L	1.0	0.5	7466/520
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	298	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	91	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/12/17 1904	170511-4	1NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/12/17 1904	170511-4	1NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 1548	170510-1	1EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 1241	170511-5	1MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0250	1MS8128	2MS8128	GMA	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2051	170509-2	9IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1135	1IC2132	1IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050536

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050537
Sample Description: WG-05052017-BS-MW09S1

Date Sampled: 05/05/2017
Time Sampled: 1025

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	0.306	µg/L	1.0	0.011	7460/203
B-BHC	0.060	µg/L	1.0	0.037	7460/203
G-BHC	0.079	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	0.70	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	0.68	µg/L	1.0	0.10	7460/203
D-BHC	0.27	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	OC	µg/L	1.0	0.5	7466/520
Benzene	21.7	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloroform	0.7	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	49.3	µg/L	1.0	0.5	7466/520
Trichloroethylene	OC	µg/L	1.0	0.5	7466/520
Vinyl chloride	1.2	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	0.5	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	781	mg/L as CaCO3	5.0	25	7443/990
Chloride	480	mg/L	50	50	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/12/17 1943	170511-4	1NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/12/17 1943	170511-4	1NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 1627	170510-1	1EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 1322	170511-5	1MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0326	1MS8128	2MS8128	GMA	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2055	170509-2	9IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1147	1IC2132	1IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050537

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050537R
Sample Description: WG-05052017-BS-MW09S1

Date Sampled: 05/05/2017
Time Sampled: 1025

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(3)	µg/L	5.0	3	7466/521
1,2-Dichloroethane	113	µg/L	5.0	3	7466/521
Benzene	18	µg/L	5.0	3	7466/521
Carbon tetrachloride	ND(3)	µg/L	5.0	3	7466/521
Chloroform	ND(3)	µg/L	5.0	3	7466/521
Chloromethane	ND(3)	µg/L	5.0	3	7466/521
Methylene chloride	ND(3)	µg/L	5.0	3	7466/521
Tetrachloroethylene	45	µg/L	5.0	3	7466/521
Trichloroethylene	174	µg/L	5.0	3	7466/521
Vinyl chloride	ND(3)	µg/L	5.0	3	7466/521
1,2-Dichloropropane	ND(3)	µg/L	5.0	3	7466/521

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/09/17 2010	1MS8129	1MS8129	GMA	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17050537R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050538
Sample Description: WG-05052017-BS-MW02S1

Date Sampled: 05/05/2017
Time Sampled: 1135

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/203
B-BHC	0.199	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	12.6	µg/L	1.0	0.5	7466/520
Chloroform	6.0	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	293	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	87	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/12/17 2022	170511-4	1NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/12/17 2022	170511-4	1NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 1707	170510-1	1EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 1403	170511-5	1MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0402	1MS8128	2MS8128	GMA	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2059	170509-2	9IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1159	1IC2132	1IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050538

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050539
Sample Description: WG-05052017-BS-MW02S2

Date Sampled: 05/05/2017
Time Sampled: 1120

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	0.094	µg/L	1.0	0.011	7460/203
B-BHC	2.09	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	0.03	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	113	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	8.8	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	5.0	µg/L	2.0	1	7466/520
1,2-Dichloroethane	ND(1)	µg/L	2.0	1	7466/520
Benzene	6.9	µg/L	2.0	1	7466/520
Carbon tetrachloride	124	µg/L	2.0	1	7466/520
Chloroform	18	µg/L	2.0	1	7466/520
Chloromethane	ND(1)	µg/L	2.0	1	7466/520
Methylene chloride	ND(1)	µg/L	2.0	1	7466/520
Tetrachloroethylene	3.5	µg/L	2.0	1	7466/520
Trichloroethylene	ND(1)	µg/L	2.0	1	7466/520
Vinyl chloride	ND(1)	µg/L	2.0	1	7466/520
1,2-Dichloropropane	ND(1)	µg/L	2.0	1	7466/520
Hardness (Calculated)	245	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	970	mg/L	100	100	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/12/17 2101	170511-4	1NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/12/17 2101	170511-4	1NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 1747	170510-1	1EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/17/17 1105	170511-5	1MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0438	1MS8128	2MS8128	GMA	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2103	170509-2	9IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1211	1IC2132	1IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050539

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050540
Sample Description: WG-05042017-DF-ER9

Date Sampled: 05/04/2017
Time Sampled: 1315

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/203
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/12/17 2141	170511-4	1NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/12/17 2141	170511-4	1NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 1826	170510-1	1EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 1526	170511-5	1MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0514	1MS8128	2MS8128	GMA	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2107	170509-2	9IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1248	1IC2132	2IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050540

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Lab Number: 17050541
Sample Description: WG-05042017-BS-AMW106S

Date Sampled: 05/04/2017
Time Sampled: 1425

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/203
B-BHC	0.048	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloroethane	0.6	µg/L	1.0	0.5	7466/520
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/520
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/520
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/520
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/520
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/520
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/520
Hardness (Calculated)	366	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	88	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/12/17 2259	170511-4	2NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/12/17 2259	170511-4	2NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 2025	170510-1	2EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 1607	170511-5	1MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 0549	1MS8128	2MS8128	GMA	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2120	170509-2	10IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1301	1IC2132	2IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050541

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Appendix

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

ND indicates not detected with the LOQ (Limit of Quantitation) in parentheses. The LOQ value has been adjusted for the dilution factor and percent solids, as applicable. Due to rounding of significant figures, the LOQ value may vary slightly from the reported concentration. The LOQ is the lowest concentration of the analytical standard that was used for calibrating the instrument. If an analytical standard is analyzed at the LOQ, an error of as much as +/- 50% can be expected. N/A, if present, indicates not applicable.

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

No analysis with a holding time of seventy-two hours or less was performed in this Pace order.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

ID - This analyte did not meet qualitative criteria or was subject to chromatographic peak distortion. The reported sample concentration is estimated.

OC - The response for this analyte exceeded the calibration range of the instrument. Sample dilution and reanalysis is necessary to obtain an accurate result. The reported result, if provided, is estimated.

QC - QC data qualifiers were noted. See the Quality Control Report.

Following is the full name of each analyst that performed analysis(es) on this Pace order number:

Analyst Initials	Analyst Full Name
GMA	Guy Allen
JDL	John D. Lamer
JMM	Julie M. McCullough
KMW	Keegan M. Wilson
MLL	Melissa L. Lundgrin
RKR	Rhonda K. Reilly

Accreditation Summary

Client: Occidental Chemical Corporation_Oxy
Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Pace is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Pace is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Pace's full NELAP accreditation status may be viewed at www.kdheks.gov/envlab. Note that unless qualified otherwise in the Laboratory Report, Pace performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

Test	Analysis	Matrix-Regulatory Program	Method	Pace NELAP Accredited in Other Reg. Program
CL351	OXY Chlorinated Hyd.	L-RCRA	8121	
CL351	Hexachloroethane	L-RCRA	8121	No
CL351	Hexachlorobutadiene	L-RCRA	8121	No
MS302	OXY GC/MS Acids	L-RCRA	8270C	
MS302	3-& 4-Chlorophenol	L-RCRA	8270C	No
MS302	2,5-Dichlorophenol	L-RCRA	8270C	No
MS302	2,3,4,5-Tetrachlorophenol	L-RCRA	8270C	No

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170509-3	170509BLK3 05/11/17 1832	170509LCS3 05/11/17 1912	17050532MS 05/12/17 1015

Lab numbers associated with this batch:
17050513 17050514 17050515 17050516 17050517 17050518 17050519 17050520 17050521 17050522 17050523
17050524 17050525 17050526 17050527 17050528 17050529 17050530 17050531 17050532

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170511-4	170511BLK4 05/12/17 1626	170511LCS4 05/12/17 1706	17050560MS 05/13/17 0809

Lab numbers associated with this batch:
17050533 17050534 17050536 17050537 17050538 17050539 17050540 17050541

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL350	Pentachlorophenol	170509-3	170509BLK3 05/11/17 1832	170509LCS3 05/11/17 1912	17050532MS 05/12/17 1015

Lab numbers associated with this batch:
17050513 17050514 17050515 17050516 17050517 17050518 17050519 17050520 17050521 17050522 17050523
17050524 17050525 17050526 17050527 17050528 17050529 17050530 17050531 17050532

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL350	Pentachlorophenol	170511-4	170511BLK4 05/12/17 1626	170511LCS4 05/12/17 1706	17050560MS 05/13/17 0809

Lab numbers associated with this batch:
17050533 17050534 17050536 17050537 17050538 17050539 17050540 17050541

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL351	OXY Chlorinated Hyd.	170509-1	170509BLK1 05/11/17 1200	170509LCS1 05/11/17 1239	17050532MS 05/12/17 0511

Lab numbers associated with this batch:
17050513 17050514 17050515 17050516 17050517 17050518 17050519 17050520 17050521 17050522 17050523
17050524 17050525 17050526 17050527 17050528 17050529 17050530 17050531 17050532

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL351	OXY Chlorinated Hyd.	170510-1	170510BLK1 05/12/17 1309	170510LCS1 05/12/17 1348	17050560MS 05/13/17 0619

Lab numbers associated with this batch:
17050533 17050534 17050536 17050537 17050538 17050539 17050540 17050541

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS302	OXY GC/MS Acids	170509-2	170509BLK2 05/12/17 0930	170509LCS2 05/12/17 1011	17050532MS 05/13/17 0151

Lab numbers associated with this batch:
17050513 17050514 17050515 17050516 17050517 17050518 17050519 17050520 17050521 17050522 17050523
17050524 17050525 17050526 17050527 17050528 17050529 17050530 17050531 17050532

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS302	OXY GC/MS Acids	170511-5	170511BLK5 05/16/17 0957	170511LCS5 05/16/17 1038	17050560MS 05/17/17 0225

Lab numbers associated with this batch:
17050533 17050534 17050536 17050537 17050538 17050539 17050540 17050541

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS350	OXY Volatiles by 8260	1MS8128	BLK1MS8128 05/08/17 1420	LCS1MS8128 05/08/17 1308	17050532MS 05/09/17 0701

Lab numbers associated with this batch:
17050527 17050528 17050529 17050530 17050531 17050532 17050533 17050534 17050536 17050537 17050538
17050539 17050540 17050541

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS350	OXY Volatiles by 8260	1MS9128	BLK1MS9128 05/08/17 1644	LCS1MS9128 05/08/17 1554	
Lab numbers associated with this batch: 17050513 17050514 17050515 17050516 17050517 17050518 17050519 17050520 17050521 17050522 17050523 17050524 17050525					
MS350	OXY Volatiles by 8260	1MS8129	BLK1MS8129 05/09/17 1337	LCS1MS8129 05/09/17 1226	17050532RS 05/09/17 2122
Lab numbers associated with this batch: 17050532R 17050537R					
MS350	OXY Volatiles by 8260	1MS9129	BLK1MS9129 05/09/17 1458	LCS1MS9129 05/09/17 1408	17050560MS 05/09/17 2339
Lab numbers associated with this batch: 17050526					
SL423	Hardness (Calculated)	170508-4	170508BLK4 05/12/17 1936	170508LCS4 05/12/17 1940	17050532MS 05/19/17 1038
Lab numbers associated with this batch: 17050513 17050514 17050515 17050516 17050517 17050518 17050519 17050520 17050521 17050522 17050523 17050524 17050525 17050526 17050527 17050528 17050529 17050530 17050531 17050532					
SL423	Hardness (Calculated)	170509-2	170509BLK2 05/17/17 2034	170509LCS2 05/17/17 2038	17050560MS 05/19/17 1119
Lab numbers associated with this batch: 17050533 17050534 17050536 17050537 17050538 17050539 17050540 17050541					
GL502	Chloride	1IC2132	BLK1IC2132 05/12/17 1021	LCS1IC2132 05/12/17 1033	17050553MS 05/12/17 1553
Lab numbers associated with this batch: 17050533 17050534 17050536 17050537 17050538 17050539 17050540 17050541					
GL502	Chloride	4IC2130	BLK4IC2130 05/11/17 0905	LCS4IC2130 05/11/17 0918	17050532MS 05/11/17 1425
Lab numbers associated with this batch: 17050513 17050514 17050515 17050516 17050517 17050518 17050519 17050520 17050521 17050522 17050523 17050524 17050525 17050526 17050527 17050528 17050529 17050530 17050531 17050532					
GL100	No Tests Assigned		N/A	N/A	
Lab numbers associated with this batch: 17050535					

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170508-4	**For samples prepared on: 05/08/2017 1124**					**Spiked sample: 17050532**						
Hardness (Calculated)	ND(5.0)	91.3	80.0-120	357		84.3	83.8	80.0-120	357	mg/L a	0.590	20.0
QC Batch: 170509-1	**For samples prepared on: 05/09/2017 0800**					**Spiked sample: 17050532**						
OXY Chlorinated Hyd.												
A-BHC	ND(0.011)	96.6	75.0-125	0.50	µg/L	103	102	76.1-127	0.50	µg/L	0.980	16.0
B-BHC	ND(0.037)	101	68.0-125	0.50	µg/L	81.0	73.6	71.5-125	0.50	µg/L	9.60	18.0
G-BHC	ND(0.052)	97.6	72.5-123	0.50	µg/L	104	100.	73.9-126	0.50	µg/L	3.90	17.4
Hexachloroethane	ND(0.02)	74.6	55.1-115	0.50	µg/L	78.7	75.9	45.8-118	0.50	µg/L	3.60	33.4
Hexachlorobutadiene	ND(0.02)	70.4	35.3-134	0.50	µg/L	73.4	70.2	36.7-122	0.50	µg/L	4.50	37.9
Hexachlorobenzene	ND(0.10)	87.4	63.7-119	0.50	µg/L	91.9	87.7	62.9-119	0.50	µg/L	4.70	20.7
D-BHC	ND(0.05)	105	70.6-126	0.50	µg/L	112	111	71.7-131	0.50	µg/L	0.90	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	92.9	83.3	65.9-110	8.0	µg/L	92.4	94.6	65.9-110	8.0	µg/L		
QC Batch: 170509-2	**For samples prepared on: 05/09/2017 1100**					**Spiked sample: 17050532**						
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	84.3	75.9-99.3	50.0	µg/L	81.2	84.9	75.1-100	50.0	µg/L	4.50	13.9
3-& 4-Chlorophenol	ND(5.0)	74.4	56.0-90.2	50.0	µg/L	72.4	75.1	58.8-91.2	50.0	µg/L	3.70	14.5
2,4-Dichlorophenol	ND(5.0)	96.6	68.2-106	50.0	µg/L	90.1	86.5	65.6-112	50.0	µg/L	4.10	21.2
2,5-Dichlorophenol	ND(5.0)	88.6	73.9-103	50.0	µg/L	88.1	99.1	65.4-106	50.0	µg/L	11.8	27.7
2,6-Dichlorophenol	ND(5.0)	93.6	78.3-104	50.0	µg/L	91.3	94.4	76.7-107	50.0	µg/L	3.30	13.4
2,4,5-Trichlorophenol	ND(5.0)	96.1	75.3-109	50.0	µg/L	92.3	94.7	72.4-114	50.0	µg/L	2.60	12.9
2,4,6-Trichlorophenol	ND(5.0)	91.7	77.1-110	50.0	µg/L	91.2	94.5	75.0-116	50.0	µg/L	3.60	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	94.5 CE	72.5-115	100	µg/L	93.7 CE	94.9 CE	74.5-120	100	µg/L	1.30	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	103	71.6-118	50.0	µg/L	101	100.	73.7-122	50.0	µg/L	1.00	13.4
Surrogate Data:												
PHENOL-d6	34.0	35.8	25.6-44.5	150	µg/L	34.2	36.0	25.6-44.5	150	µg/L		
2-FLUOROPHENOL	52.5	53.3	42.2-68.2	150	µg/L	52.2	54.5	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	82.3	102	53.9-131	150	µg/L	98.1	98.1	53.9-131	150	µg/L		
QC Batch: 170509-2	**For samples prepared on: 05/09/2017 0855**					**Spiked sample: 17050560**						
Hardness (Calculated)	ND(5.0)	86.0	80.0-120	357	mg/L a	MN	MN	80.0-120	357	mg/L a	**	20.0
QC Batch: 170509-3	**For samples prepared on: 05/09/2017 1400**					**Spiked sample: 17050532**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	94.3	58.8-127	4.0	µg/L	97.2	92.9	64.6-126	4.0	µg/L	4.50	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	89.0	93.4	62.2-119	5.0	µg/L	101	99.9	62.2-119	5.0	µg/L		
QC Batch: 170509-3	**For samples prepared on: 05/09/2017 1400**					**Spiked sample: 17050532**						
Pentachlorophenol	ND(0.5)	84.9	66.3-127	4.0	µg/L	75.5	73.4	7.60-144	4.0	µg/L	2.80	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	89.0	93.4	62.2-119	5.0	µg/L	101	99.9	62.2-119	5.0	µg/L		
QC Batch: 170510-1	**For samples prepared on: 05/10/2017 1800**					**Spiked sample: 17050560**						
OXY Chlorinated Hyd.						MN	MN					
A-BHC	ND(0.011)	102	75.0-125	0.50	µg/L			76.1-127	0.50	µg/L	**	16.0
B-BHC	ND(0.037)	101	68.0-125	0.50	µg/L			71.5-125	0.50	µg/L	**	18.0
G-BHC	ND(0.052)	101	72.5-123	0.50	µg/L			73.9-126	0.50	µg/L	**	17.4
Hexachloroethane	ND(0.02)	83.4	55.1-115	0.50	µg/L			45.8-118	0.50	µg/L	**	33.4
Hexachlorobutadiene	ND(0.02)	78.4	35.3-134	0.50	µg/L			36.7-122	0.50	µg/L	**	37.9
Hexachlorobenzene	ND(0.10)	90.8	63.7-119	0.50	µg/L			62.9-119	0.50	µg/L	**	20.7
D-BHC	ND(0.05)	103	70.6-126	0.50	µg/L			71.7-131	0.50	µg/L	**	20.8

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170510-1	**For samples prepared on: 05/10/2017**					**Spiked sample: 17050560**						
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	83.7	85.3	65.9-110	8.0	µg/L	MN	MN	65.9-110	8.0	µg/L	**	
QC Batch: 170511-4	**For samples prepared on: 05/11/2017 1100**					**Spiked sample: 17050560**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	84.3	58.8-127	4.0	µg/L	MN	MN	64.6-126	4.0	µg/L	**	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	73.4	92.1	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170511-4	**For samples prepared on: 05/11/2017 1100**					**Spiked sample: 17050560**						
Pentachlorophenol	ND(0.5)	86.8	66.3-127	4.0	µg/L	MN	MN	7.60-144	4.0	µg/L	**	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	73.4	92.1	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170511-5	**For samples prepared on: 05/11/2017 1700**					**Spiked sample: 17050560**						
OXY GC/MS Acids						MN	MN					
2-Chlorophenol	ND(5.0)	91.1	75.9-99.3	50.0	µg/L			75.1-100	50.0	µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	80.2	56.0-90.2	50.0	µg/L			58.8-91.2	50.0	µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	96.0	68.2-106	50.0	µg/L			65.6-112	50.0	µg/L	**	21.2
2,5-Dichlorophenol	ND(5.0)	96.9	73.9-103	50.0	µg/L			65.4-106	50.0	µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	97.6	78.3-104	50.0	µg/L			76.7-107	50.0	µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	97.4	75.3-109	50.0	µg/L			72.4-114	50.0	µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	94.2	77.1-110	50.0	µg/L			75.0-116	50.0	µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	93.1 CE	72.5-115	100	µg/L			74.5-120	100	µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	104	71.6-118	50.0	µg/L			73.7-122	50.0	µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	36.7	40.7	25.6-44.5	150	µg/L	MN	MN	25.6-44.5	150	µg/L	**	
2-FLUOROPHENOL	57.6	60.6	42.2-68.2	150	µg/L	MN	MN	42.2-68.2	150	µg/L	**	
2,4,6-TRIBROMOPHENOL	83.0	97.7	53.9-131	150	µg/L	MN	MN	53.9-131	150	µg/L	**	
QC Batch: 1IC2132	**For sample analyzed on: 05/12/2017**					**Spiked sample: 17050553**						
Chloride	ND(1.0)	103	90.0-110	4.0	mg/L	MN	MN	68.4-120	400	mg/L	**	21.6
QC Batch: 1MS8128	**For sample analyzed on: 05/08/2017**					**Spiked sample: 17050532**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	101	80.0-120	10.0	µg/L	102	102	83.0-121	10.0	µg/L	0.00	9.8
1,2-Dichloroethane	ND(0.5)	97.4	75.6-120	10.0	µg/L	106	108	77.5-122	10.0	µg/L	1.90	9.5
Benzene	ND(0.5)	98.2	80.0-120	10.0	µg/L	106	106	82.7-117	10.0	µg/L	0.00	8.3
Carbon tetrachloride	ND(0.5)	103	79.9-125	10.0	µg/L	I	I	79.0-125	10.0	µg/L	**	13.6
Chloroform	ND(0.5)	97.4	79.6-120	10.0	µg/L	98.5	104	78.4-117	10.0	µg/L	5.40	9.2
Chloromethane	ND(0.5)	103	70.2-127	10.0	µg/L	105	108	69.7-129	10.0	µg/L	2.80	15.9
Methylene chloride	ND(0.5)	98.7	77.1-120	10.0	µg/L	107	109	76.3-119	10.0	µg/L	1.90	9.6
Tetrachloroethylene	ND(0.5)	106	80.0-120	10.0	µg/L	104	99.4	82.0-121	10.0	µg/L	4.50	11.3
Trichloroethylene	ND(0.5)	98.3	80.0-120	10.0	µg/L	101	102	79.3-120	10.0	µg/L	0.990	13.7
Vinyl chloride	ND(0.5)	100	76.2-128	10.0	µg/L	98.6	97.9	78.0-130	10.0	µg/L	0.710	14.6
1,2-Dichloropropane	ND(0.5)	95.4	79.5-120	10.0	µg/L	103	105	81.7-117	10.0	µg/L	1.90	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	98.9	96.1	76.2-126	10.0	µg/L	108	112	76.2-126	10.0	µg/L		
TOLUENE-d8	101	105	80.0-120	10.0	µg/L	106	107	80.0-120	10.0	µg/L		
QC Batch: 1MS8129	**For sample analyzed on: 05/09/2017**					**Spiked sample: 17050532R**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	94.8	80.0-120	10.0	µg/L	101	101	83.0-121	50.0	µg/L	0.00	9.8

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 1MS8129	**For sample analyzed on: 05/09/2017**					**Spiked sample: 17050532R**						
1,2-Dichloroethane	ND(0.5)	97.6	75.6-120	10.0	µg/L	99.4	104	77.5-122	50.0	µg/L	4.50	9.5
Benzene	ND(0.5)	97.0	80.0-120	10.0	µg/L	99.1	99.7	82.7-117	50.0	µg/L	0.60	8.3
Carbon tetrachloride	ND(0.5)	97.4	79.9-125	10.0	µg/L	92.5	84.0	79.0-125	50.0	µg/L	9.60	13.6
Chloroform	ND(0.5)	93.6	79.6-120	10.0	µg/L	96.9	98.0	78.4-117	50.0	µg/L	1.10	9.2
Chloromethane	ND(0.5)	94.4	70.2-127	10.0	µg/L	94.7	101	69.7-129	50.0	µg/L	6.40	15.9
Methylene chloride	ND(0.5)	93.1	77.1-120	10.0	µg/L	96.2	101	76.3-119	50.0	µg/L	4.90	9.6
Tetrachloroethylene	ND(0.5)	104	80.0-120	10.0	µg/L	114	107	82.0-121	50.0	µg/L	6.30	11.3
Trichloroethylene	ND(0.5)	97.1	80.0-120	10.0	µg/L	97.3	97.9	79.3-120	50.0	µg/L	0.610	13.7
Vinyl chloride	ND(0.5)	88.4	76.2-128	10.0	µg/L	90.1	95.4	78.0-130	50.0	µg/L	5.70	14.6
1,2-Dichloropropane	ND(0.5)	91.8	79.5-120	10.0	µg/L	92.7	91.0	81.7-117	50.0	µg/L	1.90	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	95.8	98.9	76.2-126	10.0	µg/L	100.	99.0	76.2-126	50.0	µg/L		
TOLUENE-d8	100.	107	80.0-120	10.0	µg/L	105	104	80.0-120	50.0	µg/L		
QC Batch: 1MS9128	**For sample analyzed on: 05/08/2017**					**Spiked sample:**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	98.2	80.0-120	10.0	µg/L			83.0-121		µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	87.6	75.6-120	10.0	µg/L			77.5-122		µg/L	**	9.5
Benzene	ND(0.5)	112	80.0-120	10.0	µg/L			82.7-117		µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	99.2	79.9-125	10.0	µg/L			79.0-125		µg/L	**	13.6
Chloroform	ND(0.5)	102	79.6-120	10.0	µg/L			78.4-117		µg/L	**	9.2
Chloromethane	ND(0.5)	136 LH	70.2-127	10.0	µg/L			69.7-129		µg/L	**	15.9
Methylene chloride	ND(0.5)	113	77.1-120	10.0	µg/L			76.3-119		µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	96.4	80.0-120	10.0	µg/L			82.0-121		µg/L	**	11.3
Trichloroethylene	ND(0.5)	107	80.0-120	10.0	µg/L			79.3-120		µg/L	**	13.7
Vinyl chloride	ND(0.5)	114	76.2-128	10.0	µg/L			78.0-130		µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	101	79.5-120	10.0	µg/L			81.7-117		µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	92.2	91.2	76.2-126	10.0	µg/L	MN	MN	76.2-126		µg/L	**	
TOLUENE-d8	104	104	80.0-120	10.0	µg/L	MN	MN	80.0-120		µg/L	**	
QC Batch: 1MS9129	**For sample analyzed on: 05/09/2017**					**Spiked sample: 17050560**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	95.3	80.0-120	10.0	µg/L			83.0-121	10.0	µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	82.5	75.6-120	10.0	µg/L			77.5-122	10.0	µg/L	**	9.5
Benzene	ND(0.5)	110.	80.0-120	10.0	µg/L			82.7-117	10.0	µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	97.5	79.9-125	10.0	µg/L			79.0-125	10.0	µg/L	**	13.6
Chloroform	ND(0.5)	101	79.6-120	10.0	µg/L			78.4-117	10.0	µg/L	**	9.2
Chloromethane	ND(0.5)	127	70.2-127	10.0	µg/L			69.7-129	10.0	µg/L	**	15.9
Methylene chloride	ND(0.5)	104	77.1-120	10.0	µg/L			76.3-119	10.0	µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	96.5	80.0-120	10.0	µg/L			82.0-121	10.0	µg/L	**	11.3
Trichloroethylene	ND(0.5)	104	80.0-120	10.0	µg/L			79.3-120	10.0	µg/L	**	13.7
Vinyl chloride	ND(0.5)	109	76.2-128	10.0	µg/L			78.0-130	10.0	µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	94.5	79.5-120	10.0	µg/L			81.7-117	10.0	µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	94.8	93.6	76.2-126	10.0	µg/L	MN	MN	76.2-126	10.0	µg/L	**	
TOLUENE-d8	104	105	80.0-120	10.0	µg/L	MN	MN	80.0-120	10.0	µg/L	**	
QC Batch: 4IC2130	**For sample analyzed on: 05/11/2017**					**Spiked sample: 17050532**						
Chloride	ND(1.0)	106	90.0-110	4.0	mg/L	93.5	91.7	68.4-120	200	mg/L	1.90	21.6

Data Qualifiers:

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

MN - The MS/MSD sample analyses were not performed on a sample from this Pace order number.

I - Due to the concentration of analyte in the sample, the spike level is too low to allow accurate quantification of the spike recovery.

LH - The Laboratory Control Sample (LCS) recovery for this analyte was above the method or laboratory quality control limit. The reported sample concentration may be biased high.

** - RPD calculation not applicable/not available for this analysis.

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050513		**Sample Description: WG-05042017-JR-MW028S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	85.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	85.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	82.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	30.9	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	48.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	80.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	99.5	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	102	80.0-120
Lab Number: 17050514		**Sample Description: WG-05042017-JR-MW028S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	82.3	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	82.3	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/13/2017	8.0	µg/L	96.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	33.9	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	51.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	85.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	98.0	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	103	80.0-120
Lab Number: 17050515		**Sample Description: WG-05042017-JR-MW028S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	79.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	79.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	88.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	30.9	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	48.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	78.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	102	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	102	80.0-120
Lab Number: 17050516		**Sample Description: WG-05042017-BS-AMW105D**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	86.7	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	86.7	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	94.3	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	29.0	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050516		**Sample Description: WG-05042017-BS-AMW105D**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	43.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	73.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	97.2	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	108	80.0-120
Lab Number: 17050517		**Sample Description: WG-05042017-BS-AMW105S**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	83.7	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	83.7	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	89.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	34.7	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	53.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	79.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	99.4	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	102	80.0-120
Lab Number: 17050518		**Sample Description: WG-05042017-BS-AMW107S**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	93.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	93.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	93.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	32.0	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	50.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	84.3	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	92.6	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	108	80.0-120
Lab Number: 17050519		**Sample Description: WG-05042017-BS-AMW005S**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	90.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/11/2017	5.0	µg/L	90.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	99.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	33.2	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	48.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	92.3	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	95.5	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	101	80.0-120
Lab Number: 17050520		**Sample Description: WG-05042017-BS-MW141S2/S3**				

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050520		**Sample Description: WG-05042017-BS-MW141S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	86.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	86.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	90.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	31.7	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	49.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	86.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	95.6	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	105	80.0-120
Lab Number: 17050521		**Sample Description: WG-05042017-BS-AMW001**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	91.7	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	91.7	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	78.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	33.3	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	52.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	91.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	97.4	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	105	80.0-120
Lab Number: 17050522		**Sample Description: WG-05042017-BS-AMW107D**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	87.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	87.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	89.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	32.0	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	50.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	87.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	96.7	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	102	80.0-120
Lab Number: 17050523		**Sample Description: WG-05042017-BS-FD02**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	85.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	85.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	85.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	30.2	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050523		**Sample Description: WG-05042017-BS-FD02**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	46.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	80.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	94.1	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	103	80.0-120
Lab Number: 17050524		**Sample Description: WG-05042017-DF-MW016S4R**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	80.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	80.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	90.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	29.8	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	46.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	77.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	90.3	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	99.3	80.0-120
Lab Number: 17050525		**Sample Description: WG-05042017-DF-MW016S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	80.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	80.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	87.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	31.8	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	50.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	83.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	92.7	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	101	80.0-120
Lab Number: 17050526		**Sample Description: WG-05042017-DF-MW016S2SS**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	83.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	83.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	82.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	30.6	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	48.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	83.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	93.4	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	104	80.0-120
Lab Number: 17050527		**Sample Description: WG-05042017-DF-MW016BR**				

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050527		**Sample Description: WG-05042017-DF-MW016BR**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	71.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	71.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/11/2017	8.0	µg/L	96.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	33.5	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	53.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	94.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	96.5	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	105	80.0-120
Lab Number: 17050528		**Sample Description: WG-05042017-DF-MW003S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	76.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	76.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/12/2017	8.0	µg/L	93.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	35.2	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	54.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	93.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	97.5	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	102	80.0-120
Lab Number: 17050529		**Sample Description: WG-05042017-DF-MW135S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	77.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	77.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/12/2017	8.0	µg/L	91.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	34.6	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	51.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	84.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/08/2017	10	µg/L	97.5	76.2-126
TOLUENE-d8		05/08/2017	10	µg/L	101	80.0-120
Lab Number: 17050530		**Sample Description: WG-05042017-DF-MW021S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	82.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	82.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/12/2017	8.0	µg/L	91.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/12/2017	150	µg/L	33.2	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050530		**Sample Description: WG-05042017-DF-MW021S3**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/09/2017	05/12/2017	150	µg/L	53.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/12/2017	150	µg/L	87.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	99.7	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	101	80.0-120
Lab Number: 17050531		**Sample Description: WG-05042017-DF-MW135S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	75.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	75.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/12/2017	8.0	µg/L	92.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/13/2017	150	µg/L	32.5	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/13/2017	150	µg/L	51.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/13/2017	150	µg/L	88.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	102	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	103	80.0-120
Lab Number: 17050532		**Sample Description: WG-05052017-JR-MW008S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	82.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/09/2017	05/12/2017	5.0	µg/L	82.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/09/2017	05/12/2017	8.0	µg/L	92.3	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/09/2017	05/13/2017	150	µg/L	32.9	25.6-44.5
2-FLUOROPHENOL	05/09/2017	05/13/2017	150	µg/L	50.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/09/2017	05/13/2017	150	µg/L	86.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	107	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	100.	80.0-120
Lab Number: 17050532R		**Sample Description: WG-05052017-JR-MW008S2**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	50	µg/L	105	76.2-126
TOLUENE-d8		05/09/2017	50	µg/L	97.5	80.0-120
Lab Number: 17050533		**Sample Description: WG-05052017-JR-MW008S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	85.3	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	85.3	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	90.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	29.7	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	43.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	86.3	53.9-131

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050533		**Sample Description: WG-05052017-JR-MW008S1**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	103	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	103	80.0-120
Lab Number: 17050534		**Sample Description: WG-05052017-JR-MW008S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	83.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	83.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	89.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	32.6	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	51.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	86.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	102	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	102	80.0-120
Lab Number: 17050536		**Sample Description: WG-05052017-BS-MW09S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	76.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	76.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	89.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	32.0	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	48.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	82.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	101	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	103	80.0-120
Lab Number: 17050537		**Sample Description: WG-05052017-BS-MW09S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	80.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	80.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	87.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	31.6	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	50.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	85.3	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	107	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	102	80.0-120
Lab Number: 17050537R		**Sample Description: WG-05052017-BS-MW09S1**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	50	µg/L	100.	76.2-126
TOLUENE-d8		05/09/2017	50	µg/L	98.9	80.0-120

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050538		**Sample Description: WG-05052017-BS-MW02S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	74.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	74.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	91.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	29.4	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	46.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	82.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	110.	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	100.	80.0-120
Lab Number: 17050539		**Sample Description: WG-05052017-BS-MW02S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	77.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	77.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	91.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/17/2017	150	µg/L	34.1	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/17/2017	150	µg/L	53.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/17/2017	150	µg/L	94.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	102	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	102	80.0-120
Lab Number: 17050540		**Sample Description: WG-05042017-DF-ER9**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	73.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	73.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	89.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	33.9	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	52.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	79.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	101	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	100.	80.0-120
Lab Number: 17050541		**Sample Description: WG-05042017-BS-AMW106S**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	89.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	89.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	99.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	30.7	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050541		**Sample Description: WG-05042017-BS-AMW106S**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	46.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	83.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	104	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	99.2	80.0-120

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
2,4-Dichlorophenoxyacetic Acid	05/11/2017	1NX5131	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/12/2017	2NX5131	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/12/2017	3NX5131	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/12/2017	4NX5131	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/12/2017	1NX5132	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/12/2017	2NX5132	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/13/2017	3NX5132	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/11/2017	1NX5131	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/12/2017	2NX5131	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/12/2017	3NX5131	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/12/2017	4NX5131	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/12/2017	1NX5132	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/12/2017	2NX5132	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/13/2017	3NX5132	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/11/2017	1EX3131	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/11/2017	2EX3131	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/12/2017	3EX3131	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/12/2017	4EX3131	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/12/2017	1EX3132	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/12/2017	2EX3132	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/13/2017	3EX3132	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/13/2017	4EX3132	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/11/2017	10IC2130	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/11/2017	11IC2130	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/11/2017	13IC2130	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/11/2017	14IC2130	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/12/2017	1IC2132	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/12/2017	2IC2132	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/12/2017	3IC2132	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/12/2017	1MS6132	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/12/2017	2MS6132	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/13/2017	3MS6132	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/16/2017	1MS6136	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/16/2017	2MS6136	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/17/2017	1MS6137	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/17/2017	2MS6137	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/08/2017	1MS8128	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/08/2017	2MS8128	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/09/2017	3MS8128	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/09/2017	1MS8129	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/09/2017	2MS8129	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/08/2017		CCV recovery acceptable except as qualified below.			
Chloromethane	05/08/2017	1MS9128	10.0	13.6	µg/L	136 CH

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/19/2017
Date Received: 05/05/2017
Pace File No: 7775
Pace Order No: 140299

Samples associated with this Continuing Calibration Verification:

Laboratory Number	Instrument Batch	Sample Description
17050513	1MS9128	WG-05042017-JR-MW028S1
17050514	1MS9128	WG-05042017-JR-MW028S2
17050515	1MS9128	WG-05042017-JR-MW028S3
17050516	1MS9128	WG-05042017-BS-AMW105D
17050517	1MS9128	WG-05042017-BS-AMW105S
17050518	1MS9128	WG-05042017-BS-AMW107S
17050519	1MS9128	WG-05042017-BS-AMW005S
17050520	1MS9128	WG-05042017-BS-MW141S2/S3
17050521	1MS9128	WG-05042017-BS-AMW001
17050522	1MS9128	WG-05042017-BS-AMW107D
17050523	1MS9128	WG-05042017-BS-FD02
17050524	1MS9128	WG-05042017-DF-MW016S4R
17050525	1MS9128	WG-05042017-DF-MW016S1

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
OXY Volatiles by 8260	05/09/2017	2MS9128	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/09/2017		CCV recovery acceptable except as qualified below.			
Chloromethane	05/09/2017	1MS9129	10.0	12.7	µg/L	127 CH

Samples associated with this Continuing Calibration Verification:

Laboratory Number	Instrument Batch	Sample Description
17050526	1MS9129	WG-05042017-DF-MW016S2SS

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
OXY Volatiles by 8260	05/10/2017	2MS9129	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/12/2017	9IP4132	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/12/2017	10IP4132	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/12/2017	11IP4132	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/12/2017	12IP4132	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/17/2017	9IP4137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/17/2017	10IP4137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/17/2017	11IP4137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/19/2017	2IP4139	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/19/2017	3IP4139	CCV recovery acceptable for this Instrument Batch.			

Data Qualifiers:
CH - The continuing calibration verification (CCV) standard recovery for this analyte was above the method or SOP limit. The reported concentration for this analyte may be biased high.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Discrepancies
See C/S RF

Page: 1 of 3

2059067

Section A Required Client Information:

Company: GHD
Address: 2626 W. Pawnee Wichita
Email To: Travis
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Travis Kogl
Copy To: Paul McMahon
Purchase Order No.:
Project Name: Oxy Spring 2017
Project Number: ~~1137148~~ 1137148

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Greg Groene
Pace Profile #:

Edits made prior to sample receipt
5-5-17

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOCs	SVOCs	Pest/Herb	Chlor'd Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-0504017-JR-MW028S1	WT	G			5/4/17	1505		8	5			3					X	X	X	X			
2	WG-0504017-JR-MW028S2						1550		8	5			3					X	X	X	X			
3	WG-0504017-JR-MW028S3						1650		8	5			3					X	X	X	X			
4	WG-0504017-BS-AMW105D						1050		8	5			3					X	X	X	X			
5	WG-0504017-BS-AMW105S						1125		8	5			3					X	X	X	X			
6	WG-0504017-BS-AMW107S						1345		8	5			3					X	X	X	X			
7	WG-0504017-BS-AMW005S						1330		8	5			3					X	X	X	X			
8	WG-0504017-BS-14152/S3						1515		8	5			3					X	X	X	X			
9	WG-0504017-BS-AMW001						1625		8	5			3					X	X	X	X			
10	WG-0504017-BS-AMW107D						1425		8	5			3					X	X	X	X			
11	WG-0504017-BS-FD02						0:00		8	5			3					X	X	X	X			
12	WG-0504017-DF-MW016S4R						9:30		8	5			3					X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	GHD	5/5/17	1500	PACE	5-5-17	1500	
		5-5-17	1620		5-5-17	1620	

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jeremy Rapp
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY):

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

2059289

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Koyl	Attention:
Address: 2626 W Pawnee Wichita, KS	Copy To: Paul McMahon	Company Name:
	Purchase Order No.:	Address:
Email To: Travis Koyl	Project Name: Oxy Spring 2017 GMW	Pace Quote Reference:
Phone: Fax:	Project Number: 11137148	Pace Project Manager: Greg Groene
Requested Due Date/TAT:		Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOCs	SVOCs	Pest/Herb	Chloride/Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05042017-DF-MW016s1	WT	G			5/4/17	1125		8	5			3					X	X	X	X			
2	WG-05042017-DF-MW016s2ss						1025		8	5			3					X	X	X	X			
3	WG-05042017-DF-MW016BR						1225		8	5			3					X	X	X	X			
4	WG-05042017-DF-MW003s1						1400		8	5			3					X	X	X	X			
5	WG-05042017-DF-MW135s2/s3						1605		8	5			3					X	X	X	X			
6	WG-05042017-DF-MW021s3						1505		8	5			3					X	X	X	X			
7	WG-05042017-DF-MW135s1						1650		8	5			3					X	X	X	X			
8	WG-05052017-JR-MW008s2					5/5/17	1020		24	15			9					X	X	X	X			MS/MSD
9	WG-05052017-JR-MW008s1						1135		8	5			3					X	X	X	X			
10	WG-05052017-JR-MW008s3						1240		8	5			3					X	X	X	X			
11	TB-4								3				3					X						DO NOT RECD kfb 5/5/17
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	GHD	5/5/17	1500		5/5/17	1500	
		5-5-17	1620		5-5-17	1620	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeremy Rayl

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 5/5/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 3 of 3

2059291

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Kagle	Attention:
Address: 2626 W Pawnee Wichita, KS	Copy To: Paul McMahon	Company Name:
		Address:
Email To: Travis' Kogl	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Oxy Spring 2017 GWM	Pace Project Manager: Greg Groene
Requested Due Date/TAT:	Project Number: 11137148	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: VOC's	SVOC's	Pest/Herb.	Chloride/Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05052017-BS-MW09S 3	WT	G	5/5/17		5/5/17	0850		8	5		[illegible]	3					X	X	X	X			
2	WG-05052017-BS-MW09S 1	WT	G				1025		8	5			3					X	X	X	X			
3	WG-05052017-BS-MW02S1	WT	G				1135		8	5			3					X	X	X	X			
4	WG-05052017-BS-MW02S2	WT	G				1120		8	5			3					X	X	X	X			
5																									
6																									
7																									
8																									
9																									
10																									Edited to CA 5/5/17 bjb
11	WG-05042017-DF-ER9	WT	G			5/4/17	1315		8	5			3					X	X	X	X				3 Received Samples and added to this CA
12	WG-05042017-BS-AMW106S	WT	G			5/4/17	1425		8	5			3					X	X	X	X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brian Schauer	5/5/17	1500	[illegible] PACE	5/5/17	1500	
	[illegible]	5-5-17	1620	[illegible] Pace	5-5-17	1620	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: BRIAN Schauer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 5/5/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140299

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

3 ~~4~~ HAC 5-5-17 LTA 1 250P MW003S1 1 250 P-
3 ~~4~~ HAC 5-5-17 LTA 1 250P MW021S3 MW028S2
3 ___ LTA ___ 250P MW135 S2/S3 1 LTA-MW135S1
1 LTA ___ 250P MW016S1
VOC 1 250 MW028S1

Cooler 1 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4026 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/5/17 16:20

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: ___

Seal Name: ___ Seal Date: ___

Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 2.8 Corrected Reading (°C) 2.4

Temperature. By: Temperature Blank Surface Temperature

Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from:
  - Cover Letter ☐ Container ☐
  - PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: ___

Detail to discrepancies/comments:

Completed by: SKR **Date Completed:** 5-5-17

Pace Analytical Services, Inc. **Pace Order No.:** 140299

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 1 250P MW02853

__ LTA __ 250P

__ LTA __ 250P

__ LTA __ 250P

VOC - Sets No Trip Blanks -

Cooler 2 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4150 / Client's Cooler / Box / Letter / Hand-delivered

Other: _____

Date/Time Cooler Received: 5/5/17 16:20

Delivered By: UPS / FedX / AB Express / Field Svc / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____

Seal Name: _____ Seal Date: _____

Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.1 Corrected Reading (°C) 1.7

Temperature. By: Temperature Blank Surface Temperature

Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐

☐ Container label absent

☐ Chain of Custody incomplete [see detail below]

☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)

☐ Date or Time sampled obtained from container label

☐ Chain of Custody missing sampler's name

☐ Chain of Custody missing matrix (sample type)

☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody

☑ Sample listed on Chain of Custody, not received

☐ Sample identification on container and Chain of Custody do not agree

☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]

☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]

☐ Broken or leaking containers (detail actions below)

☐ Sample container type or labeled chemical preservation inappropriate

☐ Other discrepancies: _____

Detail to discrepancies/comments:

1 LTA Reads MW0853

Trip Blanks on COC - Did not Receive.

Completed by: SKR **Date Completed:** 5-5-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140299

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LtA ___ 250P MW008S1
3 LtA ___ 250P MW008S2
4 LtA ___ 250P MW008S3
___ LtA ___ 250P
VOC

Cooler 3 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 66219 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/5/17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.9 Corrected Reading (°C) 1.5
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ ~~No~~ ☐ **Yes** **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR **Date Completed:** 5-5-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140299

Client Name: Oxy

Pace File No.: 7775

Sample ID's in cooler:

2 LTA 1 250P AMW105S
4 LTA 1 250P FD2
4 LTA 1 250P AMW141 S2|S3
___ LTA ___ 250P
VOC

Cooler 4 of 13 for this Pace Order No.

Cooler Identification: Pace Cooler #: 09984 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5.5.17 11:20

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.8 Corrected Reading (°C) 1.4
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☑ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

250P sample reads AMS141 S2|S3 should be AMW141S2|S3

4 LTA & 1 250P read FD2 should be FD02

Completed by: SKR Date Completed: 5-5-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140299

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA	250P MW0163R	LTA-MW0165 4R
3 LTA	250P MW135 S1	LTA-DF-135 S2 S3
1 LTA	250P MW021S3	250P MW0165 1
1 LTA	250P MW0165 2 S3	250P MW003S1
VOC		

Cooler 5 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 14352 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/5/17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Dry Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.9 Corrected Reading (°C) 2.5
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR **Date Completed:** 5-5-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140299

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LtA 1 250P WG 05042017 DF MW0165 4R
3 LtA 0 250P WG 05042017 DF MW0165 1
3 LtA 0 250P WG 05042017 DF MW0165 3 2 5 3
1 LtA 0 250P WG 05042017 DF MW 003 5 1
0 VOC 3-250p. Leach. WG-05042017 DF-MW016BR, MW13551, MW13552/53

Cooler 6 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 1262 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/5/17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / ~~Dry Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.3 Corrected Reading (°C) 2.9
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:
Labels reads WG 05042017 DF - MW0165253 - COC reads MW0165255

Completed by: SKR **Date Completed:** 5-5-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140299

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

3 LTA 1 250P AMW105D
3 LTA — 250P AMW105S
3 LTA 1 250P AMW106S
— LTA — 250P
VOC

Cooler 7 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 12058 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/5/17 16:20

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.7 Corrected Reading (°C) 1.3
Temperature. By: Temperature Blank Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☑ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☑ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:
Container reads AMW106S
Not ON COC - Rec'd 4LTA 1-250P
3-VOC.

~~Labels read 0504201 AMW107D~~
~~should be AMW107D~~ 5-5-17
~~Sho COC reads AMW007D~~
5-5-17 OK 5/5/17

Completed by: SKR **Date Completed:** 5-5-17

ATT C1 SS-4 Rev 3.1 Cooler-Sample Receipt Form

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140299

Client Name: Oxy

Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P AMW1075
4 LTA 1 250P AMW0065
2 LTA 1 250P DF-ER9
___ LTA ___ 250P
VOC

Cooler 8 of 13 for this Pace Order No.

Cooler Identification: Pace Cooler #: 3279 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/5/17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.5 Corrected Reading (°C) 1.1
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☑ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:
Bottle - Not on COC
WC 05042017 DF ER9 4-LTA, 1-250P, 3-VOC
Also. (See cooler 10084)

Completed by: SKR Date Completed: 5-5-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140299

Client Name: Oxy

Pace File No.: 7775

Sample ID's in cooler:

9 LTA 3 250P WG-050 52017 JR MW008s2
0 LTA 1 250P " " JR MW008s3
0 LTA 1 250P " " JR - MW008s1
0 LTA 0 250P
0 VOC

Cooler 9 of 13 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4201 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5.5.17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.6 Corrected Reading (°C) 2.2
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-5-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140299

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 1 250P MW093
4 LTA 1 250P MW95I
___ LTA ___ 250P
___ LTA ___ 250P
VOC

Cooler 10 of 13 for this Pace Order No.

Cooler Identification: Pace Cooler #: 606047 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/5/17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 0.9 Corrected Reading (°C) 0.5
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☑ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:
4 LTA + 1 250P read MW95I should be MW093I

Completed by: SKR **Date Completed:** 5-5-17

Pace Analytical Services, Inc. Pace Order No.: 140299

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P AMW1
4 LTA 1 250P AMW107D
2 LTA 250P ER9
LTA 250P
VOC

Cooler 11 of 13 for this Pace Order No.

Cooler Identification: Pace Cooler #: 10094 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/5/17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.9 Corrected Reading (°C) 1.5
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☑ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

4 LTA + 1 250P reads AMW1 should be AMW001
~~Chain reads 107D label reads 007D~~ MP 5/5/17

Completed by: SKR Date Completed: 5-5-17

Pace Analytical Services, Inc. Pace Order No.: 140299

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LtA 1 250P WG05052017 BS MW02S2

4 LtA 1 250P WG05052017 BS MW02S1

__ LtA __ 250P

__ LtA __ 250P

VOC

Cooler 12 of 13 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4142 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5.5.17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____

Seal Name: _____ Seal Date: _____

Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.0 Corrected Reading (°C) 1.6

Temperature. By: ~~Temperature Blank~~ Surface Temperature

Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐

☐ Container label absent

☐ Chain of Custody incomplete [see detail below]

☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)

☐ Date or Time sampled obtained from container label

☐ Chain of Custody missing sampler's name

☐ Chain of Custody missing matrix (sample type)

☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody

☐ Sample listed on Chain of Custody, not received

☐ Sample identification on container and Chain of Custody do not agree

☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]

☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]

☐ Broken or leaking containers (detail actions below)

☐ Sample container type or labeled chemical preservation inappropriate

☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-5-17

Pace Analytical Services, Inc. Pace Order No.: 140299

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LTA 250P MW028S1
4 LTA 250P MW028S2
LTA 250P
LTA 250P
VOC

Cooler 13 of 13 for this Pace Order No.

Cooler Identification: Pace Cooler #: 20A / Client's Cooler / Box / Letter / Hand-delivered
Other:

Date/Time Cooler Received: 5/5/17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other:

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No:
Seal Name: Seal Date:
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other:

Cooler Temperature (°C): Original Reading (°C) 1.6 Corrected Reading (°C) 1.2
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies:

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-5-17

Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date and Time Received: 05/06/2017 1545
Pace File No.: 7775
Pace Order No.: 140300
P.O./Project No: 4502201562-11119420
Project ID: OXY WICHITA GWM
Purchase Auth: SSOW251-402-D02-3100

Dear Ms. Thurman:

This laboratory report, containing the samples indicated below, includes 93 pages for the analytical report, 5 page(s) for the chain of custody and/or analysis request, and 14 page(s) for the sample receipt form.

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17050542	WG-05052017-DF-MW011S3A	Liquid	5/5/2017
17050543	WG-05052017-DF-MW011S1	Liquid	5/5/2017
17050544	WG-05052017-DF-MW011S3B	Liquid	5/5/2017
17050545	WG-05052017-DF-MW137S2	Liquid	5/5/2017
17050546	WG-05052017-DF-MW021S1	Liquid	5/5/2017
17050546R	WG-05052017-DF-MW021S1	Liquid	5/5/2017
17050547	WG-05052017-DF-MW136S2/S3	Liquid	5/5/2017
17050548	WG-05052017-JD-ER10	Liquid	5/5/2017
17050549	WG-05052017-JR-MW143S2/S3	Liquid	5/5/2017
17050550	TB-4	Liquid	5/5/2017
17050551	WG-05052017-BS-MW014S1	Liquid	5/5/2017
17050552	WG-05052017-BS-MW014S3	Liquid	5/5/2017
17050552R	WG-05052017-BS-MW014S3	Liquid	5/5/2017
17050553	WG-05052017-BS-MW012S1A	Liquid	5/5/2017
17050553R	WG-05052017-BS-MW012S1A	Liquid	5/5/2017
17050554	WG-05052017-BS-MW012S3	Liquid	5/5/2017
17050554R	WG-05052017-BS-MW012S3	Liquid	5/5/2017
17050555	WG-05052017-BS-MW23BR	Liquid	5/5/2017
17050555R	WG-05052017-BS-MW23BR	Liquid	5/5/2017
17050556	WG-05062017-BS-MW015S1	Liquid	5/6/2017
17050556R	WG-05062017-BS-MW015S1	Liquid	5/6/2017
17050557	WG-05062017-BS-MW015S2	Liquid	5/6/2017
17050557R	WG-05062017-BS-MW015S2	Liquid	5/6/2017
17050558	WG-05062017-BS-AMW005D	Liquid	5/6/2017
17050558R	WG-05062017-BS-AMW005D	Liquid	5/6/2017
17050559	WG-05062017-BS-AMW106D	Liquid	5/6/2017
17050559R	WG-05062017-BS-AMW106D	Liquid	5/6/2017
17050560	WG-05062017-JR-MW030S1	Liquid	5/6/2017
17050560R	WG-05062017-JR-MW030S1	Liquid	5/6/2017
17050561	WG-05062017-JR-MW030S2	Liquid	5/6/2017
17050561R	WG-05062017-JR-MW030S2	Liquid	5/6/2017
17050562	WG-05062017-JR-MW030S3	Liquid	5/6/2017

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17050562R	WG-05062017-JR-MW030S3	Liquid	5/6/2017
17050563	WG-05062017-JR-FD5	Liquid	5/6/2017
17050563R	WG-05062017-JR-FD5	Liquid	5/6/2017
17050564	WG-05062017-DF-MW022S1	Liquid	5/6/2017
17050564R	WG-05062017-DF-MW022S1	Liquid	5/6/2017
17050565	WG-05062017-DF-MW140S1	Liquid	5/6/2017
17050565R	WG-05062017-DF-MW140S1	Liquid	5/6/2017
17050566	WG-05062017-DF-MW140S2/S3	Liquid	5/6/2017
17050566R	WG-05062017-DF-MW140S2/S3	Liquid	5/6/2017
17050567	WG-05062017-DF-FD4	Liquid	5/6/2017
17050567R	WG-05062017-DF-FD4	Liquid	5/6/2017
17050569	TB-5	Liquid	5/6/2017

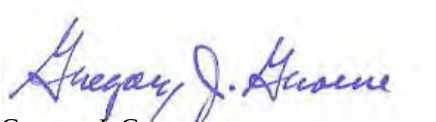
The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

Samples will be retained for thirty days unless Pace is otherwise notified. Pace is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Pace's Standard Operating Procedures. These procedures are in substantial compliance with the approved methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.

Thank you for choosing Pace for this project.



Gregory J. Groene
Project Manager
Gregory.Groene@pacelabs.com

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050542
Sample Description: WG-05052017-DF-MW011S3A

Date Sampled: 05/05/2017
Time Sampled: 1615

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/203
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	260.	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	87	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/12/17 2338	170511-4	2NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/12/17 2338	170511-4	2NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 2105	170510-1	2EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 1647	170511-5	1MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1548	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2124	170509-2	10IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1313	1IC2132	2IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050542

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050543
Sample Description: WG-05052017-DF-MW011S1

Date Sampled: 05/05/2017
Time Sampled: 1525

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	0.025	µg/L	1.0	0.011	7460/203
B-BHC	0.152	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	2.3	µg/L	1.0	0.5	7465/345
Chloroform	1.5	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	313	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	145	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/13/17 0018	170511-4	2NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/13/17 0018	170511-4	2NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 2144	170510-1	2EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 1727	170511-5	1MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1612	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2128	170509-2	10IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1325	1IC2132	2IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050543

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050544
Sample Description: WG-05052017-DF-MW011S3B

Date Sampled: 05/05/2017
Time Sampled: 1420

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/203
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	153	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	78	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/13/17 0057	170511-4	2NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/13/17 0057	170511-4	2NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 2224	170510-1	2EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 1808	170511-5	1MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1637	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2132	170509-2	10IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1337	1IC2132	2IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050544

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050545
Sample Description: WG-05052017-DF-MW137S2

Date Sampled: 05/05/2017
Time Sampled: 1346

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/203
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	246	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	23.7	mg/L	1.0	1.0	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/13/17 0136	170511-4	2NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/13/17 0136	170511-4	2NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 2304	170510-1	2EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 2021	170511-5	2MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1702	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2136	170509-2	10IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1350	1IC2132	2IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050545

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050546
Sample Description: WG-05052017-DF-MW021S1

Date Sampled: 05/05/2017
Time Sampled: 1150

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	0.015	µg/L	1.0	0.011	7460/203
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	1.01	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	OC	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	0.50	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids	SR				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	1.6	µg/L	1.0	0.5	7465/345
Chloroform	1.5	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	3.0	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	478	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	590.	mg/L	50	50	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/13/17 0215	170511-4	2NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/13/17 0215	170511-4	2NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/12/17 2344	170510-1	2EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 2102	170511-5	2MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1727	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2140	170509-2	10IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1402	1IC2132	2IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050546

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050546R
Sample Description: WG-05052017-DF-MW021S1

Date Sampled: 05/05/2017
Time Sampled: 1150

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Chlorinated Hyd.					
A-BHC	ND(0.044)	µg/L	4.0	0.044	7460/204
B-BHC	ND(0.15)	µg/L	4.0	0.15	7460/204
G-BHC	ND(0.21)	µg/L	4.0	0.21	7460/204
Hexachloroethane	0.91	µg/L	4.0	0.08	7460/204
Hexachlorobutadiene	11.1	µg/L	4.0	0.08	7460/204
Hexachlorobenzene	0.52	µg/L	4.0	0.40	7460/204
D-BHC	ND(0.2)	µg/L	4.0	0.2	7460/204
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Chlorinated Hyd.	05/10/17 1800	05/15/17 2007	170510-1	2EX3135	JMM	8121
OXY GC/MS Acids	05/17/17 1530	05/18/17 1759	170517-1	1MS6138	JMM	8270C
Acid Preparation Method						625/3510C
Chlorinated Hydrocarbons Preparation Method						3510C

Conclusion of Lab Number: 17050546R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050547
Sample Description: WG-05052017-DF-MW136S2/S3

Date Sampled: 05/05/2017
Time Sampled: 1030

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/203
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/521
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/521
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/521
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/521
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/521
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/521
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/521
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/521
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/521
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/521
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/521
Hardness (Calculated)	229	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	77	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/13/17 0255	170511-4	2NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/13/17 0255	170511-4	2NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/13/17 0023	170510-1	2EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 2143	170511-5	2MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1712	1MS8129	1MS8129	GMA	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2145	170509-2	10IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1414	1IC2132	2IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050547

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050548
Sample Description: WG-05052017-JD-ER10

Date Sampled: 05/05/2017
Time Sampled: 1700

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/203
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/13/17 0334	170511-4	2NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/13/17 0334	170511-4	2NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/13/17 0103	170510-1	2EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 2222	170511-5	2MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1817	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2149	170509-2	10IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1427	1IC2132	2IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050548

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050549
Sample Description: WG-05052017-JR-MW143S2/S3

Date Sampled: 05/05/2017
Time Sampled: 1535

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/203
B-BHC	0.038	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	4.2	µg/L	1.0	0.5	7465/345
Chloroform	2.5	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	422	mg/L as CaCO3	1.0	5.0	7443/991
Chloride	203	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/13/17 0413	170511-4	2NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/13/17 0413	170511-4	2NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/13/17 0142	170510-1	2EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 2303	170511-5	2MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1841	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/09/17 0855	05/19/17 1050	170509-2	2IP4139	KMW	6010B & SM 2340B
Chloride	N/A	05/12/17 1439	1IC2132	2IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050549

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050550
Sample Description: TB-4

Date Sampled: 05/05/2017
Time Sampled: 0000

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/09/17 1906	1MS9129	1MS9129	RKR	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17050550

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050551
Sample Description: WG-05052017-BS-MW014S1

Date Sampled: 05/05/2017
Time Sampled: 1530

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/203
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	0.6	µg/L	1.0	0.5	7465/345
Chloroform	1.4	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	0.7	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	342	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	29.4	mg/L	1.0	1.0	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/13/17 0452	170511-4	2NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/13/17 0452	170511-4	2NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/13/17 0341	170510-1	3EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/16/17 2343	170511-5	2MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1931	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2157	170509-2	10IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1516	1IC2132	3IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050551

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050552
Sample Description: WG-05052017-BS-MW014S3

Date Sampled: 05/05/2017
Time Sampled: 1540

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	0.9	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	0.095	µg/L	1.0	0.011	7460/203
B-BHC	0.473	µg/L	1.0	0.037	7460/203
G-BHC	0.148	µg/L	1.0	0.052	7460/203
Hexachloroethane	OC	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	1.26	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	0.14	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(50)	µg/L	100	50	7465/345
1,2-Dichloroethane	ND(50)	µg/L	100	50	7465/345
Benzene	ND(50)	µg/L	100	50	7465/345
Carbon tetrachloride	2620	µg/L	100	50	7465/345
Chloroform	4730	µg/L	100	50	7465/345
Chloromethane	ND(50) QC	µg/L	100	50	7465/345
Methylene chloride	ND(50)	µg/L	100	50	7465/345
Tetrachloroethylene	440	µg/L	100	50	7465/345
Trichloroethylene	50	µg/L	100	50	7465/345
Vinyl chloride	ND(50)	µg/L	100	50	7465/345
1,2-Dichloropropane	ND(50)	µg/L	100	50	7465/345
Hardness (Calculated)	724	mg/L as CaCO3	5.0	25	7443/991
Chloride	720	mg/L	100	100	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/13/17 0611	170511-4	3NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/13/17 0611	170511-4	3NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/13/17 0421	170510-1	3EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/17/17 0024	170511-5	2MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1956	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/09/17 0855	05/19/17 1054	170509-2	2IP4139	KMW	6010B & SM 2340B
Chloride	N/A	05/12/17 1528	1IC2132	3IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050552

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050552R
Sample Description: WG-05052017-BS-MW014S3

Date Sampled: 05/05/2017
Time Sampled: 1540

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Chlorinated Hyd.					
A-BHC	0.094	µg/L	2.0	0.022	7460/204
B-BHC	0.484	µg/L	2.0	0.074	7460/204
G-BHC	0.15	µg/L	2.0	0.10	7460/204
Hexachloroethane	5.41	µg/L	2.0	0.04	7460/204
Hexachlorobutadiene	1.3	µg/L	2.0	0.04	7460/204
Hexachlorobenzene	ND(0.20)	µg/L	2.0	0.2	7460/204
D-BHC	0.1	µg/L	2.0	0.1	7460/204

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Chlorinated Hyd.	05/10/17 1800	05/15/17 2047	170510-1	2EX3135	JMM	8121
Chlorinated Hydrocarbons Preparation Method						3510C

Conclusion of Lab Number: 17050552R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050553
Sample Description: WG-05052017-BS-MW012S1A

Date Sampled: 05/05/2017
Time Sampled: 1640

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	0.9	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	0.636	µg/L	1.0	0.011	7460/203
B-BHC	0.525 FC E	µg/L	1.0	0.037	7460/203
G-BHC	0.744	µg/L	1.0	0.052	7460/203
Hexachloroethane	OC	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	4.29	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	0.71	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	13.8	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	110.	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	64.2	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	20.3	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(50)	µg/L	100	50	7465/345
1,2-Dichloroethane	ND(50)	µg/L	100	50	7465/345
Benzene	ND(50)	µg/L	100	50	7465/345
Carbon tetrachloride	1390	µg/L	100	50	7465/345
Chloroform	4260	µg/L	100	50	7465/345
Chloromethane	ND(50) QC	µg/L	100	50	7465/345
Methylene chloride	ND(50)	µg/L	100	50	7465/345
Tetrachloroethylene	560	µg/L	100	50	7465/345
Trichloroethylene	50	µg/L	100	50	7465/345
Vinyl chloride	ND(50)	µg/L	100	50	7465/345
1,2-Dichloropropane	ND(50)	µg/L	100	50	7465/345
Hardness (Calculated)	411	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	830	mg/L	100	100	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/13/17 0650	170511-4	3NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/13/17 0650	170511-4	3NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/13/17 0500	170510-1	3EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/17/17 0104	170511-5	2MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 2021	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/09/17 0855	05/17/17 2214	170509-2	11IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1540	1IC2132	3IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050553

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050553R
Sample Description: WG-05052017-BS-MW012S1A

Date Sampled: 05/05/2017
Time Sampled: 1640

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Chlorinated Hyd.					
A-BHC	0.588	µg/L	4.0	0.044	7460/204
B-BHC	0.455	µg/L	4.0	0.15	7460/204
G-BHC	0.816	µg/L	4.0	0.21	7460/204
Hexachloroethane	7.61	µg/L	4.0	0.08	7460/204
Hexachlorobutadiene	4.44	µg/L	4.0	0.08	7460/204
Hexachlorobenzene	ND(0.40)	µg/L	4.0	0.4	7460/204
D-BHC	0.69	µg/L	4.0	0.2	7460/204

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Chlorinated Hyd.	05/10/17 1800	05/15/17 2127	170510-1	2EX3135	JMM	8121
Chlorinated Hydrocarbons Preparation Method						3510C

Conclusion of Lab Number: 17050553R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050554
Sample Description: WG-05052017-BS-MW012S3

Date Sampled: 05/05/2017
Time Sampled: 1640

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	0.025	µg/L	1.0	0.011	7460/204
B-BHC	OC	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	0.60	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	1.56	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	54.0	µg/L	1.0	0.5	7465/345
Chloroform	19.0	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	50.8	µg/L	1.0	0.5	7465/345
Trichloroethylene	0.6	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	229	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	148	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/15/17 1955	170512-1	1NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/15/17 1955	170512-1	1NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/15/17 2326	170512-2	2EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 1146	170512-3	1MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 2045	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2243	170510-1	11IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1642	2IC2132	3IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050554

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050554R
Sample Description: WG-05052017-BS-MW012S3

Date Sampled: 05/05/2017
Time Sampled: 1640

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Chlorinated Hyd.					
A-BHC	0.047	µg/L	4.0	0.044	7460/204
B-BHC	11.3	µg/L	4.0	0.15	7460/204
G-BHC	ND(0.21)	µg/L	4.0	0.21	7460/204
Hexachloroethane	0.55	µg/L	4.0	0.08	7460/204
Hexachlorobutadiene	1.7	µg/L	4.0	0.08	7460/204
Hexachlorobenzene	ND(0.40)	µg/L	4.0	0.4	7460/204
D-BHC	ND(0.2)	µg/L	4.0	0.2	7460/204
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 1838	170512-2	5EX3135	JMM	8121
OXY GC/MS Acids	05/22/17 0800	05/23/17 1222	170522-1	1MS6143	JMM	8270C
Acid Preparation Method						625/3510C
Chlorinated Hydrocarbons Preparation Method						3510C

Conclusion of Lab Number: 17050554R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050555
Sample Description: WG-05052017-BS-MW23BR

Date Sampled: 05/05/2017
Time Sampled: 1810

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	1770	mg/L as CaCO3	5.0	25	7443/990
Chloride	92	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/15/17 2035	170512-1	1NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/15/17 2035	170512-1	1NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 0005	170512-2	2EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 1226	170512-3	1MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 2110	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2247	170510-1	11IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1654	2IC2132	3IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050555

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050555R
Sample Description: WG-05052017-BS-MW23BR

Date Sampled: 05/05/2017
Time Sampled: 1810

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 1302	170522-1	1MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050555R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050556
Sample Description: WG-05062017-BS-MW015S1

Date Sampled: 05/06/2017
Time Sampled: 0950

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	0.14	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	45.4	µg/L	1.0	0.5	7465/345
Chloroform	64.1	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	0.7	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	464	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	282	mg/L	20	20	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/15/17 2114	170512-1	1NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/15/17 2114	170512-1	1NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 0204	170512-2	3EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 1306	170512-3	1MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 2135	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2259	170510-1	12IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1707	2IC2132	3IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050556

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050556R
Sample Description: WG-05062017-BS-MW015S1

Date Sampled: 05/06/2017
Time Sampled: 0950

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 1343	170522-1	1MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050556R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050557
Sample Description: WG-05062017-BS-MW015S2

Date Sampled: 05/06/2017
Time Sampled: 1010

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	0.108	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(2)	µg/L	4.0	2	7465/345
1,2-Dichloroethane	ND(2)	µg/L	4.0	2	7465/345
Benzene	ND(2)	µg/L	4.0	2	7465/345
Carbon tetrachloride	208	µg/L	4.0	2	7465/345
Chloroform	8.1	µg/L	4.0	2	7465/345
Chloromethane	ND(2) QC	µg/L	4.0	2	7465/345
Methylene chloride	ND(2)	µg/L	4.0	2	7465/345
Tetrachloroethylene	ND(2)	µg/L	4.0	2	7465/345
Trichloroethylene	ND(2)	µg/L	4.0	2	7465/345
Vinyl chloride	ND(2)	µg/L	4.0	2	7465/345
1,2-Dichloropropane	ND(2)	µg/L	4.0	2	7465/345
Hardness (Calculated)	344	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	229	mg/L	20	20	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/15/17 2153	170512-1	1NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/15/17 2153	170512-1	1NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 0244	170512-2	3EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 1347	170512-3	1MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 2200	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2304	170510-1	12IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1743	2IC2132	4IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050557

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050557R
Sample Description: WG-05062017-BS-MW015S2

Date Sampled: 05/06/2017
Time Sampled: 1010

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 1423	170522-1	1MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050557R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050558
Sample Description: WG-05062017-BS-AMW005D

Date Sampled: 05/06/2017
Time Sampled: 1140

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	1.5	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	20.5	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	282	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	101	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/15/17 2232	170512-1	1NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/15/17 2232	170512-1	1NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 0323	170512-2	3EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 1427	170512-3	1MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 2225	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2308	170510-1	12IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1756	2IC2132	4IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050558

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050558R
Sample Description: WG-05062017-BS-AMW005D

Date Sampled: 05/06/2017
Time Sampled: 1140

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 1504	170522-1	1MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050558R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050559
Sample Description: WG-05062017-BS-AMW106D

Date Sampled: 05/06/2017
Time Sampled: 1105

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Trichloroethylene	1.3	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	449	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	129	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/15/17 2312	170512-1	1NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/15/17 2312	170512-1	1NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 0403	170512-2	3EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 1508	170512-3	1MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 2250	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2312	170510-1	12IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1808	2IC2132	4IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050559

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050559R
Sample Description: WG-05062017-BS-AMW106D

Date Sampled: 05/06/2017
Time Sampled: 1105

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 1544	170522-1	1MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050559R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050560
Sample Description: WG-05062017-JR-MW030S1

Date Sampled: 05/06/2017
Time Sampled: 0955

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/179
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/179
OXY Chlorinated Hyd.					
A-BHC	0.013	µg/L	1.0	0.011	7460/203
B-BHC	0.184	µg/L	1.0	0.037	7460/203
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/203
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/203
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/203
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/203
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/325
3-& 4-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/325
2,4-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/325
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/325
2,6-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/325
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/325
2,4,6-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/325
2,3,4,5-Tetrachlorophenol	ND(5.0) CE QC	µg/L	1.0	5.0	7471/325
2,3,4,6-Tetrachlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/325
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	6.3	µg/L	1.0	0.5	7465/345
Chloroform	5.0	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	0.7 ID	µg/L	1.0	0.5	7465/345
Trichloroethylene	0.7 ID	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	589 QC	mg/L as CaCO3	5.0	25	7443/991
Chloride	700	mg/L	100	100	7551/260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/11/17 1100	05/13/17 0729	170511-4	3NX5132	JMM	8151A(M)
Pentachlorophenol	05/11/17 1100	05/13/17 0729	170511-4	3NX5132	JMM	8151A(M)
OXY Chlorinated Hyd.	05/10/17 1800	05/13/17 0540	170510-1	3EX3132	JMM	8121
OXY GC/MS Acids	05/11/17 1700	05/17/17 0145	170511-5	2MS6136	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 2315	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/09/17 0855	05/19/17 1107	170509-2	2IP4139	KMW	6010B & SM 2340B
Chloride	N/A	05/18/17 0955	1IC2138	1IC2138	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050560

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050560R
Sample Description: WG-05062017-JR-MW030S1

Date Sampled: 05/06/2017
Time Sampled: 0955

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/18/17 1420	05/19/17 1137	170518-4	1MS6139	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050560R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050561
Sample Description: WG-05062017-JR-MW030S2

Date Sampled: 05/06/2017
Time Sampled: 1055

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/521
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/521
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/521
Carbon tetrachloride	47.6	µg/L	1.0	0.5	7466/521
Chloroform	1.7	µg/L	1.0	0.5	7466/521
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/521
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/521
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/521
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/521
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/521
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/521
Hardness (Calculated)	239	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	74	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/15/17 2351	170512-1	1NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/15/17 2351	170512-1	1NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 0443	170512-2	3EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 1548	170512-3	1MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1524	1MS8129	1MS8129	GMA	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2317	170510-1	12IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1857	2IC2132	4IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050561

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050561R
Sample Description: WG-05062017-JR-MW030S2

Date Sampled: 05/06/2017
Time Sampled: 1055

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 1624	170522-1	1MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050561R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050562
Sample Description: WG-05062017-JR-MW030S3

Date Sampled: 05/06/2017
Time Sampled: 1135

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	0.096	µg/L	1.0	0.011	7460/204
B-BHC	0.439	µg/L	1.0	0.037	7460/204
G-BHC	0.075	µg/L	1.0	0.052	7460/204
Hexachloroethane	3.78	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	0.06	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(100)	µg/L	200	100	7466/521
1,2-Dichloroethane	ND(100)	µg/L	200	100	7466/521
Benzene	ND(100)	µg/L	200	100	7466/521
Carbon tetrachloride	11700	µg/L	200	100	7466/521
Chloroform	200	µg/L	200	100	7466/521
Chloromethane	ND(100)	µg/L	200	100	7466/521
Methylene chloride	ND(100)	µg/L	200	100	7466/521
Tetrachloroethylene	ND(100)	µg/L	200	100	7466/521
Trichloroethylene	ND(100)	µg/L	200	100	7466/521
Vinyl chloride	ND(100)	µg/L	200	100	7466/521
1,2-Dichloropropane	ND(100)	µg/L	200	100	7466/521
Hardness (Calculated)	539	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	521	mg/L	50	50	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 0109	170512-1	2NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 0109	170512-1	2NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 1758	170512-2	5EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 1628	170512-3	1MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1600	1MS8129	1MS8129	GMA	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2321	170510-1	12IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1910	2IC2132	4IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050562

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050562R
Sample Description: WG-05062017-JR-MW030S3

Date Sampled: 05/06/2017
Time Sampled: 1135

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 1704	170522-1	1MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050562R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050563
Sample Description: WG-05062017-JR-FD5

Date Sampled: 05/06/2017
Time Sampled: 0000

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	0.089	µg/L	1.0	0.011	7460/204
B-BHC	0.405	µg/L	1.0	0.037	7460/204
G-BHC	0.070	µg/L	1.0	0.052	7460/204
Hexachloroethane	3.59	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	0.06	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(100)	µg/L	200	100	7466/521
1,2-Dichloroethane	ND(100)	µg/L	200	100	7466/521
Benzene	ND(100)	µg/L	200	100	7466/521
Carbon tetrachloride	11300	µg/L	200	100	7466/521
Chloroform	200	µg/L	200	100	7466/521
Chloromethane	ND(100)	µg/L	200	100	7466/521
Methylene chloride	ND(100)	µg/L	200	100	7466/521
Tetrachloroethylene	ND(100)	µg/L	200	100	7466/521
Trichloroethylene	ND(100)	µg/L	200	100	7466/521
Vinyl chloride	ND(100)	µg/L	200	100	7466/521
1,2-Dichloropropane	ND(100)	µg/L	200	100	7466/521
Hardness (Calculated)	534	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	529	mg/L	50	50	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 0148	170512-1	2NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 0148	170512-1	2NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 0602	170512-2	3EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 1709	170512-3	1MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1636	1MS8129	1MS8129	GMA	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2325	170510-1	12IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1922	2IC2132	4IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050563

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050563R
Sample Description: WG-05062017-JR-FD5

Date Sampled: 05/06/2017
Time Sampled: 0000

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 1745	170522-1	1MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050563R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050564
Sample Description: WG-05062017-DF-MW022S1

Date Sampled: 05/06/2017
Time Sampled: 1030

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/345
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/345
Carbon tetrachloride	21.3	µg/L	1.0	0.5	7465/345
Chloroform	3.0	µg/L	1.0	0.5	7465/345
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/345
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/345
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/345
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/345
Hardness (Calculated)	311	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	138	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 0228	170512-1	2NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 0228	170512-1	2NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 0642	170512-2	3EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 1750	170512-3	1MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1752	1MS9129	1MS9129	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2329	170510-1	12IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 1934	2IC2132	4IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050564

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050564R
Sample Description: WG-05062017-DF-MW022S1

Date Sampled: 05/06/2017
Time Sampled: 1030

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 1825	170522-1	1MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050564R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050565
Sample Description: WG-05062017-DF-MW140S1

Date Sampled: 05/06/2017
Time Sampled: 1240

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/521
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/521
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/521
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/521
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/521
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/521
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/521
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/521
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/521
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/521
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/521
Hardness (Calculated)	275	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	18.1	mg/L	1.0	1.0	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 0307	170512-1	2NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 0307	170512-1	2NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 0721	170512-2	3EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 2044	170512-3	2MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1747	1MS8129	1MS8129	GMA	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2334	170510-1	12IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 2011	2IC2132	5IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050565

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050565R
Sample Description: WG-05062017-DF-MW140S1

Date Sampled: 05/06/2017
Time Sampled: 1240

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 1905	170522-1	1MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050565R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050566
Sample Description: WG-05062017-DF-MW140S2/S3

Date Sampled: 05/06/2017
Time Sampled: 1315

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	0.04	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(10)	µg/L	20	10	7466/521
1,2-Dichloroethane	ND(10)	µg/L	20	10	7466/521
Benzene	ND(10)	µg/L	20	10	7466/521
Carbon tetrachloride	578	µg/L	20	10	7466/521
Chloroform	20	µg/L	20	10	7466/521
Chloromethane	ND(10)	µg/L	20	10	7466/521
Methylene chloride	ND(10)	µg/L	20	10	7466/521
Tetrachloroethylene	ND(10)	µg/L	20	10	7466/521
Trichloroethylene	ND(10)	µg/L	20	10	7466/521
Vinyl chloride	ND(10)	µg/L	20	10	7466/521
1,2-Dichloropropane	ND(10)	µg/L	20	10	7466/521
Hardness (Calculated)	757	mg/L as CaCO3	5.0	25	7443/990
Chloride	613	mg/L	50	50	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 0346	170512-1	2NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 0346	170512-1	2NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 0921	170512-2	4EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 2125	170512-3	2MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/09/17 1823	1MS8129	1MS8129	GMA	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2338	170510-1	12IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 2023	2IC2132	5IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050566

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050566R
Sample Description: WG-05062017-DF-MW140S2/S3

Date Sampled: 05/06/2017
Time Sampled: 1315

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 2117	170522-1	2MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050566R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050567
Sample Description: WG-05062017-DF-FD4

Date Sampled: 05/06/2017
Time Sampled: 1200

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/326
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/326
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/326
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/522
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/522
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/522
Carbon tetrachloride	14.1	µg/L	1.0	0.5	7466/522
Chloroform	2.2	µg/L	1.0	0.5	7466/522
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/522
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/522
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/522
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/522
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/522
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/522
Hardness (Calculated)	311	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	139	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 0425	170512-1	2NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 0425	170512-1	2NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 1000	170512-2	4EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/17/17 2204	170512-3	2MS6137	JMM	8270C
OXY Volatiles by 8260	N/A	05/10/17 1559	1MS8130	1MS8130	GMA	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2350	170510-1	13IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 2036	2IC2132	5IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050567

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050567R
Sample Description: WG-05062017-DF-FD4

Date Sampled: 05/06/2017
Time Sampled: 1200

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 2157	170522-1	2MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050567R

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Lab Number: 17050569
Sample Description: TB-5

Date Sampled: 05/06/2017
Time Sampled: 0000

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/521
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/521
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/521
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/521
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/521
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/521
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/521
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/521
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/521
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/521
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/521

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/09/17 1935	1MS8129	1MS8129	GMA	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17050569

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Appendix

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

ND indicates not detected with the LOQ (Limit of Quantitation) in parentheses. The LOQ value has been adjusted for the dilution factor and percent solids, as applicable. Due to rounding of significant figures, the LOQ value may vary slightly from the reported concentration. The LOQ is the lowest concentration of the analytical standard that was used for calibrating the instrument. If an analytical standard is analyzed at the LOQ, an error of as much as +/- 50% can be expected. N/A, if present, indicates not applicable.

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

No analysis with a holding time of seventy-two hours or less was performed in this Pace order.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

E - Concentration or reporting limit is an estimated value. Matrix interferences and/or sample heterogeneity were noted at the time of sample analysis.

FC - The confirmation analysis on a second GC column (or detector) resulted in a greater than 40% difference between the primary and confirmation results. The lower value was reported.

HP - Regulatory preparation holding time for this analysis was exceeded.

ID - This analyte did not meet qualitative criteria or was subject to chromatographic peak distortion. The reported sample concentration is estimated.

OC - The response for this analyte exceeded the calibration range of the instrument. Sample dilution and reanalysis is necessary to obtain an accurate result. The reported result, if provided, is estimated.

QC - QC data qualifiers were noted. See the Quality Control Report.

SR - One or more surrogate recoveries for this analysis did not meet quality control limits, or was diluted below the low calibration point. Please see the Quality Control Report for the sample surrogate data.

Additional Comments:

The OXY GC/MS Acids analyte 2-Chlorophenol was below the Laboratory Control Sample limits in QC Batch 170512-3. The associated samples were reprepared in QC Batch 170522-1 to confirm the analyte was not detected. Both sets of analyses are included on the enclosed report.

Following is the full name of each analyst that performed analysis(es) on this Pace order number:

Analyst Initials	Analyst Full Name
GMA	Guy Allen
JDL	John D. Lamer
JMM	Julie M. McCullough
KMW	Keegan M. Wilson
MLL	Melissa L. Lundgrin
RKR	Rhonda K. Reilly

Accreditation Summary

Client: Occidental Chemical Corporation_Oxy
Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Pace is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Pace is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Pace's full NELAP accreditation status may be viewed at www.kdheks.gov/envlab. Note that unless qualified otherwise in the Laboratory Report, Pace performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

Test	Analysis	Matrix-Regulatory Program	Method	Pace NELAP Accredited in Other Reg. Program
CL351	OXY Chlorinated Hyd.	L-RCRA	8121	
CL351	Hexachloroethane	L-RCRA	8121	No
CL351	Hexachlorobutadiene	L-RCRA	8121	No
MS302	OXY GC/MS Acids	L-RCRA	8270C	
MS302	3-& 4-Chlorophenol	L-RCRA	8270C	No
MS302	2,5-Dichlorophenol	L-RCRA	8270C	No
MS302	2,3,4,5-Tetrachlorophenol	L-RCRA	8270C	No

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170511-4	170511BLK4 05/12/17 1626	170511LCS4 05/12/17 1706	17050560MS 05/13/17 0809

Lab numbers associated with this batch:
17050542 17050543 17050544 17050545 17050546 17050547 17050548 17050549 17050551 17050552 17050553 17050560

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170512-1	170512BLK1 05/15/17 1837	170512LCS1 05/15/17 1916	17050679MS 05/16/17 0900

Lab numbers associated with this batch:
17050554 17050555 17050556 17050557 17050558 17050559 17050561 17050562 17050563 17050564 17050565 17050566 17050567

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL350	Pentachlorophenol	170511-4	170511BLK4 05/12/17 1626	170511LCS4 05/12/17 1706	17050560MS 05/13/17 0809

Lab numbers associated with this batch:
17050542 17050543 17050544 17050545 17050546 17050547 17050548 17050549 17050551 17050552 17050553 17050560

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL350	Pentachlorophenol	170512-1	170512BLK1 05/15/17 1837	170512LCS1 05/15/17 1916	17050679MS 05/16/17 0900

Lab numbers associated with this batch:
17050554 17050555 17050556 17050557 17050558 17050559 17050561 17050562 17050563 17050564 17050565 17050566 17050567

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL351	OXY Chlorinated Hyd.	170510-1	170510BLK1 05/12/17 1309	170510LCS1 05/12/17 1348	17050560MS 05/13/17 0619

Lab numbers associated with this batch:
17050542 17050543 17050544 17050545 17050546 17050546R 17050547 17050548 17050549 17050551 17050552 17050552R 17050553 17050553R 17050560

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL351	OXY Chlorinated Hyd.	170512-2	170512BLK2 05/15/17 2206	170512LCS2 05/15/17 2246	17050679MS 05/16/17 1319

Lab numbers associated with this batch:
17050554 17050554R 17050555 17050556 17050557 17050558 17050559 17050561 17050562 17050563 17050564 17050565 17050566 17050567

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS302	OXY GC/MS Acids	170511-5	170511BLK5 05/16/17 0957	170511LCS5 05/16/17 1038	17050560MS 05/17/17 0225

Lab numbers associated with this batch:
17050542 17050543 17050544 17050545 17050546 17050547 17050548 17050549 17050551 17050552 17050553 17050560

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS302	OXY GC/MS Acids	170512-3	170512BLK3 05/17/17 0945	170512LCS3 05/17/17 1025	17050679MS 05/18/17 1237

Lab numbers associated with this batch:
17050554 17050555 17050556 17050557 17050558 17050559 17050561 17050562 17050563 17050564 17050565 17050566 17050567

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS302	OXY GC/MS Acids	170517-1	170517BLK1 05/18/17 1638	170517LCS1 05/18/17 1718	

Lab numbers associated with this batch:
17050546R

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS302	OXY GC/MS Acids	170518-4	170518BLK4 05/19/17 1016	170518LCS4 05/19/17 1057	17050560RS 05/19/17 1218

Lab numbers associated with this batch:
17050560R

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS302	OXY GC/MS Acids	170522-1	170522BLK1 05/23/17 1102	170522LCS1 05/23/17 1142	17050679RS 05/24/17 0116

Lab numbers associated with this batch:
17050554R 17050555R 17050556R 17050557R 17050558R 17050559R 17050561R 17050562R 17050563R 17050564R 17050565R 17050566R 17050567R

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS350	OXY Volatiles by 8260	1MS8129	BLK1MS8129 05/09/17 1337	LCS1MS8129 05/09/17 1226	17050532RS 05/09/17 2122

Lab numbers associated with this batch:
17050547 17050561 17050562 17050563 17050565 17050566 17050569

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS350	OXY Volatiles by 8260	1MS9129	BLK1MS9129 05/09/17 1458	LCS1MS9129 05/09/17 1408	17050560MS 05/09/17 2339

Lab numbers associated with this batch:
17050542 17050543 17050544 17050545 17050546 17050548 17050549 17050550 17050551 17050552 17050553 17050554 17050555 17050556 17050557 17050558 17050559 17050560 17050564

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS350	OXY Volatiles by 8260	1MS8130	BLK1MS8130 05/10/17 1225	LCS1MS8130 05/10/17 1113	

Lab numbers associated with this batch:
17050567

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
SL423	Hardness (Calculated)	170509-2	170509BLK2 05/17/17 2034	170509LCS2 05/17/17 2038	17050560MS 05/19/17 1119

Lab numbers associated with this batch:
17050542 17050543 17050544 17050545 17050546 17050547 17050548 17050549 17050551 17050552 17050553 17050560

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
SL423	Hardness (Calculated)	170510-1	170510BLK1 05/17/17 2235	170510LCS1 05/17/17 2239	17050679MS 05/18/17 0011

Lab numbers associated with this batch:
17050554 17050555 17050556 17050557 17050558 17050559 17050561 17050562 17050563 17050564 17050565 17050566 17050567

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL502	Chloride	1IC2132	BLK1IC2132 05/12/17 1021	LCS1IC2132 05/12/17 1033	17050553MS 05/12/17 1553

Lab numbers associated with this batch:
17050542 17050543 17050544 17050545 17050546 17050547 17050548 17050549 17050551 17050552 17050553

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL502	Chloride	1IC2138	BLK1IC2138 05/18/17 0930	LCS1IC2138 05/18/17 0942	17050560MS 05/18/17 1007

Lab numbers associated with this batch:
17050560

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL502	Chloride	2IC2132	BLK2IC2132 05/12/17 1617	LCS2IC2132 05/12/17 1630	17050679MS 05/12/17 2137

Lab numbers associated with this batch:
17050554 17050555 17050556 17050557 17050558 17050559 17050561 17050562 17050563 17050564 17050565 17050566 17050567

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170509-2	**For samples prepared on: 05/09/2017 0855**					**Spiked sample: 17050560**						
Hardness (Calculated)	ND(5.0)	86.0	80.0-120	357	mg/L a	76.8 ML	78.0 ML	80.0-120	357	mg/L a	1.60	20.0
QC Batch: 170510-1	**For samples prepared on: 05/10/2017 1800**					**Spiked sample: 17050560**						
OXY Chlorinated Hyd.												
A-BHC	ND(0.011)	102	75.0-125	0.50	µg/L	102	105	76.1-127	0.50	µg/L	2.90	16.0
B-BHC	ND(0.037)	101	68.0-125	0.50	µg/L	99.7	106	71.5-125	0.50	µg/L	6.10	18.0
G-BHC	ND(0.052)	101	72.5-123	0.50	µg/L	105	108	73.9-126	0.50	µg/L	2.80	17.4
Hexachloroethane	ND(0.02)	83.4	55.1-115	0.50	µg/L	83.8	83.8	45.8-118	0.50	µg/L	0.00	33.4
Hexachlorobutadiene	ND(0.02)	78.4	35.3-134	0.50	µg/L	77.4	78.2	36.7-122	0.50	µg/L	1.00	37.9
Hexachlorobenzene	ND(0.10)	90.8	63.7-119	0.50	µg/L	87.6	87.6	62.9-119	0.50	µg/L	0.00	20.7
D-BHC	ND(0.05)	103	70.6-126	0.50	µg/L	110	114	71.7-131	0.50	µg/L	3.60	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	83.7	85.3	65.9-110	8.0	µg/L	91.8	95.6	65.9-110	8.0	µg/L		
QC Batch: 170510-1	**For samples prepared on: 05/10/2017 1053**					**Spiked sample: 17050679**						
Hardness (Calculated)	ND(5.0)	88.9	80.0-120	357	mg/L a	MN	MN	80.0-120	357	mg/L a	**	20.0
QC Batch: 170511-4	**For samples prepared on: 05/11/2017 1100**					**Spiked sample: 17050560**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	84.3	58.8-127	4.0	µg/L	87.7	89.7	64.6-126	4.0	µg/L	2.30	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	73.4	92.1	62.2-119	5.0	µg/L	101	106	62.2-119	5.0	µg/L		
QC Batch: 170511-4	**For samples prepared on: 05/11/2017 1100**					**Spiked sample: 17050560**						
Pentachlorophenol	ND(0.5)	86.8	66.3-127	4.0	µg/L	62.1	65.1	7.60-144	4.0	µg/L	4.70	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	73.4	92.1	62.2-119	5.0	µg/L	101	106	62.2-119	5.0	µg/L		
QC Batch: 170511-5	**For samples prepared on: 05/11/2017 1700**					**Spiked sample: 17050560**						
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	91.1	75.9-99.3	50.0	µg/L	87.8	63.1 MZ	75.1-100	50.0	µg/L	32.7	13.9
3-& 4-Chlorophenol	ND(5.0)	80.2	56.0-90.2	50.0	µg/L	76.9	56.4 MZ	58.8-91.2	50.0	µg/L	30.8	14.5
2,4-Dichlorophenol	ND(5.0)	96.0	68.2-106	50.0	µg/L	100.	68.4 MP	65.6-112	50.0	µg/L	37.5	21.2
2,5-Dichlorophenol	ND(5.0)	96.9	73.9-103	50.0	µg/L	91.2	71.0	65.4-106	50.0	µg/L	24.9	27.7
2,6-Dichlorophenol	ND(5.0)	97.6	78.3-104	50.0	µg/L	97.5	68.9 MZ	76.7-107	50.0	µg/L	34.4	13.4
2,4,5-Trichlorophenol	ND(5.0)	97.4	75.3-109	50.0	µg/L	95.7	70.5 MZ	72.4-114	50.0	µg/L	30.3	12.9
2,4,6-Trichlorophenol	ND(5.0)	94.2	77.1-110	50.0	µg/L	95.9	67.4 MZ	75.0-116	50.0	µg/L	34.9	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	93.1 CE	72.5-115	100	µg/L	95.1 CE	70.5 CE MZ	74.5-120	100	µg/L	29.7	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	104	71.6-118	50.0	µg/L	100.	74.0 MP	73.7-122	50.0	µg/L	29.9	13.4
Surrogate Data:												
PHENOL-d6	36.7	40.7	25.6-44.5	150	µg/L	35.7	26.9	25.6-44.5	150	µg/L		
2-FLUOROPHENOL	57.6	60.6	42.2-68.2	150	µg/L	54.7	40.9 SL	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	83.0	97.7	53.9-131	150	µg/L	99.4	72.3	53.9-131	150	µg/L		
QC Batch: 170512-1	**For samples prepared on: 05/12/2017 0700**					**Spiked sample: 17050679**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	107	58.8-127	4.0	µg/L	MN	MN	64.6-126	4.0	µg/L	**	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	94.8	102	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170512-1	**For samples prepared on: 05/12/2017 0700**					**Spiked sample: 17050679**						
Pentachlorophenol	ND(0.5)	95.0	66.3-127	4.0	µg/L	MN	MN	7.60-144	4.0	µg/L	**	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	94.8	102	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170512-2	**For samples prepared on: 05/12/2017 1200**					**Spiked sample: 17050679**						
OXY Chlorinated Hyd.						MN	MN					
A-BHC	ND(0.011)	101	75.0-125	0.50	µg/L			76.1-127	0.50	µg/L	**	16.0
B-BHC	ND(0.037)	103	68.0-125	0.50	µg/L			71.5-125	0.50	µg/L	**	18.0
G-BHC	ND(0.052)	95.8	72.5-123	0.50	µg/L			73.9-126	0.50	µg/L	**	17.4
Hexachloroethane	ND(0.02)	78.0	55.1-115	0.50	µg/L			45.8-118	0.50	µg/L	**	33.4
Hexachlorobutadiene	ND(0.02)	75.4	35.3-134	0.50	µg/L			36.7-122	0.50	µg/L	**	37.9
Hexachlorobenzene	ND(0.10)	91.0	63.7-119	0.50	µg/L			62.9-119	0.50	µg/L	**	20.7
D-BHC	ND(0.05)	105	70.6-126	0.50	µg/L			71.7-131	0.50	µg/L	**	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	85.2	86.9	65.9-110	8.0	µg/L	MN	MN	65.9-110	8.0	µg/L	**	
QC Batch: 170512-3	**For samples prepared on: 05/12/2017 1500**					**Spiked sample: 17050679**						
OXY GC/MS Acids						MN	MN					
2-Chlorophenol	ND(5.0)	75.6 LL	75.9-99.3	50.0	µg/L			75.1-100	50.0	µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	68.9	56.0-90.2	50.0	µg/L			58.8-91.2	50.0	µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	84.7	68.2-106	50.0	µg/L			65.6-112	50.0	µg/L	**	21.2
2,5-Dichlorophenol	ND(5.0)	75.0	73.9-103	50.0	µg/L			65.4-106	50.0	µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	83.9	78.3-104	50.0	µg/L			76.7-107	50.0	µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	85.3	75.3-109	50.0	µg/L			72.4-114	50.0	µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	80.6	77.1-110	50.0	µg/L			75.0-116	50.0	µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	74.8 CE	72.5-115	100	µg/L			74.5-120	100	µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	84.1	71.6-118	50.0	µg/L			73.7-122	50.0	µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	36.0	33.0	25.6-44.5	150	µg/L	MN	MN	25.6-44.5	150	µg/L	**	
2-FLUOROPHENOL	57.0	50.9	42.2-68.2	150	µg/L	MN	MN	42.2-68.2	150	µg/L	**	
2,4,6-TRIBROMOPHENOL	86.5	89.4	53.9-131	150	µg/L	MN	MN	53.9-131	150	µg/L	**	
QC Batch: 170517-1	**For samples prepared on: 05/17/2017 1530**					**Spiked sample:**						
OXY GC/MS Acids						MN	MN					
2-Chlorophenol	ND(5.0)	88.0	75.9-99.3	50.0	µg/L			75.1-100		µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	78.7	56.0-90.2	50.0	µg/L			58.8-91.2		µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	96.5	68.2-106	50.0	µg/L			65.6-112		µg/L	**	21.2
2,5-Dichlorophenol	ND(5.0)	94.7	73.9-103	50.0	µg/L			65.4-106		µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	96.8	78.3-104	50.0	µg/L			76.7-107		µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	96.5	75.3-109	50.0	µg/L			72.4-114		µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	89.0	77.1-110	50.0	µg/L			75.0-116		µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	84.2 CE	72.5-115	100	µg/L			74.5-120		µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	91.9	71.6-118	50.0	µg/L			73.7-122		µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	38.8	41.3	25.6-44.5	150	µg/L	MN	MN	25.6-44.5		µg/L	**	
2-FLUOROPHENOL	58.6	62.4	42.2-68.2	150	µg/L	MN	MN	42.2-68.2		µg/L	**	
2,4,6-TRIBROMOPHENOL	78.4	101	53.9-131	150	µg/L	MN	MN	53.9-131		µg/L	**	
QC Batch: 170518-4	**For samples prepared on: 05/18/2017 1420**					**Spiked sample: 17050560R**						
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	89.1	75.9-99.3	50.0	µg/L	88.7	85.8	75.1-100	50.0	µg/L	3.30	13.9
3-& 4-Chlorophenol	ND(5.0)	78.6	56.0-90.2	50.0	µg/L	77.9	76.1	58.8-91.2	50.0	µg/L	2.30	14.5
2,4-Dichlorophenol	ND(5.0)	97.9	68.2-106	50.0	µg/L	87.5	92.8	65.6-112	50.0	µg/L	5.90	21.2
2,5-Dichlorophenol	ND(5.0)	98.2	73.9-103	50.0	µg/L	110. MH	100.	65.4-106	50.0	µg/L	9.50	27.7
2,6-Dichlorophenol	ND(5.0)	103	78.3-104	50.0	µg/L	102	98.9	76.7-107	50.0	µg/L	3.10	13.4
2,4,5-Trichlorophenol	ND(5.0)	101	75.3-109	50.0	µg/L	100.	97.6	72.4-114	50.0	µg/L	2.40	12.9
2,4,6-Trichlorophenol	ND(5.0)	95.1	77.1-110	50.0	µg/L	100.	95.6	75.0-116	50.0	µg/L	4.50	15.7

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170518-4	**For samples prepared on: 05/18/2017 1420**					**Spiked sample: 17050560R**						
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	98.2 CE	72.5-115	100	µg/L	98.5 CE	96.2 CE	74.5-120	100	µg/L	2.40	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	105	71.6-118	50.0	µg/L	107	102	73.7-122	50.0	µg/L	4.80	13.4
Surrogate Data:												
PHENOL-d6	33.8	35.8	25.6-44.5	150	µg/L	34.5	33.7	25.6-44.5	150	µg/L		
2-FLUOROPHENOL	54.1	55.3	42.2-68.2	150	µg/L	53.7	52.2	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	96.9	116	53.9-131	150	µg/L	115	112	53.9-131	150	µg/L		
QC Batch: 170522-1	**For samples prepared on: 05/22/2017 0800**					**Spiked sample: 17050679R**						
OXY GC/MS Acids						MN	MN					
2-Chlorophenol	ND(5.0)	87.3	75.9-99.3	50.0	µg/L			75.1-100	50.0	µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	78.3	56.0-90.2	50.0	µg/L			58.8-91.2	50.0	µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	92.8	68.2-106	50.0	µg/L			65.6-112	50.0	µg/L	**	21.2
2,5-Dichlorophenol	ND(5.0)	104 LH	73.9-103	50.0	µg/L			65.4-106	50.0	µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	101	78.3-104	50.0	µg/L			76.7-107	50.0	µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	102	75.3-109	50.0	µg/L			72.4-114	50.0	µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	101	77.1-110	50.0	µg/L			75.0-116	50.0	µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	95.2 CE	72.5-115	100	µg/L			74.5-120	100	µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	104	71.6-118	50.0	µg/L			73.7-122	50.0	µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	33.5	35.8	25.6-44.5	150	µg/L	MN	MN	25.6-44.5	150	µg/L	**	
2-FLUOROPHENOL	52.7	55.6	42.2-68.2	150	µg/L	MN	MN	42.2-68.2	150	µg/L	**	
2,4,6-TRIBROMOPHENOL	100.	118	53.9-131	150	µg/L	MN	MN	53.9-131	150	µg/L	**	
QC Batch: 1IC2132	**For sample analyzed on: 05/12/2017**					**Spiked sample: 17050553**						
Chloride	ND(1.0)	103	90.0-110	4.0	mg/L	98.7	98.0	68.4-120	400	mg/L	0.710	21.6
QC Batch: 1IC2138	**For sample analyzed on: 05/18/2017**					**Spiked sample: 17050560**						
Chloride	ND(1.0)	102	90.0-110	4.0	mg/L	97.5	94.0	68.4-120	400	mg/L	3.70	21.6
QC Batch: 1MS8129	**For sample analyzed on: 05/09/2017**					**Spiked sample: 17050532R**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	94.8	80.0-120	10.0	µg/L			83.0-121	50.0	µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	97.6	75.6-120	10.0	µg/L			77.5-122	50.0	µg/L	**	9.5
Benzene	ND(0.5)	97.0	80.0-120	10.0	µg/L			82.7-117	50.0	µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	97.4	79.9-125	10.0	µg/L			79.0-125	50.0	µg/L	**	13.6
Chloroform	ND(0.5)	93.6	79.6-120	10.0	µg/L			78.4-117	50.0	µg/L	**	9.2
Chloromethane	ND(0.5)	94.4	70.2-127	10.0	µg/L			69.7-129	50.0	µg/L	**	15.9
Methylene chloride	ND(0.5)	93.1	77.1-120	10.0	µg/L			76.3-119	50.0	µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	104	80.0-120	10.0	µg/L			82.0-121	50.0	µg/L	**	11.3
Trichloroethylene	ND(0.5)	97.1	80.0-120	10.0	µg/L			79.3-120	50.0	µg/L	**	13.7
Vinyl chloride	ND(0.5)	88.4	76.2-128	10.0	µg/L			78.0-130	50.0	µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	91.8	79.5-120	10.0	µg/L			81.7-117	50.0	µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	95.8	98.9	76.2-126	10.0	µg/L	MN	MN	76.2-126	50.0	µg/L	**	
TOLUENE-d8	100.	107	80.0-120	10.0	µg/L	MN	MN	80.0-120	50.0	µg/L	**	
QC Batch: 1MS8130	**For sample analyzed on: 05/10/2017**					**Spiked sample:**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	98.0	80.0-120	10.0	µg/L			83.0-121		µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	96.8	75.6-120	10.0	µg/L			77.5-122		µg/L	**	9.5
Benzene	ND(0.5)	99.8	80.0-120	10.0	µg/L			82.7-117		µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	100.	79.9-125	10.0	µg/L			79.0-125		µg/L	**	13.6

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 1MS8130	**For sample analyzed on: 05/10/2017**					**Spiked sample:**						
Chloroform	ND(0.5)	96.6	79.6-120	10.0	µg/L			78.4-117		µg/L	**	9.2
Chloromethane	ND(0.5)	96.9	70.2-127	10.0	µg/L			69.7-129		µg/L	**	15.9
Methylene chloride	ND(0.5)	95.7	77.1-120	10.0	µg/L			76.3-119		µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	106	80.0-120	10.0	µg/L			82.0-121		µg/L	**	11.3
Trichloroethylene	ND(0.5)	97.7	80.0-120	10.0	µg/L			79.3-120		µg/L	**	13.7
Vinyl chloride	ND(0.5)	90.7	76.2-128	10.0	µg/L			78.0-130		µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	94.2	79.5-120	10.0	µg/L			81.7-117		µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	102	99.6	76.2-126	10.0	µg/L	MN	MN	76.2-126		µg/L	**	
TOLUENE-d8	101	106	80.0-120	10.0	µg/L	MN	MN	80.0-120		µg/L	**	
QC Batch: 1MS9129	**For sample analyzed on: 05/09/2017**					**Spiked sample: 17050560**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	95.3	80.0-120	10.0	µg/L	102	96.9	83.0-121	10.0	µg/L	5.10	9.8
1,2-Dichloroethane	ND(0.5)	82.5	75.6-120	10.0	µg/L	95.6	90.0	77.5-122	10.0	µg/L	6.00	9.5
Benzene	ND(0.5)	110.	80.0-120	10.0	µg/L	115	111	82.7-117	10.0	µg/L	3.50	8.3
Carbon tetrachloride	ND(0.5)	97.5	79.9-125	10.0	µg/L	99.3	94.6	79.0-125	10.0	µg/L	4.80	13.6
Chloroform	ND(0.5)	101	79.6-120	10.0	µg/L	103	98.6	78.4-117	10.0	µg/L	4.40	9.2
Chloromethane	ND(0.5)	127	70.2-127	10.0	µg/L	136 MH	121	69.7-129	10.0	µg/L	11.7	15.9
Methylene chloride	ND(0.5)	104	77.1-120	10.0	µg/L	112	107	76.3-119	10.0	µg/L	4.60	9.6
Tetrachloroethylene	ND(0.5)	96.5	80.0-120	10.0	µg/L	104	99.1	82.0-121	10.0	µg/L	4.80	11.3
Trichloroethylene	ND(0.5)	104	80.0-120	10.0	µg/L	112	112	79.3-120	10.0	µg/L	0.00	13.7
Vinyl chloride	ND(0.5)	109	76.2-128	10.0	µg/L	110.	106	78.0-130	10.0	µg/L	3.70	14.6
1,2-Dichloropropane	ND(0.5)	94.5	79.5-120	10.0	µg/L	100.	100.	81.7-117	10.0	µg/L	0.00	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	94.8	93.6	76.2-126	10.0	µg/L	96.0	91.7	76.2-126	10.0	µg/L		
TOLUENE-d8	104	105	80.0-120	10.0	µg/L	110.	106	80.0-120	10.0	µg/L		
QC Batch: 2IC2132	**For sample analyzed on: 05/12/2017**					**Spiked sample: 17050679**						
Chloride	ND(1.0)	103	90.0-110	4.0	mg/L	MN	MN	68.4-120	40.0	mg/L	**	21.6

Data Qualifiers:

ML - The matrix spike and/or matrix spike duplicate recovery for this analyte was below the method or laboratory control limit. See LCS data for the basis for acceptance of this sample. The reported sample concentration is estimated.

MN - The MS/MSD sample analyses were not performed on a sample from this Pace order number.

MZ - The MSD recovery and the MS/MSD precision for this analyte were outside of method or laboratory control limits. See LCS data for the basis for acceptance of this sample. Reported sample concentration is estimated.

MP - The MS/MSD recoveries for this analyte exceeded the method or laboratory precision control limit. The reported sample concentration is estimated.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

SL - The surrogate recovery for this analysis was below the method or laboratory control limits. The reported sample concentration may be biased low.

LL - The Laboratory Control Sample (LCS) recovery for this analyte was below the method or laboratory quality control limit. The reported sample concentration may be biased low.

MH - The matrix spike and/or matrix spike duplicate recovery for this analyte was above the method or laboratory control limit. See LCS data for the basis for acceptance of this sample. The reported sample concentration is estimated.

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit

LH - The Laboratory Control Sample (LCS) recovery for this analyte was above the method or laboratory quality control limit. The reported sample concentration may be biased high.

** - RPD calculation not applicable/not available for this analysis.

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050542		**Sample Description: WG-05052017-DF-MW011S3A**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	72.7	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/12/2017	5.0	µg/L	72.7	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	93.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	30.4	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	47.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	70.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	91.6	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	103	80.0-120
Lab Number: 17050543		**Sample Description: WG-05052017-DF-MW011S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	72.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	72.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	93.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	32.5	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	49.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	81.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	96.8	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	105	80.0-120
Lab Number: 17050544		**Sample Description: WG-05052017-DF-MW011S3B**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	71.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	71.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	90.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	28.8	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	45.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	73.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	103	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	99.7	80.0-120
Lab Number: 17050545		**Sample Description: WG-05052017-DF-MW137S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	75.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	75.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	89.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	33.5	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050545		**Sample Description: WG-05052017-DF-MW137S2**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	50.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	78.4	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	93.5	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	104	80.0-120
Lab Number: 17050546		**Sample Description: WG-05052017-DF-MW021S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	76.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	76.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/12/2017	8.0	µg/L	95.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	24.1 SL	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	35.0 SL	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	74.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	96.3	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	101	80.0-120
Lab Number: 17050546R		**Sample Description: WG-05052017-DF-MW021S1**				
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/15/2017	8.0	µg/L	103	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/17/2017	05/18/2017	150	µg/L	35.0	25.6-44.5
2-FLUOROPHENOL	05/17/2017	05/18/2017	150	µg/L	56.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/17/2017	05/18/2017	150	µg/L	97.5	53.9-131
Lab Number: 17050547		**Sample Description: WG-05052017-DF-MW136S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	70.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	70.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/13/2017	8.0	µg/L	88.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	33.8	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	51.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	79.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	94.3	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	102	80.0-120
Lab Number: 17050548		**Sample Description: WG-05052017-JD-ER10**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	73.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	73.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/13/2017	8.0	µg/L	85.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	34.1	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050548		**Sample Description: WG-05052017-JD-ER10**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	52.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	80.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	97.8	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	105	80.0-120
Lab Number: 17050549		**Sample Description: WG-05052017-JR-MW143S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	69.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	69.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/13/2017	8.0	µg/L	83.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	32.4	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	49.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	91.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	90.7	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	103	80.0-120
Lab Number: 17050550		**Sample Description: TB-4**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	93.9	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	101	80.0-120
Lab Number: 17050551		**Sample Description: WG-05052017-BS-MW014S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	68.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	68.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/13/2017	8.0	µg/L	92.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/16/2017	150	µg/L	32.3	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/16/2017	150	µg/L	49.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/16/2017	150	µg/L	77.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	90.3	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	103	80.0-120
Lab Number: 17050552		**Sample Description: WG-05052017-BS-MW014S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	67.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	67.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/13/2017	8.0	µg/L	93.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/17/2017	150	µg/L	33.0	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/17/2017	150	µg/L	51.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/17/2017	150	µg/L	83.5	53.9-131

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050552		**Sample Description: WG-05052017-BS-MW014S3**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	1000	µg/L	87.4	76.2-126
TOLUENE-d8		05/09/2017	1000	µg/L	102	80.0-120
Lab Number: 17050552R		**Sample Description: WG-05052017-BS-MW014S3**				
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/15/2017	8.0	µg/L	101	65.9-110
Lab Number: 17050553		**Sample Description: WG-05052017-BS-MW012S1A**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	88.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	88.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/13/2017	8.0	µg/L	96.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/17/2017	150	µg/L	37.8	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/17/2017	150	µg/L	57.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/17/2017	150	µg/L	92.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	1000	µg/L	97.7	76.2-126
TOLUENE-d8		05/09/2017	1000	µg/L	103	80.0-120
Lab Number: 17050553R		**Sample Description: WG-05052017-BS-MW012S1A**				
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/15/2017	8.0	µg/L	107	65.9-110
Lab Number: 17050554		**Sample Description: WG-05052017-BS-MW012S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	101	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	101	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/15/2017	8.0	µg/L	83.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	32.7	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	51.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	85.4	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	97.3	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	101	80.0-120
Lab Number: 17050554R		**Sample Description: WG-05052017-BS-MW012S3**				
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	91.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	31.9	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	50.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	91.8	53.9-131
Lab Number: 17050555		**Sample Description: WG-05052017-BS-MW23BR**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	82.1	62.2-119

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050555		**Sample Description: WG-05052017-BS-MW23BR**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	82.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	88.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	31.0	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	48.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	89.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	98.4	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	105	80.0-120
Lab Number: 17050555R		**Sample Description: WG-05052017-BS-MW23BR**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	31.7	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	50.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	98.5	53.9-131
Lab Number: 17050556		**Sample Description: WG-05062017-BS-MW015S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	87.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	87.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	89.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	30.4	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	46.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	82.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	99.8	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	104	80.0-120
Lab Number: 17050556R		**Sample Description: WG-05062017-BS-MW015S1**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	32.9	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	51.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	101	53.9-131
Lab Number: 17050557		**Sample Description: WG-05062017-BS-MW015S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	83.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	83.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	87.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	36.4	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	57.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	88.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	40	µg/L	88.9	76.2-126
TOLUENE-d8		05/09/2017	40	µg/L	105	80.0-120

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050557R		**Sample Description: WG-05062017-BS-MW015S2**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	33.9	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	54.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	98.7	53.9-131
Lab Number: 17050558		**Sample Description: WG-05062017-BS-AMW005D**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	90.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	90.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	95.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	33.2	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	53.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	96.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	95.1	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	104	80.0-120
Lab Number: 17050558R		**Sample Description: WG-05062017-BS-AMW005D**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	32.6	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	50.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	108	53.9-131
Lab Number: 17050559		**Sample Description: WG-05062017-BS-AMW106D**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	82.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	82.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	87.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	32.0	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	50.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	97.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	97.6	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	101	80.0-120
Lab Number: 17050559R		**Sample Description: WG-05062017-BS-AMW106D**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	33.1	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	51.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	103	53.9-131
Lab Number: 17050560		**Sample Description: WG-05062017-JR-MW030S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	69.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/11/2017	05/13/2017	5.0	µg/L	69.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/10/2017	05/13/2017	8.0	µg/L	96.0	65.9-110

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050560		**Sample Description: WG-05062017-JR-MW030S1**				
OXY GC/MS Acids						
PHENOL-d6	05/11/2017	05/17/2017	150	µg/L	33.9	25.6-44.5
2-FLUOROPHENOL	05/11/2017	05/17/2017	150	µg/L	52.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/11/2017	05/17/2017	150	µg/L	88.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	97.6	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	102	80.0-120
Lab Number: 17050560R		**Sample Description: WG-05062017-JR-MW030S1**				
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/19/2017	150	µg/L	34.3	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/19/2017	150	µg/L	55.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/19/2017	150	µg/L	99.3	53.9-131
Lab Number: 17050561		**Sample Description: WG-05062017-JR-MW030S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	85.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/15/2017	5.0	µg/L	85.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	83.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	32.3	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	52.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	93.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	98.0	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	99.0	80.0-120
Lab Number: 17050561R		**Sample Description: WG-05062017-JR-MW030S2**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	30.5	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	48.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	95.5	53.9-131
Lab Number: 17050562		**Sample Description: WG-05062017-JR-MW030S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	76.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	76.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	88.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	33.5	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	53.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	91.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	2000	µg/L	98.7	76.2-126
TOLUENE-d8		05/09/2017	2000	µg/L	98.1	80.0-120
Lab Number: 17050562R		**Sample Description: WG-05062017-JR-MW030S3**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	35.5	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050562R		**Sample Description: WG-05062017-JR-MW030S3**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	55.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	107	53.9-131
Lab Number: 17050563		**Sample Description: WG-05062017-JR-FD5**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	80.3	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	80.3	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	82.3	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	32.6	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	50.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	83.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	2000	µg/L	102	76.2-126
TOLUENE-d8		05/09/2017	2000	µg/L	99.2	80.0-120
Lab Number: 17050563R		**Sample Description: WG-05062017-JR-FD5**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	36.2	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	58.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	109	53.9-131
Lab Number: 17050564		**Sample Description: WG-05062017-DF-MW022S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	81.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	81.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	82.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	32.2	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	50.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	83.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	104	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	96.2	80.0-120
Lab Number: 17050564R		**Sample Description: WG-05062017-DF-MW022S1**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	36.4	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	58.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	97.6	53.9-131
Lab Number: 17050565		**Sample Description: WG-05062017-DF-MW140S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	84.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	84.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	88.9	65.9-110

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050565		**Sample Description: WG-05062017-DF-MW140S1**				
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	34.2	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	52.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	82.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	105	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	97.9	80.0-120
Lab Number: 17050565R		**Sample Description: WG-05062017-DF-MW140S1**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	32.2	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	51.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	92.8	53.9-131
Lab Number: 17050566		**Sample Description: WG-05062017-DF-MW140S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	73.7	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	73.7	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	86.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	30.8	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	48.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	84.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	200	µg/L	101	76.2-126
TOLUENE-d8		05/09/2017	200	µg/L	99.5	80.0-120
Lab Number: 17050566R		**Sample Description: WG-05062017-DF-MW140S2/S3**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	32.0	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	51.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	96.7	53.9-131
Lab Number: 17050567		**Sample Description: WG-05062017-DF-FD4**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	82.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	82.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	84.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/17/2017	150	µg/L	36.1	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/17/2017	150	µg/L	54.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/17/2017	150	µg/L	82.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/10/2017	10	µg/L	98.1	76.2-126
TOLUENE-d8		05/10/2017	10	µg/L	104	80.0-120
Lab Number: 17050567R		**Sample Description: WG-05062017-DF-FD4**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	34.8	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050567R		**Sample Description: WG-05062017-DF-FD4**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	55.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	93.2	53.9-131
Lab Number: 17050569		**Sample Description: TB-5**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/09/2017	10	µg/L	101	76.2-126
TOLUENE-d8		05/09/2017	10	µg/L	94.2	80.0-120

Data Qualifiers:
SL - The surrogate recovery for this analysis was below the method or laboratory control limits. The reported sample concentration may be biased low.

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
2,4-Dichlorophenoxyacetic Acid	05/12/2017	2NX5132	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/13/2017	3NX5132	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/13/2017	4NX5132	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/15/2017	1NX5135	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/16/2017	2NX5135	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/16/2017	3NX5135	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/12/2017	2NX5132	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/13/2017	3NX5132	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/13/2017	4NX5132	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/15/2017	1NX5135	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/16/2017	2NX5135	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/16/2017	3NX5135	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/12/2017	2EX3132	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/13/2017	3EX3132	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/13/2017	4EX3132	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/15/2017	2EX3135	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/16/2017	3EX3135	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/16/2017	4EX3135	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/16/2017	5EX3135	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/16/2017	6EX3135	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/12/2017	2IC2132	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/12/2017	3IC2132	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/12/2017	4IC2132	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/12/2017	5IC2132	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/12/2017	6IC2132	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/18/2017	1IC2138	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/18/2017	2IC2138	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/16/2017	1MS6136	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/16/2017	2MS6136	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/17/2017	3MS6136	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/17/2017	1MS6137	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/17/2017	2MS6137	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/18/2017	1MS6138	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/18/2017	2MS6138	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/19/2017	1MS6139	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/19/2017	2MS6139	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/23/2017	1MS6143	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/23/2017	2MS6143	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/24/2017	3MS6143	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/09/2017	1MS8129	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/09/2017	2MS8129	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/10/2017	1MS8130	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/10/2017	2MS8130	CCV recovery acceptable for this Instrument Batch.			

Quality Control Report
Continuing Calibration Report

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/06/2017
Pace File No: 7775
Pace Order No: 140300

OXY Volatiles by 8260	05/09/2017		CCV recovery acceptable except as qualified below.				
Chloromethane	05/09/2017	1MS9129	10.0	12.7	µg/L	127	CH

Samples associated with this Continuing Calibration Verification:

Laboratory Number	Instrument Batch	Sample Description
17050542	1MS9129	WG-05052017-DF-MW011S3A
17050543	1MS9129	WG-05052017-DF-MW011S1
17050544	1MS9129	WG-05052017-DF-MW011S3B
17050545	1MS9129	WG-05052017-DF-MW137S2
17050546	1MS9129	WG-05052017-DF-MW021S1
17050548	1MS9129	WG-05052017-JD-ER10
17050549	1MS9129	WG-05052017-JR-MW143S2/S3
17050550	1MS9129	TB-4
17050551	1MS9129	WG-05052017-BS-MW014S1
17050552	1MS9129	WG-05052017-BS-MW014S3
17050553	1MS9129	WG-05052017-BS-MW012S1A
17050554	1MS9129	WG-05052017-BS-MW012S3
17050555	1MS9129	WG-05052017-BS-MW23BR
17050556	1MS9129	WG-05062017-BS-MW015S1
17050557	1MS9129	WG-05062017-BS-MW015S2
17050558	1MS9129	WG-05062017-BS-AMW005D
17050559	1MS9129	WG-05062017-BS-AMW106D
17050560	1MS9129	WG-05062017-JR-MW030S1
17050564	1MS9129	WG-05062017-DF-MW022S1

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
OXY Volatiles by 8260	05/10/2017	2MS9129	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/17/2017	10IP4137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/17/2017	11IP4137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/17/2017	12IP4137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/17/2017	13IP4137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/18/2017	14IP4137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/19/2017	2IP4139	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/19/2017	3IP4139	CCV recovery acceptable for this Instrument Batch.			

Data Qualifiers:
CH - The continuing calibration verification (CCV) standard recovery for this analyte was above the method or SOP limit. The reported concentration for this analyte may be biased high.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Discrepancies See C/S RF

Page: 1 of 4

2059292

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Kogl	Attention:
Address: 2216 Pawnee Shed Wichita KS	Copy To: Paul McMahon	Company Name:
		Address:
Email To: Travis Kogl	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Oxy Spring 2017 GWM	Pace Project Manager: Greg Groene
Requested Due Date/TAT:	Project Number: 11137198	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

Matrix Codes MATRIX / CODE

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

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOCs	SVOCs	Pest/Herbs	Chloride Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05052017-DF-MW011s3A	WT	G			5/5/17	1615		8	5			3					Y	X	X	X	X		
2	WG-05052017-DF-MW011s1						1525		8	5			3					Y	X	X	X	X		
3	WG-05052017-DF-MW011s3B						1420		8	5			3					Y	X	X	X	X		
4	WG-05052017-DF-MW137s2						1346		8	5			3					Y	X	X	X	X		
5	WG-05052017-DF-MW021s1						1150		8	5			3					Y	X	X	X	X		
6	WG-05052017-DF-MW136s2/3	V	V			V	1030		8	5			3					Y	X	X	X	X		
7	WG-05052017-SD-ER10	WT	G			5/5/17	1700		8	5			3					Y	X	X	X	X		
8	WG-05052017-JR-MW143s2/3	WT	G			V	1535		8	5			3					Y	X	X	X	X		
9	TB-4					5/5/17	0000		3				3					Y	X					
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		5/6/17	1400		5/6/17	1400	
					5/6/17	1545	

ORIGINAL

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:					
SIGNATURE of SAMPLER:	DATE Signed (MM/DD/YY):				

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 2 of 4

2059293

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Kogl	Attention:
Address: 2626 Pawnee Ste D Wichita KS	Copy To:	Company Name:
		Address:
Email To: Travis.kogl@ghd.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: OXY Spring 2017 GWM	Pace Project Manager: Greg Groene
Requested Due Date/TAT:	Project Number: 11137148	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOCs	SVOCs	Pesticides/Herbicides	Chlorides/Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05052017-BS-MW014s1	WT	G			5/5/17	1530		8	5			3						/	/	/	/		
2	WG-05052017-BS-MW014s3					5/5/17	1540		8	5			3						/	/	/	/		
3	WG-05052017-BS-MW012s1A					5/5/17	1640		8	5			3						/	/	/	/		
4	WG-05052017-BS-MW012s3					5/5/17	1640		8	5			3						/	/	/	/		
5	WG-05052017-BS-MW238R					5/5/17	1810		8	5			3						/	/	/	/		
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	5/6/17	1400	[signature]	5617	1400	
				[signature]	5617	1545	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: BRIAN Schwee

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 5/6/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

2059294

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Kogl	Attention:
Address: 2626 Pawnee Ste D Wichita, KS	Copy To:	Company Name:
Email To: Travis.Kogl@ghd.com	Purchase Order No.:	Address:
Phone: Fax:	Project Name: OXY Spring 2017 GWM	Pace Quote Reference:
Requested Due Date/TAT:	Project Number: 11137148	Pace Project Manager: Greg Groene
		Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

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

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOC's	SVOC's	Pesticide / Herbicide	Chloride / Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05062017-BS-MW015s1	WT	G			5/6/17	950		8	5			3					X	X	X	X		
2	WG-05062017-BS-MW015s2					5/6/17	1010		8	5			3					X	X	X	X		
3	WG-05062017-BS-AMW005D					5/6/17	1140		8	5			3					X	X	X	X		
4	WG-05062017-BS-AMW106D					5/6/17	1105		8	5			3					X	X	X	X		
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		5/6/17	1400		5/6/17	1400	
					5/7	1540	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: BRIAN Schnee

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 5/6/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

2059295

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Kogl	Attention:
Address: 2626 W. Pawnee Wichita KS	Copy To: Paul McMahon	Company Name:
Email To: Travis Kogl	Purchase Order No.:	Address:
Phone: Fax:	Project Name: Oxy Spring 2017 GMW	Pace Quote Reference:
Requested Due Date/TAT:	Project Number: 11137148	Pace Project Manager: Grey Greene
		Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: _____

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOC	SVOC	Nitrate/Nitrite	Chloride/Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05062017-JR-MW30S1	WT	G			5/6/17	955		24	15			9						X	X	X	X		MS/MSD
2	WG-05062017-JR-MW30S2	"	"			"	1055		8	5			3						X	X	X	X		
3	WG-05062017-JR-MW30S3	"	"			"	1135		8	6			3						X	X	X	X		
4	WG-05062017-JR-FD5	"	"			"	0:00		8	5			3						X	X	X	X		
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		5/6/17	1400		5/6/17	1700	
					5/6/17	1541	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: of

2059297

Section A Required Client Information:

Company: GHD
Address: 2626 Pawnee Ste D
Email To: Travis Kost
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Travis Kost
Copy To: Paul McMahon
Purchase Order No.:
Project Name: Oty Spring
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Greg Greene
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

Matrix Codes MATRIX / CODE

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

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOCs	SVOCs	Pest/Herbs	Chlorine Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WB-05062017-DF-MW02251	WT	G			5/6/17	1050		8	5			3					X	X	X	X			
2	WB-05062017-DF-MW14051						1240		8	5			3					X	X	X	X			
3	WB-05062017-DF-MW14052/53						1315		8	5			3					X	X	X	X			
4	WB-05062017-DF-FD4						1200		8	5			3					X	X	X	X			
5	TB-5					5/6/17	0000		3				3					X						Added per J.Rupp 5/15/17 LJG
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Sean Murphy GHD	5/6/17	1409		5/6/17	1900	
					5/7/17	1540	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Sean Murphy
SIGNATURE of SAMPLER: Sean Murphy
DATE Signed (MM/DD/YY): 05/06/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140300

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler: 2 HAS 5-3-17

4 LTA : MW136 S2S3 1ea250 P : MW136 S2S3, MW021S1,
4LTA: MW021S1 MW137S2, MW011S1
2 LTA: MW137S2

Cooler 1 **of** 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 3027 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.8 Corrected Reading (°C) 2.4
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc. Pace Order No.: 140300

Cooler/Sample Receipt Form (C/S RF)

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler: (Sets)

22 VOC's (1 Trip Blank) - Set. (TB-4)
2 LTA: MW011S3A
1 LTA: MW011S1
1 LTA: MW13TS2

Cooler 2 **of** 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 48qt Red-Igloo / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.0 Corrected Reading (°C) 1.6
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc. **Pace Order No.:** 140300

Cooler/Sample Receipt Form (C/S RF)

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

3-LTA WC-05062017 JR -MW0305 3
2-LTA ↓ JR FDS

Cooler 3 **of** 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4334 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.5 Corrected Reading (°C) 1.1
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc. **Pace Order No.:**

Cooler/Sample Receipt Form (C/S RF) 140300

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

9LTA: MW030S1

Cooler 4 **of** 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: Igloo Red / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.5 Corrected Reading (°C) 1.1
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140300

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA: MW140 S2 S3
1 250P: MW140 S2 S3
2 LTA: MW140 S1

(4 VOC's -Sets) Trip Blank - (Set) (FOR AF050 Cooler TB-5 Added to the COC by

Cooler 5 of 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4329 / Client's Cooler / Box / Letter / Hand-delivered
Other:

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other:

Custody Seal: Present: Intact / Broken (Absent) Seal No:
Seal Name: Seal Date:
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other:

Cooler Temperature (°C): Original Reading (°C) 1.6 Corrected Reading (°C) 1.2
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☑ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies:

Detail to discrepancies/comments:

Rec'd 3-VOC Trip Blanks Not on COC. PM Called.

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140300

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA + 1250P: FD-4
4 LTA + 1250P: MW022S1
2 LTA + 1250P: MW140S1

Cooler 6 **of** 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4341 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.7 Corrected Reading (°C) 2.3
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled ✓

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc. **Pace Order No.:**

Cooler/Sample Receipt Form (C/S RF) 140300

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

3 LTA: MW011S1
4 LTA + 1250 P: MW011S3B
2 LTA + 1250P: MW011S3A
1 LTA: MW13752

Cooler 7 **of** 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4148 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.6 Corrected Reading (°C) 1.2
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc. **Pace Order No.:**

Cooler/Sample Receipt Form (C/S RF) 140300

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA + 1250P: MW14352/53

4 LTA + 1250P: ER10

Cooler 8 **of** 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4149 / Client's Cooler / Box / Letter / Hand-delivered

Other: _____

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____

Seal Name: _____ Seal Date: _____

Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.3 Corrected Reading (°C) 0.9

Temperature. By: (Temperature Blank) Surface Temperature

Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled ✓

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐

☐ Container label absent

☐ Chain of Custody incomplete [see detail below]

☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)

☐ Date or Time sampled obtained from container label

☐ Chain of Custody missing sampler's name

☐ Chain of Custody missing matrix (sample type)

☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody

☐ Sample listed on Chain of Custody, not received

☐ Sample identification on container and Chain of Custody do not agree

☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]

☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]

☐ Broken or leaking containers (detail actions below)

☐ Sample container type or labeled chemical preservation inappropriate

☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc. **Pace Order No.:**

Cooler/Sample Receipt Form (C/S RF) 140300

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA + 1250P: AMW005D
4 LTA + 1250P: AMW106D

Cooler 9 **of** 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4332 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.5 Corrected Reading (°C) 3.1
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc. **Pace Order No.:**

Cooler/Sample Receipt Form (C/S RF) 140300

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA + 1 250P: MW23BR

Cooler 10 **of** 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #MS Huebner Igloo / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.6 Corrected Reading (°C) 1.2
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140300

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA + 1 250P: MW015S1

4 LTA + 1 250P: MW15S2

Cooler 11 **of** 14 **for this Pace Order No.** 4340

Cooler Identification: Pace Cooler #: ~~3440~~ HAC 5-8-17 / Client's Cooler / Box / Letter / Hand-delivered

Other: _____

Date/Time Cooler Received: 5 / 6 / 17 15 : 45

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____

Seal Name: _____ Seal Date: _____

Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 5.1 Corrected Reading (°C) 4.7

Temperature. By: (Temperature Blank) Surface Temperature

Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐

☐ Container label absent

☐ Chain of Custody incomplete [see detail below]

☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)

☐ Date or Time sampled obtained from container label

☐ Chain of Custody missing sampler's name

☐ Chain of Custody missing matrix (sample type)

☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody

☐ Sample listed on Chain of Custody, not received

☑ Sample identification on container and Chain of Custody do not agree

☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]

☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]

☐ Broken or leaking containers (detail actions below)

☐ Sample container type or labeled chemical preservation inappropriate

☐ Other discrepancies: _____

Detail to discrepancies/comments:

label reads MW15S2 COC Reads MW015S2

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140300

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

3 LtA 3-250p WF0506 2017 JR MW030S1
4 LtA 1 250p JR MW030S2
1 LtA 1 250p JR-MW030S3
2 LtA 1 250p JR-~~#~~ FD5
5-6-17

Cooler 12 **of** 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: Fg100 4720 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5 / 6 / 17 15:45

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ____ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.0 Corrected Reading (°C) 1.6
Temperature. By: Temperature Blank Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled ✓

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc. Pace Order No.: 140300

Cooler/Sample Receipt Form (C/S RF)

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA + 1250P: MW1453

4 LTA + 1250P: MW1251A

Cooler 13 of 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 3670 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.2 Corrected Reading (°C) 1.8
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☑ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments: HAC 5-8-17

COC Reads BSMW0125S3 4 Label Reads MW1453

COC Reads BSMW0125S1A Label Reads MW1251A

Completed by: HAC **Date Completed:** 5-8-17

Pace Analytical Services, Inc. **Pace Order No.:**

Cooler/Sample Receipt Form (C/S RF) 140300

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA + L250P: MW12S3
4 LTA + 1250P: MW0145I

Cooler 14 **of** 14 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4330 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/6/17 15:45

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken (Absent) Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.3 Corrected Reading (°C) 0.9
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☑ Sample listed on Chain of Custody, not received
- ☑ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

COC Reads BSMW012S3 Label Reads MW12S3

Completed by: HAC **Date Completed:** 5-8-17

Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date and Time Received: 05/09/2017 1620
Pace File No.: 7775
Pace Order No.: 140344
P.O./Project No: 4502201562-11119420
Project ID: OXY WICHITA GWM
Purchase Auth: SSOW251-402-D02-3100

Dear Ms. Thurman:

This laboratory report, containing the samples indicated below, includes 78 pages for the analytical report, 3 page(s) for the chain of custody and/or analysis request, and 13 page(s) for the sample receipt form.

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17050676	WG-05082017-JR-MW017S1	Liquid	5/8/2017
17050676R	WG-050817-JR-MW017S1	Liquid	5/8/2017
17050677	WG-05082017-JR-MW017S3B	Liquid	5/8/2017
17050677R	WG-050817-JR-MW017S3B	Liquid	5/8/2017
17050678	WG-05082017-JR-MW017S3A	Liquid	5/8/2017
17050678R	WG-050817-JR-MW017S3A	Liquid	5/8/2017
17050679	WG-05082017-JR-MW147S1	Liquid	5/8/2017
17050679R	WG-050817-JR-MW147S1	Liquid	5/8/2017
17050680	WG-05082017-JR-MW147S2/S3	Liquid	5/8/2017
17050680R	WG-050817-JR-MW147S2/S3	Liquid	5/8/2017
17050681	WG-05082017-JR-MW148S1	Liquid	5/8/2017
17050681R	WG-050817-JR-MW148S1	Liquid	5/8/2017
17050682	WG-05082017-JR-MW148S2/S3	Liquid	5/8/2017
17050682R	WG-05082017-JR-MW148S2/S3	Liquid	5/8/2017
17050683	WG-05082017-JR-MW006BR	Liquid	5/8/2017
17050684	WG-05082017-JR-FD6	Liquid	5/8/2017
17050685	WG-05092017-BS-AMW102D	Liquid	5/9/2017
17050686	WG-05092017-BS-MW26S1	Liquid	5/9/2017
17050687	WG-05092017-BS-MW26S3	Liquid	5/9/2017
17050688	WG-05092017-JR-MW142S2/S3	Liquid	5/9/2017
17050689	WG-05092017-JR-MW029S3	Liquid	5/9/2017
17050689R	WG-05092017-JR-MW029S3	Liquid	5/9/2017
17050690	WG-05092017-JR-MW015S4	Liquid	5/9/2017
17050691	TB-7	Liquid	5/9/2017
17050692	WG-05082017-DF-MW020S1	Liquid	5/8/2017
17050693	WG-05082017-DF-MW020S3	Liquid	5/8/2017
17050694	WG-05082017-DF-MW138S1	Liquid	5/8/2017
17050695	WG-05082017-DF-MW138S2/S3	Liquid	5/8/2017
17050696	WG-05082017-DF-MW131S2	Liquid	5/8/2017
17050697	WG-05082017-DF-MW131S3	Liquid	5/8/2017
17050698	WG-05082017-DF-MW022S2	Liquid	5/8/2017
17050699	WG-05082017-DF-MW022S4	Liquid	5/8/2017

The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

Samples will be retained for thirty days unless Pace is otherwise notified. Pace is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Pace's Standard Operating Procedures. These procedures are in substantial compliance with the approved methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.

Thank you for choosing Pace for this project.

Gregory J. Groene
Project Manager
Gregory.Groene@pacelabs.com

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050676
Sample Description: WG-05082017-JR-MW017S1

Date Sampled: 05/08/2017
Time Sampled: 1145

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/396
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/396
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/396
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/396
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/396
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/396
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/396
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/396
Hardness (Calculated)	349	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	24.5	mg/L	1.0	1.0	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 0505	170512-1	2NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 0505	170512-1	2NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 1040	170512-2	4EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/18/17 0954	170512-3	1MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/11/17 1718	1MS5131	1MS5131	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2354	170510-1	13IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 2048	2IC2132	5IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050676

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050676R
Sample Description: WG-050817-JR-MW017S1

Date Sampled: 05/08/2017
Time Sampled: 1145

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 2237	170522-1	2MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050676R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050677
Sample Description: WG-05082017-JR-MW017S3B

Date Sampled: 05/08/2017
Time Sampled: 1220

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/396
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/396
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/396
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/396
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/396
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/396
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/396
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/396
Hardness (Calculated)	461	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	269	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 0544	170512-1	2NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 0544	170512-1	2NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 1120	170512-2	4EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/18/17 1035	170512-3	1MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/11/17 1744	1MS5131	1MS5131	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/17/17 2359	170510-1	13IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 2100	2IC2132	5IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050677

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050677R
Sample Description: WG-050817-JR-MW017S3B

Date Sampled: 05/08/2017
Time Sampled: 1220

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 2317	170522-1	2MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050677R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050678
Sample Description: WG-05082017-JR-MW017S3A

Date Sampled: 05/08/2017
Time Sampled: 1305

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	0.84	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/396
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/396
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/396
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/396
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/396
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/396
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/396
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/396
Hardness (Calculated)	241	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	26.2	mg/L	1.0	1.0	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 0623	170512-1	2NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 0623	170512-1	2NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 1200	170512-2	4EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/18/17 1115	170512-3	1MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/11/17 1810	1MS5131	1MS5131	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/18/17 0003	170510-1	13IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 2112	2IC2132	5IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050678

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050678R
Sample Description: WG-050817-JR-MW017S3A

Date Sampled: 05/08/2017
Time Sampled: 1305

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/23/17 2357	170522-1	2MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050678R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050679
Sample Description: WG-05082017-JR-MW147S1

Date Sampled: 05/08/2017
Time Sampled: 1405

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloroethane	ND(0.5) QC	µg/L	1.0	0.5	7464/396
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/396
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/396
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/396
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/396
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/396
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/396
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/396
Hardness (Calculated)	388 QC	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	51	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 0821	170512-1	3NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 0821	170512-1	3NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 1240	170512-2	4EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/18/17 1156	170512-3	1MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/11/17 1836	1MS5131	1MS5131	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/18/17 0007	170510-1	13IP4137	KMW	6010B & SM 2340B
Chloride	N/A	05/12/17 2125	2IC2132	5IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050679

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050679R
Sample Description: WG-050817-JR-MW147S1

Date Sampled: 05/08/2017
Time Sampled: 1405

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/24/17 0036	170522-1	2MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050679R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050680
Sample Description: WG-05082017-JR-MW147S2/S3

Date Sampled: 05/08/2017
Time Sampled: 1500

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	34.5	µg/L	1.0	0.5	7466/524
Chloroform	9.3	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	1.8	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	228	mg/L as CaCO3	1.0	5.0	7443/990
Chloride	62	mg/L	10	10	7551/256

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 0702	170512-1	2NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 0702	170512-1	2NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 1559	170512-2	5EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/18/17 1438	170512-3	1MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1319	1MS8132	1MS8132	GMA	8260B
Hardness (Calculated)	05/10/17 1053	05/18/17 0023	170510-1	13IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/12/17 2202	2IC2132	5IC2132	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050680

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050680R
Sample Description: WG-050817-JR-MW147S2/S3

Date Sampled: 05/08/2017
Time Sampled: 1500

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/24/17 0235	170522-1	2MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050680R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050681
Sample Description: WG-05082017-JR-MW148S1

Date Sampled: 05/08/2017
Time Sampled: 1540

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/204
B-BHC	0.186	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/396
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/396
Carbon tetrachloride	0.7	µg/L	1.0	0.5	7464/396
Chloroform	3.1	µg/L	1.0	0.5	7464/396
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/396
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
Tetrachloroethylene	0.6	µg/L	1.0	0.5	7464/396
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/396
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/396
Hardness (Calculated)	753	mg/L as CaCO3	5.0	25	7443/990
Chloride	970	mg/L	100	100	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 1019	170512-1	3NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 1019	170512-1	3NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 1639	170512-2	5EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/18/17 1558	170512-3	1MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/11/17 2019	1MS5131	1MS5131	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/18/17 0028	170510-1	13IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/13/17 1208	1IC2133	1IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050681

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050681R
Sample Description: WG-050817-JR-MW148S1

Date Sampled: 05/08/2017
Time Sampled: 1540

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/24/17 0315	170522-1	2MS6143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050681R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050682
Sample Description: WG-05082017-JR-MW148S2/S3

Date Sampled: 05/08/2017
Time Sampled: 1620

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/180
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/180
OXY Chlorinated Hyd.					
A-BHC	0.026	µg/L	1.0	0.011	7460/204
B-BHC	1.23	µg/L	1.0	0.037	7460/204
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/204
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/204
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/204
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/204
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/396
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/396
Carbon tetrachloride	OC	µg/L	1.0	0.5	7464/396
Chloroform	40.1	µg/L	1.0	0.5	7464/396
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/396
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
Tetrachloroethylene	4.4	µg/L	1.0	0.5	7464/396
Trichloroethylene	3.0	µg/L	1.0	0.5	7464/396
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/396
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/396
Hardness (Calculated)	819	mg/L as CaCO3	5.0	25	7443/990
Chloride	1130	mg/L	100	100	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/12/17 0700	05/16/17 1058	170512-1	3NX5135	JMM	8151A(M)
Pentachlorophenol	05/12/17 0700	05/16/17 1058	170512-1	3NX5135	JMM	8151A(M)
OXY Chlorinated Hyd.	05/12/17 1200	05/16/17 1718	170512-2	5EX3135	JMM	8121
OXY GC/MS Acids	05/12/17 1500	05/19/17 0501	170512-3	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/11/17 2046	1MS5131	1MS5131	RKR	8260B
Hardness (Calculated)	05/10/17 1053	05/18/17 0040	170510-1	14IP4137	JDL	6010B & SM 2340B
Chloride	N/A	05/13/17 1221	1IC2133	1IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050682

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050682R
Sample Description: WG-05082017-JR-MW148S2/S3

Date Sampled: 05/08/2017
Time Sampled: 1620

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/331
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/331
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/331
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(5)	µg/L	10	5	7466/524
1,2-Dichloroethane	ND(5)	µg/L	10	5	7466/524
Benzene	ND(5)	µg/L	10	5	7466/524
Carbon tetrachloride	261	µg/L	10	5	7466/524
Chloroform	29	µg/L	10	5	7466/524
Chloromethane	ND(5)	µg/L	10	5	7466/524
Methylene chloride	ND(5)	µg/L	10	5	7466/524
Tetrachloroethylene	ND(5)	µg/L	10	5	7466/524
Trichloroethylene	ND(5)	µg/L	10	5	7466/524
Vinyl chloride	ND(5)	µg/L	10	5	7466/524
1,2-Dichloropropane	ND(5)	µg/L	10	5	7466/524

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/22/17 0800	05/24/17 0354	170522-1	2MS6143	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1355	1MS8132	1MS8132	GMA	8260B
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050682R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050683
Sample Description: WG-05082017-JR-MW006BR

Date Sampled: 05/08/2017
Time Sampled: 1700

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	0.013	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	0.18	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	0.24	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	0.15	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	0.5	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	1680	mg/L as CaCO3	5.0	25	7443/995
Chloride	66	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/17/17 1857	170514-1	1NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/17/17 1857	170514-1	1NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 1259	170513-2	1EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/18/17 2054	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1431	1MS8132	1MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/23/17 1346	170516-3	2IP4143	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1233	1IC2133	1IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050683

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050684
Sample Description: WG-05082017-JR-FD6

Date Sampled: 05/08/2017
Time Sampled: 0000

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	0.218	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	0.9	µg/L	1.0	0.5	7466/524
Chloroform	3.1	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	0.7	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	695	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	980	mg/L	100	100	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/17/17 1936	170514-1	1NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/17/17 1936	170514-1	1NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 1339	170513-2	1EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/18/17 2134	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1506	1MS8132	1MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2101	170516-3	7IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1245	1IC2133	1IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050684

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050685
Sample Description: WG-05092017-BS-AMW102D

Date Sampled: 05/09/2017
Time Sampled: 0915

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	0.25	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	263	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	73	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/17/17 2015	170514-1	1NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/17/17 2015	170514-1	1NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 1419	170513-2	1EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/18/17 2215	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1542	1MS8132	1MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2106	170516-3	7IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1258	1IC2133	1IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050685

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050686
Sample Description: WG-05092017-BS-MW26S1

Date Sampled: 05/09/2017
Time Sampled: 1045

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	0.02	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	0.9	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	7.5	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	274	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	57	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/17/17 2055	170514-1	1NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/17/17 2055	170514-1	1NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 1459	170513-2	1EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/18/17 2256	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1618	1MS8132	1MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2110	170516-3	7IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1310	1IC2133	1IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050686

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050687
Sample Description: WG-05092017-BS-MW26S3

Date Sampled: 05/09/2017
Time Sampled: 1055

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	0.075	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	335 QC	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	107	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/18/17 2000	170514-4	1NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/18/17 2000	170514-4	1NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 1255	170515-2	1EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/19/17 2239	170515-1	2MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1917	1MS8132	1MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2114	170516-3	7IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1322	1IC2133	1IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050687

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050688
Sample Description: WG-05092017-JR-MW142S2/S3

Date Sampled: 05/09/2017
Time Sampled: 1010

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	0.03	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	191	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	19.9	mg/L	1.0	1.0	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/17/17 2134	170514-1	1NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/17/17 2134	170514-1	1NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 1539	170513-2	1EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/18/17 2336	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1654	1MS8132	1MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2139	170516-3	8IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1424	1IC2133	2IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050688

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050689
Sample Description: WG-05092017-JR-MW029S3

Date Sampled: 05/09/2017
Time Sampled: 1140

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	4.2 E FC	µg/L	1.0	1.0	7462/181
Pentachlorophenol	6.1	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	0.035	µg/L	1.0	0.011	7460/205
B-BHC	1.32 E FC	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	31.1	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	5.7	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	10.8	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	8.7 CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	5.2	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	3.7	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	OC	µg/L	1.0	0.5	7466/524
Benzene	3.3	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	55.9	µg/L	1.0	0.5	7466/524
Trichloroethylene	OC	µg/L	1.0	0.5	7466/524
Vinyl chloride	1.3	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(1.0) M	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	424	mg/L as CaCO3	5.0	25	7443/995
Chloride	1080	mg/L	100	100	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/17/17 2213	170514-1	1NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/17/17 2213	170514-1	1NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 1618	170513-2	1EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 0017	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1729	1MS8132	1MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/23/17 1350	170516-3	2IP4143	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1436	1IC2133	2IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050689

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050689R
Sample Description: WG-05092017-JR-MW029S3

Date Sampled: 05/09/2017
Time Sampled: 1140

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(3)	µg/L	5.0	3	7465/348
1,2-Dichloroethane	133 QC	µg/L	5.0	3	7465/348
Benzene	3	µg/L	5.0	3	7465/348
Carbon tetrachloride	ND(3)	µg/L	5.0	3	7465/348
Chloroform	ND(3)	µg/L	5.0	3	7465/348
Chloromethane	ND(3) QC	µg/L	5.0	3	7465/348
Methylene chloride	ND(3)	µg/L	5.0	3	7465/348
Tetrachloroethylene	47	µg/L	5.0	3	7465/348
Trichloroethylene	114 QC	µg/L	5.0	3	7465/348
Vinyl chloride	ND(3)	µg/L	5.0	3	7465/348
1,2-Dichloropropane	ND(3)	µg/L	5.0	3	7465/348

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/15/17 1320	1MS9135	1MS9135	RKR	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17050689R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050690
Sample Description: WG-05092017-JR-MW015S4

Date Sampled: 05/09/2017
Time Sampled: 1155

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	0.12	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/348
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/348
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/348
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/348
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/348
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/348
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/348
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/348
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/348
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/348
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/348
Hardness (Calculated)	53.8	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	4.2	mg/L	1.0	1.0	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/17/17 2252	170514-1	1NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/17/17 2252	170514-1	1NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 1658	170513-2	1EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 0058	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 1435	1MS9135	1MS9135	RKR	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2148	170516-3	8IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1448	1IC2133	2IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050690

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050691
Sample Description: TB-7

Date Sampled: 05/09/2017
Time Sampled:

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/12/17 1841	1MS8132	1MS8132	GMA	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17050691

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050692
Sample Description: WG-05082017-DF-MW020S1

Date Sampled: 05/08/2017
Time Sampled: 1700

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	0.03	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	219	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	25.1	mg/L	1.0	1.0	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 1841	170514-1	1NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 1841	170514-1	1NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 1857	170513-2	2EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 0138	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 2251	1MS8132	2MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2152	170516-3	8IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1501	1IC2133	2IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050692

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050693
Sample Description: WG-05082017-DF-MW020S3

Date Sampled: 05/08/2017
Time Sampled: 1730

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	45.3	µg/L	1.0	0.5	7466/524
Chloroform	1.5	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	247	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	71	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 0050	170514-1	2NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 0050	170514-1	2NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 1937	170513-2	2EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 0219	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 2327	1MS8132	2MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2157	170516-3	8IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1513	1IC2133	2IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050693

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050694
Sample Description: WG-05082017-DF-MW138S1

Date Sampled: 05/08/2017
Time Sampled: 1535

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	268	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	59	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 0129	170514-1	2NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 0129	170514-1	2NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 2017	170513-2	2EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 0259	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/13/17 0003	1MS8132	2MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2201	170516-3	8IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1525	1IC2133	2IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050694

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050695
Sample Description: WG-05082017-DF-MW138S2/S3

Date Sampled: 05/08/2017
Time Sampled: 1450

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	268	mg/L as CaCO3	5.0	25	7443/995
Chloride	67	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 0209	170514-1	2NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 0209	170514-1	2NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 2056	170513-2	2EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 0340	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/13/17 0039	1MS8132	2MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/23/17 1354	170516-3	2IP4143	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1537	1IC2133	2IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050695

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050696
Sample Description: WG-05082017-DF-MW131S2

Date Sampled: 05/08/2017
Time Sampled: 1405

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	0.383	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/327
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/327
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	236	mg/L as CaCO3	5.0	25	7443/995
Chloride	77	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 0248	170514-1	2NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 0248	170514-1	2NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 2136	170513-2	2EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 0420	170513-1	2MS6138	JMM	8270C
OXY Volatiles by 8260	N/A	05/13/17 0114	1MS8132	2MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/23/17 1358	170516-3	2IP4143	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1550	1IC2133	2IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050696

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050697
Sample Description: WG-05082017-DF-MW131S3

Date Sampled: 05/08/2017
Time Sampled: 1310

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	0.188	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	204	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	96	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 0327	170514-1	2NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 0327	170514-1	2NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 2216	170513-2	2EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 1339	170513-1	1MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/13/17 0150	1MS8132	2MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2213	170516-3	8IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1602	1IC2133	2IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050697

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050698
Sample Description: WG-05082017-DF-MW022S2

Date Sampled: 05/08/2017
Time Sampled: 1055

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	0.011	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	0.14	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(20)	µg/L	40	20	7465/347
1,2-Dichloroethane	ND(20)	µg/L	40	20	7465/347
Benzene	ND(20)	µg/L	40	20	7465/347
Carbon tetrachloride	522	µg/L	40	20	7465/347
Chloroform	30	µg/L	40	20	7465/347
Chloromethane	ND(20) QC	µg/L	40	20	7465/347
Methylene chloride	ND(20)	µg/L	40	20	7465/347
Tetrachloroethylene	ND(20)	µg/L	40	20	7465/347
Trichloroethylene	ND(20)	µg/L	40	20	7465/347
Vinyl chloride	ND(20)	µg/L	40	20	7465/347
1,2-Dichloropropane	ND(20)	µg/L	40	20	7465/347
Hardness (Calculated)	360. QC	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	223	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 0406	170514-1	2NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 0406	170514-1	2NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/17/17 2255	170513-2	2EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 1501	170513-1	1MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 2113	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/22/17 2300	170516-4	9IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1639	1IC2133	3IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050698

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Lab Number: 17050699
Sample Description: WG-05082017-DF-MW022S4

Date Sampled: 05/08/2017
Time Sampled: 1135

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	60.8	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	19.4	mg/L	1.0	1.0	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 0604	170514-1	2NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 0604	170514-1	2NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/18/17 0214	170513-2	3EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 1420	170513-1	1MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 2049	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2226	170516-3	9IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1716	1IC2133	3IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050699

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Appendix

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

ND indicates not detected with the LOQ (Limit of Quantitation) in parentheses. The LOQ value has been adjusted for the dilution factor and percent solids, as applicable. Due to rounding of significant figures, the LOQ value may vary slightly from the reported concentration. The LOQ is the lowest concentration of the analytical standard that was used for calibrating the instrument. If an analytical standard is analyzed at the LOQ, an error of as much as +/- 50% can be expected. N/A, if present, indicates not applicable.

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

No analysis with a holding time of seventy-two hours or less was performed in this Pace order.

QC - QC data qualifiers were noted. See the Quality Control Report.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

E - Concentration or reporting limit is an estimated value. Matrix interferences and/or sample heterogeneity were noted at the time of sample analysis.

FC - The confirmation analysis on a second GC column (or detector) resulted in a greater than 40% difference between the primary and confirmation results. The lower value was reported.

HP - Regulatory preparation holding time for this analysis was exceeded.

M - The Limit of Quantitation (LOQ) is higher than normal due to matrix interferences.

OC - The response for this analyte exceeded the calibration range of the instrument. Sample dilution and reanalysis is necessary to obtain an accurate result. The reported result, if provided, is estimated.

Additional Comments:

The OXY GC/MS Acids analyte 2-Chlorophenol was below the Laboratory Control Sample limits in QC Batch 170512-3. The associated samples were reprepared in QC Batch 170522-1 to confirm the analyte was not detected. Both sets of analyses are included on the enclosed report.

Following is the full name of each analyst that performed analysis(es) on this Pace order number:

Analyst Initials	Analyst Full Name
GMA	Guy Allen
JDL	John D. Lamer
JMM	Julie M. McCullough
KMW	Keegan M. Wilson
MLL	Melissa L. Lundgrin
RKR	Rhonda K. Reilly
SPA	Stephen P. Albin

Accreditation Summary

Client: Occidental Chemical Corporation_Oxy
Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Pace is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Pace is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Pace's full NELAP accreditation status may be viewed at www.kdheks.gov/envlab. Note that unless qualified otherwise in the Laboratory Report, Pace performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

Test	Analysis	Matrix-Regulatory Program	Method	Pace NELAP Accredited in Other Reg. Program
CL351	OXY Chlorinated Hyd.	L-RCRA	8121	
CL351	Hexachloroethane	L-RCRA	8121	No
CL351	Hexachlorobutadiene	L-RCRA	8121	No
MS302	OXY GC/MS Acids	L-RCRA	8270C	
MS302	3-& 4-Chlorophenol	L-RCRA	8270C	No
MS302	2,5-Dichlorophenol	L-RCRA	8270C	No
MS302	2,3,4,5-Tetrachlorophenol	L-RCRA	8270C	No

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170512-1	170512BLK1 05/15/17 1837	170512LCS1 05/15/17 1916	17050679MS 05/16/17 0900
Lab numbers associated with this batch: 17050676 17050677 17050678 17050679 17050680 17050681 17050682					
CL223	2,4-Dichlorophenoxyacetic Acid	170514-1	170514BLK1 05/17/17 1738	170514LCS1 05/17/17 1817	17050698MS 05/18/17 0446
Lab numbers associated with this batch: 17050683 17050684 17050685 17050686 17050688 17050689 17050690 17050692 17050693 17050694 17050695 17050696 17050697 17050698 17050699					
CL223	2,4-Dichlorophenoxyacetic Acid	170514-4	170514BLK4 05/18/17 1723	170514LCS4 05/18/17 1802	17050687MS 05/18/17 2039
Lab numbers associated with this batch: 17050687					
CL350	Pentachlorophenol	170512-1	170512BLK1 05/15/17 1837	170512LCS1 05/15/17 1916	17050679MS 05/16/17 0900
Lab numbers associated with this batch: 17050676 17050677 17050678 17050679 17050680 17050681 17050682					
CL350	Pentachlorophenol	170514-1	170514BLK1 05/17/17 1738	170514LCS1 05/17/17 1817	17050698MS 05/18/17 0446
Lab numbers associated with this batch: 17050683 17050684 17050685 17050686 17050688 17050689 17050690 17050692 17050693 17050694 17050695 17050696 17050697 17050698 17050699					
CL350	Pentachlorophenol	170514-4	170514BLK4 05/18/17 1723	170514LCS4 05/18/17 1802	17050687MS 05/18/17 2039
Lab numbers associated with this batch: 17050687					
CL351	OXY Chlorinated Hyd.	170512-2	170512BLK2 05/15/17 2206	170512LCS2 05/15/17 2246	17050679MS 05/16/17 1319
Lab numbers associated with this batch: 17050676 17050677 17050678 17050679 17050680 17050681 17050682					
CL351	OXY Chlorinated Hyd.	170513-2	170513BLK2 05/17/17 1139	170513LCS2 05/17/17 1219	17050698MS 05/17/17 2335
Lab numbers associated with this batch: 17050683 17050684 17050685 17050686 17050688 17050689 17050690 17050692 17050693 17050694 17050695 17050696 17050697 17050698 17050699					
CL351	OXY Chlorinated Hyd.	170515-2	170515BLK2 05/18/17 1135	170515LCS2 05/18/17 1215	17050687MS 05/18/17 1334
Lab numbers associated with this batch: 17050687					
MS302	OXY GC/MS Acids	170512-3	170512BLK3 05/17/17 0945	170512LCS3 05/17/17 1025	17050679MS 05/18/17 1237
Lab numbers associated with this batch: 17050676 17050677 17050678 17050679 17050680 17050681 17050682					

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS302	OXY GC/MS Acids	170513-1	170513BLK1 05/18/17 1932	170513LCS1 05/18/17 2013	17050698MS 05/19/17 1542

Lab numbers associated with this batch:
17050683 17050684 17050685 17050686 17050688 17050689 17050690 17050692 17050693 17050694 17050695 17050696 17050697 17050698 17050699

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS302	OXY GC/MS Acids	170515-1	170515BLK1 05/19/17 1958	170515LCS1 05/19/17 2039	17050687MS 05/19/17 2319

Lab numbers associated with this batch:
17050687

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS302	OXY GC/MS Acids	170522-1	170522BLK1 05/23/17 1102	170522LCS1 05/23/17 1142	17050679RS 05/24/17 0116

Lab numbers associated with this batch:
17050676R 17050677R 17050678R 17050679R 17050680R 17050681R 17050682R

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS350	OXY Volatiles by 8260	1MS5131	BLK1MS5131 05/11/17 1443	LCS1MS5131 05/11/17 1350	17050679MS 05/11/17 1902

Lab numbers associated with this batch:
17050676 17050677 17050678 17050679 17050681 17050682

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS350	OXY Volatiles by 8260	1MS8132	BLK1MS8132 05/12/17 1243	LCS1MS8132 05/12/17 1132	17050687MS 05/12/17 1952

Lab numbers associated with this batch:
17050680 17050682R 17050683 17050684 17050685 17050686 17050687 17050688 17050689 17050691 17050692 17050693 17050694 17050695 17050696 17050697

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS350	OXY Volatiles by 8260	1MS9132	BLK1MS9132 05/12/17 1259	LCS1MS9132 05/12/17 1209	17050698MS 05/12/17 2138

Lab numbers associated with this batch:
17050698 17050699

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS350	OXY Volatiles by 8260	1MS9135	BLK1MS9135 05/15/17 1255	LCS1MS9135 05/15/17 1206	17050689RS 05/15/17 1345

Lab numbers associated with this batch:
17050689R 17050690

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
SL423	Hardness (Calculated)	170510-1	170510BLK1 05/17/17 2235	170510LCS1 05/17/17 2239	17050679MS 05/18/17 0011

Lab numbers associated with this batch:
17050676 17050677 17050678 17050679 17050680 17050681 17050682

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
SL423	Hardness (Calculated)	170516-3	170516BLK3 05/22/17 2049	170516LCS3 05/22/17 2053	17050687MS 05/22/17 2119

Lab numbers associated with this batch:
17050683 17050684 17050685 17050686 17050687 17050688 17050689 17050690 17050692 17050693 17050694 17050695 17050696 17050697 17050699

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
SL423	Hardness (Calculated)	170516-4	170516BLK4 05/22/17 2251	170516LCS4 05/22/17 2256	17050698MS 05/22/17 2304

Lab numbers associated with this batch:
17050698

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL502	Chloride	1IC2133	BLK1IC2133 05/13/17 1144	LCS1IC2133 N/A	17050687MS, 17050698MS 05/13/17 1334

Lab numbers associated with this batch:
17050681 17050682 17050683 17050684 17050685 17050686 17050687 17050688 17050689 17050690 17050692
17050693 17050694 17050695 17050696 17050697 17050698 17050699

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL502	Chloride	2IC2132	BLK2IC2132 05/12/17 1617	LCS2IC2132 05/12/17 1630	17050679MS 05/12/17 2137

Lab numbers associated with this batch:
17050676 17050677 17050678 17050679 17050680

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170510-1	**For samples prepared on: 05/10/2017 1053**					**Spiked sample: 17050679**						
Hardness (Calculated)	ND(5.0)	88.9	80.0-120	357	mg/L a	79.8 ML	86.3	80.0-120	357	mg/L a	7.80	20.0
QC Batch: 170512-1	**For samples prepared on: 05/12/2017 0700**					**Spiked sample: 17050679**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	107	58.8-127	4.0	µg/L	100	101	64.6-126	4.0	µg/L	1.00	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	94.8	102	62.2-119	5.0	µg/L	102	103	62.2-119	5.0	µg/L		
QC Batch: 170512-1	**For samples prepared on: 05/12/2017 0700**					**Spiked sample: 17050679**						
Pentachlorophenol	ND(0.5)	95.0	66.3-127	4.0	µg/L	35.2	36.7	7.60-144	4.0	µg/L	4.20	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	94.8	102	62.2-119	5.0	µg/L	102	103	62.2-119	5.0	µg/L		
QC Batch: 170512-2	**For samples prepared on: 05/12/2017 1200**					**Spiked sample: 17050679**						
OXY Chlorinated Hyd.												
A-BHC	ND(0.011)	101	75.0-125	0.50	µg/L	101	100.	76.1-127	0.50	µg/L	1.00	16.0
B-BHC	ND(0.037)	103	68.0-125	0.50	µg/L	111	105	71.5-125	0.50	µg/L	5.60	18.0
G-BHC	ND(0.052)	95.8	72.5-123	0.50	µg/L	101	98.0	73.9-126	0.50	µg/L	3.00	17.4
Hexachloroethane	ND(0.02)	78.0	55.1-115	0.50	µg/L	78.6	79.4	45.8-118	0.50	µg/L	1.00	33.4
Hexachlorobutadiene	ND(0.02)	75.4	35.3-134	0.50	µg/L	75.8	75.8	36.7-122	0.50	µg/L	0.00	37.9
Hexachlorobenzene	ND(0.10)	91.0	63.7-119	0.50	µg/L	85.2	84.2	62.9-119	0.50	µg/L	1.20	20.7
D-BHC	ND(0.05)	105	70.6-126	0.50	µg/L	116	109	71.7-131	0.50	µg/L	6.20	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	85.2	86.9	65.9-110	8.0	µg/L	91.7	90.5	65.9-110	8.0	µg/L		
QC Batch: 170512-3	**For samples prepared on: 05/12/2017 1500**					**Spiked sample: 17050679**						
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	75.6 LL	75.9-99.3	50.0	µg/L	89.5	91.5	75.1-100	50.0	µg/L	2.20	13.9
3-& 4-Chlorophenol	ND(5.0)	68.9	56.0-90.2	50.0	µg/L	77.9	77.8	58.8-91.2	50.0	µg/L	0.130	14.5
2,4-Dichlorophenol	ND(5.0)	84.7	68.2-106	50.0	µg/L	87.2	91.0	65.6-112	50.0	µg/L	4.30	21.2
2,5-Dichlorophenol	ND(5.0)	75.0	73.9-103	50.0	µg/L	110. MH	108 MH	65.4-106	50.0	µg/L	1.80	27.7
2,6-Dichlorophenol	ND(5.0)	83.9	78.3-104	50.0	µg/L	103	103	76.7-107	50.0	µg/L	0.00	13.4
2,4,5-Trichlorophenol	ND(5.0)	85.3	75.3-109	50.0	µg/L	102	101	72.4-114	50.0	µg/L	0.990	12.9
2,4,6-Trichlorophenol	ND(5.0)	80.6	77.1-110	50.0	µg/L	99.4	99.2	75.0-116	50.0	µg/L	0.20	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	74.8 CE	72.5-115	100	µg/L	97.5 CE	99.3 CE	74.5-120	100	µg/L	1.80	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	84.1	71.6-118	50.0	µg/L	107	112	73.7-122	50.0	µg/L	4.60	13.4
Surrogate Data:												
PHENOL-d6	36.0	33.0	25.6-44.5	150	µg/L	35.8	37.6	25.6-44.5	150	µg/L		
2-FLUOROPHENOL	57.0	50.9	42.2-68.2	150	µg/L	55.9	57.8	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	86.5	89.4	53.9-131	150	µg/L	112	114	53.9-131	150	µg/L		
QC Batch: 170513-1	**For samples prepared on: 05/13/2017 1015**					**Spiked sample: 17050698**						
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	77.9	75.9-99.3	50.0	µg/L	75.5	81.3	75.1-100	50.0	µg/L	7.40	13.9
3-& 4-Chlorophenol	ND(5.0)	71.6	56.0-90.2	50.0	µg/L	66.1	69.6	58.8-91.2	50.0	µg/L	5.20	14.5
2,4-Dichlorophenol	ND(5.0)	83.0	68.2-106	50.0	µg/L	84.7	89.0	65.6-112	50.0	µg/L	5.00	21.2
2,5-Dichlorophenol	ND(5.0)	93.3	73.9-103	50.0	µg/L	77.4	89.2	65.4-106	50.0	µg/L	14.2	27.7
2,6-Dichlorophenol	ND(5.0)	89.9	78.3-104	50.0	µg/L	84.4	93.0	76.7-107	50.0	µg/L	9.70	13.4
2,4,5-Trichlorophenol	ND(5.0)	93.8	75.3-109	50.0	µg/L	84.3	92.1	72.4-114	50.0	µg/L	8.80	12.9
2,4,6-Trichlorophenol	ND(5.0)	88.0	77.1-110	50.0	µg/L	84.1	89.0	75.0-116	50.0	µg/L	5.70	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	89.5 CE	72.5-115	100	µg/L	84.4 CE	87.9 CE	74.5-120	100	µg/L	4.10	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	96.6	71.6-118	50.0	µg/L	86.5	94.3	73.7-122	50.0	µg/L	8.60	13.4
Surrogate Data:												
PHENOL-d6	36.5	33.5	25.6-44.5	150	µg/L	29.7	30.7	25.6-44.5	150	µg/L		

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170513-1	**For samples prepared on: 05/13/2017**					**Spiked sample: 17050698**						
Surrogate Data:												
2-FLUOROPHENOL	56.5	51.0	42.2-68.2	150	µg/L	46.7	47.6	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	89.3	103	53.9-131	150	µg/L	101	105	53.9-131	150	µg/L		
QC Batch: 170513-2	**For samples prepared on: 05/13/2017 1300**					**Spiked sample: 17050698**						
OXY Chlorinated Hyd.												
A-BHC	ND(0.011)	98.4	75.0-125	0.50	µg/L	102	97.9	76.1-127	0.50	µg/L	4.10	16.0
B-BHC	ND(0.037)	102	68.0-125	0.50	µg/L	111	107	71.5-125	0.50	µg/L	3.70	18.0
G-BHC	ND(0.052)	102	72.5-123	0.50	µg/L	107	104	73.9-126	0.50	µg/L	2.80	17.4
Hexachloroethane	ND(0.02)	80.6	55.1-115	0.50	µg/L	82.4	77.7	45.8-118	0.50	µg/L	5.90	33.4
Hexachlorobutadiene	ND(0.02)	77.2	35.3-134	0.50	µg/L	79.2	75.2	36.7-122	0.50	µg/L	5.20	37.9
Hexachlorobenzene	ND(0.10)	91.4	63.7-119	0.50	µg/L	99.4	95.0	62.9-119	0.50	µg/L	4.50	20.7
D-BHC	ND(0.05)	103	70.6-126	0.50	µg/L	114	110	71.7-131	0.50	µg/L	3.60	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	86.8	82.2	65.9-110	8.0	µg/L	89.4	88.5	65.9-110	8.0	µg/L		
QC Batch: 170514-1	**For samples prepared on: 05/14/2017 1345**					**Spiked sample: 17050698**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	82.5	58.8-127	4.0	µg/L	79.7	79.4	64.6-126	4.0	µg/L	0.380	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	74.1	101	62.2-119	5.0	µg/L	94.7	97.7	62.2-119	5.0	µg/L		
QC Batch: 170514-1	**For samples prepared on: 05/14/2017 1345**					**Spiked sample: 17050698**						
Pentachlorophenol	ND(0.5)	95.5	66.3-127	4.0	µg/L	74.0	77.5	7.60-144	4.0	µg/L	4.60	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	74.1	101	62.2-119	5.0	µg/L	94.7	97.7	62.2-119	5.0	µg/L		
QC Batch: 170514-4	**For samples prepared on: 05/14/2017 1345**					**Spiked sample: 17050687**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	93.2	58.8-127	4.0	µg/L	97.9	101	64.6-126	4.0	µg/L	3.10	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	90.4	112	62.2-119	5.0	µg/L	103	101	62.2-119	5.0	µg/L		
QC Batch: 170514-4	**For samples prepared on: 05/14/2017 1345**					**Spiked sample: 17050687**						
Pentachlorophenol	ND(0.5)	101	66.3-127	4.0	µg/L	80.5	77.4	7.60-144	4.0	µg/L	3.90	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	90.4	112	62.2-119	5.0	µg/L	103	101	62.2-119	5.0	µg/L		
QC Batch: 170515-1	**For samples prepared on: 05/15/2017 0900**					**Spiked sample: 17050687**						
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	82.6	75.9-99.3	50.0	µg/L	82.9	77.8	75.1-100	50.0	µg/L	6.30	13.9
3-& 4-Chlorophenol	ND(5.0)	73.3	56.0-90.2	50.0	µg/L	78.5	74.0	58.8-91.2	50.0	µg/L	5.90	14.5
2,4-Dichlorophenol	ND(5.0)	84.7	68.2-106	50.0	µg/L	89.9	80.1	65.6-112	50.0	µg/L	11.5	21.2
2,5-Dichlorophenol	ND(5.0)	97.1	73.9-103	50.0	µg/L	91.7	96.7	65.4-106	50.0	µg/L	5.30	27.7
2,6-Dichlorophenol	ND(5.0)	93.2	78.3-104	50.0	µg/L	93.6	90.5	76.7-107	50.0	µg/L	3.40	13.4
2,4,5-Trichlorophenol	ND(5.0)	92.9	75.3-109	50.0	µg/L	92.1	92.7	72.4-114	50.0	µg/L	0.650	12.9
2,4,6-Trichlorophenol	ND(5.0)	94.2	77.1-110	50.0	µg/L	90.2	89.4	75.0-116	50.0	µg/L	0.890	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	84.6 CE	72.5-115	100	µg/L	88.5 CE	86.6 CE	74.5-120	100	µg/L	2.20	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	93.9	71.6-118	50.0	µg/L	96.0	97.7	73.7-122	50.0	µg/L	1.80	13.4
Surrogate Data:												
PHENOL-d6	33.6	34.2	25.6-44.5	150	µg/L	39.6	34.2	25.6-44.5	150	µg/L		
2-FLUOROPHENOL	52.9	53.7	42.2-68.2	150	µg/L	57.5	51.6	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	94.1	108	53.9-131	150	µg/L	105	108	53.9-131	150	µg/L		

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170515-2	**For samples prepared on: 05/15/2017 1215**					**Spiked sample: 17050687**						
OXY Chlorinated Hyd.												
A-BHC	ND(0.011)	106	75.0-125	0.50	µg/L	99.4	94.7	76.1-127	0.50	µg/L	4.80	16.0
B-BHC	ND(0.037)	114	68.0-125	0.50	µg/L	106	101	71.5-125	0.50	µg/L	4.80	18.0
G-BHC	ND(0.052)	112	72.5-123	0.50	µg/L	104	98.8	73.9-126	0.50	µg/L	5.10	17.4
Hexachloroethane	ND(0.02)	90.0	55.1-115	0.50	µg/L	95.4	90.4	45.8-118	0.50	µg/L	5.40	33.4
Hexachlorobutadiene	ND(0.02)	90.8	35.3-134	0.50	µg/L	97.4	92.4	36.7-122	0.50	µg/L	5.30	37.9
Hexachlorobenzene	ND(0.10)	103	63.7-119	0.50	µg/L	102	96.8	62.9-119	0.50	µg/L	5.20	20.7
D-BHC	ND(0.05)	116	70.6-126	0.50	µg/L	107	101	71.7-131	0.50	µg/L	5.80	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	83.4	86.7	65.9-110	8.0	µg/L	86.9	81.6	65.9-110	8.0	µg/L		
QC Batch: 170516-3	**For samples prepared on: 05/16/2017 1025**					**Spiked sample: 17050687**						
Hardness (Calculated)	ND(5.0)	89.0	80.0-120	357	mg/L a	73.7 ML	75.1 ML	80.0-120	357	mg/L a	1.90	20.0
QC Batch: 170516-4	**For samples prepared on: 05/16/2017 1106**					**Spiked sample: 17050698**						
Hardness (Calculated)	ND(5.0)	84.3	80.0-120	357	mg/L a	76.9 ML	82.6	80.0-120	357	mg/L a	7.10	20.0
QC Batch: 170522-1	**For samples prepared on: 05/22/2017 0800**					**Spiked sample: 17050679R**						
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	87.3	75.9-99.3	50.0	µg/L	85.4	77.0	75.1-100	50.0	µg/L	10.3	13.9
3-& 4-Chlorophenol	ND(5.0)	78.3	56.0-90.2	50.0	µg/L	74.2	68.9	58.8-91.2	50.0	µg/L	7.40	14.5
2,4-Dichlorophenol	ND(5.0)	92.8	68.2-106	50.0	µg/L	99.4	80.9	65.6-112	50.0	µg/L	20.5	21.2
2,5-Dichlorophenol	ND(5.0)	104 LH	73.9-103	50.0	µg/L	90.4	93.3	65.4-106	50.0	µg/L	3.20	27.7
2,6-Dichlorophenol	ND(5.0)	101	78.3-104	50.0	µg/L	95.1	89.2	76.7-107	50.0	µg/L	6.40	13.4
2,4,5-Trichlorophenol	ND(5.0)	102	75.3-109	50.0	µg/L	98.9	90.3	72.4-114	50.0	µg/L	9.10	12.9
2,4,6-Trichlorophenol	ND(5.0)	101	77.1-110	50.0	µg/L	94.1	88.7	75.0-116	50.0	µg/L	5.90	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	95.2 CE	72.5-115	100	µg/L	94.1 CE	88.1 CE	74.5-120	100	µg/L	6.60	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	104	71.6-118	50.0	µg/L	102	93.8	73.7-122	50.0	µg/L	8.40	13.4
Surrogate Data:												
PHENOL-d6	33.5	35.8	25.6-44.5	150	µg/L	34.5	32.0	25.6-44.5	150	µg/L		
2-FLUOROPHENOL	52.7	55.6	42.2-68.2	150	µg/L	54.3	48.7	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	100.	118	53.9-131	150	µg/L	108	107	53.9-131	150	µg/L		
QC Batch: 1IC2133	**For sample analyzed on: 05/13/2017**					**Spiked sample: 17050687**						
Chloride	ND(1.0)	100	90.0-110	4.0	mg/L	89.0	89.5	68.4-120	40.0	mg/L	0.560	21.6
QC Batch: 1IC2133	**For sample analyzed on: 05/13/2017**					**Spiked sample: 17050698**						
Chloride	ND(1.0)	100	90.0-110	4.0	mg/L	I	I	68.4-120	40.0	mg/L	**	21.6
QC Batch: 1MS5131	**For sample analyzed on: 05/11/2017**					**Spiked sample: 17050679**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	102	80.0-120	10.0	µg/L	101	99.8	83.0-121	10.0	µg/L	1.20	9.8
1,2-Dichloroethane	ND(0.5)	92.2	75.6-120	10.0	µg/L	72.6 ML	75.5 ML	77.5-122	10.0	µg/L	3.90	9.5
Benzene	ND(0.5)	92.7	80.0-120	10.0	µg/L	94.2	94.4	82.7-117	10.0	µg/L	0.210	8.3
Carbon tetrachloride	ND(0.5)	108	79.9-125	10.0	µg/L	106	105	79.0-125	10.0	µg/L	0.950	13.6
Chloroform	ND(0.5)	95.0	79.6-120	10.0	µg/L	98.8	98.1	78.4-117	10.0	µg/L	0.710	9.2
Chloromethane	ND(0.5)	96.0	70.2-127	10.0	µg/L	94.0	93.0	69.7-129	10.0	µg/L	1.10	15.9
Methylene chloride	ND(0.5)	97.0	77.1-120	10.0	µg/L	96.9	96.5	76.3-119	10.0	µg/L	0.410	9.6
Tetrachloroethylene	ND(0.5)	102	80.0-120	10.0	µg/L	116	112	82.0-121	10.0	µg/L	3.50	11.3
Trichloroethylene	ND(0.5)	97.4	80.0-120	10.0	µg/L	99.0	97.3	79.3-120	10.0	µg/L	1.70	13.7
Vinyl chloride	ND(0.5)	106	76.2-128	10.0	µg/L	101	99.5	78.0-130	10.0	µg/L	1.50	14.6
1,2-Dichloropropane	ND(0.5)	95.2	79.5-120	10.0	µg/L	85.9	87.2	81.7-117	10.0	µg/L	1.50	10.1

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 1MS5131	**For sample analyzed on: 05/11/2017**					**Spiked sample: 17050679**						
Surrogate Data:												
1,2-DICHLOROETHANE-d4	98.4	98.3	76.2-126	10.0	µg/L	76.7	77.3	76.2-126	10.0	µg/L		
TOLUENE-d8	97.1	99.8	80.0-120	10.0	µg/L	109	105	80.0-120	10.0	µg/L		
QC Batch: 1MS8132	**For sample analyzed on: 05/12/2017**					**Spiked sample: 17050687**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	94.3	80.0-120	10.0	µg/L	98.0	96.5	83.0-121	10.0	µg/L	1.50	9.8
1,2-Dichloroethane	ND(0.5)	95.7	75.6-120	10.0	µg/L	102	98.2	77.5-122	10.0	µg/L	3.80	9.5
Benzene	ND(0.5)	95.9	80.0-120	10.0	µg/L	94.0	93.2	82.7-117	10.0	µg/L	0.850	8.3
Carbon tetrachloride	ND(0.5)	96.6	79.9-125	10.0	µg/L	101	100.	79.0-125	10.0	µg/L	1.00	13.6
Chloroform	ND(0.5)	93.8	79.6-120	10.0	µg/L	95.6	95.0	78.4-117	10.0	µg/L	0.630	9.2
Chloromethane	ND(0.5)	90.3	70.2-127	10.0	µg/L	87.2	88.1	69.7-129	10.0	µg/L	1.00	15.9
Methylene chloride	ND(0.5)	94.8	77.1-120	10.0	µg/L	91.1	90.3	76.3-119	10.0	µg/L	0.880	9.6
Tetrachloroethylene	ND(0.5)	102	80.0-120	10.0	µg/L	108	107	82.0-121	10.0	µg/L	0.930	11.3
Trichloroethylene	ND(0.5)	97.8	80.0-120	10.0	µg/L	92.2	92.7	79.3-120	10.0	µg/L	0.540	13.7
Vinyl chloride	ND(0.5)	86.9	76.2-128	10.0	µg/L	84.9	86.1	78.0-130	10.0	µg/L	1.40	14.6
1,2-Dichloropropane	ND(0.5)	92.6	79.5-120	10.0	µg/L	85.8	86.1	81.7-117	10.0	µg/L	0.350	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	100.	97.6	76.2-126	10.0	µg/L	102	98.4	76.2-126	10.0	µg/L		
TOLUENE-d8	101	105	80.0-120	10.0	µg/L	104	104	80.0-120	10.0	µg/L		
QC Batch: 1MS9132	**For sample analyzed on: 05/12/2017**					**Spiked sample: 17050698**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	93.5	80.0-120	10.0	µg/L	93.1	94.3	83.0-121	400	µg/L	1.30	9.8
1,2-Dichloroethane	ND(0.5)	82.3	75.6-120	10.0	µg/L	92.0	91.6	77.5-122	400	µg/L	0.440	9.5
Benzene	ND(0.5)	107	80.0-120	10.0	µg/L	113	117	82.7-117	400	µg/L	3.50	8.3
Carbon tetrachloride	ND(0.5)	95.2	79.9-125	10.0	µg/L	83.9	91.3	79.0-125	400	µg/L	8.40	13.6
Chloroform	ND(0.5)	101	79.6-120	10.0	µg/L	106	106	78.4-117	400	µg/L	0.00	9.2
Chloromethane	ND(0.5)	124	70.2-127	10.0	µg/L	128	124	69.7-129	400	µg/L	3.20	15.9
Methylene chloride	ND(0.5)	105	77.1-120	10.0	µg/L	113	117	76.3-119	400	µg/L	3.50	9.6
Tetrachloroethylene	ND(0.5)	98.6	80.0-120	10.0	µg/L	95.0	96.3	82.0-121	400	µg/L	1.40	11.3
Trichloroethylene	ND(0.5)	106	80.0-120	10.0	µg/L	102	110.	79.3-120	400	µg/L	7.50	13.7
Vinyl chloride	ND(0.5)	105	76.2-128	10.0	µg/L	105	108	78.0-130	400	µg/L	2.80	14.6
1,2-Dichloropropane	ND(0.5)	96.9	79.5-120	10.0	µg/L	101	103	81.7-117	400	µg/L	2.00	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	91.1	93.2	76.2-126	10.0	µg/L	92.5	103	76.2-126	400	µg/L		
TOLUENE-d8	107	108	80.0-120	10.0	µg/L	102	106	80.0-120	400	µg/L		
QC Batch: 1MS9135	**For sample analyzed on: 05/15/2017**					**Spiked sample: 17050689R**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	97.5	80.0-120	10.0	µg/L	101	95.3	83.0-121	50.0	µg/L	5.80	9.8
1,2-Dichloroethane	ND(0.5)	89.7	75.6-120	10.0	µg/L	72.4 ML	57.5 MZ	77.5-122	50.0	µg/L	22.9	9.5
Benzene	ND(0.5)	114	80.0-120	10.0	µg/L	113	107	82.7-117	50.0	µg/L	5.50	8.3
Carbon tetrachloride	ND(0.5)	105	79.9-125	10.0	µg/L	100.	96.3	79.0-125	50.0	µg/L	3.80	13.6
Chloroform	ND(0.5)	105	79.6-120	10.0	µg/L	102	101	78.4-117	50.0	µg/L	0.990	9.2
Chloromethane	ND(0.5)	133 LH	70.2-127	10.0	µg/L	131 MH	126	69.7-129	50.0	µg/L	3.90	15.9
Methylene chloride	ND(0.5)	112	77.1-120	10.0	µg/L	110.	102	76.3-119	50.0	µg/L	7.50	9.6
Tetrachloroethylene	ND(0.5)	104	80.0-120	10.0	µg/L	91.6	87.2	82.0-121	50.0	µg/L	4.90	11.3
Trichloroethylene	ND(0.5)	110.	80.0-120	10.0	µg/L	101	81.7 MP	79.3-120	50.0	µg/L	21.1	13.7
Vinyl chloride	ND(0.5)	113	76.2-128	10.0	µg/L	109	110.	78.0-130	50.0	µg/L	0.910	14.6
1,2-Dichloropropane	ND(0.5)	96.0	79.5-120	10.0	µg/L	101	97.9	81.7-117	50.0	µg/L	3.10	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	94.4	95.3	76.2-126	10.0	µg/L	95.2	87.3	76.2-126	50.0	µg/L		

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 1MS9135	**For sample analyzed on: 05/15/2017**					**Spiked sample: 17050689R**						
Surrogate Data:												
TOLUENE-d8	103	106	80.0-120	10.0	µg/L	103	107	80.0-120	50.0	µg/L		
QC Batch: 2IC2132	**For sample analyzed on: 05/12/2017**					**Spiked sample: 17050679**						
Chloride	ND(1.0)	103	90.0-110	4.0	mg/L	97.4	92.1	68.4-120	40.0	mg/L	5.60	21.6

Data Qualifiers:

ML - The matrix spike and/or matrix spike duplicate recovery for this analyte was below the method or laboratory control limit. See LCS data for the basis for acceptance of this sample. The reported sample concentration is estimated.

LL - The Laboratory Control Sample (LCS) recovery for this analyte was below the method or laboratory quality control limit. The reported sample concentration may be biased low.

MH - The matrix spike and/or matrix spike duplicate recovery for this analyte was above the method or laboratory control limit. See LCS data for the basis for acceptance of this sample. The reported sample concentration is estimated.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

LH - The Laboratory Control Sample (LCS) recovery for this analyte was above the method or laboratory quality control limit. The reported sample concentration may be biased high.

I - Due to the concentration of analyte in the sample, the spike level is too low to allow accurate quantification of the spike recovery.

MZ - The MSD recovery and the MS/MSD precision for this analyte were outside of method or laboratory control limits. See LCS data for the basis for acceptance of this sample. Reported sample concentration is estimated.

MP - The MS/MSD recoveries for this analyte exceeded the method or laboratory precision control limit. The reported sample concentration is estimated.

** - RPD calculation not applicable/not available for this analysis.

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050676		**Sample Description: WG-05082017-JR-MW017S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	74.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	74.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	82.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/18/2017	150	µg/L	32.4	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/18/2017	150	µg/L	50.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/18/2017	150	µg/L	84.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/11/2017	10	µg/L	93.5	76.2-126
TOLUENE-d8		05/11/2017	10	µg/L	101	80.0-120
Lab Number: 17050676R		**Sample Description: WG-050817-JR-MW017S1**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	29.7	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	47.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	85.9	53.9-131
Lab Number: 17050677		**Sample Description: WG-05082017-JR-MW017S3B**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	73.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	73.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	85.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/18/2017	150	µg/L	34.0	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/18/2017	150	µg/L	53.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/18/2017	150	µg/L	88.3	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/11/2017	10	µg/L	93.0	76.2-126
TOLUENE-d8		05/11/2017	10	µg/L	99.8	80.0-120
Lab Number: 17050677R		**Sample Description: WG-050817-JR-MW017S3B**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	35.6	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	55.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	97.8	53.9-131
Lab Number: 17050678		**Sample Description: WG-05082017-JR-MW017S3A**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	74.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	74.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	82.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/18/2017	150	µg/L	35.8	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/18/2017	150	µg/L	56.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/18/2017	150	µg/L	85.4	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/11/2017	10	µg/L	90.9	76.2-126

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050678		**Sample Description: WG-05082017-JR-MW017S3A**				
OXY Volatiles by 8260						
TOLUENE-d8		05/11/2017	10	µg/L	101	80.0-120
Lab Number: 17050678R		**Sample Description: WG-050817-JR-MW017S3A**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/23/2017	150	µg/L	32.3	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/23/2017	150	µg/L	50.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/23/2017	150	µg/L	85.4	53.9-131
Lab Number: 17050679		**Sample Description: WG-05082017-JR-MW147S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	88.3	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	88.3	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	83.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/18/2017	150	µg/L	34.1	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/18/2017	150	µg/L	57.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/18/2017	150	µg/L	97.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/11/2017	10	µg/L	84.1	76.2-126
TOLUENE-d8		05/11/2017	10	µg/L	104	80.0-120
Lab Number: 17050679R		**Sample Description: WG-050817-JR-MW147S1**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/24/2017	150	µg/L	32.0	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/24/2017	150	µg/L	51.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/24/2017	150	µg/L	88.7	53.9-131
Lab Number: 17050680		**Sample Description: WG-05082017-JR-MW147S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	73.7	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	73.7	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	88.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/18/2017	150	µg/L	36.6	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/18/2017	150	µg/L	56.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/18/2017	150	µg/L	101	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	100.	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	99.0	80.0-120
Lab Number: 17050680R		**Sample Description: WG-050817-JR-MW147S2/S3**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/24/2017	150	µg/L	33.2	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/24/2017	150	µg/L	52.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/24/2017	150	µg/L	94.8	53.9-131
Lab Number: 17050681		**Sample Description: WG-05082017-JR-MW148S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	79.8	62.2-119

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050681		**Sample Description: WG-05082017-JR-MW148S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	79.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	88.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/18/2017	150	µg/L	31.7	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/18/2017	150	µg/L	49.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/18/2017	150	µg/L	75.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/11/2017	10	µg/L	81.4	76.2-126
TOLUENE-d8		05/11/2017	10	µg/L	102	80.0-120
Lab Number: 17050681R		**Sample Description: WG-050817-JR-MW148S1**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/24/2017	150	µg/L	33.7	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/24/2017	150	µg/L	53.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/24/2017	150	µg/L	94.2	53.9-131
Lab Number: 17050682		**Sample Description: WG-05082017-JR-MW148S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	79.3	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/12/2017	05/16/2017	5.0	µg/L	79.3	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/12/2017	05/16/2017	8.0	µg/L	91.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/12/2017	05/19/2017	150	µg/L	37.6	25.6-44.5
2-FLUOROPHENOL	05/12/2017	05/19/2017	150	µg/L	60.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/12/2017	05/19/2017	150	µg/L	112	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/11/2017	10	µg/L	84.3	76.2-126
TOLUENE-d8		05/11/2017	10	µg/L	101	80.0-120
Lab Number: 17050682R		**Sample Description: WG-05082017-JR-MW148S2/S3**				
OXY GC/MS Acids						
PHENOL-d6	05/22/2017	05/24/2017	150	µg/L	33.9	25.6-44.5
2-FLUOROPHENOL	05/22/2017	05/24/2017	150	µg/L	53.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/22/2017	05/24/2017	150	µg/L	91.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	100	µg/L	98.1	76.2-126
TOLUENE-d8		05/12/2017	100	µg/L	101	80.0-120
Lab Number: 17050683		**Sample Description: WG-05082017-JR-MW006BR**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	76.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	76.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	99.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/18/2017	150	µg/L	33.6	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/18/2017	150	µg/L	50.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/18/2017	150	µg/L	104	53.9-131

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050683		**Sample Description: WG-05082017-JR-MW006BR**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	95.4	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	101	80.0-120
Lab Number: 17050684		**Sample Description: WG-05082017-JR-FD6**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	71.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	71.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	94.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/18/2017	150	µg/L	31.4	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/18/2017	150	µg/L	49.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/18/2017	150	µg/L	104	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	99.5	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	98.9	80.0-120
Lab Number: 17050685		**Sample Description: WG-05092017-BS-AMW102D**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	75.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	75.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	92.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/18/2017	150	µg/L	31.6	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/18/2017	150	µg/L	50.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/18/2017	150	µg/L	107	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	102	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	96.4	80.0-120
Lab Number: 17050686		**Sample Description: WG-05092017-BS-MW26S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	71.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	71.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	91.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/18/2017	150	µg/L	30.1	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/18/2017	150	µg/L	48.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/18/2017	150	µg/L	90.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	102	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	98.0	80.0-120
Lab Number: 17050687		**Sample Description: WG-05092017-BS-MW26S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	79.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	79.5	62.2-119

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050687		**Sample Description: WG-05092017-BS-MW26S3**				
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	80.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/19/2017	150	µg/L	32.1	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/19/2017	150	µg/L	49.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/19/2017	150	µg/L	87.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	105	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	98.4	80.0-120
Lab Number: 17050688		**Sample Description: WG-05092017-JR-MW142S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	69.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	69.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	95.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/18/2017	150	µg/L	30.3	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/18/2017	150	µg/L	47.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/18/2017	150	µg/L	100.	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	103	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	102	80.0-120
Lab Number: 17050689		**Sample Description: WG-05092017-JR-MW029S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	83.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	83.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	76.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	32.2	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	49.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	110.	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	104	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	99.2	80.0-120
Lab Number: 17050689R		**Sample Description: WG-05092017-JR-MW029S3**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	50	µg/L	95.1	76.2-126
TOLUENE-d8		05/15/2017	50	µg/L	105	80.0-120
Lab Number: 17050690		**Sample Description: WG-05092017-JR-MW015S4**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	75.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/17/2017	5.0	µg/L	75.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	87.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	30.9	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050690		**Sample Description: WG-05092017-JR-MW015S4**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	47.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	97.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	96.7	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	101	80.0-120
Lab Number: 17050691		**Sample Description: TB-7**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	108	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	96.1	80.0-120
Lab Number: 17050692		**Sample Description: WG-05082017-DF-MW020S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	77.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	77.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	90.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	31.1	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	51.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	102	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	104	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	96.7	80.0-120
Lab Number: 17050693		**Sample Description: WG-05082017-DF-MW020S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	66.7	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	66.7	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	89.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	32.3	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	51.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	102	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	118	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	97.7	80.0-120
Lab Number: 17050694		**Sample Description: WG-05082017-DF-MW138S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	62.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	62.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	89.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	33.2	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	52.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	102	53.9-131

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050694		**Sample Description: WG-05082017-DF-MW138S1**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/13/2017	10	µg/L	112	76.2-126
TOLUENE-d8		05/13/2017	10	µg/L	96.1	80.0-120
Lab Number: 17050695		**Sample Description: WG-05082017-DF-MW138S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	66.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	66.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	85.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	33.1	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	49.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	98.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/13/2017	10	µg/L	112	76.2-126
TOLUENE-d8		05/13/2017	10	µg/L	96.0	80.0-120
Lab Number: 17050696		**Sample Description: WG-05082017-DF-MW131S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	70.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	70.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	91.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	30.7	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	48.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	97.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/13/2017	10	µg/L	112	76.2-126
TOLUENE-d8		05/13/2017	10	µg/L	98.6	80.0-120
Lab Number: 17050697		**Sample Description: WG-05082017-DF-MW131S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	72.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	72.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	91.3	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	28.6	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	45.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	96.4	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/13/2017	10	µg/L	111	76.2-126
TOLUENE-d8		05/13/2017	10	µg/L	99.4	80.0-120
Lab Number: 17050698		**Sample Description: WG-05082017-DF-MW022S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	71.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	71.9	62.2-119

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050698		**Sample Description: WG-05082017-DF-MW022S2**				
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/17/2017	8.0	µg/L	89.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	32.4	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	51.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	98.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	400	µg/L	98.1	76.2-126
TOLUENE-d8		05/12/2017	400	µg/L	104	80.0-120
Lab Number: 17050699		**Sample Description: WG-05082017-DF-MW022S4**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	67.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	67.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/18/2017	8.0	µg/L	79.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	32.5	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	51.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	98.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	93.5	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	102	80.0-120

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
2,4-Dichlorophenoxyacetic Acid	05/16/2017	2NX5135	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/16/2017	3NX5135	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/16/2017	4NX5135	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/17/2017	1NX5137	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/17/2017	2NX5137	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/18/2017	3NX5137	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/18/2017	1NX5138	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/18/2017	2NX5138	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/16/2017	2NX5135	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/16/2017	3NX5135	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/16/2017	4NX5135	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/17/2017	1NX5137	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/17/2017	2NX5137	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/18/2017	3NX5137	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/18/2017	1NX5138	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/18/2017	2NX5138	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/16/2017	4EX3135	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/16/2017	5EX3135	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/16/2017	6EX3135	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/17/2017	1EX3137	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/17/2017	2EX3137	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/18/2017	3EX3137	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/18/2017	4EX3137	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/18/2017	1EX3138	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/18/2017	2EX3138	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/12/2017	5IC2132	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/12/2017	6IC2132	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/13/2017	1IC2133	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/13/2017	2IC2133	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/13/2017	3IC2133	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/13/2017	4IC2133	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/18/2017	1MS6138	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/18/2017	2MS6138	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/19/2017	1MS6139	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/19/2017	2MS6139	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/20/2017	3MS6139	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/23/2017	2MS6143	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/24/2017	3MS6143	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/11/2017	1MS5131	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/12/2017	1MS8132	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/12/2017	2MS8132	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/13/2017	3MS8132	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/12/2017		CCV recovery acceptable except as qualified below.			
Chloromethane	05/12/2017	1MS9132	10.0	12.4	µg/L	124 CH

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/09/2017
Pace File No: 7775
Pace Order No: 140344

Samples associated with this Continuing Calibration Verification:

Laboratory Number	Instrument Batch	Sample Description
17050698	1MS9132	WG-05082017-DF-MW022S2
17050699	1MS9132	WG-05082017-DF-MW022S4

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
OXY Volatiles by 8260	05/12/2017	2MS9132	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/15/2017		CCV recovery acceptable except as qualified below.			
Chloromethane	05/15/2017	1MS9135	10.0	13.3	µg/L	133 CH

Samples associated with this Continuing Calibration Verification:

Laboratory Number	Instrument Batch	Sample Description
17050689R	1MS9135	WG-05092017-JR-MW029S3
17050690	1MS9135	WG-05092017-JR-MW015S4

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
OXY Volatiles by 8260	05/15/2017	2MS9135	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/17/2017	13IP4137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/18/2017	14IP4137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/18/2017	15IP4137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/22/2017	7IP4142	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/22/2017	8IP4142	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/22/2017	9IP4142	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/22/2017	10IP4142	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/23/2017	2IP4143	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/23/2017	3IP4143	CCV recovery acceptable for this Instrument Batch.			

Data Qualifiers:
CH - The continuing calibration verification (CCV) standard recovery for this analyte was above the method or SOP limit. The reported concentration for this analyte may be biased high.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Edits made prior to sample receipt 5-9-17

Page: 1 of 3

2059300

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Kogl	Attention:
Address: 2626 W. Pawnee ST6D	Copy To:	Company Name:
		Address:
Email To: Travs.kogl@GHD.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Oxy Spring 2017 GWM	Pace Project Manager: Greg Greene
Requested Due Date/TAT:	Project Number: 11137148	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOCs	SVOCs	Pest/Herb	Chlorid/Hard	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05082017-JR-MW017s1	WT	G			5/8/17	1145		8	5			3						X	X	X	X		
2	WG-05082017-JR-MW017s3B						1220		8	5			3						X	X	X	X		
3	WG-05082017-JR-MW017s3A						1305		8	5			3						X	X	X	X		MS/MSD
4	WG-05082017-JR-MW147s1						1405		24	15			9						X	X	X	X		
5	WG-05082017-JR-MW147s2/s3						1500		8	5			3						X	X	X	X		
6	WG-05082017-JR-MW148s1						1540		8	5			3						X	X	X	X		
7	WG-05082017-JR-MW148s2/s3						1620		8	5			3						X	X	X	X		
8	WG-05082017-JR-MW006BR						1700		8	5			3						X	X	X	X		
9	WG-05082017-JR-FD6						0:00		8	5			3						X	X	X	X		
10	WG-05092017-BS-AMW102D					5/9/17	9:15		8	5			3						X	X	X	X		
11	WG-05092017-BS-MW26s1					5/9/17	10:45		8	5			3						X	X	X	X		
12	WG-05092017-BS-MW26s3					5/9/17	10:55		24	15			9						X	X	X	X		MS/MSD

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] GHD	5/9/17	1450	[signature]	5/9/17	1450	
	[signature]	5/9/17	1620	[signature]	5/9/17	1620	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Brian Schauer

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 5/9/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Edits made prior to sample receipt

2059298

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Kogl	Attention:
Address: 2626 Pawnee Ste D	Copy To:	Company Name:
		Address:
Email To: Travis Kogl	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Oxy Spring 2017 GWM	Pace Project Manager: Greg Groeve
Requested Due Date/TAT:	Project Number: 11137148	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOCs	SVOCs	Pest / Herbs	Chloride Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05082017-DF-MW020s1	WT	G			5/8/17	1700		8	5			3					X	X	X	X			
2	WG-05082017-DF-MW020s3						1730		8	5			3					X	X	X	X			
3	WG-05082017-DF-MW138s1						1535		8	5			3					X	X	X	X			
4	WG-05082017-DF-MW138s2/s3						1450		8	5			3					X	X	X	X			
5	WG-05082017-DF-MW13s2						1405		8	5			3					X	X	X	X			
6	WG-05082017-DF-MW13s3						1310		8	5			3					X	X	X	X			
7	WG-05082017-DF-MW022s2						1055		24	5			9					X	X	X	X			MS/MSD
8	WG-05082017-DF-MW022s4						1135		8	5			3					X	X	X	X			
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	GHD	5/9/17	1450		5/9/17	1450	
		5/9/17	1620		5/9/17	1620	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Sean Murphy

SIGNATURE of SAMPLER: Sean Murphy

DATE Signed (MM/DD/YY): 05/08/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 3 of 3

2059299

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Koyl	Attention:
Address: 2626 W. Pawnee St D	Copy To: Paul McMahon	Company Name:
		Address:
Email To: Travis Koyl	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Ox4 Spring 2017 GWM	Pace Project Manager: Grey Groene
Requested Due Date/TAT:	Project Number: 11137148	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOCs	SVOCs	BTEX / Herb	Chloride / Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05092017-JR-MW142s2s3	WT	G			5/9/17	1010		8	5			3					X	X	X	X			
2	WG-05092017-JR-MW029s3	1	1				1140		8	5			3					X	X	X	X			
3	WG-05092017-JR-MW015s4						1155		8	5			3					X	X	X	X			
4	TB-7						—		3				3					X						
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		5/9/11	1450		5/9/17	1450	
		5/9/17	1620		5/9/17	1620	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeremy Reyes

SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): 5/9/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140345

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

10 LtA 3 250P MW14751
__ LtA __ 250P
__ LtA __ 250P
__ LtA __ 250P
VOC

Cooler 1 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4333 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/9/17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.7 Corrected Reading (°C) 1.3
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled ✓

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKL **Date Completed:** 5-9-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140349

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 1 250P MW020S1
2 LTA — 250P MW138S1
1 LTA 1 250P MW020S3
2 LTA — 250P MW138S2S3
VOC 1 250P: MW131S2

Cooler 2 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 11278 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/9/17 16:20

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.6 Corrected Reading (°C) 1.2
Temperature. By: Temperature Blank Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): −0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-9-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140344

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

8 LTA 2 250P MW022S2
2 LTA — 250P MW148S2/S3
— LTA — 250P
— LTA — 250P
VOC

Cooler 3 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4338 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/9/17 16:20

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 0.5 Corrected Reading (°C) 0.1
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): −0.4

☐ Evidence of Cooling and date received = date sampled 9

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SMR **Date Completed:** 5-9-17

Pace Analytical Services, Inc. Pace Order No.: 140344

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

10 LtA 3 250P MW2653
__ LtA __ 250P
__ LtA __ 250P
__ LtA __ 250P
VOC

Cooler 4 of 13 for this Pace Order No.

Cooler Identification: Pace Cooler #: ALS / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/9/17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / ~~Dry Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.7 Corrected Reading (°C) 3.3
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): −0.4
☐ Evidence of Cooling and date received = date sampled ~~7~~

Sample Receipt Discrepancies: ☒ ~~No~~ ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: [signature] Date Completed: 5-9-17

Pace Analytical Services, Inc. Pace Order No.: 140344

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 1 250P MW015S4

__ LTA __ 250P

__ LTA __ 250P

__ LTA __ 250P

VOC

Cooler 5 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4341 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: ___/___/___ ___:___

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.9 Corrected Reading (°C) 1.5
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): −0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SCA **Date Completed:** 5-9-17

Pace Analytical Services, Inc. **Pace Order No.:** 140344

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LtA ___ 250P FD6
2 LtA ___ 250P MW148S2S3
4 LtA ___ 250P MW148S1
___ LtA ___ 250P
VOC

Cooler 6 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4017 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/9/17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: ___
Seal Name: ___ Seal Date: ___
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 2.6 Corrected Reading (°C) 2.2
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): −0.4

☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: ___

Detail to discrepancies/comments:

Completed by: ___ **Date Completed:** 5-9-17

Pace Analytical Services, Inc. **Pace Order No.:** 140344

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LtA 1 250P MW02254
4 LtA 1 250P MW02252
___ LtA ___ 250P
___ LtA ___ 250P
VOC

Cooler 7 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4112 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/9/17 16:20

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: ___
Seal Name: ___ Seal Date: ___
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 2.6 Corrected Reading (°C) 2.2
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: ___

Detail to discrepancies/comments:

Completed by: SK **Date Completed:** 5-9-17

Pace Analytical Services, Inc. Pace Order No.: 140344

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

2 LTA ___ 250P MW2653
4 LTA 1 250P MW2651
4 LTA 1 250P AMW102D
___ LTA ___ 250P
VOC

Cooler 8 of 13 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4032 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/9/17 16:20

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: ___
Seal Name: ___ Seal Date: ___
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Dry Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 3.6 Corrected Reading (°C) 3.2
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled 7

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: ___

Detail to discrepancies/comments:

Completed by: SL Date Completed: 5-9-17

Pace Analytical Services, Inc. **Pace Order No.:** 140344

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LtA 1 250P MW1425253
4 LtA 1 250P MW02953
__ LtA __ 250P
__ LtA __ 250P
VOC

Cooler 9 of 13 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4342 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/9/17 16:20

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Dry Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.4 Corrected Reading (°C) 2.1
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: [signature] **Date Completed:** 5-9-17

Pace Analytical Services, Inc. **Pace Order No.:** 140344

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LtA ___ 250P MW0175 3A
4 LtA ___ 250P MW1475 2S3
2 LtA ___ 250P MW1481
___ LtA 1 250P FD6
VOC

Cooler 10 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4109 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/9/17 16:20

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: ___
Seal Name: ___ Seal Date: ___
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 3.6 Corrected Reading (°C) 3.2
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: ___

Detail to discrepancies/comments:

Completed by: ___ **Date Completed:** 5-9-17

Pace Analytical Services, Inc. **Pace Order No.:** 140344

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LtA 1 250P MW017S1 1 EA 250P: MW017S3B
3 ~~4~~ LtA 1 250P MW017S3B MW148S1
___ LtA ___ 250P MW147S2S3
___ LtA ___ 250P MW148S2S3
23 sets VOC + 1 TB

Cooler 11 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 3909 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5 / 9 / 17 16 : 20

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: ___
Seal Name: ___ Seal Date: ___
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 3.1 Corrected Reading (°C) 2.7
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): −0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: ___

Detail to discrepancies/comments:

Completed by: ___ **Date Completed:** 5-9-17

Pace Analytical Services, Inc. **Pace Order No.:** 140344

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 1 250P MW006BR 2 LTA: MW138S1
1 LTA 250P MW017S3B 1 LTA: MW138S2S3
1 LTA 250P MW020S3
1 LTA 250P MW131S2
VOC

Cooler 12 of 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4335 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/9/17 16:20

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.2 Corrected Reading (°C) 1.8
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SL **Date Completed:** 5-9-17

Pace Analytical Services, Inc. **Pace Order No.:** 140344

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

3 LtA 250P MW1315S2 1250P: MW1385S1
1 LtA 1 250P MW1385S2S3
4 LtA 1 250P MW1315S3
2 LtA 250P MW02053
VOC

Cooler 13 **of** 13 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 43326 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/9/17 16:20

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.0 Corrected Reading (°C) 3.2
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): −0.4

☐ Evidence of Cooling and date received = date sampled ✓

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKA **Date Completed:** 5-9-17

Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date and Time Received: 05/10/2017 1655
Pace File No.: 7775
Pace Order No.: 140414
P.O./Project No: 4502201562-11119420
Project ID: OXY WICHITA GWM
Purchase Auth: SSOW251-402-D02-3100

Dear Ms. Thurman:

This laboratory report, containing the samples indicated below, includes 61 pages for the analytical report, 3 page(s) for the chain of custody and/or analysis request, and 8 page(s) for the sample receipt form.

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17050930	WG-05092017-BS-MW007S1	Liquid	5/9/2017
17050931	WG-05092017-BS-MW007S2	Liquid	5/9/2017
17050932	WG-05092017-BS-MW007S3	Liquid	5/9/2017
17050933	WG-05092017-BS-AMW102S	Liquid	5/9/2017
17050934	WG-05102017-BS-APMW302S2	Liquid	5/10/2017
17050935	WG-05102017-BS-APMW302S1	Liquid	5/10/2017
17050936	WG-05102017-BS-APMW302S3	Liquid	5/10/2017
17050937	WG-05092017-JR-MW024S1	Liquid	5/9/2017
17050938	WG-05092017-JR-MW024S3	Liquid	5/9/2017
17050939	WG-05092017-JR-MW024S4	Liquid	5/9/2017
17050940	WG-05092017-JD-ER12	Liquid	5/9/2017
17050940R	WG-05092017-JD-ER12	Liquid	5/9/2017
17050941	WG-05092017-DF-MW130S1	Liquid	5/9/2017
17050942	WG-05092017-DF-MW130S2	Liquid	5/9/2017
17050943	WG-05092017-DF-MW130S3	Liquid	5/9/2017
17050943R	WG-05092017-DF-MW130S3	Liquid	5/9/2017
17050944	WG-05092017-DF-MW132S1	Liquid	5/9/2017
17050945	WG-05092017-DF-MW132S2/S3	Liquid	5/9/2017
17050946	WG-05092017-DF-MW145S2/S3	Liquid	5/9/2017
17050947	WG-05092017-DF-FD7	Liquid	5/9/2017
17050948	TB-8	Liquid	5/9/2017
17050949	WG-05092017-DF-ER11	Liquid	5/9/2017
17050950	WG-05102017-JR-MW032S1	Liquid	5/10/2017

The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

Samples will be retained for thirty days unless Pace is otherwise notified. Pace is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Pace's Standard Operating Procedures. These procedures are in substantial compliance with the approved

methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.

Thank you for choosing Pace for this project.

Gregory J. Groene
Project Manager
Gregory.Groene@pacelabs.com

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050930
Sample Description: WG-05092017-BS-MW007S1

Date Sampled: 05/09/2017
Time Sampled: 1405

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	220 SR	µg/L	25	25	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	0.38	µg/L	5.0	0.055	7460/205
B-BHC	ND(0.19)	µg/L	5.0	0.19	7460/205
G-BHC	0.41	µg/L	5.0	0.26	7460/205
Hexachloroethane	8.79	µg/L	5.0	0.1	7460/205
Hexachlorobutadiene	1.9	µg/L	5.0	0.1	7460/205
Hexachlorobenzene	ND(0.50)	µg/L	5.0	0.5	7460/205
D-BHC	0.3	µg/L	5.0	0.3	7460/205
OXY GC/MS Acids					
2-Chlorophenol	6.8	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	96.5	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	10.6	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	13.4	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(50)	µg/L	100	50	7466/524
1,2-Dichloroethane	190	µg/L	100	50	7466/524
Benzene	80	µg/L	100	50	7466/524
Carbon tetrachloride	1460	µg/L	100	50	7466/524
Chloroform	1760	µg/L	100	50	7466/524
Chloromethane	ND(50)	µg/L	100	50	7466/524
Methylene chloride	770	µg/L	100	50	7466/524
Tetrachloroethylene	350	µg/L	100	50	7466/524
Trichloroethylene	ND(50)	µg/L	100	50	7466/524
Vinyl chloride	ND(50)	µg/L	100	50	7466/524
1,2-Dichloropropane	ND(50)	µg/L	100	50	7466/524
Hardness (Calculated)	1300	mg/L as CaCO3	5.0	25	7443/996
Chloride	970	mg/L	100	100	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 2356	170514-1	2NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 1039	170514-1	3NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/18/17 0253	170513-2	3EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/20/17 1120	170513-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/13/17 0226	1MS8132	2MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/23/17 1607	170516-3	5IP4143	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1805	2IC2133	3IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050930

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050931
Sample Description: WG-05092017-BS-MW007S2

Date Sampled: 05/09/2017
Time Sampled: 1450

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	0.7	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	459	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	176	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 0802	170514-1	3NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 0802	170514-1	3NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/18/17 0333	170513-2	3EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 1744	170513-1	1MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/13/17 0302	1MS8132	2MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2234	170516-3	9IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1817	2IC2133	3IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050931

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050932
Sample Description: WG-05092017-BS-MW007S3

Date Sampled: 05/09/2017
Time Sampled: 1515

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/524
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/524
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/524
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/524
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/524
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/524
Hardness (Calculated)	421	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	158	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 0841	170514-1	3NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 0841	170514-1	3NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/18/17 0413	170513-2	3EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 1825	170513-1	1MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/13/17 0337	1MS8132	2MS8132	GMA	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2239	170516-3	9IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1830	2IC2133	3IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050932

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050933
Sample Description: WG-05092017-BS-AMW102S

Date Sampled: 05/09/2017
Time Sampled: 1700

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/181
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/181
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	255	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	62	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 0921	170514-1	3NX5137	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 0921	170514-1	3NX5137	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/18/17 0452	170513-2	3EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 2119	170513-1	2MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1323	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2243	170516-3	9IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1906	2IC2133	4IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050933

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050934
Sample Description: WG-05102017-BS-APMW302S2

Date Sampled: 05/10/2017
Time Sampled: 0850

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	291	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	47	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/18/17 2158	170514-4	1NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/18/17 2158	170514-4	1NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 1454	170515-2	1EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 0040	170515-1	2MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1348	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1025	05/22/17 2247	170516-3	9IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1919	2IC2133	4IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050934

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050935
Sample Description: WG-05102017-BS-APMW302S1

Date Sampled: 05/10/2017
Time Sampled: 0900

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	9.9	µg/L	1.0	0.5	7465/347
Chloroform	17.5	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	4.8	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	274	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	45	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/18/17 2237	170514-4	1NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/18/17 2237	170514-4	1NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 1534	170515-2	1EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 0120	170515-1	2MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1413	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/22/17 2326	170516-4	10IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1931	2IC2133	4IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050935

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050936
Sample Description: WG-05102017-BS-APMW302S3

Date Sampled: 05/10/2017
Time Sampled: 0930

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	0.69	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	2.1	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	280.	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	45	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0035	170514-4	2NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0035	170514-4	2NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 1613	170515-2	1EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 0200	170515-1	2MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1438	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/22/17 2330	170516-4	10IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1943	2IC2133	4IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050936

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050937
Sample Description: WG-05092017-JR-MW024S1

Date Sampled: 05/09/2017
Time Sampled: 1400

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	0.033	µg/L	1.0	0.011	7460/205
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/205
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/205
Hexachloroethane	0.31	µg/L	1.0	0.02	7460/205
Hexachlorobutadiene	0.22	µg/L	1.0	0.02	7460/205
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/205
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/205
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(1)	µg/L	2.0	1	7465/347
1,2-Dichloroethane	8.6	µg/L	2.0	1	7465/347
Benzene	ND(1)	µg/L	2.0	1	7465/347
Carbon tetrachloride	82.6	µg/L	2.0	1	7465/347
Chloroform	182	µg/L	2.0	1	7465/347
Chloromethane	ND(1) QC	µg/L	2.0	1	7465/347
Methylene chloride	1	µg/L	2.0	1	7465/347
Tetrachloroethylene	26.7	µg/L	2.0	1	7465/347
Trichloroethylene	2.7	µg/L	2.0	1	7465/347
Vinyl chloride	ND(1)	µg/L	2.0	1	7465/347
1,2-Dichloropropane	ND(1)	µg/L	2.0	1	7465/347
Hardness (Calculated)	298	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	57	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 0830	05/18/17 1921	170514-1	1NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 0830	05/18/17 1921	170514-1	1NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/13/17 1300	05/18/17 0532	170513-2	3EX3137	JMM	8121
OXY GC/MS Acids	05/13/17 1015	05/19/17 2159	170513-1	2MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1502	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/22/17 2334	170516-4	10IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 1956	2IC2133	4IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050937

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050938
Sample Description: WG-05092017-JR-MW024S3

Date Sampled: 05/09/2017
Time Sampled: 1445

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	14.7	µg/L	1.0	0.5	7465/347
Chloroform	14.0	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	4.0	µg/L	1.0	0.5	7465/347
Trichloroethylene	0.6	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	307	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	86	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0114	170514-4	2NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0114	170514-4	2NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 1653	170515-2	1EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 0240	170515-1	2MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1527	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/22/17 2339	170516-4	10IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2008	2IC2133	4IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050938

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050939
Sample Description: WG-05092017-JR-MW024S4

Date Sampled: 05/09/2017
Time Sampled: 1520

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	31.1	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	13.9	mg/L	1.0	1.0	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0154	170514-4	2NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0154	170514-4	2NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 1853	170515-2	2EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 0320	170515-1	2MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1552	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/22/17 2343	170516-4	10IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2020	2IC2133	4IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050939

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050940
Sample Description: WG-05092017-JD-ER12

Date Sampled: 05/09/2017
Time Sampled: 1800

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) SR	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5) SR	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/22/17 1147	170514-4	1NX5142	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/22/17 1147	170514-4	1NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 1932	170515-2	2EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 0401	170515-1	2MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1616	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/22/17 2348	170516-4	10IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2033	2IC2133	4IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050940

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050940R
Sample Description: WG-05092017-JD-ER12

Date Sampled: 05/09/2017
Time Sampled: 1800

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5) HP	µg/L	1.0	0.5	7462/185

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/22/17 1200	05/24/17 2107	170522-2	5NX5143	JMM	8151A(M)
Pentachlorophenol	05/22/17 1200	05/24/17 2107	170522-2	5NX5143	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17050940R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050941
Sample Description: WG-05092017-DF-MW130S1

Date Sampled: 05/09/2017
Time Sampled: 0915

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	153	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	51	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0312	170514-4	2NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0312	170514-4	2NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 2012	170515-2	2EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 0441	170515-1	2MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1641	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/22/17 2354	170516-4	10IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2045	2IC2133	4IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050941

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050942
Sample Description: WG-05092017-DF-MW130S2

Date Sampled: 05/09/2017
Time Sampled: 1020

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/328
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/328
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	133	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	61	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0352	170514-4	2NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0352	170514-4	2NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 2052	170515-2	2EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 0521	170515-1	2MS6139	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1706	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/22/17 2359	170516-4	10IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2057	2IC2133	4IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050942

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050943
Sample Description: WG-05092017-DF-MW130S3

Date Sampled: 05/09/2017
Time Sampled: 1040

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids	SR				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	176	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	59	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0431	170514-4	2NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0431	170514-4	2NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 2131	170515-2	2EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 1200	170515-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1731	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/23/17 0013	170516-4	11IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2159	2IC2133	5IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050943

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050943R
Sample Description: WG-05092017-DF-MW130S3

Date Sampled: 05/09/2017
Time Sampled: 1040

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/441
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/441
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/441
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/441
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/441
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/441
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/441
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/441
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/441

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/23/17 0800	05/23/17 2340	170523-2	1MS7143	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17050943R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050944
Sample Description: WG-05092017-DF-MW132S1

Date Sampled: 05/09/2017
Time Sampled: 1315

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	289	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	56	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0510	170514-4	2NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0510	170514-4	2NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 2211	170515-2	2EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 1240	170515-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1755	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/23/17 0018	170516-4	11IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2211	2IC2133	5IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050944

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050945
Sample Description: WG-05092017-DF-MW132S2/S3

Date Sampled: 05/09/2017
Time Sampled: 1205

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	192	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	24.2	mg/L	1.0	1.0	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0550	170514-4	2NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0550	170514-4	2NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 2251	170515-2	2EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 1320	170515-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1820	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/23/17 0023	170516-4	11IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2223	2IC2133	5IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050945

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050946
Sample Description: WG-05092017-DF-MW145S2/S3

Date Sampled: 05/09/2017
Time Sampled: 1350

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	0.013	µg/L	1.0	0.011	7460/206
B-BHC	1.03	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	0.04	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	250.	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	180	mg/L	20	20	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0708	170514-4	3NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0708	170514-4	3NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/18/17 2330	170515-2	2EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 1400	170515-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1845	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/23/17 0028	170516-4	11IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2235	2IC2133	5IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050946

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050947
Sample Description: WG-05092017-DF-FD7

Date Sampled: 05/09/2017
Time Sampled: 1200

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	161	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	50.	mg/L	10	10	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0747	170514-4	3NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0747	170514-4	3NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/19/17 0010	170515-2	2EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 1440	170515-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1910	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/23/17 0033	170516-4	11IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2248	2IC2133	5IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050947

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050948
Sample Description: TB-8

Date Sampled: 05/09/2017
Time Sampled:

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/12/17 1935	1MS9132	1MS9132	RKR	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17050948

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050949
Sample Description: WG-05092017-DF-ER11

Date Sampled: 05/09/2017
Time Sampled: 0840

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/22/17 1227	170514-4	1NX5142	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/22/17 1227	170514-4	1NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/19/17 0209	170515-2	3EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 1520	170515-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 1959	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/23/17 0037	170516-4	11IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2300	2IC2133	5IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050949

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Lab Number: 17050950
Sample Description: WG-05102017-JR-MW032S1

Date Sampled: 05/10/2017
Time Sampled: 0935

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	0.033	µg/L	1.0	0.011	7460/206
B-BHC	1.06	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	0.06	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/347
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/347
Carbon tetrachloride	34.5	µg/L	1.0	0.5	7465/347
Chloroform	17.2	µg/L	1.0	0.5	7465/347
Chloromethane	ND(0.5) QC	µg/L	1.0	0.5	7465/347
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
Tetrachloroethylene	4.4	µg/L	1.0	0.5	7465/347
Trichloroethylene	5.2	µg/L	1.0	0.5	7465/347
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/347
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/347
Hardness (Calculated)	1080	mg/L as CaCO3	5.0	25	7443/996
Chloride	1170	mg/L	100	100	7551/257

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0906	170514-4	3NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0906	170514-4	3NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/19/17 0249	170515-2	3EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 1600	170515-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/12/17 2024	1MS9132	1MS9132	RKR	8260B
Hardness (Calculated)	05/16/17 1106	05/23/17 1611	170516-4	5IP4143	KMW	6010B & SM 2340B
Chloride	N/A	05/13/17 2312	2IC2133	5IC2133	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17050950

Appendix

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

ND indicates not detected with the LOQ (Limit of Quantitation) in parentheses. The LOQ value has been adjusted for the dilution factor and percent solids, as applicable. Due to rounding of significant figures, the LOQ value may vary slightly from the reported concentration. The LOQ is the lowest concentration of the analytical standard that was used for calibrating the instrument. If an analytical standard is analyzed at the LOQ, an error of as much as +/- 50% can be expected. N/A, if present, indicates not applicable.

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

No analysis with a holding time of seventy-two hours or less was performed in this Pace order.

SR - One or more surrogate recoveries for this analysis did not meet quality control limits, or was diluted below the low calibration point. Please see the Quality Control Report for the sample surrogate data.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

HP - Regulatory preparation holding time for this analysis was exceeded.

QC - QC data qualifiers were noted. See the Quality Control Report.

Following is the full name of each analyst that performed analysis(es) on this Pace order number:

Analyst Initials	Analyst Full Name
GMA	Guy Allen
JMM	Julie M. McCullough
KMW	Keegan M. Wilson
MLL	Melissa L. Lundgrin
RKR	Rhonda K. Reilly
SPA	Stephen P. Albin

Accreditation Summary

Client: Occidental Chemical Corporation_Oxy
Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Pace is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Pace is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Pace's full NELAP accreditation status may be viewed at www.kdheks.gov/envlab. Note that unless qualified otherwise in the Laboratory Report, Pace performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

Test	Analysis	Matrix-Regulatory Program	Method	Pace NELAP Accredited in Other Reg. Program
CL351	OXY Chlorinated Hyd.	L-RCRA	8121	
CL351	Hexachloroethane	L-RCRA	8121	No
CL351	Hexachlorobutadiene	L-RCRA	8121	No
MS302	OXY GC/MS Acids	L-RCRA	8270C	
MS302	3-& 4-Chlorophenol	L-RCRA	8270C	No
MS302	2,5-Dichlorophenol	L-RCRA	8270C	No
MS302	2,3,4,5-Tetrachlorophenol	L-RCRA	8270C	No

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170514-1	170514BLK1 05/17/17 1738	170514LCS1 05/17/17 1817	17050698MS 05/18/17 0446
Lab numbers associated with this batch: 17050930 17050931 17050932 17050933 17050937					
CL223	2,4-Dichlorophenoxyacetic Acid	170514-4	170514BLK4 05/18/17 1723	170514LCS4 05/18/17 1802	17050687MS 05/18/17 2039
Lab numbers associated with this batch: 17050934 17050935 17050936 17050938 17050939 17050940 17050941 17050942 17050943 17050944 17050945 17050946 17050947 17050949 17050950					
CL223	2,4-Dichlorophenoxyacetic Acid	170522-2	170522BLK2 05/24/17 1949	170522LCS2 05/24/17 2028	
Lab numbers associated with this batch: 17050940R					
CL350	Pentachlorophenol	170514-1	170514BLK1 05/17/17 1738	170514LCS1 05/17/17 1817	17050698MS 05/18/17 0446
Lab numbers associated with this batch: 17050930 17050931 17050932 17050933 17050937					
CL350	Pentachlorophenol	170514-4	170514BLK4 05/18/17 1723	170514LCS4 05/18/17 1802	17050687MS 05/18/17 2039
Lab numbers associated with this batch: 17050934 17050935 17050936 17050938 17050939 17050940 17050941 17050942 17050943 17050944 17050945 17050946 17050947 17050949 17050950					
CL350	Pentachlorophenol	170522-2	170522BLK2 05/24/17 1949	170522LCS2 05/24/17 2028	
Lab numbers associated with this batch: 17050940R					
CL351	OXY Chlorinated Hyd.	170513-2	170513BLK2 05/17/17 1139	170513LCS2 05/17/17 1219	17050698MS 05/17/17 2335
Lab numbers associated with this batch: 17050930 17050931 17050932 17050933 17050937					
CL351	OXY Chlorinated Hyd.	170515-2	170515BLK2 05/18/17 1135	170515LCS2 05/18/17 1215	17050687MS 05/18/17 1334
Lab numbers associated with this batch: 17050934 17050935 17050936 17050938 17050939 17050940 17050941 17050942 17050943 17050944 17050945 17050946 17050947 17050949 17050950					
MS302	OXY GC/MS Acids	170513-1	170513BLK1 05/18/17 1932	170513LCS1 05/18/17 2013	17050698MS 05/19/17 1542
Lab numbers associated with this batch: 17050930 17050931 17050932 17050933 17050937					
MS302	OXY GC/MS Acids	170515-1	170515BLK1 05/19/17 1958	170515LCS1 05/19/17 2039	17050687MS 05/19/17 2319
Lab numbers associated with this batch: 17050934 17050935 17050936 17050938 17050939 17050940 17050941 17050942 17050943 17050944 17050945 17050946 17050947 17050949 17050950					

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
MS302	OXY GC/MS Acids	170523-2	170523BLK2 05/23/17 2221	170523LCS2 05/23/17 2300	17050943RS 05/23/17
Lab numbers associated with this batch: 17050943R					
MS350	OXY Volatiles by 8260	1MS8132	BLK1MS8132 05/12/17 1243	LCS1MS8132 05/12/17 1132	17050687MS 05/12/17 1952
Lab numbers associated with this batch: 17050930 17050931 17050932					
MS350	OXY Volatiles by 8260	1MS9132	BLK1MS9132 05/12/17 1259	LCS1MS9132 05/12/17 1209	17050698MS 05/12/17 2138
Lab numbers associated with this batch: 17050933 17050934 17050935 17050936 17050937 17050938 17050939 17050940 17050941 17050942 17050943 17050944 17050945 17050946 17050947 17050948 17050949 17050950					
SL423	Hardness (Calculated)	170516-3	170516BLK3 05/22/17 2049	170516LCS3 05/22/17 2053	17050687MS 05/22/17 2119
Lab numbers associated with this batch: 17050930 17050931 17050932 17050933 17050934					
SL423	Hardness (Calculated)	170516-4	170516BLK4 05/22/17 2251	170516LCS4 05/22/17 2256	17050698MS 05/22/17 2304
Lab numbers associated with this batch: 17050935 17050936 17050937 17050938 17050939 17050940 17050941 17050942 17050943 17050944 17050945 17050946 17050947 17050949 17050950					
GL502	Chloride	2IC2133	BLK2IC2133 05/13/17 1740	LCS2IC2133 05/13/17 1753	17050942MS 05/13/17 2134
Lab numbers associated with this batch: 17050930 17050931 17050932 17050933 17050934 17050935 17050936 17050937 17050938 17050939 17050940 17050941 17050942 17050943 17050944 17050945 17050946 17050947 17050949 17050950					

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170513-1	**For samples prepared on: 05/13/2017 1015**					**Spiked sample: 17050698**						
OXY GC/MS Acids						MN	MN					
2-Chlorophenol	ND(5.0)	77.9	75.9-99.3	50.0	µg/L			75.1-100	50.0	µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	71.6	56.0-90.2	50.0	µg/L			58.8-91.2	50.0	µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	83.0	68.2-106	50.0	µg/L			65.6-112	50.0	µg/L	**	21.2
2,5-Dichlorophenol	ND(5.0)	93.3	73.9-103	50.0	µg/L			65.4-106	50.0	µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	89.9	78.3-104	50.0	µg/L			76.7-107	50.0	µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	93.8	75.3-109	50.0	µg/L			72.4-114	50.0	µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	88.0	77.1-110	50.0	µg/L			75.0-116	50.0	µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	89.5 CE	72.5-115	100	µg/L			74.5-120	100	µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	96.6	71.6-118	50.0	µg/L			73.7-122	50.0	µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	36.5	33.5	25.6-44.5	150	µg/L	MN	MN	25.6-44.5	150	µg/L	**	
2-FLUOROPHENOL	56.5	51.0	42.2-68.2	150	µg/L	MN	MN	42.2-68.2	150	µg/L	**	
2,4,6-TRIBROMOPHENOL	89.3	103	53.9-131	150	µg/L	MN	MN	53.9-131	150	µg/L	**	
QC Batch: 170513-2	**For samples prepared on: 05/13/2017 1300**					**Spiked sample: 17050698**						
OXY Chlorinated Hyd.						MN	MN					
A-BHC	ND(0.011)	98.4	75.0-125	0.50	µg/L			76.1-127	0.50	µg/L	**	16.0
B-BHC	ND(0.037)	102	68.0-125	0.50	µg/L			71.5-125	0.50	µg/L	**	18.0
G-BHC	ND(0.052)	102	72.5-123	0.50	µg/L			73.9-126	0.50	µg/L	**	17.4
Hexachloroethane	ND(0.02)	80.6	55.1-115	0.50	µg/L			45.8-118	0.50	µg/L	**	33.4
Hexachlorobutadiene	ND(0.02)	77.2	35.3-134	0.50	µg/L			36.7-122	0.50	µg/L	**	37.9
Hexachlorobenzene	ND(0.10)	91.4	63.7-119	0.50	µg/L			62.9-119	0.50	µg/L	**	20.7
D-BHC	ND(0.05)	103	70.6-126	0.50	µg/L			71.7-131	0.50	µg/L	**	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	86.8	82.2	65.9-110	8.0	µg/L	MN	MN	65.9-110	8.0	µg/L	**	
QC Batch: 170514-1	**For samples prepared on: 05/14/2017 1345**					**Spiked sample: 17050698**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	82.5	58.8-127	4.0	µg/L	MN	MN	64.6-126	4.0	µg/L	**	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	74.1	101	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170514-1	**For samples prepared on: 05/14/2017 1345**					**Spiked sample: 17050698**						
Pentachlorophenol	ND(0.5)	95.5	66.3-127	4.0	µg/L	MN	MN	7.60-144	4.0	µg/L	**	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	74.1	101	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170514-4	**For samples prepared on: 05/14/2017 1345**					**Spiked sample: 17050687**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	93.2	58.8-127	4.0	µg/L	MN	MN	64.6-126	4.0	µg/L	**	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	90.4	112	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170514-4	**For samples prepared on: 05/14/2017 1345**					**Spiked sample: 17050687**						
Pentachlorophenol	ND(0.5)	101	66.3-127	4.0	µg/L	MN	MN	7.60-144	4.0	µg/L	**	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	90.4	112	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170515-1	**For samples prepared on: 05/15/2017 0900**					**Spiked sample: 17050687**						
OXY GC/MS Acids						MN	MN					
2-Chlorophenol	ND(5.0)	82.6	75.9-99.3	50.0	µg/L			75.1-100	50.0	µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	73.3	56.0-90.2	50.0	µg/L			58.8-91.2	50.0	µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	84.7	68.2-106	50.0	µg/L			65.6-112	50.0	µg/L	**	21.2

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170515-1	**For samples prepared on: 05/15/2017 0900**					**Spiked sample: 17050687**						
2,5-Dichlorophenol	ND(5.0)	97.1	73.9-103	50.0	µg/L			65.4-106	50.0	µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	93.2	78.3-104	50.0	µg/L			76.7-107	50.0	µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	92.9	75.3-109	50.0	µg/L			72.4-114	50.0	µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	94.2	77.1-110	50.0	µg/L			75.0-116	50.0	µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	84.6 CE	72.5-115	100	µg/L			74.5-120	100	µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	93.9	71.6-118	50.0	µg/L			73.7-122	50.0	µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	33.6	34.2	25.6-44.5	150	µg/L	MN	MN	25.6-44.5	150	µg/L	**	
2-FLUOROPHENOL	52.9	53.7	42.2-68.2	150	µg/L	MN	MN	42.2-68.2	150	µg/L	**	
2,4,6-TRIBROMOPHENOL	94.1	108	53.9-131	150	µg/L	MN	MN	53.9-131	150	µg/L	**	
QC Batch: 170515-2	**For samples prepared on: 05/15/2017 1215**					**Spiked sample: 17050687**						
OXY Chlorinated Hyd.						MN	MN					
A-BHC	ND(0.011)	106	75.0-125	0.50	µg/L			76.1-127	0.50	µg/L	**	16.0
B-BHC	ND(0.037)	114	68.0-125	0.50	µg/L			71.5-125	0.50	µg/L	**	18.0
G-BHC	ND(0.052)	112	72.5-123	0.50	µg/L			73.9-126	0.50	µg/L	**	17.4
Hexachloroethane	ND(0.02)	90.0	55.1-115	0.50	µg/L			45.8-118	0.50	µg/L	**	33.4
Hexachlorobutadiene	ND(0.02)	90.8	35.3-134	0.50	µg/L			36.7-122	0.50	µg/L	**	37.9
Hexachlorobenzene	ND(0.10)	103	63.7-119	0.50	µg/L			62.9-119	0.50	µg/L	**	20.7
D-BHC	ND(0.05)	116	70.6-126	0.50	µg/L			71.7-131	0.50	µg/L	**	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	83.4	86.7	65.9-110	8.0	µg/L	MN	MN	65.9-110	8.0	µg/L	**	
QC Batch: 170516-3	**For samples prepared on: 05/16/2017 1025**					**Spiked sample: 17050687**						
Hardness (Calculated)	ND(5.0)	89.0	80.0-120	357	mg/L a	MN	MN	80.0-120	357	mg/L a	**	20.0
QC Batch: 170516-4	**For samples prepared on: 05/16/2017 1106**					**Spiked sample: 17050698**						
Hardness (Calculated)	ND(5.0)	84.3	80.0-120	357	mg/L a	MN	MN	80.0-120	357	mg/L a	**	20.0
QC Batch: 170522-2	**For samples prepared on: 05/22/2017 1200**					**Spiked sample:**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	104	58.8-127	4.0	µg/L	MN	MN	64.6-126		µg/L	**	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	77.9	107	62.2-119	5.0	µg/L	MN	MN	62.2-119		µg/L	**	
QC Batch: 170522-2	**For samples prepared on: 05/22/2017 1200**					**Spiked sample:**						
Pentachlorophenol	ND(0.5)	102	66.3-127	4.0	µg/L	MN	MN	7.60-144		µg/L	**	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	77.9	107	62.2-119	5.0	µg/L	MN	MN	62.2-119		µg/L	**	
QC Batch: 170523-2	**For samples prepared on: 05/23/2017 0800**					**Spiked sample: 17050943R**						
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	90.0	75.9-99.3	50.0	µg/L	F	F	60.0-140	N/A	mg/kg	**	20.0
3-& 4-Chlorophenol	ND(5.0)	59.5	56.0-90.2	50.0	µg/L	F	F	60.0-140	N/A	mg/kg	**	20.0
2,4-Dichlorophenol	ND(5.0)	94.7	68.2-106	50.0	µg/L	F	F	60.0-140	N/A	mg/kg	**	20.0
2,5-Dichlorophenol	ND(5.0)	90.3	73.9-103	50.0	µg/L	F	F	60.0-140	N/A	mg/kg	**	20.0
2,6-Dichlorophenol	ND(5.0)	93.3	78.3-104	50.0	µg/L	F	F	60.0-140	N/A	mg/kg	**	20.0
2,4,5-Trichlorophenol	ND(5.0)	97.5	75.3-109	50.0	µg/L	F	F	60.0-140	N/A	mg/kg	**	20.0
2,4,6-Trichlorophenol	ND(5.0)	99.5	77.1-110	50.0	µg/L	F	F	60.0-140	N/A	mg/kg	**	20.0
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	86.5 CE	72.5-115	100	µg/L	F	F	60.0-140	N/A	mg/kg	**	20.0
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	86.5 CE	71.6-118	100	µg/L	F	F	60.0-140	N/A	mg/kg	**	20.0
Surrogate Data:												
PHENOL-d6	39.2	41.8	25.6-44.5	150	µg/L			25.6-44.5		µg/L	**	

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170523-2	**For samples prepared on: 05/23/2017**					**Spiked sample: 17050943R**						
Surrogate Data:												
2-FLUOROPHENOL	59.2	62.0	42.2-68.2	150	µg/L			42.2-68.2		µg/L	**	
2,4,6-TRIBROMOPHENOL	82.3	95.9	53.9-131	150	µg/L			53.9-131		µg/L	**	
QC Batch: 1MS8132	**For sample analyzed on: 05/12/2017**					**Spiked sample: 17050687**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	94.3	80.0-120	10.0	µg/L			83.0-121	10.0	µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	95.7	75.6-120	10.0	µg/L			77.5-122	10.0	µg/L	**	9.5
Benzene	ND(0.5)	95.9	80.0-120	10.0	µg/L			82.7-117	10.0	µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	96.6	79.9-125	10.0	µg/L			79.0-125	10.0	µg/L	**	13.6
Chloroform	ND(0.5)	93.8	79.6-120	10.0	µg/L			78.4-117	10.0	µg/L	**	9.2
Chloromethane	ND(0.5)	90.3	70.2-127	10.0	µg/L			69.7-129	10.0	µg/L	**	15.9
Methylene chloride	ND(0.5)	94.8	77.1-120	10.0	µg/L			76.3-119	10.0	µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	102	80.0-120	10.0	µg/L			82.0-121	10.0	µg/L	**	11.3
Trichloroethylene	ND(0.5)	97.8	80.0-120	10.0	µg/L			79.3-120	10.0	µg/L	**	13.7
Vinyl chloride	ND(0.5)	86.9	76.2-128	10.0	µg/L			78.0-130	10.0	µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	92.6	79.5-120	10.0	µg/L			81.7-117	10.0	µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	100.	97.6	76.2-126	10.0	µg/L	MN	MN	76.2-126	10.0	µg/L	**	
TOLUENE-d8	101	105	80.0-120	10.0	µg/L	MN	MN	80.0-120	10.0	µg/L	**	
QC Batch: 1MS9132	**For sample analyzed on: 05/12/2017**					**Spiked sample: 17050698**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	93.5	80.0-120	10.0	µg/L			83.0-121	400	µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	82.3	75.6-120	10.0	µg/L			77.5-122	400	µg/L	**	9.5
Benzene	ND(0.5)	107	80.0-120	10.0	µg/L			82.7-117	400	µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	95.2	79.9-125	10.0	µg/L			79.0-125	400	µg/L	**	13.6
Chloroform	ND(0.5)	101	79.6-120	10.0	µg/L			78.4-117	400	µg/L	**	9.2
Chloromethane	ND(0.5)	124	70.2-127	10.0	µg/L			69.7-129	400	µg/L	**	15.9
Methylene chloride	ND(0.5)	105	77.1-120	10.0	µg/L			76.3-119	400	µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	98.6	80.0-120	10.0	µg/L			82.0-121	400	µg/L	**	11.3
Trichloroethylene	ND(0.5)	106	80.0-120	10.0	µg/L			79.3-120	400	µg/L	**	13.7
Vinyl chloride	ND(0.5)	105	76.2-128	10.0	µg/L			78.0-130	400	µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	96.9	79.5-120	10.0	µg/L			81.7-117	400	µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	91.1	93.2	76.2-126	10.0	µg/L	MN	MN	76.2-126	400	µg/L	**	
TOLUENE-d8	107	108	80.0-120	10.0	µg/L	MN	MN	80.0-120	400	µg/L	**	
QC Batch: 2IC2133	**For sample analyzed on: 05/13/2017**					**Spiked sample: 17050942**						
Chloride	ND(1.0)	101	90.0-110	4.0	mg/L	89.5	92.6	68.4-120	40.0	mg/L	3.40	21.6

Data Qualifiers:

MN - The MS/MSD sample analyses were not performed on a sample from this Pace order number.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

F - MS and/or MSD sample data are not available due to insufficient sample volume.

** - RPD calculation not applicable/not available for this analysis.

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050930		**Sample Description: WG-05092017-BS-MW007S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	C	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	106	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/18/2017	8.0	µg/L	99.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/20/2017	150	µg/L	31.9	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/20/2017	150	µg/L	51.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/20/2017	150	µg/L	109	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/13/2017	1000	µg/L	119	76.2-126
TOLUENE-d8		05/13/2017	1000	µg/L	94.7	80.0-120
Lab Number: 17050931		**Sample Description: WG-05092017-BS-MW007S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	67.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	67.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/18/2017	8.0	µg/L	83.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	30.1	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	47.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	92.4	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/13/2017	10	µg/L	119	76.2-126
TOLUENE-d8		05/13/2017	10	µg/L	95.3	80.0-120
Lab Number: 17050932		**Sample Description: WG-05092017-BS-MW007S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	73.7	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	73.7	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/18/2017	8.0	µg/L	90.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	29.6	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	48.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	102	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/13/2017	10	µg/L	112	76.2-126
TOLUENE-d8		05/13/2017	10	µg/L	93.1	80.0-120
Lab Number: 17050933		**Sample Description: WG-05092017-BS-AMW102S**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	71.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	71.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/18/2017	8.0	µg/L	96.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	31.3	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050933		**Sample Description: WG-05092017-BS-AMW102S**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	51.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	98.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	87.6	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	105	80.0-120
Lab Number: 17050934		**Sample Description: WG-05102017-BS-APMW302S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	82.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	82.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	81.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	34.3	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	53.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	101	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	89.4	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	101	80.0-120
Lab Number: 17050935		**Sample Description: WG-05102017-BS-APMW302S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	83.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	83.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	86.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	32.8	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	51.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	97.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	94.6	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	101	80.0-120
Lab Number: 17050936		**Sample Description: WG-05102017-BS-APMW302S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	74.3	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	74.3	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	83.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	31.2	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	47.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	88.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	88.4	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	104	80.0-120
Lab Number: 17050937		**Sample Description: WG-05092017-JR-MW024S1**				

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050937		**Sample Description: WG-05092017-JR-MW024S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	79.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/18/2017	5.0	µg/L	79.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/13/2017	05/18/2017	8.0	µg/L	91.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/13/2017	05/19/2017	150	µg/L	31.1	25.6-44.5
2-FLUOROPHENOL	05/13/2017	05/19/2017	150	µg/L	49.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/13/2017	05/19/2017	150	µg/L	94.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	20	µg/L	93.9	76.2-126
TOLUENE-d8		05/12/2017	20	µg/L	103	80.0-120
Lab Number: 17050938		**Sample Description: WG-05092017-JR-MW024S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	68.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	68.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	81.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	30.4	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	48.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	90.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	96.7	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	102	80.0-120
Lab Number: 17050939		**Sample Description: WG-05092017-JR-MW024S4**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	76.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	76.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	81.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	29.9	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	47.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	83.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	97.8	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	104	80.0-120
Lab Number: 17050940		**Sample Description: WG-05092017-JD-ER12**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/22/2017	5.0	µg/L	55.5 SL	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/22/2017	5.0	µg/L	55.5 SL	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	84.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	33.7	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050940		**Sample Description: WG-05092017-JD-ER12**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	52.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	84.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	89.9	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	99.6	80.0-120
Lab Number: 17050940R		**Sample Description: WG-05092017-JD-ER12**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/22/2017	05/24/2017	5.0	µg/L	84.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/22/2017	05/24/2017	5.0	µg/L	84.9	62.2-119
Lab Number: 17050941		**Sample Description: WG-05092017-DF-MW130S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	68.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	68.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	84.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	34.0	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	53.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	94.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	93.1	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	103	80.0-120
Lab Number: 17050942		**Sample Description: WG-05092017-DF-MW130S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	80.3	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	80.3	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	85.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	31.6	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	50.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	93.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	95.0	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	104	80.0-120
Lab Number: 17050943		**Sample Description: WG-05092017-DF-MW130S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	81.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	81.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	82.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	22.5 SL	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	36.1 SL	42.2-68.2

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050943		**Sample Description: WG-05092017-DF-MW130S3**				
OXY GC/MS Acids						
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	93.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	93.2	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	101	80.0-120
Lab Number: 17050943R		**Sample Description: WG-05092017-DF-MW130S3**				
OXY GC/MS Acids						
PHENOL-d6	05/23/2017	05/23/2017	150	µg/L	31.7	25.6-44.5
2-FLUOROPHENOL	05/23/2017	05/23/2017	150	µg/L	49.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/23/2017	05/23/2017	150	µg/L	83.0	53.9-131
Lab Number: 17050944		**Sample Description: WG-05092017-DF-MW132S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	67.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	67.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	83.3	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	30.1	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	48.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	98.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	88.1	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	103	80.0-120
Lab Number: 17050945		**Sample Description: WG-05092017-DF-MW132S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	77.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	77.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	84.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	33.1	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	51.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	92.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	97.2	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	102	80.0-120
Lab Number: 17050946		**Sample Description: WG-05092017-DF-MW145S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	75.3	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	75.3	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/18/2017	8.0	µg/L	83.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	32.7	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	51.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	97.0	53.9-131

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17050946		**Sample Description: WG-05092017-DF-MW145S2/S3**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	94.8	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	102	80.0-120
Lab Number: 17050947		**Sample Description: WG-05092017-DF-FD7**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	70.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	70.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/19/2017	8.0	µg/L	91.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	31.9	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	50.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	93.4	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	90.7	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	104	80.0-120
Lab Number: 17050948		**Sample Description: TB-8**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	106	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	103	80.0-120
Lab Number: 17050949		**Sample Description: WG-05092017-DF-ER11**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/22/2017	5.0	µg/L	88.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/22/2017	5.0	µg/L	88.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/19/2017	8.0	µg/L	81.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	34.4	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	53.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	89.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	93.0	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	101	80.0-120
Lab Number: 17050950		**Sample Description: WG-05102017-JR-MW032S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	63.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	63.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/19/2017	8.0	µg/L	85.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	33.0	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	52.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	93.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/12/2017	10	µg/L	88.2	76.2-126
TOLUENE-d8		05/12/2017	10	µg/L	102	80.0-120

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits

Data Qualifiers:
C - Due to matrix interference(s) and/or high concentration(s) of analyte(s) present in the sample, dilution was required causing the spike level for this analyte to be below the reporting limit and/or below the lowest point of the calibration curve.

SL - The surrogate recovery for this analysis was below the method or laboratory control limits. The reported sample concentration may be biased low.

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
2,4-Dichlorophenoxyacetic Acid	05/18/2017	3NX5137	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/18/2017	4NX5137	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/18/2017	1NX5138	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/18/2017	2NX5138	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/19/2017	3NX5138	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/19/2017	4NX5138	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/22/2017	1NX5142	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/22/2017	2NX5142	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/24/2017	5NX5143	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/25/2017	6NX5143	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/18/2017	3NX5137	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/18/2017	4NX5137	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/18/2017	1NX5138	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/18/2017	2NX5138	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/19/2017	3NX5138	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/19/2017	4NX5138	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/22/2017	1NX5142	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/22/2017	2NX5142	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/24/2017	5NX5143	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/25/2017	6NX5143	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/18/2017	3EX3137	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/18/2017	4EX3137	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/18/2017	1EX3138	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/18/2017	2EX3138	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/19/2017	3EX3138	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/19/2017	4EX3138	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/13/2017	3IC2133	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/13/2017	4IC2133	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/13/2017	5IC2133	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/13/2017	6IC2133	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/19/2017	1MS6139	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/19/2017	2MS6139	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/20/2017	3MS6139	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/20/2017	1MS6140	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/20/2017	2MS6140	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/23/2017	1MS7143	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/24/2017	2MS7143	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/12/2017	2MS8132	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/13/2017	3MS8132	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/12/2017		CCV recovery acceptable except as qualified below.			
Chloromethane	05/12/2017	1MS9132	10.0	12.4	µg/L	124 CH

Samples associated with this Continuing Calibration Verification:

Laboratory Number	Instrument Batch	Sample Description
17050933	1MS9132	WG-05092017-BS-AMW102S

Quality Control Report
Continuing Calibration Report

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/25/2017
Date Received: 05/10/2017
Pace File No: 7775
Pace Order No: 140414

Laboratory Number	Instrument Batch	Sample Description
17050934	1MS9132	WG-05102017-BS-APMW302S2
17050935	1MS9132	WG-05102017-BS-APMW302S1
17050936	1MS9132	WG-05102017-BS-APMW302S3
17050937	1MS9132	WG-05092017-JR-MW024S1
17050938	1MS9132	WG-05092017-JR-MW024S3
17050939	1MS9132	WG-05092017-JR-MW024S4
17050940	1MS9132	WG-05092017-JD-ER12
17050941	1MS9132	WG-05092017-DF-MW130S1
17050942	1MS9132	WG-05092017-DF-MW130S2
17050943	1MS9132	WG-05092017-DF-MW130S3
17050944	1MS9132	WG-05092017-DF-MW132S1
17050945	1MS9132	WG-05092017-DF-MW132S2/S3
17050946	1MS9132	WG-05092017-DF-MW145S2/S3
17050947	1MS9132	WG-05092017-DF-FD7
17050948	1MS9132	TB-8
17050949	1MS9132	WG-05092017-DF-ER11
17050950	1MS9132	WG-05102017-JR-MW032S1

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
OXY Volatiles by 8260	05/12/2017	2MS9132	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/22/2017	9IP4142	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/22/2017	10IP4142	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/23/2017	11IP4142	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/23/2017	12IP4142	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/23/2017	5IP4143	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/23/2017	6IP4143	CCV recovery acceptable for this Instrument Batch.			

Data Qualifiers:
CH - The continuing calibration verification (CCV) standard recovery for this analyte was above the method or SOP limit. The reported concentration for this analyte may be biased high.

CONESTOGA-ROVERS & ASSOCIATES

CHAIN OF CUSTODY RECORD

Address: 2626 W. Pawnee Wichita, KS

Phone: _____ Fax: _____

140414

COC NO.: 45735

PAGE 1 OF 3

(See Reverse Side for Instructions)

Discrepancies See C/S RF

Edits made prior to sample receipt

5-10-17

Project No/ Phase/Task Code: 11137148 OXY Spring 2017 GWM	Laboratory Name: Pace	Lab Location: Salina, KS	SSOW ID:
Project Name:	Lab Contact:	Lab Quote No:	Cooler No:
Project Location: Wichita, KS			Carrier:
Chemistry Contact:			Airbill No:
Sampler(s): Brian Schavee Barry Cheatham			Date Shipped:

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Sample Type: Matrix Code (see back of COC)	Sample Type: Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested (See Back of COC for Definitions): VOC	SVOC	Pest/HERB	Chloride/Hard					MS/MSD Request	Comments/ Special Instructions:
1	WG-05092017-BS-MW007s1	5/9/17	1405	WT	G	5	3							8	X	X	X	X						
2	WG-05092017-BS-MW007s2	5/9/17	1450	WT	G	5	3							8	X	X	X	X						
3	WG-05092017-BS-MW007s3	5/9/17	1515	WT	G	5	3							8	X	X	X	X						
4	WG-05092017-BS-AMW102S	5/9/17	1700	WT	G	5	3							8	X	X	X	X						
5	WG-05102017-BS-APMW302s2	5/10/17	850	WT	G	5	3							8	X	X	X	X						
6	WG-05102017-BS-APMW302s1	5/10/17	900	WT	G	5	3							8	X	X	X	X						
7	WG-05102017-BS-APMW302s3	5/10/17	930	WT	G	5	3							8	X	X	X	X						
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other: STD

Total Number of Containers: 56

All Samples in Cooler must be on COC

Notes/ Special Requirements:

	Relinquished By	Company	Date	Time		Received By	Company	Date	Time
1.	[signature]	GHD	5/10/17	1430	1.	[signature]	5 PACE	51017	1430
2.	[signature]	PACE	51017	1655	2.	[signature]	Pace	51017	1655
3.					3.				

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

140414

2059281

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Kogl	Attention:
Address: 2626 W. Pawnee	Copy To: Paul McMahon	Company Name:
		Address:
Email To: Travis Kogl	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: OxySpring 2017 GWM	Pace Project Manager: Greg Groene
Requested Due Date/TAT:	Project Number: 11137148	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOCs	SVOCs	Pest/Herb	Chloride	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05092017-JR-MW024S1	WT				5/10/17	1400		8	5			3						X	X	X	X		
2	WG-05092017-JR-MW024S3						1445		8	5			3						X	X	X	X		
3	WG-05092017-JR-MW024S4						1520		8	5			3						X	X	X	X		
4	WG-05092017-JR-FR12						1800		8	5			3						X	X	X	X		
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Sean Murphy GHD	5/10/17	1430	[signature]	5/10/17	1430	
	[signature]	5/10/17	1655	[signature]	5/10/17	1655	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Sean Murphy

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 5/10/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

140414

Page: 3 of 3

2059282

Section A Required Client Information:

Company:	GHD
Address:	2626 Pawnee Ste D
Email To:	Travis.Kogl@ghd.com
Phone:	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Travis Kogl
Copy To:	
Purchase Order No.:	
Project Name:	Oxy Spring 2017 GMW
Project Number:	11137148

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Greg Groene
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

Matrix Codes MATRIX / CODE

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOCs	SVOCs	Pest/Herb	Chloride Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05092017-DF-MW130s1					5/9/17	0915		8	5			3					X	X	X	X			
2	WG-05092017-DF-MW130s2						1020		8	5			3					X	X	X	X			
3	WG-05092017-DF-MW130s3						1040		8	5			3					X	X	X	X			
4	WG-05092017-DF-MW132s1						1315		8	5			3					X	X	X	X			
5	WG-05092017-DF-MW132s2/s3						1205		8	5			3					X	X	X	X			
6	WG-05092017-DF-MW145s2/s3						1350		8	5			3					X	X	X	X			
7	WG-05092017-DF-FD1					V	1200		8	5			3					X	X	X	X			
8	TB-8					5/9/17	—		3				3					X						
9	WG-05092017-DF-ER11					5/9/17	0840		8	5			3					X	X	X	X			
10	WG-05102017-JR-MW032s1					5/10/17	0935		8	5			3					X	X	X	X			
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Sean Murphy GHD	5/10/17	1430		5/10/17	1430	
		5/10/17	1655		5/10/17	1655	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Sean Murphy

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 5/10/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, Inc. **Pace Order No.:** 140414

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

2 LTA ___ 250P MW132S1
2 LTA ___ 250P MW130S2
4 LTA ___ 250P MW130S3
___ LTA ___ 250P
20 sets VOC + 1 Trip Blank

Cooler 1 **of** 9 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4339 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/10/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 2.1 Corrected Reading (°C) 2.7
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled ✓

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: ___

Detail to discrepancies/comments:

Completed by: SKP **Date Completed:** 5-10-17

Pace Analytical Services, Inc. **Pace Order No.:** 140414

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LtA 1 250P MW302S2
4 LtA 1 250P APMW302S1
___ LtA ___ 250P
___ LtA ___ 250P
VOC

Cooler 2 **of** 9 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 25095 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/10/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Sycs~~ / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: ___
Seal Name: ___ Seal Date: ___
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / ~~Dice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 2.4 Corrected Reading (°C) 2.9
Temperature. By: ~~Temperature Blank~~ Surface Temperature HAC 5-10-17
Thermo. ID No.: 585 HAC 5/10/17 Thermo. Correction Factor (°C): +0.5 HAC 5-10-17

☐ Evidence of Cooling and date received = date sampled ✓

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: ___

Detail to discrepancies/comments:

Completed by: SKL **Date Completed:** 5-10-17

Pace Analytical Services, Inc. Pace Order No.: 140414

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P FD7
4 LTA 1 250P MW130S1
2 LTA 1 250P MW130S2
__ LTA 1 250P MW130S3
VOC

Cooler 3 of 9 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4331 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/10/17 16:55

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.0 Corrected Reading (°C) 2.6
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKL Date Completed: 5-10-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140414

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 1 250P MW302S3
1 LTA ___ 250P MW032S2
3 LTA 1 250P MW032S1
___ LTA ___ 250P
VOC

Cooler 4 **of** 9 **for this Pace Order No.**

Cooler Identification: Pace Cooler # Blue Pace Cooler / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/10/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 5.1 Corrected Reading (°C) 4.7
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled —

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☑ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: ___

Detail to discrepancies/comments:
Container reads MW032S2 Chain reads MW032S1
Container reads MW302S3 Chain Reads APMW302S3

Completed by: SKL **Date Completed:** 5-10-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140414

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

3 ~~4~~ HAC 5-10-17 LTA ___ 250P MW007S2
1 LTA 1 250P MW07S2
3 LTA 1 250P MW007S1
1 LTA ___ 250P MW07S1
VOC

Cooler 5 **of** 9 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4337 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/10/17 16:55

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 2.2 Corrected Reading (°C) 1.8
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled +

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from:
  - Cover Letter ☐ Container ☐
  - PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☑ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: ___

Detail to discrepancies/comments:

1 LTA + 1 250P: chain reads MW007S2 label reads MW07S2
1 250P Chain reads MW007S1 Label Reads MW07S1

Completed by: SKR **Date Completed:** 5-10-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140414

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 1 250P MW00TS3
4 LTA 1 250P AMW102S
___ LTA ___ 250P
___ LTA ___ 250P
VOC

Cooler 6a **of** 9 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 25311 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/10/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 3.5 Corrected Reading (°C) 3.1
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled —

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: ___

Detail to discrepancies/comments:

Completed by: SKL **Date Completed:** 5-10-17

Pace Analytical Services, Inc. **Pace Order No.:** 140414

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler: HAC 5-10-17

4	LTA	1 250P	FDS MW145S2S3
4	LTA	HAC 5/10/17 1 250P	MW132S2S3
2	LTA	1 250P	MW132S1
___	LTA	___ 250P	
	VOC		

Cooler 7 **of** 9 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4341 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/10/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / ~~Dry~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 3.6 Corrected Reading (°C) 3.2
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☑ **No** ☐ **Yes** **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: ___

Detail to discrepancies/comments:

Completed by: SKL **Date Completed:** 5-10-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: HAC 5-10-17 — 140414 140414

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 250P MW02454
4 LTA 1 250P ER11
2 LTA 250P ER12
LTA 250P
VOC

Cooler 8 of 9 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4149 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/10/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Dry Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 4.8 Corrected Reading (°C) 4.4
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☑ **No** ☐ **Yes** **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKL **Date Completed:** 5-10-17

Pace Analytical Services, Inc. **Pace Order No.:** 140414

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 3 HAC 5-10-17 LTA 1 250P MW02451

4 LTA 1 250P MW02453

2 LTA 1 250P ER12

___ LTA 1 250P MW02454

VOC

Cooler 9 **of** 9 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 12058 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/10/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.1 Corrected Reading (°C) 2.6
Temperature. By: ~~Temperature Blank~~ Surface Temperature HAC 5-10-17
Thermo. ID No.: ~~585~~ HAC 5-10-17 Thermo. Correction Factor (°C): ~~0.4~~ 0.5

☐ Evidence of Cooling and date received = date sampled —

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKL **Date Completed:** 5-10-17

Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date and Time Received: 05/11/2017 1615
Pace File No.: 7775
Pace Order No.: 140446
P.O./Project No: 4502201562-11119420
Project ID: OXY WICHITA GWM
Purchase Auth: SSOW251-402-D02-3100

Dear Ms. Thurman:

This laboratory report, containing the samples indicated below, includes 28 pages for the analytical report, 1 page(s) for the chain of custody and/or analysis request, and 3 page(s) for the sample receipt form.

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17051070	WG-05112017-BS-AMW108D	Liquid	5/11/2017
17051071	WG-05112017-BS-AMW008D	Liquid	5/11/2017
17051072	WG-05112017-BS-AMW008S	Liquid	5/11/2017
17051073	WG-05102017-BS-MW146S1	Liquid	5/10/2017
17051074	WG-05112017-JR-MW114S1	Liquid	5/11/2017
17051075	WG-05112017-JR-MW113S3	Liquid	5/11/2017
17051075R	WG-05112017-JR-MW113S3	Liquid	5/11/2017
17051076	WG-05102017-DF-MW010S2	Liquid	5/10/2017
17051077	TB-09	Liquid	5/10/2017

The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

Samples will be retained for thirty days unless Pace is otherwise notified. Pace is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Pace's Standard Operating Procedures. These procedures are in substantial compliance with the approved methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.

Thank you for choosing Pace for this project.

Gregory J. Groene
Project Manager
Gregory.Groene@pacelabs.com

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Lab Number: 17051070
Sample Description: WG-05112017-BS-AMW108D

Date Sampled: 05/11/2017
Time Sampled: 0935

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	454	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	111	mg/L	10	10	7551/260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 0945	170514-4	3NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 0945	170514-4	3NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/19/17 0328	170515-2	3EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 1641	170515-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 1426	1MS8135	1MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1106	05/23/17 0047	170516-4	11IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/18/17 1031	1IC2138	1IC2138	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051070

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Lab Number: 17051071
Sample Description: WG-05112017-BS-AMW008D

Date Sampled: 05/11/2017
Time Sampled: 1035

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	564	mg/L as CaCO3	5.0	25	7443/996
Chloride	213	mg/L	20	20	7551/260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 1025	170514-4	3NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 1025	170514-4	3NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/19/17 0408	170515-2	3EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 1721	170515-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 1502	1MS8135	1MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1106	05/23/17 1615	170516-4	5IP4143	KMW	6010B & SM 2340B
Chloride	N/A	05/18/17 1044	1IC2138	1IC2138	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051071

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Lab Number: 17051072
Sample Description: WG-05112017-BS-AMW008S

Date Sampled: 05/11/2017
Time Sampled: 1115

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	3.6	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	310.	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	132	mg/L	10	10	7551/260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/19/17 1941	170515-3	1NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/19/17 1941	170515-3	1NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 1439	170516-2	1EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 1154	170516-1	1MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 1538	1MS8135	1MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1106	05/23/17 0056	170516-4	11IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/18/17 1056	1IC2138	1IC2138	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051072

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Lab Number: 17051073
Sample Description: WG-05102017-BS-MW146S1

Date Sampled: 05/10/2017
Time Sampled: 1435

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	305	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	25.0	mg/L	1.0	1.0	7551/260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 1104	170514-4	3NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 1104	170514-4	3NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/19/17 0448	170515-2	3EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 1801	170515-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 1614	1MS8135	1MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1106	05/23/17 0108	170516-4	12IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/18/17 1108	1IC2138	1IC2138	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051073

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Lab Number: 17051074
Sample Description: WG-05112017-JR-MW114S1

Date Sampled: 05/11/2017
Time Sampled: 0935

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	0.014	µg/L	1.0	0.011	7460/207
B-BHC	0.494	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	2.8	µg/L	1.0	0.5	7466/525
Trichloroethylene	0.9	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	836	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	1370	mg/L	100	100	7551/260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/19/17 2020	170515-3	1NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/19/17 2020	170515-3	1NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 1519	170516-2	1EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 1234	170516-1	1MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 1649	1MS8135	1MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0121	170516-5	12IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/18/17 1121	1IC2138	1IC2138	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051074

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Lab Number: 17051075
Sample Description: WG-05112017-JR-MW113S3

Date Sampled: 05/11/2017
Time Sampled: 1010

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	42 SR	µg/L	5.0	5.0	7462/184
Pentachlorophenol	31 SR	µg/L	5.0	3	7462/184
OXY Chlorinated Hyd.	SR				
A-BHC	ND(0.44)	µg/L	40	0.44	7460/207
B-BHC	4.24	µg/L	40	1.5	7460/207
G-BHC	ND(2.1)	µg/L	40	2.1	7460/207
Hexachloroethane	114	µg/L	40	0.8	7460/207
Hexachlorobutadiene	59.0	µg/L	40	0.8	7460/207
Hexachlorobenzene	ND(4.0)	µg/L	40	4	7460/207
D-BHC	ND(2)	µg/L	40	2	7460/207
OXY GC/MS Acids	SR				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	34.3	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	11.2	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	95.8	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	26.6	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	80	µg/L	100	50	7466/525
1,2-Dichloroethane	80	µg/L	100	50	7466/525
Benzene	ND(50)	µg/L	100	50	7466/525
Carbon tetrachloride	OC	µg/L	100	50	7466/525
Chloroform	OC	µg/L	100	50	7466/525
Chloromethane	ND(50)	µg/L	100	50	7466/525
Methylene chloride	1130	µg/L	100	50	7466/525
Tetrachloroethylene	6060	µg/L	100	50	7466/525
Trichloroethylene	250	µg/L	100	50	7466/525
Vinyl chloride	ND(50)	µg/L	100	50	7466/525
1,2-Dichloropropane	230	µg/L	100	50	7466/525
Hardness (Calculated)	98.3	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	5900	mg/L	1000	1000	7551/260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/23/17 1201	170515-3	4NX5142	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/23/17 1201	170515-3	4NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 1559	170516-2	1EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 1315	170516-1	1MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 2024	1MS8135	1MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0125	170516-5	12IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/18/17 1158	1IC2138	2IC2138	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051075

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Lab Number: 17051075R
Sample Description: WG-05112017-JR-MW113S3

Date Sampled: 05/11/2017
Time Sampled: 1010

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(500)	µg/L	1000	500	7466/527
1,2-Dichloroethane	ND(500)	µg/L	1000	500	7466/527
Benzene	ND(500)	µg/L	1000	500	7466/527
Carbon tetrachloride	27900 QC	µg/L	1000	500	7466/527
Chloroform	25200	µg/L	1000	500	7466/527
Chloromethane	ND(500)	µg/L	1000	500	7466/527
Methylene chloride	1200	µg/L	1000	500	7466/527
Tetrachloroethylene	5700	µg/L	1000	500	7466/527
Trichloroethylene	ND(500)	µg/L	1000	500	7466/527
Vinyl chloride	ND(500)	µg/L	1000	500	7466/527
1,2-Dichloropropane	ND(500)	µg/L	1000	500	7466/527

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/17/17 2140	1MS8137	1MS8137	GMA	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17051075R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Lab Number: 17051076
Sample Description: WG-05102017-DF-MW010S2

Date Sampled: 05/10/2017
Time Sampled: 0935

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/182
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/182
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/206
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/206
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/206
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/206
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/206
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/206
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/329
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/329
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	36.8	µg/L	1.0	0.5	7466/525
Chloroform	2.1	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	0.9	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	323	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	118	mg/L	10	10	7551/260

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/14/17 1345	05/19/17 1144	170514-4	3NX5138	JMM	8151A(M)
Pentachlorophenol	05/14/17 1345	05/19/17 1144	170514-4	3NX5138	JMM	8151A(M)
OXY Chlorinated Hyd.	05/15/17 1215	05/19/17 0527	170515-2	3EX3138	SPA	8121
OXY GC/MS Acids	05/15/17 0900	05/20/17 1841	170515-1	1MS6140	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 1725	1MS8135	1MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0129	170516-5	12IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/18/17 1210	1IC2138	2IC2138	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051076

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Lab Number: 17051077
Sample Description: TB-09

Date Sampled: 05/10/2017
Time Sampled:

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/15/17 1801	1MS8135	1MS8135	GMA	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17051077

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Appendix

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

ND indicates not detected with the LOQ (Limit of Quantitation) in parentheses. The LOQ value has been adjusted for the dilution factor and percent solids, as applicable. Due to rounding of significant figures, the LOQ value may vary slightly from the reported concentration. The LOQ is the lowest concentration of the analytical standard that was used for calibrating the instrument. If an analytical standard is analyzed at the LOQ, an error of as much as +/- 50% can be expected. N/A, if present, indicates not applicable.

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

No analysis with a holding time of seventy-two hours or less was performed in this Pace order.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

OC - The response for this analyte exceeded the calibration range of the instrument. Sample dilution and reanalysis is necessary to obtain an accurate result. The reported result, if provided, is estimated.

QC - QC data qualifiers were noted. See the Quality Control Report.

SR - One or more surrogate recoveries for this analysis did not meet quality control limits, or was diluted below the low calibration point. Please see the Quality Control Report for the sample surrogate data.

Following is the full name of each analyst that performed analysis(es) on this Pace order number:

Analyst Initials	Analyst Full Name
GMA	Guy Allen
JMM	Julie M. McCullough
KMW	Keegan M. Wilson
MLL	Melissa L. Lundgrin
SPA	Stephen P. Albin

Accreditation Summary

Client: Occidental Chemical Corporation_Oxy
Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Pace is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Pace is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Pace's full NELAP accreditation status may be viewed at www.kdheks.gov/envlab. Note that unless qualified otherwise in the Laboratory Report, Pace performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

Test	Analysis	Matrix-Regulatory Program	Method	Pace NELAP Accredited in Other Reg. Program
CL351	OXY Chlorinated Hyd.	L-RCRA	8121	
CL351	Hexachloroethane	L-RCRA	8121	No
CL351	Hexachlorobutadiene	L-RCRA	8121	No
MS302	OXY GC/MS Acids	L-RCRA	8270C	
MS302	3-& 4-Chlorophenol	L-RCRA	8270C	No
MS302	2,5-Dichlorophenol	L-RCRA	8270C	No
MS302	2,3,4,5-Tetrachlorophenol	L-RCRA	8270C	No

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170514-4	170514BLK4 05/18/17 1723	170514LCS4 05/18/17 1802	17050687MS 05/18/17 2039
Lab numbers associated with this batch: 17051070 17051071 17051073 17051076					
CL223	2,4-Dichlorophenoxyacetic Acid	170515-3	170515BLK3 05/19/17 1703	170515LCS3 05/19/17 1742	17051174MS 05/20/17 0728
Lab numbers associated with this batch: 17051072 17051074 17051075					
CL350	Pentachlorophenol	170514-4	170514BLK4 05/18/17 1723	170514LCS4 05/18/17 1802	17050687MS 05/18/17 2039
Lab numbers associated with this batch: 17051070 17051071 17051073 17051076					
CL350	Pentachlorophenol	170515-3	170515BLK3 05/19/17 1703	170515LCS3 05/19/17 1742	17051174MS 05/20/17 0728
Lab numbers associated with this batch: 17051072 17051074 17051075					
CL351	OXY Chlorinated Hyd.	170515-2	170515BLK2 05/18/17 1135	170515LCS2 05/18/17 1215	17050687MS 05/18/17 1334
Lab numbers associated with this batch: 17051070 17051071 17051073 17051076					
CL351	OXY Chlorinated Hyd.	170516-2	170516BLK2 05/19/17 1121	170516LCS2 05/19/17 1200	17051174MS 05/19/17 1320
Lab numbers associated with this batch: 17051072 17051074 17051075					
MS302	OXY GC/MS Acids	170515-1	170515BLK1 05/19/17 1958	170515LCS1 05/19/17 2039	17050687MS 05/19/17 2319
Lab numbers associated with this batch: 17051070 17051071 17051073 17051076					
MS302	OXY GC/MS Acids	170516-1	170516BLK1 05/22/17 1033	170516LCS1 05/22/17 1113	17051174MS 05/22/17 2254
Lab numbers associated with this batch: 17051072 17051074 17051075					
MS350	OXY Volatiles by 8260	1MS8135	BLK1MS8135 05/15/17 1351	LCS1MS8135 05/15/17 1239	17051075MS 05/15/17 2100
Lab numbers associated with this batch: 17051070 17051071 17051072 17051073 17051074 17051075 17051076 17051077					
MS350	OXY Volatiles by 8260	1MS8137	BLK1MS8137 05/17/17 1507	LCS1MS8137 05/17/17 1356	17051075RS 05/17/17 2216
Lab numbers associated with this batch: 17051075R					

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
SL423	Hardness (Calculated)	170516-4	170516BLK4 05/22/17 2251	170516LCS4 05/22/17 2256	17050698MS 05/22/17 2304

Lab numbers associated with this batch:
17051070 17051071 17051072 17051073

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
SL423	Hardness (Calculated)	170516-5	170516BLK5 05/23/17 0113	170516LCS5 05/23/17 0117	17051164MS 05/23/17 0301

Lab numbers associated with this batch:
17051074 17051075 17051076

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL502	Chloride	1IC2138	BLK1IC2138 05/18/17 0930	LCS1IC2138 05/18/17 0942	17050560MS 05/18/17 1007

Lab numbers associated with this batch:
17051070 17051071 17051072 17051073 17051074 17051075 17051076

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170514-4	**For samples prepared on: 05/14/2017 1345**					**Spiked sample: 17050687**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	93.2	58.8-127	4.0	µg/L	MN	MN	64.6-126	4.0	µg/L	**	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	90.4	112	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170514-4	**For samples prepared on: 05/14/2017 1345**					**Spiked sample: 17050687**						
Pentachlorophenol	ND(0.5)	101	66.3-127	4.0	µg/L	MN	MN	7.60-144	4.0	µg/L	**	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	90.4	112	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170515-1	**For samples prepared on: 05/15/2017 0900**					**Spiked sample: 17050687**						
OXY GC/MS Acids						MN	MN					
2-Chlorophenol	ND(5.0)	82.6	75.9-99.3	50.0	µg/L			75.1-100	50.0	µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	73.3	56.0-90.2	50.0	µg/L			58.8-91.2	50.0	µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	84.7	68.2-106	50.0	µg/L			65.6-112	50.0	µg/L	**	21.2
2,5-Dichlorophenol	ND(5.0)	97.1	73.9-103	50.0	µg/L			65.4-106	50.0	µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	93.2	78.3-104	50.0	µg/L			76.7-107	50.0	µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	92.9	75.3-109	50.0	µg/L			72.4-114	50.0	µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	94.2	77.1-110	50.0	µg/L			75.0-116	50.0	µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	84.6 CE	72.5-115	100	µg/L			74.5-120	100	µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	93.9	71.6-118	50.0	µg/L			73.7-122	50.0	µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	33.6	34.2	25.6-44.5	150	µg/L	MN	MN	25.6-44.5	150	µg/L	**	
2-FLUOROPHENOL	52.9	53.7	42.2-68.2	150	µg/L	MN	MN	42.2-68.2	150	µg/L	**	
2,4,6-TRIBROMOPHENOL	94.1	108	53.9-131	150	µg/L	MN	MN	53.9-131	150	µg/L	**	
QC Batch: 170515-2	**For samples prepared on: 05/15/2017 1215**					**Spiked sample: 17050687**						
OXY Chlorinated Hyd.						MN	MN					
A-BHC	ND(0.011)	106	75.0-125	0.50	µg/L			76.1-127	0.50	µg/L	**	16.0
B-BHC	ND(0.037)	114	68.0-125	0.50	µg/L			71.5-125	0.50	µg/L	**	18.0
G-BHC	ND(0.052)	112	72.5-123	0.50	µg/L			73.9-126	0.50	µg/L	**	17.4
Hexachloroethane	ND(0.02)	90.0	55.1-115	0.50	µg/L			45.8-118	0.50	µg/L	**	33.4
Hexachlorobutadiene	ND(0.02)	90.8	35.3-134	0.50	µg/L			36.7-122	0.50	µg/L	**	37.9
Hexachlorobenzene	ND(0.10)	103	63.7-119	0.50	µg/L			62.9-119	0.50	µg/L	**	20.7
D-BHC	ND(0.05)	116	70.6-126	0.50	µg/L			71.7-131	0.50	µg/L	**	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	83.4	86.7	65.9-110	8.0	µg/L	MN	MN	65.9-110	8.0	µg/L	**	
QC Batch: 170515-3	**For samples prepared on: 05/15/2017 1600**					**Spiked sample: 17051174**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	77.9	58.8-127	4.0	µg/L	MN	MN	64.6-126	4.0	µg/L	**	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	71.8	98.3	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170515-3	**For samples prepared on: 05/15/2017 1600**					**Spiked sample: 17051174**						
Pentachlorophenol	ND(0.5)	89.4	66.3-127	4.0	µg/L	MN	MN	7.60-144	4.0	µg/L	**	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	71.8	98.3	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170516-1	**For samples prepared on: 05/16/2017 0900**					**Spiked sample:**						
OXY GC/MS Acids						MN	MN					
2-Chlorophenol	ND(5.0)	81.4	75.9-99.3	50.0	µg/L			75.1-100		µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	74.1	56.0-90.2	50.0	µg/L			58.8-91.2		µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	91.1	68.2-106	50.0	µg/L			65.6-112		µg/L	**	21.2

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170516-1	**For samples prepared on: 05/16/2017 0900**					**Spiked sample:**						
2,5-Dichlorophenol	ND(5.0)	90.1	73.9-103	50.0	µg/L			65.4-106		µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	94.1	78.3-104	50.0	µg/L			76.7-107		µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	92.1	75.3-109	50.0	µg/L			72.4-114		µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	91.7	77.1-110	50.0	µg/L			75.0-116		µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	86.6 CE	72.5-115	100	µg/L			74.5-120		µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	92.6	71.6-118	50.0	µg/L			73.7-122		µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	35.0	33.6	25.6-44.5	150	µg/L	MN	MN	25.6-44.5		µg/L	**	
2-FLUOROPHENOL	55.1	51.8	42.2-68.2	150	µg/L	MN	MN	42.2-68.2		µg/L	**	
2,4,6-TRIBROMOPHENOL	86.1	115	53.9-131	150	µg/L	MN	MN	53.9-131		µg/L	**	
QC Batch: 170516-2	**For samples prepared on: 05/16/2017 1200**					**Spiked sample: 17051174**						
OXY Chlorinated Hyd.						MN	MN					
A-BHC	ND(0.011)	99.8	75.0-125	0.50	µg/L			76.1-127	0.50	µg/L	**	16.0
B-BHC	ND(0.037)	107	68.0-125	0.50	µg/L			71.5-125	0.50	µg/L	**	18.0
G-BHC	ND(0.052)	104	72.5-123	0.50	µg/L			73.9-126	0.50	µg/L	**	17.4
Hexachloroethane	ND(0.02)	91.0	55.1-115	0.50	µg/L			45.8-118	0.50	µg/L	**	33.4
Hexachlorobutadiene	ND(0.02)	92.2	35.3-134	0.50	µg/L			36.7-122	0.50	µg/L	**	37.9
Hexachlorobenzene	ND(0.10)	99.8	63.7-119	0.50	µg/L			62.9-119	0.50	µg/L	**	20.7
D-BHC	ND(0.05)	102	70.6-126	0.50	µg/L			71.7-131	0.50	µg/L	**	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	84.5	85.3	65.9-110	8.0	µg/L	MN	MN	65.9-110	8.0	µg/L	**	
QC Batch: 170516-4	**For samples prepared on: 05/16/2017 1106**					**Spiked sample: 17050698**						
Hardness (Calculated)	ND(5.0)	84.3	80.0-120	357	mg/L a	MN	MN	80.0-120	357	mg/L a	**	20.0
QC Batch: 170516-5	**For samples prepared on: 05/16/2017 1227**					**Spiked sample: 17051164**						
Hardness (Calculated)	ND(5.0)	86.1	80.0-120	357	mg/L a	MN	MN	80.0-120	357	mg/L a	**	20.0
QC Batch: 1IC2138	**For sample analyzed on: 05/18/2017**					**Spiked sample: 17050560**						
Chloride	ND(1.0)	102	90.0-110	4.0	mg/L	MN	MN	68.4-120	400	mg/L	**	21.6
QC Batch: 1MS8135	**For sample analyzed on: 05/15/2017**					**Spiked sample: 17051075**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	102	80.0-120	10.0	µg/L	103	102	83.0-121	1000	µg/L	0.980	9.8
1,2-Dichloroethane	ND(0.5)	105	75.6-120	10.0	µg/L	110.	108	77.5-122	1000	µg/L	1.80	9.5
Benzene	ND(0.5)	93.8	80.0-120	10.0	µg/L	98.8	98.7	82.7-117	1000	µg/L	0.10	8.3
Carbon tetrachloride	ND(0.5)	107	79.9-125	10.0	µg/L	OC	OC	79.0-125	1000	µg/L	**	13.6
Chloroform	ND(0.5)	97.8	79.6-120	10.0	µg/L	OC	OC	78.4-117	1000	µg/L	**	9.2
Chloromethane	ND(0.5)	102	70.2-127	10.0	µg/L	99.5	98.7	69.7-129	1000	µg/L	0.810	15.9
Methylene chloride	ND(0.5)	94.7	77.1-120	10.0	µg/L	90.9	91.1	76.3-119	1000	µg/L	0.220	9.6
Tetrachloroethylene	ND(0.5)	115	80.0-120	10.0	µg/L	I	I	82.0-121	1000	µg/L	**	11.3
Trichloroethylene	ND(0.5)	95.0	80.0-120	10.0	µg/L	93.6	95.3	79.3-120	1000	µg/L	1.80	13.7
Vinyl chloride	ND(0.5)	93.8	76.2-128	10.0	µg/L	92.9	95.8	78.0-130	1000	µg/L	3.10	14.6
1,2-Dichloropropane	ND(0.5)	86.4	79.5-120	10.0	µg/L	88.5	87.3	81.7-117	1000	µg/L	1.40	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	99.7	98.6	76.2-126	10.0	µg/L	102	104	76.2-126	1000	µg/L		
TOLUENE-d8	97.5	104	80.0-120	10.0	µg/L	103	104	80.0-120	1000	µg/L		
QC Batch: 1MS8137	**For sample analyzed on: 05/17/2017**					**Spiked sample: 17051075R**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	101	80.0-120	10.0	µg/L	103	104	83.0-121	10000	µg/L	0.970	9.8

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 1MS8137	**For sample analyzed on: 05/17/2017**					**Spiked sample: 17051075R**						
1,2-Dichloroethane	ND(0.5)	99.0	75.6-120	10.0	µg/L	104	108	77.5-122	10000	µg/L	3.80	9.5
Benzene	ND(0.5)	99.6	80.0-120	10.0	µg/L	94.7	93.9	82.7-117	10000	µg/L	0.850	8.3
Carbon tetrachloride	ND(0.5)	100.	79.9-125	10.0	µg/L	105	86.2 MP	79.0-125	10000	µg/L	19.7	13.6
Chloroform	ND(0.5)	97.7	79.6-120	10.0	µg/L	103	95.6	78.4-117	10000	µg/L	7.50	9.2
Chloromethane	ND(0.5)	99.5	70.2-127	10.0	µg/L	96.9	95.9	69.7-129	10000	µg/L	1.00	15.9
Methylene chloride	ND(0.5)	96.0	77.1-120	10.0	µg/L	92.3	91.1	76.3-119	10000	µg/L	1.30	9.6
Tetrachloroethylene	ND(0.5)	106	80.0-120	10.0	µg/L	111	114	82.0-121	10000	µg/L	2.70	11.3
Trichloroethylene	ND(0.5)	102	80.0-120	10.0	µg/L	99.1	97.7	79.3-120	10000	µg/L	1.40	13.7
Vinyl chloride	ND(0.5)	94.7	76.2-128	10.0	µg/L	90.7	87.0	78.0-130	10000	µg/L	4.20	14.6
1,2-Dichloropropane	ND(0.5)	97.7	79.5-120	10.0	µg/L	90.0	90.7	81.7-117	10000	µg/L	0.770	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	97.2	95.5	76.2-126	10.0	µg/L	103	104	76.2-126	10000	µg/L		
TOLUENE-d8	99.2	104	80.0-120	10.0	µg/L	105	106	80.0-120	10000	µg/L		

Data Qualifiers:

MN - The MS/MSD sample analyses were not performed on a sample from this Pace order number.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

OC - The response for this analyte exceeded the calibration range of the instrument. Sample dilution and reanalysis is necessary to obtain an accurate result. The reported result, if provided, is estimated.

I - Due to the concentration of analyte in the sample, the spike level is too low to allow accurate quantification of the spike recovery.

MP - The MS/MSD recoveries for this analyte exceeded the method or laboratory precision control limit. The reported sample concentration is estimated.

** - RPD calculation not applicable/not available for this analysis.

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051070		**Sample Description: WG-05112017-BS-AMW108D**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	78.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	78.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/19/2017	8.0	µg/L	88.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	29.5	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	46.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	90.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	99.7	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	96.6	80.0-120
Lab Number: 17051071		**Sample Description: WG-05112017-BS-AMW008D**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	75.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	75.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/19/2017	8.0	µg/L	93.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	32.4	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	50.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	108	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	106	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	98.1	80.0-120
Lab Number: 17051072		**Sample Description: WG-05112017-BS-AMW008S**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/19/2017	5.0	µg/L	83.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/19/2017	5.0	µg/L	83.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	89.3	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	31.5	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	47.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	103	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	104	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	99.1	80.0-120
Lab Number: 17051073		**Sample Description: WG-05102017-BS-MW146S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	75.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	75.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/19/2017	8.0	µg/L	85.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	33.3	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051073		**Sample Description: WG-05102017-BS-MW146S1**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	51.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	102	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	108	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	99.4	80.0-120
Lab Number: 17051074		**Sample Description: WG-05112017-JR-MW114S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/19/2017	5.0	µg/L	71.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/19/2017	5.0	µg/L	71.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	89.3	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	32.1	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	51.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	101	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	106	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	97.3	80.0-120
Lab Number: 17051075		**Sample Description: WG-05112017-JR-MW113S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/23/2017	5.0	µg/L	137 SI	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/23/2017	5.0	µg/L	137 SI	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	C	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	0.0 SI	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	8.8 SI	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	84.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	1000	µg/L	101	76.2-126
TOLUENE-d8		05/15/2017	1000	µg/L	97.3	80.0-120
Lab Number: 17051075R		**Sample Description: WG-05112017-JR-MW113S3**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	10000	µg/L	102	76.2-126
TOLUENE-d8		05/17/2017	10000	µg/L	99.6	80.0-120
Lab Number: 17051076		**Sample Description: WG-05102017-DF-MW010S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	65.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/14/2017	05/19/2017	5.0	µg/L	65.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/15/2017	05/19/2017	8.0	µg/L	85.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/15/2017	05/20/2017	150	µg/L	30.4	25.6-44.5
2-FLUOROPHENOL	05/15/2017	05/20/2017	150	µg/L	50.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/15/2017	05/20/2017	150	µg/L	99.6	53.9-131

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051076		**Sample Description: WG-05102017-DF-MW010S2**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	103	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	97.0	80.0-120
Lab Number: 17051077		**Sample Description: TB-09**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	105	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	94.7	80.0-120

Data Qualifiers:
SI - One or more surrogate recoveries for this analysis were not within the laboratory or method control limits. The sample result(s) or reporting limit(s) for this analysis are estimated due to sample matrix interferences.

C - Due to matrix interference(s) and/or high concentration(s) of analyte(s) present in the sample, dilution was required causing the spike level for this analyte to be below the reporting limit and/or below the lowest point of the calibration curve.

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/24/2017
Date Received: 05/11/2017
Pace File No: 7775
Pace Order No: 140446

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
2,4-Dichlorophenoxyacetic Acid	05/19/2017	3NX5138	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/19/2017	4NX5138	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/19/2017	1NX5139	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/19/2017	2NX5139	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/23/2017	4NX5142	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/23/2017	5NX5142	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/19/2017	3NX5138	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/19/2017	4NX5138	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/19/2017	1NX5139	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/19/2017	2NX5139	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/23/2017	4NX5142	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/23/2017	5NX5142	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/19/2017	3EX3138	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/19/2017	4EX3138	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/19/2017	1EX3139	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/19/2017	2EX3139	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/18/2017	1IC2138	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/18/2017	2IC2138	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/18/2017	3IC2138	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/20/2017	1MS6140	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/20/2017	2MS6140	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/22/2017	1MS6142	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/15/2017	1MS8135	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/15/2017	2MS8135	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/17/2017	1MS8137	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/18/2017	2MS8137	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/23/2017	11IP4142	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/23/2017	12IP4142	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/23/2017	13IP4142	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/23/2017	5IP4143	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/23/2017	6IP4143	CCV recovery acceptable for this Instrument Batch.			

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

140446

Page: 1 of 1

2059255

Section A Required Client Information:

Company:	GHD
Address:	2626 W Pawnee
	Wichita, KS
Email To:	Travis.Kagl@GHD.com
Phone:	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Travis Kagl
Copy To:	Paul McMahon
Purchase Order No.:	
Project Name:	ash Spring 2017 GWM
Project Number:	11137148

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: KS

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test ↓: VOCs	SVOCs	Pest/Herb	Chloride/Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-051120 17-BS-AMW 108D					5/11/17	935		8	5			3						X	X	X	X		
2	WG-051120 17-BS-AMW008D					5/11/17	1035		8	5			3						X	X	X	X		
3	WG-051120 17-BS-AMW008S					5/11/17	1115		8	5			3						X	X	X	X		
4	WG-051020 17-BS-MW146S1					5/10/17	1435		8	5			3						X	X	X	X		
5	WG-051120 17-JR-MW114S1					5/11/17	935		8	5			3						X	X	X	X		
6	WG-051120 17-JR-MW113S3					5/11/17	1010		8	5			3						X	X	X	X		
7	WG-051020 17-DF-MW010S2					5/10/17	935		8	5			3						X	X	X	X		
8	TB-01					5/10/17	—		3				3						X					
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		5/11/17	1445		5-11-17	1445	
		5/11/17	1615				

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: BRIAN SCHAVER

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 5/11/17

Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140446

Client Name: Oxy

Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P MW010S2
4 LTA 1 250P MW14GS1
___ LTA ___ 250P
___ LTA ___ 250P
All VOC

Cooler ___ of ___ for this Pace Order No.

Cooler Identification: Pace Cooler #: 3027 / Client's Cooler / Box / Letter / Hand-delivered
Other: ___

Date/Time Cooler Received: 5/11/17 14:15

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: ___

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: ___
Seal Name: ___ Seal Date: ___
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: ___

Cooler Temperature (°C): Original Reading (°C) 1.8 Corrected Reading (°C) 1.4
Temperature By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☒ No ☐ Yes **(See below for discrepancies.)**

Note: **If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.**

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: ___

Detail to discrepancies/comments:

Completed by: DLS Date Completed: 5-11-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140446

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4	LTA 1 250P	MW11353
4	LTA 1 250P	MW11451
	LTA 250P	
	LTA 250P	
	VOC	

Cooler _____ **of** _____ **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4341 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/11/17 14:15

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.2 Corrected Reading (°C) 1.8
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☒ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ * Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: DCB **Date Completed:** 5-11-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140446

Client Name: Oxy

Pace File No.: 7775

Sample ID's in cooler:

4	LTA	1 250P	AMW 108D
4	LTA	1 250P	AMW 008D
4	LTA	1 250P	AM 0085
	LTA	250P	
	VOC		

Cooler _____ of _____ for this Pace Order No.

Cooler Identification: Pace Cooler #: 2055 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/11/17 14:15

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 4.2 Corrected Reading (°C) 3.8
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☒ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: DLB Date Completed: 5-11-17

Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date and Time Received: 05/12/2017 1655
Pace File No.: 7775
Pace Order No.: 140470
P.O./Project No: 4502201562-11119420
Project ID: OXY WICHITA GWM
Purchase Auth: SSOW251-402-D02-3100

Dear Ms. Thurman:

This laboratory report, containing the samples indicated below, includes 143 pages for the analytical report, 5 page(s) for the chain of custody and/or analysis request, and 21 page(s) for the sample receipt form.

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17051137	WG-05112017-DF-MW133S2/S3	Liquid	5/11/2017
17051138	WG-05112017-DF-MW004S3	Liquid	5/11/2017
17051139	WG-05112017-DF-MW004S1	Liquid	5/11/2017
17051140	WG-05112017-DF-MW013S3	Liquid	5/11/2017
17051141	WG-05112017-DF-MW013S1	Liquid	5/11/2017
17051142	WG-05112017-DF-MW139S2/S3	Liquid	5/11/2017
17051143	WG-05112017-DF-MW031S1	Liquid	5/11/2017
17051144	WG-05112017-DF-FD8	Liquid	5/11/2017
17051145	WG-05112017-DF-ER13	Liquid	5/11/2017
17051146	WG-05122017-DF-IW45	Liquid	5/12/2017
17051147	WG-05122017-DF-IW43	Liquid	5/12/2017
17051147R	WG-05122017-DF-IW43	Liquid	5/12/2017
17051148	WG-05122017-DF-FD10	Liquid	5/12/2017
17051148R	WG-05122017-DF-FD10	Liquid	5/12/2017
17051149	WG-05122017-DF-MW010S3	Liquid	5/12/2017
17051149R	WG-05122017-DF-MW010S3	Liquid	5/12/2017
17051150	WG-05122017-JR-MW010S1	Liquid	5/12/2017
17051150R	WG-05122017-JR-MW010S1	Liquid	5/12/2017
17051151	WG-05122017-JR-MW005S3	Liquid	5/12/2017
17051151R	WG-05122017-JR-MW005S3	Liquid	5/12/2017
17051152	WG-05122017-JR-MW019S2	Liquid	5/12/2017
17051152R	WG-05122017-JR-MW019S2	Liquid	5/12/2017
17051153	WG-05122017-JR-MW027S1	Liquid	5/12/2017
17051153R	WG-05122017-JR-MW027S1	Liquid	5/12/2017
17051154	WG-05122017-JR-MW027S2	Liquid	5/12/2017
17051154R	WG-05122017-JR-MW027S2	Liquid	5/12/2017
17051155	WG-05122017-JR-MW018S1	Liquid	5/12/2017
17051155R	WG-05122017-JR-MW018S1	Liquid	5/12/2017
17051156	WG-05122017-JR-MW018S3	Liquid	5/12/2017
17051156R	WG-05122017-JR-MW018S3	Liquid	5/12/2017
17051157	WG-05122017-DF-IW41	Liquid	5/12/2017
17051157R	WG-05122017-DF-IW41	Liquid	5/12/2017

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17051158	WG-05122017-DF-IW42	Liquid	5/12/2017
17051158R	WG-05122017-DF-IW42	Liquid	5/12/2017
17051159	WG-05122017-DF-IW46	Liquid	5/12/2017
17051159R	WG-05122017-DF-IW46	Liquid	5/12/2017
17051160	WG-05122017-DF-IW44	Liquid	5/12/2017
17051160R	WG-05122017-DF-IW44	Liquid	5/12/2017
17051161	WG-05122017-DF-IW31	Liquid	5/12/2017
17051161R	WG-05122017-DF-IW31	Liquid	5/12/2017
17051162	WG-05122017-DF-IW30	Liquid	5/12/2017
17051162R	WG-05122017-DF-IW30	Liquid	5/12/2017
17051163	WG-05122017-DF-IW36	Liquid	5/12/2017
17051163R	WG-05122017-DF-IW36	Liquid	5/12/2017
17051164	WG-05122017-DF-IW35A	Liquid	5/12/2017
17051164R	WG-05122017-DF-IW35A	Liquid	5/12/2017
17051165	WG-05122017-DF-IW29	Liquid	5/12/2017
17051165R	WG-05122017-DF-IW29	Liquid	5/12/2017
17051166	WG-05122017-DF-IW35B	Liquid	5/12/2017
17051166R	WG-05122017-DF-IW35B	Liquid	5/12/2017
17051167	WG-05122017-DF-IW40	Liquid	5/12/2017
17051168	WG-05122017-DF-IW32	Liquid	5/12/2017
17051169	WG-05122017-BS-MW019S1	Liquid	5/12/2017
17051170	WG-05122017-BS-MW019S4	Liquid	5/12/2017
17051170R	WG-05122017-BS-MW019S4	Liquid	5/12/2017
17051171	WG-05122017-BS-AMW101S	Liquid	5/12/2017
17051172	WG-05122017-BS-AMW101I	Liquid	5/12/2017
17051173	WG-05122017-BS-AMW101D	Liquid	5/12/2017
17051174	WG-05112017-JR-MW029S2	Liquid	5/11/2017
17051175	WG-05112017-JR-MW029S1	Liquid	5/11/2017
17051176	WG-05112017-JR-MW149S2/S3	Liquid	5/11/2017
17051177	WG-05112017-BS-AMW104	Liquid	5/11/2017
17051178	WG-05112017-BS-AMW003	Liquid	5/11/2017
17051179	WG-05112017-BS-AMW108S	Liquid	5/11/2017
17051180	WG-05112017-BS-FD009	Liquid	5/11/2017
17051181	TB-10	Liquid	5/12/2017
17051182	TB-11	Liquid	5/12/2017

The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

Samples will be retained for thirty days unless Pace is otherwise notified. Pace is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Pace's Standard Operating Procedures. These procedures are in substantial compliance with the approved methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.

Thank you for choosing Pace for this project.

Gregory J. Groene
Project Manager
Gregory.Groene@pacelabs.com

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051137
Sample Description: WG-05112017-DF-MW133S2/S3

Date Sampled: 05/11/2017
Time Sampled: 0855

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	0.04	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	253	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	30.9	mg/L	1.0	1.0	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/19/17 2139	170515-3	1NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/19/17 2139	170515-3	1NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 1639	170516-2	1EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 1356	170516-1	1MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 1837	1MS8135	1MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0134	170516-5	12IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1046	1IC2143	1IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051137

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051138
Sample Description: WG-05112017-DF-MW004S3

Date Sampled: 05/11/2017
Time Sampled: 0955

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	0.111	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	127	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	35.1	mg/L	1.0	1.0	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/22/17 1345	170515-3	1NX5142	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/22/17 1345	170515-3	1NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 1838	170516-2	2EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 1436	170516-1	1MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 1912	1MS8135	1MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0138	170516-5	12IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1058	1IC2143	1IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051138

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051139
Sample Description: WG-05112017-DF-MW004S1

Date Sampled: 05/11/2017
Time Sampled: 1035

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	127	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	30.4	mg/L	1.0	1.0	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/19/17 2336	170515-3	2NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/19/17 2336	170515-3	2NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 1918	170516-2	2EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 1517	170516-1	1MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 1948	1MS8135	1MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0142	170516-5	12IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1110	1IC2143	1IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051139

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051140
Sample Description: WG-05112017-DF-MW013S3

Date Sampled: 05/11/2017
Time Sampled: 1145

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	98.8	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/22/17 1425	170515-3	1NX5142	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/22/17 1425	170515-3	1NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 1958	170516-2	2EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 1557	170516-1	1MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/15/17 2359	1MS8135	2MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0146	170516-5	12IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1123	1IC2143	1IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051140

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051141
Sample Description: WG-05112017-DF-MW013S1

Date Sampled: 05/11/2017
Time Sampled: 1235

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	395	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	34.1	mg/L	1.0	1.0	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/20/17 0055	170515-3	2NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/20/17 0055	170515-3	2NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 2037	170516-2	2EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 1638	170516-1	1MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/16/17 0034	1MS8135	2MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0158	170516-5	13IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1135	1IC2143	1IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051141

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051142
Sample Description: WG-05112017-DF-MW139S2/S3

Date Sampled: 05/11/2017
Time Sampled: 1325

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	478	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	227	mg/L	20	20	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/22/17 1504	170515-3	1NX5142	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/22/17 1504	170515-3	1NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 2117	170516-2	2EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 1718	170516-1	1MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/16/17 0110	1MS8135	2MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0203	170516-5	13IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1147	1IC2143	1IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051142

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051143
Sample Description: WG-05112017-DF-MW031S1

Date Sampled: 05/11/2017
Time Sampled: 1435

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	0.023	µg/L	1.0	0.011	7460/207
B-BHC	0.336	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	0.04	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(2)	µg/L	4.0	2	7466/525
1,2-Dichloroethane	ND(2)	µg/L	4.0	2	7466/525
Benzene	ND(2)	µg/L	4.0	2	7466/525
Carbon tetrachloride	68.0	µg/L	4.0	2	7466/525
Chloroform	6.4	µg/L	4.0	2	7466/525
Chloromethane	ND(2)	µg/L	4.0	2	7466/525
Methylene chloride	ND(2)	µg/L	4.0	2	7466/525
Tetrachloroethylene	ND(2)	µg/L	4.0	2	7466/525
Trichloroethylene	ND(2)	µg/L	4.0	2	7466/525
Vinyl chloride	ND(2)	µg/L	4.0	2	7466/525
1,2-Dichloropropane	ND(2)	µg/L	4.0	2	7466/525
Hardness (Calculated)	299	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	258	mg/L	20	20	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/22/17 1544	170515-3	1NX5142	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/22/17 1544	170515-3	1NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 2157	170516-2	2EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 1758	170516-1	1MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/16/17 0257	1MS8135	2MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0207	170516-5	13IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1249	1IC2143	2IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051143

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051144
Sample Description: WG-05112017-DF-FD8

Date Sampled: 05/11/2017
Time Sampled: 0000

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	0.108	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/527
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/527
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/527
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/527
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/527
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/527
Hardness (Calculated)	125	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	35	mg/L	5.0	5.0	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/20/17 0253	170515-3	2NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/20/17 0253	170515-3	2NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 2236	170516-2	2EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 1838	170516-1	1MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 1730	1MS8137	1MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0211	170516-5	13IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1301	1IC2143	2IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051144

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051145
Sample Description: WG-05112017-DF-ER13

Date Sampled: 05/11/2017
Time Sampled: 1630

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/22/17 1623	170515-3	1NX5142	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/22/17 1623	170515-3	1NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 2316	170516-2	2EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 2052	170516-1	2MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/16/17 0146	1MS8135	2MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0215	170516-5	13IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1313	1IC2143	2IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051145

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051146
Sample Description: WG-05122017-DF-IW45

Date Sampled: 05/12/2017
Time Sampled: 1100

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/525
Carbon tetrachloride	61.1	µg/L	1.0	0.5	7466/525
Chloroform	1.9	µg/L	1.0	0.5	7466/525
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/525
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/525
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/525
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/525
Hardness (Calculated)	223	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	48	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/20/17 0411	170515-3	2NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/20/17 0411	170515-3	2NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 2356	170516-2	2EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 2133	170516-1	2MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/16/17 0222	1MS8135	2MS8135	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0219	170516-5	13IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1326	1IC2143	2IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051146

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051147
Sample Description: WG-05122017-DF-IW43

Date Sampled: 05/12/2017
Time Sampled: 1040

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	10. E QC	µg/L	2.0	2.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	0.032	µg/L	1.0	0.011	7460/208
B-BHC	0.204	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	0.29	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	18.5	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	6.0	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	9.2	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(20)	µg/L	40	20	7465/350
1,2-Dichloroethane	ND(20)	µg/L	40	20	7465/350
Benzene	ND(20)	µg/L	40	20	7465/350
Carbon tetrachloride	974	µg/L	40	20	7465/350
Chloroform	42	µg/L	40	20	7465/350
Chloromethane	ND(20)	µg/L	40	20	7465/350
Methylene chloride	ND(20)	µg/L	40	20	7465/350
Tetrachloroethylene	ND(20)	µg/L	40	20	7465/350
Trichloroethylene	ND(20)	µg/L	40	20	7465/350
Vinyl chloride	ND(20)	µg/L	40	20	7465/350
1,2-Dichloropropane	ND(20)	µg/L	40	20	7465/350
Hardness (Calculated)	355	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	361	mg/L	20	20	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/24/17 0643	170517-3	2NX5143	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/22/17 2019	170517-3	2NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/22/17 2326	170518-2	2EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 1422	170518-1	1MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 1511	1MS9137	1MS9137	RKR	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0223	170516-5	13IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1338	1IC2143	2IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051147

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051147R
Sample Description: WG-05122017-DF-IW43

Date Sampled: 05/12/2017
Time Sampled: 1040

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	1.8 E HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/26/17 0815	170524-1	4NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051147R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051148
Sample Description: WG-05122017-DF-FD10

Date Sampled: 05/12/2017
Time Sampled: 0000

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/208
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	90.8	µg/L	1.0	0.5	7466/528
Chloroform	7.7	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/528
Hardness (Calculated)	301	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	139	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/22/17 2058	170517-3	2NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/22/17 2058	170517-3	2NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 0006	170518-2	2EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 1503	170518-1	1MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 1620	1MS8138	1MS8138	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0228	170516-5	13IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1350	1IC2143	2IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051148

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051148R
Sample Description: WG-05122017-DF-FD10

Date Sampled: 05/12/2017
Time Sampled: 0000

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 1143	170524-1	1NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051148R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051149
Sample Description: WG-05122017-DF-MW010S3

Date Sampled: 05/12/2017
Time Sampled: 1415

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/208
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	0.17	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/528
Hardness (Calculated)	204	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	4.0	mg/L	1.0	1.0	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/22/17 2137	170517-3	2NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/22/17 2137	170517-3	2NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 0045	170518-2	2EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 1543	170518-1	1MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 1656	1MS8138	1MS8138	GMA	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0232	170516-5	13IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1402	1IC2143	2IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051149

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051149R
Sample Description: WG-05122017-DF-MW010S3

Date Sampled: 05/12/2017
Time Sampled: 1415

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 1222	170524-1	1NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051149R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051150
Sample Description: WG-05122017-JR-MW010S1

Date Sampled: 05/12/2017
Time Sampled: 0945

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/208
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	0.32	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/350
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/350
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/350
Carbon tetrachloride	2.2	µg/L	1.0	0.5	7465/350
Chloroform	2.6	µg/L	1.0	0.5	7465/350
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/350
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/350
Tetrachloroethylene	0.7	µg/L	1.0	0.5	7465/350
Trichloroethylene	0.5	µg/L	1.0	0.5	7465/350
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/350
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/350
Hardness (Calculated)	380.	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	231	mg/L	20	20	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/22/17 2217	170517-3	2NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/22/17 2217	170517-3	2NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 0244	170518-2	3EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 1623	170518-1	1MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 1626	1MS9137	1MS9137	RKR	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0236	170516-5	13IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1415	1IC2143	2IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051150

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051150R
Sample Description: WG-05122017-JR-MW010S1

Date Sampled: 05/12/2017
Time Sampled: 0945

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 1302	170524-1	1NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051150R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051151
Sample Description: WG-05122017-JR-MW005S3

Date Sampled: 05/12/2017
Time Sampled: 1050

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/208
B-BHC	0.145	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/350
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7465/350
Benzene	ND(0.5)	µg/L	1.0	0.5	7465/350
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7465/350
Chloroform	ND(0.5)	µg/L	1.0	0.5	7465/350
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7465/350
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7465/350
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/350
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7465/350
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7465/350
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7465/350
Hardness (Calculated)	146	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	146	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/22/17 2256	170517-3	2NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/22/17 2256	170517-3	2NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 0323	170518-2	3EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 1704	170518-1	1MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 1651	1MS9137	1MS9137	RKR	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0248	170516-5	14IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1427	1IC2143	2IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051151

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051151R
Sample Description: WG-05122017-JR-MW005S3

Date Sampled: 05/12/2017
Time Sampled: 1050

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 1341	170524-1	1NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051151R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051152
Sample Description: WG-05122017-JR-MW019S2

Date Sampled: 05/12/2017
Time Sampled: 1240

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	410 SR QC	µg/L	50	50	7462/185
Pentachlorophenol	17 FC SR	µg/L	4.0	2	7462/185
OXY Chlorinated Hyd.	SR				
A-BHC	2.6	µg/L	200	2.2	7460/208
B-BHC	40.0	µg/L	200	7.4	7460/208
G-BHC	ND(10)	µg/L	200	10	7460/208
Hexachloroethane	666	µg/L	200	4	7460/208
Hexachlorobutadiene	OC	µg/L	200	4	7460/208
Hexachlorobenzene	339	µg/L	200	20	7460/208
D-BHC	ND(10)	µg/L	200	10	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	64.4	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	17.2	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	88.1	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	6.4	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	170	µg/L	100	50	7465/350
1,2-Dichloroethane	ND(50)	µg/L	100	50	7465/350
Benzene	ND(50)	µg/L	100	50	7465/350
Carbon tetrachloride	4710	µg/L	100	50	7465/350
Chloroform	3860	µg/L	100	50	7465/350
Chloromethane	ND(50)	µg/L	100	50	7465/350
Methylene chloride	ND(50)	µg/L	100	50	7465/350
Tetrachloroethylene	3850	µg/L	100	50	7465/350
Trichloroethylene	460	µg/L	100	50	7465/350
Vinyl chloride	ND(50)	µg/L	100	50	7465/350
1,2-Dichloropropane	ND(50)	µg/L	100	50	7465/350
Hardness (Calculated)	864	mg/L as CaCO3	5.0	25	7443/996
Chloride	3220	mg/L	100	100	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/24/17 0802	170517-3	3NX5143	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/24/17 1355	170517-3	4NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 0403	170518-2	3EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/25/17 0518	170518-1	2MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 1715	1MS9137	1MS9137	RKR	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 1619	170516-5	5IP4143	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1438	1IC2143	2IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051152

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051152R
Sample Description: WG-05122017-JR-MW019S2

Date Sampled: 05/12/2017
Time Sampled: 1240

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	390 HP SR	µg/L	50	50	7462/186
OXY Chlorinated Hyd.	SR				
A-BHC	ND(5.5)	µg/L	500	5.5	7460/209
B-BHC	42	µg/L	500	19	7460/209
G-BHC	ND(26)	µg/L	500	26	7460/209
Hexachloroethane	703	µg/L	500	10	7460/209
Hexachlorobutadiene	1220	µg/L	500	10	7460/209
Hexachlorobenzene	370	µg/L	500	50	7460/209
D-BHC	ND(30)	µg/L	500	30	7460/209

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 1738	170524-1	2NX5145	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 1929	170518-2	1EX3143	SPA	8121
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C

Conclusion of Lab Number: 17051152R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051153
Sample Description: WG-05122017-JR-MW027S1

Date Sampled: 05/12/2017
Time Sampled: 1230

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(4.0) M QC	µg/L	1.0	1.0	7462/185
Pentachlorophenol	1.6	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.	SR				
A-BHC	ND(11)	µg/L	1000	11	7460/209
B-BHC	ND(37)	µg/L	1000	37	7460/209
G-BHC	ND(52)	µg/L	1000	52	7460/209
Hexachloroethane	1730	µg/L	1000	20	7460/209
Hexachlorobutadiene	2310	µg/L	1000	20	7460/209
Hexachlorobenzene	ND(100)	µg/L	1000	100	7460/209
D-BHC	ND(50)	µg/L	1000	50	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(50)	µg/L	100	50	7465/350
1,2-Dichloroethane	ND(50)	µg/L	100	50	7465/350
Benzene	ND(50)	µg/L	100	50	7465/350
Carbon tetrachloride	830	µg/L	100	50	7465/350
Chloroform	380	µg/L	100	50	7465/350
Chloromethane	ND(50)	µg/L	100	50	7465/350
Methylene chloride	ND(50)	µg/L	100	50	7465/350
Tetrachloroethylene	2660	µg/L	100	50	7465/350
Trichloroethylene	370	µg/L	100	50	7465/350
Vinyl chloride	ND(50)	µg/L	100	50	7465/350
1,2-Dichloropropane	ND(50)	µg/L	100	50	7465/350
Hardness (Calculated)	699	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	634	mg/L	50	50	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/24/17 0841	170517-3	3NX5143	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/24/17 0841	170517-3	3NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 2008	170518-2	1EX3143	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 1743	170518-1	1MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 1740	1MS9137	1MS9137	RKR	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0321	170516-6	14IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1512	1IC2143	3IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051153

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051153R
Sample Description: WG-05122017-JR-MW027S1

Date Sampled: 05/12/2017
Time Sampled: 1230

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(4.0) M HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 1420	170524-1	1NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051153R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051154
Sample Description: WG-05122017-JR-MW027S2

Date Sampled: 05/12/2017
Time Sampled: 1245

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/185
Pentachlorophenol	1.3 FC	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.	SR				
A-BHC	ND(4.4)	µg/L	400	4.4	7460/208
B-BHC	ND(15)	µg/L	400	15	7460/208
G-BHC	ND(21)	µg/L	400	21	7460/208
Hexachloroethane	1590	µg/L	400	8	7460/208
Hexachlorobutadiene	OC	µg/L	400	8	7460/208
Hexachlorobenzene	570.	µg/L	400	40	7460/208
D-BHC	ND(20)	µg/L	400	20	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(50)	µg/L	100	50	7466/527
1,2-Dichloroethane	ND(50)	µg/L	100	50	7466/527
Benzene	ND(50)	µg/L	100	50	7466/527
Carbon tetrachloride	270	µg/L	100	50	7466/527
Chloroform	ND(50)	µg/L	100	50	7466/527
Chloromethane	ND(50)	µg/L	100	50	7466/527
Methylene chloride	ND(50)	µg/L	100	50	7466/527
Tetrachloroethylene	2000	µg/L	100	50	7466/527
Trichloroethylene	ND(50)	µg/L	100	50	7466/527
Vinyl chloride	ND(50)	µg/L	100	50	7466/527
1,2-Dichloropropane	ND(50)	µg/L	100	50	7466/527
Hardness (Calculated)	535	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	450	mg/L	50	50	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/24/17 0920	170517-3	3NX5143	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/24/17 0920	170517-3	3NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 0522	170518-2	3EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/25/17 0558	170518-1	2MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 1806	1MS8137	1MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0326	170516-6	14IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1524	1IC2143	3IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051154

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051154R
Sample Description: WG-05122017-JR-MW027S2

Date Sampled: 05/12/2017
Time Sampled: 1245

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186
OXY Chlorinated Hyd.	SR				
A-BHC	ND(11)	µg/L	1000	11	7460/209
B-BHC	ND(37)	µg/L	1000	37	7460/209
G-BHC	ND(52)	µg/L	1000	52	7460/209
Hexachloroethane	1630	µg/L	1000	20	7460/209
Hexachlorobutadiene	3150	µg/L	1000	20	7460/209
Hexachlorobenzene	620	µg/L	1000	100	7460/209
D-BHC	ND(50)	µg/L	1000	50	7460/209

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 1500	170524-1	1NX5145	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 2048	170518-2	1EX3143	SPA	8121
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C

Conclusion of Lab Number: 17051154R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051155
Sample Description: WG-05122017-JR-MW018S1

Date Sampled: 05/12/2017
Time Sampled: 1350

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	3.2 QC	µg/L	1.0	1.0	7462/186
Pentachlorophenol	250 SR	µg/L	50	30	7462/185
OXY Chlorinated Hyd.	SR				
A-BHC	4.34	µg/L	20	0.22	7460/208
B-BHC	4.21 E FC	µg/L	20	0.74	7460/208
G-BHC	1.1 E FD	µg/L	20	1.0	7460/208
Hexachloroethane	OC	µg/L	20	0.4	7460/208
Hexachlorobutadiene	OC	µg/L	20	0.4	7460/208
Hexachlorobenzene	33.9	µg/L	20	2.0	7460/208
D-BHC	1	µg/L	20	1	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	13.4	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	44.7	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	37.3	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(1000)	µg/L	2000	1000	7466/527
1,2-Dichloroethane	ND(1000)	µg/L	2000	1000	7466/527
Benzene	ND(1000)	µg/L	2000	1000	7466/527
Carbon tetrachloride	55000	µg/L	2000	1000	7466/527
Chloroform	22200	µg/L	2000	1000	7466/527
Chloromethane	ND(1000)	µg/L	2000	1000	7466/527
Methylene chloride	ND(1000)	µg/L	2000	1000	7466/527
Tetrachloroethylene	23300	µg/L	2000	1000	7466/527
Trichloroethylene	ND(1000)	µg/L	2000	1000	7466/527
Vinyl chloride	ND(1000)	µg/L	2000	1000	7466/527
1,2-Dichloropropane	ND(1000)	µg/L	2000	1000	7466/527
Hardness (Calculated)	265	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	177	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/26/17 0247	170517-3	3NX5145	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/24/17 1000	170517-3	3NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 0601	170518-2	3EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 1823	170518-1	1MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 1842	1MS8137	1MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0338	170516-6	15IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1535	1IC2143	3IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051155

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051155R
Sample Description: WG-05122017-JR-MW018S1

Date Sampled: 05/12/2017
Time Sampled: 1350

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	3.1 HP	µg/L	1.0	1.0	7462/188
OXY Chlorinated Hyd.	SR				
A-BHC	4.6	µg/L	400	4.4	7460/208
B-BHC	ND(15)	µg/L	400	15	7460/208
G-BHC	ND(21)	µg/L	400	21	7460/208
Hexachloroethane	1120	µg/L	400	8	7460/208
Hexachlorobutadiene	290	µg/L	400	8	7460/208
Hexachlorobenzene	ND(40)	µg/L	400	40	7460/208
D-BHC	ND(20)	µg/L	400	20	7460/208

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/26/17 1111	170524-1	5NX5145	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 1556	170518-2	4EX3142	SPA	8121
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C

Conclusion of Lab Number: 17051155R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051156
Sample Description: WG-05122017-JR-MW018S3

Date Sampled: 05/12/2017
Time Sampled: 1415

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	3.2	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	0.095	µg/L	1.0	0.011	7460/208
B-BHC	OC	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	OC	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	OC	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	0.20	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(30)	µg/L	50	30	7466/528
1,2-Dichloroethane	ND(30)	µg/L	50	30	7466/528
Benzene	ND(30)	µg/L	50	30	7466/528
Carbon tetrachloride	2310	µg/L	50	30	7466/528
Chloroform	1240	µg/L	50	30	7466/528
Chloromethane	ND(30)	µg/L	50	30	7466/528
Methylene chloride	30	µg/L	50	30	7466/528
Tetrachloroethylene	1020	µg/L	50	30	7466/528
Trichloroethylene	ND(30)	µg/L	50	30	7466/528
Vinyl chloride	ND(30)	µg/L	50	30	7466/528
1,2-Dichloropropane	ND(30)	µg/L	50	30	7466/528
Hardness (Calculated)	130.	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	23	mg/L	5.0	5.0	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/23/17 0252	170517-3	3NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/23/17 0252	170517-3	3NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 0641	170518-2	3EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 1903	170518-1	1MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 1732	1MS8138	1MS8138	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0342	170516-6	15IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1546	1IC2143	3IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051156

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051156R
Sample Description: WG-05122017-JR-MW018S3

Date Sampled: 05/12/2017
Time Sampled: 1415

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186
OXY Chlorinated Hyd.					
A-BHC	0.15	µg/L	10	0.11	7460/209
B-BHC	12.0	µg/L	10	0.37	7460/209
G-BHC	ND(0.52)	µg/L	10	0.52	7460/209
Hexachloroethane	25.3	µg/L	10	0.2	7460/209
Hexachlorobutadiene	7.2	µg/L	10	0.2	7460/209
Hexachlorobenzene	ND(1.0)	µg/L	10	1	7460/209
D-BHC	ND(0.5)	µg/L	10	0.5	7460/209

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 1539	170524-1	1NX5145	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/24/17 1556	170518-2	4EX3143	SPA	8121
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C

Conclusion of Lab Number: 17051156R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051157
Sample Description: WG-05122017-DF-IW41

Date Sampled: 05/12/2017
Time Sampled: 1005

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/208
B-BHC	0.314	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/527
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/527
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/527
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/527
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/527
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/527
Hardness (Calculated)	267	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	88	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/23/17 0331	170517-3	3NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/23/17 0331	170517-3	3NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 0720	170518-2	3EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 1944	170518-1	1MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 1953	1MS8137	1MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0346	170516-6	15IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1620	2IC2143	3IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051157

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051157R
Sample Description: WG-05122017-DF-IW41

Date Sampled: 05/12/2017
Time Sampled: 1005

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 1817	170524-1	2NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051157R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051158
Sample Description: WG-05122017-DF-IW42

Date Sampled: 05/12/2017
Time Sampled: 0945

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/208
B-BHC	0.111	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/527
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/527
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/527
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/527
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/527
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/527
Hardness (Calculated)	178	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	71	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/23/17 0410	170517-3	3NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/23/17 0410	170517-3	3NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 0800	170518-2	3EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 2157	170518-1	2MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 2029	1MS8137	1MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0351	170516-6	15IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1631	2IC2143	3IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051158

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051158R
Sample Description: WG-05122017-DF-IW42

Date Sampled: 05/12/2017
Time Sampled: 0945

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 1856	170524-1	2NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051158R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051159
Sample Description: WG-05122017-DF-IW46

Date Sampled: 05/12/2017
Time Sampled: 1020

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/208
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/527
Carbon tetrachloride	6.5	µg/L	1.0	0.5	7466/527
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/527
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/527
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/527
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/527
Hardness (Calculated)	289	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	115	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/23/17 0449	170517-3	3NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/23/17 0449	170517-3	3NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 0959	170518-2	4EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 2237	170518-1	2MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 2105	1MS8137	1MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0355	170516-6	15IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1643	2IC2143	3IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051159

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051159R
Sample Description: WG-05122017-DF-IW46

Date Sampled: 05/12/2017
Time Sampled: 1020

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 1936	170524-1	2NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051159R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051160
Sample Description: WG-05122017-DF-IW44

Date Sampled: 05/12/2017
Time Sampled: 1050

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/208
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(5)	µg/L	10	5	7466/527
1,2-Dichloroethane	ND(5)	µg/L	10	5	7466/527
Benzene	ND(5)	µg/L	10	5	7466/527
Carbon tetrachloride	219	µg/L	10	5	7466/527
Chloroform	6	µg/L	10	5	7466/527
Chloromethane	ND(5)	µg/L	10	5	7466/527
Methylene chloride	ND(5)	µg/L	10	5	7466/527
Tetrachloroethylene	ND(5)	µg/L	10	5	7466/527
Trichloroethylene	ND(5)	µg/L	10	5	7466/527
Vinyl chloride	ND(5)	µg/L	10	5	7466/527
1,2-Dichloropropane	ND(5)	µg/L	10	5	7466/527
Hardness (Calculated)	298	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	150.	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/23/17 0528	170517-3	3NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/23/17 0528	170517-3	3NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 1039	170518-2	4EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 2317	170518-1	2MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 0115	1MS8137	2MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0359	170516-6	15IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1654	2IC2143	3IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051160

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051160R
Sample Description: WG-05122017-DF-IW44

Date Sampled: 05/12/2017
Time Sampled: 1050

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 2015	170524-1	2NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051160R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051161
Sample Description: WG-05122017-DF-IW31

Date Sampled: 05/12/2017
Time Sampled: 1320

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	220 SR QC	µg/L	40	40	7462/185
Pentachlorophenol	73	µg/L	10	5	7462/185
OXY Chlorinated Hyd.	SR				
A-BHC	13	µg/L	200	2.2	7460/209
B-BHC	ND(7.4)	µg/L	200	7.4	7460/209
G-BHC	24.0	µg/L	200	10	7460/209
Hexachloroethane	OC	µg/L	200	4	7460/209
Hexachlorobutadiene	822	µg/L	200	4	7460/209
Hexachlorobenzene	ND(20)	µg/L	200	20	7460/209
D-BHC	29	µg/L	200	10	7460/209
OXY GC/MS Acids					
2-Chlorophenol	8.6	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	7.4	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	74.2	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	35.9	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	109	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	44.3	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(200)	µg/L	400	200	7466/527
1,2-Dichloroethane	1300	µg/L	400	200	7466/527
Benzene	200	µg/L	400	200	7466/527
Carbon tetrachloride	9980	µg/L	400	200	7466/527
Chloroform	10600	µg/L	400	200	7466/527
Chloromethane	ND(200)	µg/L	400	200	7466/527
Methylene chloride	2700	µg/L	400	200	7466/527
Tetrachloroethylene	8990	µg/L	400	200	7466/527
Trichloroethylene	860	µg/L	400	200	7466/527
Vinyl chloride	ND(200)	µg/L	400	200	7466/527
1,2-Dichloropropane	1000	µg/L	400	200	7466/527
Hardness (Calculated)	752	mg/L as CaCO3	5.0	25	7443/996
Chloride	2590	mg/L	100	100	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/24/17 1039	170517-3	3NX5143	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/24/17 1435	170517-3	4NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 2127	170518-2	1EX3143	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/24/17 2357	170518-1	2MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 0151	1MS8137	2MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 1624	170516-6	5IP4143	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1728	2IC2143	4IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051161

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051161R
Sample Description: WG-05122017-DF-IW31

Date Sampled: 05/12/2017
Time Sampled: 1320

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	180 HP SR	µg/L	40	40	7462/186
OXY Chlorinated Hyd.	SR				
A-BHC	13	µg/L	400	4.4	7460/209
B-BHC	ND(15)	µg/L	400	15	7460/209
G-BHC	23	µg/L	400	21	7460/209
Hexachloroethane	1050	µg/L	400	8	7460/209
Hexachlorobutadiene	818	µg/L	400	8	7460/209
Hexachlorobenzene	ND(40)	µg/L	400	40	7460/209
D-BHC	30	µg/L	400	20	7460/209

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 2054	170524-1	2NX5145	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/24/17 1636	170518-2	4EX3143	SPA	8121
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C

Conclusion of Lab Number: 17051161R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051162
Sample Description: WG-05122017-DF-IW30

Date Sampled: 05/12/2017
Time Sampled: 1340

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	30. SR QC	µg/L	5.0	5.0	7462/185
Pentachlorophenol	100 SR	µg/L	20	10	7462/185
OXY Chlorinated Hyd.	SR				
A-BHC	1.8	µg/L	100	1.1	7460/209
B-BHC	4.3	µg/L	100	3.7	7460/209
G-BHC	ND(5.2)	µg/L	100	5.2	7460/209
Hexachloroethane	OC	µg/L	100	2	7460/209
Hexachlorobutadiene	OC	µg/L	100	2	7460/209
Hexachlorobenzene	ND(10)	µg/L	100	10	7460/209
D-BHC	ND(5)	µg/L	100	5	7460/209
OXY GC/MS Acids	SR				
2-Chlorophenol	6.5	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	87.7	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	89.4	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(200)	µg/L	400	200	7466/527
1,2-Dichloroethane	400	µg/L	400	200	7466/527
Benzene	ND(200)	µg/L	400	200	7466/527
Carbon tetrachloride	30800	µg/L	400	200	7466/527
Chloroform	28600	µg/L	400	200	7466/527
Chloromethane	ND(200)	µg/L	400	200	7466/527
Methylene chloride	640	µg/L	400	200	7466/527
Tetrachloroethylene	11200	µg/L	400	200	7466/527
Trichloroethylene	620	µg/L	400	200	7466/527
Vinyl chloride	ND(200)	µg/L	400	200	7466/527
1,2-Dichloropropane	1300	µg/L	400	200	7466/527
Hardness (Calculated)	353	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	3320	mg/L	100	100	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/24/17 1553	170517-3	4NX5143	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/24/17 1118	170517-3	3NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 2207	170518-2	1EX3143	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/25/17 0037	170518-1	2MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 0226	1MS8137	2MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0408	170516-6	15IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1739	2IC2143	4IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051162

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051162R
Sample Description: WG-05122017-DF-IW30

Date Sampled: 05/12/2017
Time Sampled: 1340

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	13 HP	µg/L	5.0	5.0	7462/186
OXY Chlorinated Hyd.	SR				
A-BHC	ND(5.5)	µg/L	500	5.5	7460/209
B-BHC	ND(19)	µg/L	500	19	7460/209
G-BHC	ND(26)	µg/L	500	26	7460/209
Hexachloroethane	1180	µg/L	500	10	7460/209
Hexachlorobutadiene	1060	µg/L	500	10	7460/209
Hexachlorobenzene	ND(50)	µg/L	500	50	7460/209
D-BHC	ND(30)	µg/L	500	30	7460/209

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 2134	170524-1	2NX5145	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/24/17 1715	170518-2	4EX3143	SPA	8121
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C

Conclusion of Lab Number: 17051162R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051163
Sample Description: WG-05122017-DF-IW36

Date Sampled: 05/12/2017
Time Sampled: 1240

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	0.021	µg/L	1.0	0.011	7460/208
B-BHC	0.344	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	0.02	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	0.04	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/527
Carbon tetrachloride	25.5	µg/L	1.0	0.5	7466/527
Chloroform	6.5	µg/L	1.0	0.5	7466/527
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
Tetrachloroethylene	0.9	µg/L	1.0	0.5	7466/527
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/527
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/527
Hardness (Calculated)	685	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	900	mg/L	100	100	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/23/17 0805	170517-3	4NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/23/17 0805	170517-3	4NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 1317	170518-2	4EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/25/17 0118	170518-1	2MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 0302	1MS8137	2MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0412	170516-6	15IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1750	2IC2143	4IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051163

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051163R
Sample Description: WG-05122017-DF-IW36

Date Sampled: 05/12/2017
Time Sampled: 1240

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 2213	170524-1	2NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051163R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051164
Sample Description: WG-05122017-DF-IW35A

Date Sampled: 05/12/2017
Time Sampled: 1145

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	0.020	µg/L	1.0	0.011	7460/208
B-BHC	1.12 QC	µg/L	1.0	0.037	7460/208
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/208
Hexachloroethane	0.23	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	0.37	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10) QC	µg/L	1.0	0.10	7460/208
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(3)	µg/L	5.0	3	7465/350
1,2-Dichloroethane	ND(3)	µg/L	5.0	3	7465/350
Benzene	ND(3)	µg/L	5.0	3	7465/350
Carbon tetrachloride	78.0	µg/L	5.0	3	7465/350
Chloroform	93.2	µg/L	5.0	3	7465/350
Chloromethane	ND(3) QC	µg/L	5.0	3	7465/350
Methylene chloride	ND(3)	µg/L	5.0	3	7465/350
Tetrachloroethylene	21	µg/L	5.0	3	7465/350
Trichloroethylene	ND(3)	µg/L	5.0	3	7465/350
Vinyl chloride	ND(3)	µg/L	5.0	3	7465/350
1,2-Dichloropropane	ND(3)	µg/L	5.0	3	7465/350
Hardness (Calculated)	327 QC	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	185	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/23/17 0845	170517-3	4NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/23/17 0845	170517-3	4NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/22/17 2127	170518-2	2EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/25/17 0158	170518-1	2MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/17/17 1805	1MS9137	1MS9137	RKR	8260B
Hardness (Calculated)	05/16/17 1227	05/23/17 0257	170516-5	14IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1802	2IC2143	4IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051164

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051164R
Sample Description: WG-05122017-DF-IW35A

Date Sampled: 05/12/2017
Time Sampled: 1145

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/25/17 2331	170524-1	3NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051164R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051165
Sample Description: WG-05122017-DF-IW29

Date Sampled: 05/12/2017
Time Sampled: 1125

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	44 QC	µg/L	10	10	7462/185
Pentachlorophenol	11	µg/L	2.0	1	7462/184
OXY Chlorinated Hyd.					
A-BHC	0.45	µg/L	20	0.22	7460/208
B-BHC	ND(0.74)	µg/L	20	0.74	7460/208
G-BHC	ND(1.0)	µg/L	20	1	7460/208
Hexachloroethane	7.1	µg/L	20	0.4	7460/208
Hexachlorobutadiene	64.6	µg/L	20	0.4	7460/208
Hexachlorobenzene	ND(2.0)	µg/L	20	2	7460/208
D-BHC	ND(1)	µg/L	20	1	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	45.9	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	10.7	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	39.8	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	6.4	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(50)	µg/L	100	50	7466/527
1,2-Dichloroethane	ND(50)	µg/L	100	50	7466/527
Benzene	ND(50)	µg/L	100	50	7466/527
Carbon tetrachloride	210	µg/L	100	50	7466/527
Chloroform	670	µg/L	100	50	7466/527
Chloromethane	ND(50)	µg/L	100	50	7466/527
Methylene chloride	100	µg/L	100	50	7466/527
Tetrachloroethylene	420	µg/L	100	50	7466/527
Trichloroethylene	ND(50)	µg/L	100	50	7466/527
Vinyl chloride	ND(50)	µg/L	100	50	7466/527
1,2-Dichloropropane	ND(50)	µg/L	100	50	7466/527
Hardness (Calculated)	547	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	890	mg/L	100	100	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/24/17 1158	170517-3	3NX5143	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/23/17 1043	170517-3	4NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 1357	170518-2	4EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/25/17 0358	170518-1	2MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 0338	1MS8137	2MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0417	170516-6	15IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1836	2IC2143	4IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051165

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051165R
Sample Description: WG-05122017-DF-IW29

Date Sampled: 05/12/2017
Time Sampled: 1125

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	34 HP	µg/L	10	10	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/26/17 0129	170524-1	3NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051165R

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051166
Sample Description: WG-05122017-DF-IW35B

Date Sampled: 05/12/2017
Time Sampled: 1200

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	0.060	µg/L	1.0	0.011	7460/208
B-BHC	1.60	µg/L	1.0	0.037	7460/208
G-BHC	0.055	µg/L	1.0	0.052	7460/208
Hexachloroethane	2.16	µg/L	1.0	0.02	7460/208
Hexachlorobutadiene	0.75	µg/L	1.0	0.02	7460/208
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/208
D-BHC	0.06	µg/L	1.0	0.05	7460/208
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/332
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/332
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(50)	µg/L	100	50	7466/527
1,2-Dichloroethane	ND(50)	µg/L	100	50	7466/527
Benzene	ND(50)	µg/L	100	50	7466/527
Carbon tetrachloride	870	µg/L	100	50	7466/527
Chloroform	1020	µg/L	100	50	7466/527
Chloromethane	ND(50)	µg/L	100	50	7466/527
Methylene chloride	ND(50)	µg/L	100	50	7466/527
Tetrachloroethylene	500	µg/L	100	50	7466/527
Trichloroethylene	ND(50)	µg/L	100	50	7466/527
Vinyl chloride	ND(50)	µg/L	100	50	7466/527
1,2-Dichloropropane	ND(50)	µg/L	100	50	7466/527
Hardness (Calculated)	416	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	418	mg/L	20	20	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/17/17 1520	05/23/17 1122	170517-3	4NX5142	JMM	8151A(M)
Pentachlorophenol	05/17/17 1520	05/23/17 1122	170517-3	4NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/18/17 1220	05/23/17 1437	170518-2	4EX3142	SPA	8121
OXY GC/MS Acids	05/18/17 0845	05/25/17 0438	170518-1	2MS6144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 0414	1MS8137	2MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0429	170516-6	16IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1847	2IC2143	4IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051166

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051166R
Sample Description: WG-05122017-DF-IW35B

Date Sampled: 05/12/2017
Time Sampled: 1200

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) HP	µg/L	1.0	1.0	7462/186

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/24/17 0630	05/26/17 0208	170524-1	3NX5145	JMM	8151A(M)
Herbicides Preparation Method						8151A(M)

Conclusion of Lab Number: 17051166R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051167
Sample Description: WG-05122017-DF-IW40

Date Sampled: 05/12/2017
Time Sampled: 1030

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/209
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/209
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/209
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/209
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/209
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/209
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/527
Carbon tetrachloride	92.5	µg/L	1.0	0.5	7466/527
Chloroform	8.4	µg/L	1.0	0.5	7466/527
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/527
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/527
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/527
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/527
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/527
Hardness (Calculated)	312	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	136	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/23/17 1937	170518-3	1NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/23/17 1937	170518-3	1NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 0323	170519-2	2EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/24/17 1828	170519-1	1MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 0450	1MS8137	2MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0434	170516-6	16IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1858	2IC2143	4IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051167

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051168
Sample Description: WG-05122017-DF-IW32

Date Sampled: 05/12/2017
Time Sampled: 1305

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	39	µg/L	5.0	5.0	7462/185
Pentachlorophenol	140 SR	µg/L	20	10	7462/185
OXY Chlorinated Hyd.	SR				
A-BHC	3.60	µg/L	20	0.22	7460/210
B-BHC	2.0 E FC	µg/L	20	0.74	7460/210
G-BHC	3.15 E FD	µg/L	20	1.0	7460/210
Hexachloroethane	17	µg/L	20	0.4	7460/210
Hexachlorobutadiene	11	µg/L	20	0.4	7460/210
Hexachlorobenzene	ND(2.0)	µg/L	20	2	7460/210
D-BHC	1	µg/L	20	1	7460/210
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	92.6	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	16.6	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	52.7	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	43.8 CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	43.8 CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(2)	µg/L	4.0	2	7466/527
1,2-Dichloroethane	34	µg/L	4.0	2	7466/527
Benzene	151	µg/L	4.0	2	7466/527
Carbon tetrachloride	180.	µg/L	4.0	2	7466/527
Chloroform	277	µg/L	4.0	2	7466/527
Chloromethane	ND(2)	µg/L	4.0	2	7466/527
Methylene chloride	36	µg/L	4.0	2	7466/527
Tetrachloroethylene	158	µg/L	4.0	2	7466/527
Trichloroethylene	27	µg/L	4.0	2	7466/527
Vinyl chloride	ND(2)	µg/L	4.0	2	7466/527
1,2-Dichloropropane	ND(2)	µg/L	4.0	2	7466/527
Hardness (Calculated)	518	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	1400	mg/L	100	100	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/24/17 1751	170518-3	4NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/24/17 1712	170518-3	4NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/25/17 1006	170519-2	2EX3144	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/24/17 1908	170519-1	1MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 0525	1MS8137	2MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0438	170516-6	16IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1910	2IC2143	4IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051168

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051169
Sample Description: WG-05122017-BS-MW019S1

Date Sampled: 05/12/2017
Time Sampled: 1340

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.	SR				
A-BHC	ND(0.55)	µg/L	50	0.55	7460/209
B-BHC	16.4	µg/L	50	1.9	7460/209
G-BHC	ND(2.6)	µg/L	50	2.6	7460/209
Hexachloroethane	209	µg/L	50	1	7460/209
Hexachlorobutadiene	145	µg/L	50	1	7460/209
Hexachlorobenzene	17	µg/L	50	5.0	7460/209
D-BHC	ND(3)	µg/L	50	3	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	43	µg/L	40	20	7466/527
1,2-Dichloroethane	ND(20)	µg/L	40	20	7466/527
Benzene	ND(20)	µg/L	40	20	7466/527
Carbon tetrachloride	750.	µg/L	40	20	7466/527
Chloroform	470.	µg/L	40	20	7466/527
Chloromethane	ND(20)	µg/L	40	20	7466/527
Methylene chloride	ND(20)	µg/L	40	20	7466/527
Tetrachloroethylene	1430	µg/L	40	20	7466/527
Trichloroethylene	30	µg/L	40	20	7466/527
Vinyl chloride	ND(20)	µg/L	40	20	7466/527
1,2-Dichloropropane	ND(20)	µg/L	40	20	7466/527
Hardness (Calculated)	475	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	716	mg/L	50	50	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/24/17 1316	170518-3	4NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/24/17 1316	170518-3	4NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 0442	170519-2	2EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/24/17 1949	170519-1	1MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 0601	1MS8137	2MS8137	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0442	170516-6	16IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1943	2IC2143	5IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051169

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051170
Sample Description: WG-05122017-BS-MW019S4

Date Sampled: 05/12/2017
Time Sampled: 1330

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	1.5	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.	SR				
A-BHC	ND(5.5)	µg/L	500	5.5	7460/209
B-BHC	ND(19)	µg/L	500	19	7460/209
G-BHC	ND(26)	µg/L	500	26	7460/209
Hexachloroethane	1690	µg/L	500	10	7460/209
Hexachlorobutadiene	OC	µg/L	500	10	7460/209
Hexachlorobenzene	190	µg/L	500	50	7460/209
D-BHC	ND(30)	µg/L	500	30	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	1200	µg/L	400	200	7466/528
1,2-Dichloroethane	200	µg/L	400	200	7466/528
Benzene	ND(200)	µg/L	400	200	7466/528
Carbon tetrachloride	24000	µg/L	400	200	7466/528
Chloroform	14600	µg/L	400	200	7466/528
Chloromethane	ND(200)	µg/L	400	200	7466/528
Methylene chloride	ND(200)	µg/L	400	200	7466/528
Tetrachloroethylene	8190	µg/L	400	200	7466/528
Trichloroethylene	640	µg/L	400	200	7466/528
Vinyl chloride	ND(200)	µg/L	400	200	7466/528
1,2-Dichloropropane	ND(200)	µg/L	400	200	7466/528
Hardness (Calculated)	1420	mg/L as CaCO3	5.0	25	7443/996
Chloride	2930	mg/L	100	100	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/23/17 2135	170518-3	1NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/23/17 2135	170518-3	1NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 0522	170519-2	2EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/24/17 2029	170519-1	1MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 1808	1MS8138	1MS8138	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 1628	170516-6	5IP4143	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 1955	2IC2143	5IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051170

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051170R
Sample Description: WG-05122017-BS-MW019S4

Date Sampled: 05/12/2017
Time Sampled: 1330

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Chlorinated Hyd.	SR				
A-BHC	ND(11)	µg/L	1000	11	7460/209
B-BHC	ND(37)	µg/L	1000	37	7460/209
G-BHC	ND(52)	µg/L	1000	52	7460/209
Hexachloroethane	1660	µg/L	1000	20	7460/209
Hexachlorobutadiene	3270	µg/L	1000	20	7460/209
Hexachlorobenzene	190	µg/L	1000	100	7460/209
D-BHC	ND(50)	µg/L	1000	50	7460/209

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 1755	170519-2	4EX3143	SPA	8121
Chlorinated Hydrocarbons Preparation Method						3510C

Conclusion of Lab Number: 17051170R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051171
Sample Description: WG-05122017-BS-AMW101S

Date Sampled: 05/12/2017
Time Sampled: 1405

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.					
A-BHC	0.012 E FC	µg/L	1.0	0.011	7460/209
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/209
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/209
Hexachloroethane	0.04	µg/L	1.0	0.02	7460/209
Hexachlorobutadiene	0.16	µg/L	1.0	0.02	7460/209
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/209
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/528
Hardness (Calculated)	158	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	82	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/23/17 2214	170518-3	1NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/23/17 2214	170518-3	1NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 0720	170519-2	3EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/24/17 2110	170519-1	1MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 1843	1MS8138	1MS8138	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0451	170516-6	16IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 2006	2IC2143	5IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051171

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051172
Sample Description: WG-05122017-BS-AMW101I

Date Sampled: 05/12/2017
Time Sampled: 1040

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.					
A-BHC	0.014 E FC	µg/L	1.0	0.011	7460/209
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/209
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/209
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/209
Hexachlorobutadiene	0.02	µg/L	1.0	0.02	7460/209
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/209
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/528
Hardness (Calculated)	280.	mg/L as CaCO3	1.0	5.0	7443/994
Chloride	56	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/23/17 2253	170518-3	1NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/23/17 2253	170518-3	1NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 0759	170519-2	3EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/24/17 2150	170519-1	1MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 1919	1MS8138	1MS8138	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 0455	170516-6	16IP4142	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 2017	2IC2143	5IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051172

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051173
Sample Description: WG-05122017-BS-AMW101D

Date Sampled: 05/12/2017
Time Sampled: 1015

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/209
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/209
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/209
Hexachloroethane	0.04	µg/L	1.0	0.02	7460/209
Hexachlorobutadiene	0.34	µg/L	1.0	0.02	7460/209
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/209
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/398
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/398
Hardness (Calculated)	203	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/266

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/23/17 2333	170518-3	1NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/23/17 2333	170518-3	1NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 0839	170519-2	3EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/24/17 2230	170519-1	1MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 1514	1MS5139	1MS5139	RKR	8260B
Hardness (Calculated)	05/23/17 1015	05/24/17 2310	170523-4	13IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/25/17 0424	3IC2144	9IC2144	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051173

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051174
Sample Description: WG-05112017-JR-MW029S2

Date Sampled: 05/11/2017
Time Sampled: 1320

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0) QC	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5) E QC	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	0.350	µg/L	1.0	0.011	7460/207
B-BHC	1.68 QC	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	0.06	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	6.8	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	28.4	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	13.3	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	8.3	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(3)	µg/L	5.0	3	7466/528
1,2-Dichloroethane	48 QC	µg/L	5.0	3	7466/528
Benzene	57.4 QC	µg/L	5.0	3	7466/528
Carbon tetrachloride	ND(3)	µg/L	5.0	3	7466/528
Chloroform	ND(3)	µg/L	5.0	3	7466/528
Chloromethane	ND(3)	µg/L	5.0	3	7466/528
Methylene chloride	3	µg/L	5.0	3	7466/528
Tetrachloroethylene	3	µg/L	5.0	3	7466/528
Trichloroethylene	14	µg/L	5.0	3	7466/528
Vinyl chloride	ND(3)	µg/L	5.0	3	7466/528
1,2-Dichloropropane	ND(3) QC	µg/L	5.0	3	7466/528
Hardness (Calculated)	1690	mg/L as CaCO3	5.0	25	7443/996
Chloride	4620	mg/L	100	100	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/20/17 0649	170515-3	3NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/20/17 0649	170515-3	3NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/19/17 1240	170516-2	1EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/22/17 2213	170516-1	2MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 0005	1MS8138	1MS8138	GMA	8260B
Hardness (Calculated)	05/16/17 1301	05/23/17 1640	170516-6	6IP4143	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 2210	3IC2143	6IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051174

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051175
Sample Description: WG-05112017-JR-MW029S1

Date Sampled: 05/11/2017
Time Sampled: 1400

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	0.018	µg/L	1.0	0.011	7460/207
B-BHC	0.232	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	34.1	µg/L	1.0	0.5	7466/528
Chloroform	8.9	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	0.9	µg/L	1.0	0.5	7466/528
Trichloroethylene	0.9	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/528
Hardness (Calculated)	574	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	861	mg/L	50	50	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/22/17 1306	170515-3	1NX5142	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/22/17 1306	170515-3	1NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/20/17 0155	170516-2	3EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/23/17 0014	170516-1	2MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 0937	1MS8138	2MS8138	GMA	8260B
Hardness (Calculated)	05/23/17 1015	05/24/17 2314	170523-4	13IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 2040	2IC2143	5IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051175

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051176
Sample Description: WG-05112017-JR-MW149S2/S3

Date Sampled: 05/11/2017
Time Sampled: 1500

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	0.096	µg/L	1.0	0.011	7460/207
B-BHC	0.594	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	10.1	µg/L	1.0	0.5	7466/528
Benzene	2.0	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	29.4	µg/L	1.0	0.5	7466/528
Trichloroethylene	12.9	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	0.7	µg/L	1.0	0.5	7466/528
Hardness (Calculated)	741	mg/L as CaCO3	5.0	25	7443/999
Chloride	1060	mg/L	100	100	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/20/17 0530	170515-3	2NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/20/17 0530	170515-3	2NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/20/17 0234	170516-2	3EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/23/17 0054	170516-1	2MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 0901	1MS8138	2MS8138	GMA	8260B
Hardness (Calculated)	05/23/17 1015	05/26/17 0440	3IP4145	18IP4145	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 2051	2IC2143	5IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051176

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051177
Sample Description: WG-05112017-BS-AMW104

Date Sampled: 05/11/2017
Time Sampled: 1225

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/528
Hardness (Calculated)	390.	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	102	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/20/17 0847	170515-3	3NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/20/17 0847	170515-3	3NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/20/17 0314	170516-2	3EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/23/17 0134	170516-1	2MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/18/17 2329	1MS8138	1MS8138	GMA	8260B
Hardness (Calculated)	05/23/17 1015	05/24/17 2323	170523-4	13IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 2103	2IC2143	5IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051177

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051178
Sample Description: WG-05112017-BS-AMW003

Date Sampled: 05/11/2017
Time Sampled: 1315

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/184
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/184
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/528
Hardness (Calculated)	330.	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	79	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/22/17 1821	170515-3	2NX5142	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/22/17 1821	170515-3	2NX5142	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/20/17 0354	170516-2	3EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/23/17 0215	170516-1	2MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 0340	1MS8138	2MS8138	GMA	8260B
Hardness (Calculated)	05/23/17 1015	05/24/17 2327	170523-4	13IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 2244	3IC2143	6IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051178

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051179
Sample Description: WG-05112017-BS-AMW108S

Date Sampled: 05/11/2017
Time Sampled: 1518

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	0.37	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/528
Hardness (Calculated)	366	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	94	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/20/17 1005	170515-3	3NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/20/17 1005	170515-3	3NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/20/17 0433	170516-2	3EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/23/17 0255	170516-1	2MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 0415	1MS8138	2MS8138	GMA	8260B
Hardness (Calculated)	05/23/17 1015	05/24/17 2331	170523-4	13IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 2255	3IC2143	6IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051179

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051180
Sample Description: WG-05112017-BS-FD009

Date Sampled: 05/11/2017
Time Sampled: 0000

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/183
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/183
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/207
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/207
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/207
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/207
Hexachlorobenzene	0.28	µg/L	1.0	0.10	7460/207
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/207
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/330
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/330
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/528
Hardness (Calculated)	376	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	93	mg/L	10	10	7551/264

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/15/17 1600	05/20/17 1044	170515-3	3NX5139	JMM	8151A(M)
Pentachlorophenol	05/15/17 1600	05/20/17 1044	170515-3	3NX5139	JMM	8151A(M)
OXY Chlorinated Hyd.	05/16/17 1200	05/20/17 0513	170516-2	3EX3139	SPA	8121
OXY GC/MS Acids	05/16/17 0900	05/23/17 0335	170516-1	2MS6142	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 0451	1MS8138	2MS8138	GMA	8260B
Hardness (Calculated)	05/23/17 1015	05/24/17 2344	170523-4	14IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/23/17 2307	3IC2143	6IC2143	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051180

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051181
Sample Description: TB-10

Date Sampled: 05/12/2017
Time Sampled:

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/528

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/19/17 0527	1MS8138	2MS8138	GMA	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17051181

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Lab Number: 17051182
Sample Description: TB-11

Date Sampled: 05/12/2017
Time Sampled:

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/528
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/528
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/528
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/528
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/528
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/528

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/19/17 0603	1MS8138	2MS8138	GMA	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17051182

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Appendix

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

ND indicates not detected with the LOQ (Limit of Quantitation) in parentheses. The LOQ value has been adjusted for the dilution factor and percent solids, as applicable. Due to rounding of significant figures, the LOQ value may vary slightly from the reported concentration. The LOQ is the lowest concentration of the analytical standard that was used for calibrating the instrument. If an analytical standard is analyzed at the LOQ, an error of as much as +/- 50% can be expected. N/A, if present, indicates not applicable.

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

No analysis with a holding time of seventy-two hours or less was performed in this Pace order.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

E - Concentration or reporting limit is an estimated value. Matrix interferences and/or sample heterogeneity were noted at the time of sample analysis.

FC - The confirmation analysis on a second GC column (or detector) resulted in a greater than 40% difference between the primary and confirmation results. The lower value was reported.

FD - The confirmation analysis on a second GC column (or detector) resulted in a greater than 40% difference between the primary and confirmation results. The higher value was reported.

HP - Regulatory preparation holding time for this analysis was exceeded.

M - The Limit of Quantitation (LOQ) is higher than normal due to matrix interferences.

OC - The response for this analyte exceeded the calibration range of the instrument. Sample dilution and reanalysis is necessary to obtain an accurate result. The reported result, if provided, is estimated.

QC - QC data qualifiers were noted. See the Quality Control Report.

SR - One or more surrogate recoveries for this analysis did not meet quality control limits, or was diluted below the low calibration point. Please see the Quality Control Report for the sample surrogate data.

Additional Comments:

The 2,4-Dichlorophenoxyacetic Acid analysis was below the Laboratory Control Sample limits in QC Batch 170517-3. The associated samples were reprepared in QC Batch 170524-1 to confirm if the analyte was detected. Both sets of analyses are included on the enclosed report.

Following is the full name of each analyst that performed analysis(es) on this Pace order number:

Analyst Initials	Analyst Full Name
GMA	Guy Allen
JMM	Julie M. McCullough
KMW	Keegan M. Wilson
MLL	Melissa L. Lundgrin
RKR	Rhonda K. Reilly
SPA	Stephen P. Albin

Accreditation Summary

Client: Occidental Chemical Corporation_Oxy
Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Pace is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Pace is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Pace's full NELAP accreditation status may be viewed at www.kdheks.gov/envlab. Note that unless qualified otherwise in the Laboratory Report, Pace performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

Test	Analysis	Matrix-Regulatory Program	Method	Pace NELAP Accredited in Other Reg. Program
CL351	OXY Chlorinated Hyd.	L-RCRA	8121	
CL351	Hexachloroethane	L-RCRA	8121	No
CL351	Hexachlorobutadiene	L-RCRA	8121	No
MS302	OXY GC/MS Acids	L-RCRA	8270C	
MS302	3-& 4-Chlorophenol	L-RCRA	8270C	No
MS302	2,5-Dichlorophenol	L-RCRA	8270C	No
MS302	2,3,4,5-Tetrachlorophenol	L-RCRA	8270C	No

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170515-3	170515BLK3 05/19/17 1703	170515LCS3 05/19/17 1742	17051174MS 05/20/17 0728

Lab numbers associated with this batch:
17051137 17051138 17051139 17051140 17051141 17051142 17051143 17051144 17051145 17051146 17051174
17051175 17051176 17051177 17051178 17051179 17051180

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170517-3	170517BLK3 05/22/17 1900	170517LCS3 05/22/17 1939	17051164MS 05/23/17 0924

Lab numbers associated with this batch:
17051147 17051148 17051149 17051150 17051151 17051152 17051153 17051154 17051155 17051156 17051157
17051158 17051159 17051160 17051161 17051162 17051163 17051164 17051165 17051166

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170518-3	170518BLK3 05/23/17 1819	170518LCS3 05/23/17 1858	17051592MS 05/24/17 0249

Lab numbers associated with this batch:
17051167 17051168 17051169 17051170 17051171 17051172 17051173

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170524-1	170524BLK1 05/25/17 1024	170524LCS1 05/25/17 1104	17051164RS 05/26/17 0010

Lab numbers associated with this batch:
17051147R 17051148R 17051149R 17051150R 17051151R 17051152R 17051153R 17051154R 17051155R 17051156R
17051157R 17051158R 17051159R 17051160R 17051161R 17051162R 17051163R 17051164R 17051165R 17051166R

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL350	Pentachlorophenol	170515-3	170515BLK3 05/19/17 1703	170515LCS3 05/19/17 1742	17051174MS 05/20/17 0728

Lab numbers associated with this batch:
17051137 17051138 17051139 17051140 17051141 17051142 17051143 17051144 17051145 17051146 17051174
17051175 17051176 17051177 17051178 17051179 17051180

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL350	Pentachlorophenol	170517-3	170517BLK3 05/22/17 1900	170517LCS3 05/22/17 1939	17051164MS 05/23/17 0924

Lab numbers associated with this batch:
17051147 17051148 17051149 17051150 17051151 17051152 17051153 17051154 17051155 17051156 17051157
17051158 17051159 17051160 17051161 17051162 17051163 17051164 17051165 17051166

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL350	Pentachlorophenol	170518-3	170518BLK3 05/23/17 1819	170518LCS3 05/23/17 1858	17051592MS 05/24/17 0249

Lab numbers associated with this batch:
17051167 17051168 17051169 17051170 17051171 17051172 17051173

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL351	OXY Chlorinated Hyd.	170516-2	170516BLK2 05/19/17 1121	170516LCS2 05/19/17 1200	17051174MS 05/19/17 1320

Lab numbers associated with this batch:
17051137 17051138 17051139 17051140 17051141 17051142 17051143 17051144 17051145 17051146 17051174
17051175 17051176 17051177 17051178 17051179 17051180

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL351	OXY Chlorinated Hyd.	170518-2	170518BLK2 05/22/17 2008	170518LCS2 05/22/17 2048	17051164MS 05/22/17 2207

Lab numbers associated with this batch:
17051147 17051148 17051149 17051150 17051151 17051152 17051152R 17051153 17051154 17051154R 17051155
17051155R 17051156 17051156R 17051157 17051158 17051159 17051160 17051161 17051161R 17051162 17051162R 17051163 17

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL351	OXY Chlorinated Hyd.	170519-2	170519BLK2 05/24/17 0006	170519LCS2 05/24/17 0045	17051592MS 05/24/17 0204
Lab numbers associated with this batch: 17051167 17051168 17051169 17051170 17051170R 17051171 17051172 17051173					
MS302	OXY GC/MS Acids	170516-1	170516BLK1 05/22/17 1033	170516LCS1 05/22/17 1113	17051174MS 05/22/17 2254
Lab numbers associated with this batch: 17051137 17051138 17051139 17051140 17051141 17051142 17051143 17051144 17051145 17051146 17051174 17051175 17051176 17051177 17051178 17051179 17051180					
MS302	OXY GC/MS Acids	170518-1	170518BLK1 05/24/17 1141	170518LCS1 05/24/17 1221	17051164MS 05/25/17 0238
Lab numbers associated with this batch: 17051147 17051148 17051149 17051150 17051151 17051152 17051153 17051154 17051155 17051156 17051157 17051158 17051159 17051160 17051161 17051162 17051163 17051164 17051165 17051166					
MS302	OXY GC/MS Acids	170519-1	170519BLK1 05/24/17 1707	170519LCS1 05/24/17 1747	17051592MS 05/24/17 2351
Lab numbers associated with this batch: 17051167 17051168 17051169 17051170 17051171 17051172 17051173					
MS350	OXY Volatiles by 8260	1MS8135	BLK1MS8135 05/15/17 1351	LCS1MS8135 05/15/17 1239	17051075MS 05/15/17 2100
Lab numbers associated with this batch: 17051137 17051138 17051139 17051140 17051141 17051142 17051143 17051145 17051146					
MS350	OXY Volatiles by 8260	1MS8137	BLK1MS8137 05/17/17 1507	LCS1MS8137 05/17/17 1356	17051075RS 05/17/17 2216
Lab numbers associated with this batch: 17051144 17051154 17051155 17051157 17051158 17051159 17051160 17051161 17051162 17051163 17051165 17051166 17051167 17051168 17051169					
MS350	OXY Volatiles by 8260	1MS9137	BLK1MS9137 05/17/17 1140	LCS1MS9137 05/17/17 1051	17051164MS 05/17/17 1830
Lab numbers associated with this batch: 17051147 17051150 17051151 17051152 17051153 17051164					
MS350	OXY Volatiles by 8260	1MS8138	BLK1MS8138 05/18/17 1545	LCS1MS8138 05/18/17 1433	17051174MS 05/19/17 0041
Lab numbers associated with this batch: 17051148 17051149 17051156 17051170 17051171 17051172 17051174 17051175 17051176 17051177 17051178 17051179 17051180 17051181 17051182					
MS350	OXY Volatiles by 8260	1MS5139	BLK1MS5139 05/19/17 1423	LCS1MS5139 05/19/17 1331	17051592MS 05/19/17 1658
Lab numbers associated with this batch: 17051173					
SL423	Hardness (Calculated)	170516-5	170516BLK5 05/23/17 0113	170516LCS5 05/23/17 0117	17051164MS 05/23/17 0301
Lab numbers associated with this batch: 17051137 17051138 17051139 17051140 17051141 17051142 17051143 17051144 17051145 17051146 17051147 17051148 17051149 17051150 17051151 17051152 17051164					

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
SL423	Hardness (Calculated)	170516-6	170516BLK6 05/23/17 0313	170516LCS6 05/23/17 0317	17051174MS 05/23/17 1644

Lab numbers associated with this batch:
17051153 17051154 17051155 17051156 17051157 17051158 17051159 17051160 17051161 17051162 17051163
17051165 17051166 17051167 17051168 17051169 17051170 17051171 17051172 17051174

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
SL423	Hardness (Calculated)	170523-4	170523BLK4 05/24/17 2302	170523LCS4 05/24/17 2306	17051592MS 05/25/17 0001

Lab numbers associated with this batch:
17051173 17051175 17051177 17051178 17051179 17051180

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
SL423	Hardness (Calculated)	3IP4145	N/A	N/A	

Lab numbers associated with this batch:
17051176

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL502	Chloride	1IC2143	BLK1IC2143 05/23/17 1021	LCS1IC2143 05/23/17 1033	17051142MS 05/23/17 1200

Lab numbers associated with this batch:
17051137 17051138 17051139 17051140 17051141 17051142 17051143 17051144 17051145 17051146 17051147
17051148 17051149 17051150 17051151 17051152 17051153 17051154 17051155 17051156

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL502	Chloride	2IC2143	BLK2IC2143 05/23/17 1557	LCS2IC2143 05/23/17 1609	17051164MS 05/23/17 1813

Lab numbers associated with this batch:
17051157 17051158 17051159 17051160 17051161 17051162 17051163 17051164 17051165 17051166 17051167
17051168 17051169 17051170 17051171 17051172 17051175 17051176 17051177

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL502	Chloride	3IC2143	BLK3IC2143 05/23/17 2114	LCS3IC2143 05/23/17 2125	17051174MS 05/23/17 2222

Lab numbers associated with this batch:
17051174 17051178 17051179 17051180

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL502	Chloride	3IC2144	BLK3IC2144 05/24/17 2137	LCS3IC2144 N/A	17051173MS 05/25/17 0435

Lab numbers associated with this batch:
17051173

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170515-3	**For samples prepared on: 05/15/2017 1600**					**Spiked sample: 17051174**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	77.9	58.8-127	4.0	µg/L	117	154 MI	64.6-126	4.0	µg/L	27.3	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	71.8	98.3	62.2-119	5.0	µg/L	93.4	84.6	62.2-119	5.0	µg/L		
QC Batch: 170515-3	**For samples prepared on: 05/15/2017 1600**					**Spiked sample: 17051174**						
Pentachlorophenol	ND(0.5)	89.4	66.3-127	4.0	µg/L	1.6 MI	3.7 MI	7.60-144	4.0	µg/L	79.2	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	71.8	98.3	62.2-119	5.0	µg/L	93.4	84.6	62.2-119	5.0	µg/L		
QC Batch: 170516-1	**For samples prepared on: 05/16/2017 0900**					**Spiked sample: 17051174**						
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	81.4	75.9-99.3	50.0	µg/L	85.0	86.4	75.1-100	50.0	µg/L	1.60	13.9
3-& 4-Chlorophenol	ND(5.0)	74.1	56.0-90.2	50.0	µg/L	78.1	78.7	58.8-91.2	50.0	µg/L	0.770	14.5
2,4-Dichlorophenol	ND(5.0)	91.1	68.2-106	50.0	µg/L	95.3	98.5	65.6-112	50.0	µg/L	3.30	21.2
2,5-Dichlorophenol	ND(5.0)	90.1	73.9-103	50.0	µg/L	103	108 MH	65.4-106	50.0	µg/L	4.70	27.7
2,6-Dichlorophenol	ND(5.0)	94.1	78.3-104	50.0	µg/L	95.0	98.5	76.7-107	50.0	µg/L	3.60	13.4
2,4,5-Trichlorophenol	ND(5.0)	92.1	75.3-109	50.0	µg/L	101	105	72.4-114	50.0	µg/L	3.90	12.9
2,4,6-Trichlorophenol	ND(5.0)	91.7	77.1-110	50.0	µg/L	95.2	99.9	75.0-116	50.0	µg/L	4.80	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	86.6 CE	72.5-115	100	µg/L	102 CE	108 CE	74.5-120	100	µg/L	5.70	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	92.6	71.6-118	50.0	µg/L	104	112	73.7-122	50.0	µg/L	7.40	13.4
Surrogate Data:												
PHENOL-d6	35.0	33.6	25.6-44.5	150	µg/L	34.8	34.9	25.6-44.5	150	µg/L		
2-FLUOROPHENOL	55.1	51.8	42.2-68.2	150	µg/L	53.3	54.7	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	86.1	115	53.9-131	150	µg/L	118	119	53.9-131	150	µg/L		
QC Batch: 170516-2	**For samples prepared on: 05/16/2017 1200**					**Spiked sample: 17051174**						
OXY Chlorinated Hyd.												
A-BHC	ND(0.011)	99.8	75.0-125	0.50	µg/L	91.0	99.1	76.1-127	0.50	µg/L	8.50	16.0
B-BHC	ND(0.037)	107	68.0-125	0.50	µg/L	86.7	116 MP	71.5-125	0.50	µg/L	28.9	18.0
G-BHC	ND(0.052)	104	72.5-123	0.50	µg/L	104	111	73.9-126	0.50	µg/L	6.50	17.4
Hexachloroethane	ND(0.02)	91.0	55.1-115	0.50	µg/L	96.6	102	45.8-118	0.50	µg/L	5.40	33.4
Hexachlorobutadiene	ND(0.02)	92.2	35.3-134	0.50	µg/L	94.8	96.5	36.7-122	0.50	µg/L	1.80	37.9
Hexachlorobenzene	ND(0.10)	99.8	63.7-119	0.50	µg/L	106	111	62.9-119	0.50	µg/L	4.60	20.7
D-BHC	ND(0.05)	102	70.6-126	0.50	µg/L	116	123	71.7-131	0.50	µg/L	5.90	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	84.5	85.3	65.9-110	8.0	µg/L	88.2	92.8	65.9-110	8.0	µg/L		
QC Batch: 170516-5	**For samples prepared on: 05/16/2017 1227**					**Spiked sample: 17051164**						
Hardness (Calculated)	ND(5.0)	86.1	80.0-120	357	mg/L a	79.0 ML	80.6	80.0-120	357	mg/L a	2.00	20.0
QC Batch: 170516-6	**For samples prepared on: 05/16/2017 1301**					**Spiked sample: 17051174**						
Hardness (Calculated)	ND(5.0)	84.5	80.0-120	357	mg/L a	I	I	80.0-120	1790	mg/L a	**	20.0
QC Batch: 170517-3	**For samples prepared on: 05/17/2017 1520**					**Spiked sample: 17051164**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	44.7 LL	58.8-127	4.0	µg/L	82.8	90.5	64.6-126	4.0	µg/L	8.90	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	103	112	62.2-119	5.0	µg/L	102	95.9	62.2-119	5.0	µg/L		
QC Batch: 170517-3	**For samples prepared on: 05/17/2017 1520**					**Spiked sample: 17051164**						
Pentachlorophenol	ND(0.5)	106	66.3-127	4.0	µg/L	93.2	89.1	7.60-144	4.0	µg/L	4.50	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	103	112	62.2-119	5.0	µg/L	102	95.9	62.2-119	5.0	µg/L		

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170518-1	**For samples prepared on: 05/18/2017 0845**					**Spiked sample: 17051164**						
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	76.8	75.9-99.3	50.0	µg/L	75.7	73.6 ML	75.1-100	50.0	µg/L	2.80	13.9
3-& 4-Chlorophenol	ND(5.0)	70.3	56.0-90.2	50.0	µg/L	70.3	68.3	58.8-91.2	50.0	µg/L	2.90	14.5
2,4-Dichlorophenol	ND(5.0)	83.3	68.2-106	50.0	µg/L	85.1	82.7	65.6-112	50.0	µg/L	2.90	21.2
2,5-Dichlorophenol	ND(5.0)	90.0	73.9-103	50.0	µg/L	92.8	91.0	65.4-106	50.0	µg/L	2.00	27.7
2,6-Dichlorophenol	ND(5.0)	88.8	78.3-104	50.0	µg/L	91.3	88.6	76.7-107	50.0	µg/L	3.00	13.4
2,4,5-Trichlorophenol	ND(5.0)	89.2	75.3-109	50.0	µg/L	98.5	90.2	72.4-114	50.0	µg/L	8.80	12.9
2,4,6-Trichlorophenol	ND(5.0)	85.2	77.1-110	50.0	µg/L	93.1	89.7	75.0-116	50.0	µg/L	3.70	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	81.1 CE	72.5-115	100	µg/L	96.6 CE	92.5 CE	74.5-120	100	µg/L	4.30	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	89.5	71.6-118	50.0	µg/L	106	98.0	73.7-122	50.0	µg/L	7.80	13.4
Surrogate Data:												
PHENOL-d6	33.2	31.1	25.6-44.5	150	µg/L	29.7	30.1	25.6-44.5	150	µg/L		
2-FLUOROPHENOL	52.0	49.4	42.2-68.2	150	µg/L	45.7	46.3	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	97.4	110.	53.9-131	150	µg/L	119	111	53.9-131	150	µg/L		
QC Batch: 170518-2	**For samples prepared on: 05/18/2017 1220**					**Spiked sample: 17051164**						
OXY Chlorinated Hyd.												
A-BHC	ND(0.011)	102	75.0-125	0.50	µg/L	109	98.7	76.1-127	0.50	µg/L	9.90	16.0
B-BHC	ND(0.037)	108	68.0-125	0.50	µg/L	101	72.0 MP	71.5-125	0.50	µg/L	33.5	18.0
G-BHC	ND(0.052)	107	72.5-123	0.50	µg/L	112	104	73.9-126	0.50	µg/L	7.40	17.4
Hexachloroethane	ND(0.02)	91.8	55.1-115	0.50	µg/L	78.6	72.0	45.8-118	0.50	µg/L	8.80	33.4
Hexachlorobutadiene	ND(0.02)	91.0	35.3-134	0.50	µg/L	84.6	67.8	36.7-122	0.50	µg/L	22.0	37.9
Hexachlorobenzene	ND(0.10)	104	63.7-119	0.50	µg/L	108	84.2 MP	62.9-119	0.50	µg/L	24.8	20.7
D-BHC	ND(0.05)	111	70.6-126	0.50	µg/L	116	110	71.7-131	0.50	µg/L	5.30	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	81.0	88.5	65.9-110	8.0	µg/L	90.5	88.1	65.9-110	8.0	µg/L		
QC Batch: 170518-3	**For samples prepared on: 05/18/2017 1600**					**Spiked sample: 17051592**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	65.1	58.8-127	4.0	µg/L	MN	MN	64.6-126	4.0	µg/L	**	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	89.1	95.1	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170518-3	**For samples prepared on: 05/18/2017 1600**					**Spiked sample: 17051592**						
Pentachlorophenol	ND(0.5)	85.0	66.3-127	4.0	µg/L	MN	MN	7.60-144	4.0	µg/L	**	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	89.1	95.1	62.2-119	5.0	µg/L	MN	MN	62.2-119	5.0	µg/L	**	
QC Batch: 170519-1	**For samples prepared on: 05/19/2017 0900**					**Spiked sample: 17051592**						
OXY GC/MS Acids						MN	MN					
2-Chlorophenol	ND(5.0)	83.7	75.9-99.3	150	µg/L			75.1-100	50.0	µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	72.4	56.0-90.2	150	µg/L			58.8-91.2	50.0	µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	93.9	68.2-106	150	µg/L			65.6-112	50.0	µg/L	**	21.2
2,5-Dichlorophenol	ND(5.0)	94.9	73.9-103	150	µg/L			65.4-106	50.0	µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	95.9	78.3-104	150	µg/L			76.7-107	50.0	µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	110. LH	75.3-109	150	µg/L			72.4-114	50.0	µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	101	77.1-110	150	µg/L			75.0-116	50.0	µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	96.0 CE	72.5-115	300	µg/L			74.5-120	100	µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	96.0 CE	71.6-118	300	µg/L			73.7-122	100	µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	39.3	40.5	25.6-44.5	150	µg/L	MN	MN	25.6-44.5	150	µg/L	**	
2-FLUOROPHENOL	58.4	63.8	42.2-68.2	150	µg/L	MN	MN	42.2-68.2	150	µg/L	**	
2,4,6-TRIBROMOPHENOL	89.9	105	53.9-131	150	µg/L	MN	MN	53.9-131	150	µg/L	**	

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170519-2	**For samples prepared on: 05/19/2017 1100**					**Spiked sample: 17051592**						
OXY Chlorinated Hyd.						MN	MN					
A-BHC	ND(0.011)	105	75.0-125	0.50	µg/L			76.1-127	0.50	µg/L	**	16.0
B-BHC	ND(0.037)	109	68.0-125	0.50	µg/L			71.5-125	0.50	µg/L	**	18.0
G-BHC	ND(0.052)	105	72.5-123	0.50	µg/L			73.9-126	0.50	µg/L	**	17.4
Hexachloroethane	ND(0.02)	102	55.1-115	0.50	µg/L			45.8-118	0.50	µg/L	**	33.4
Hexachlorobutadiene	ND(0.02)	102	35.3-134	0.50	µg/L			36.7-122	0.50	µg/L	**	37.9
Hexachlorobenzene	ND(0.10)	105	63.7-119	0.50	µg/L			62.9-119	0.50	µg/L	**	20.7
D-BHC	ND(0.05)	110	70.6-126	0.50	µg/L			71.7-131	0.50	µg/L	**	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	92.8	89.0	65.9-110	8.0	µg/L	MN	MN	65.9-110	8.0	µg/L	**	
QC Batch: 170523-4	**For samples prepared on: 05/23/2017 1015**					**Spiked sample: 17051592**						
Hardness (Calculated)	ND(5.0)	93.2	80.0-120	357	mg/L a	MN	MN	80.0-120	357	mg/L a	**	20.0
QC Batch: 170524-1	**For samples prepared on: 05/24/2017 0630**					**Spiked sample: 17051164R**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	101	58.8-127	4.0	µg/L	86.8	84.2	64.6-126	4.0	µg/L	3.00	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	79.8	105	62.2-119	5.0	µg/L	93.2	93.9	62.2-119	5.0	µg/L		
QC Batch: 1IC2143	**For sample analyzed on: 05/23/2017**					**Spiked sample: 17051142**						
Chloride	ND(1.0)	109	90.0-110	4.0	mg/L	97.5	95.8	68.4-120	80.0	mg/L	1.80	21.6
QC Batch: 1MS5139	**For sample analyzed on: 05/19/2017**					**Spiked sample: 17051592**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	101	80.0-120	10.0	µg/L			83.0-121	10.0	µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	94.6	75.6-120	10.0	µg/L			77.5-122	10.0	µg/L	**	9.5
Benzene	ND(0.5)	91.4	80.0-120	10.0	µg/L			82.7-117	10.0	µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	107	79.9-125	10.0	µg/L			79.0-125	10.0	µg/L	**	13.6
Chloroform	ND(0.5)	93.1	79.6-120	10.0	µg/L			78.4-117	10.0	µg/L	**	9.2
Chloromethane	ND(0.5)	94.3	70.2-127	10.0	µg/L			69.7-129	10.0	µg/L	**	15.9
Methylene chloride	ND(0.5)	96.3	77.1-120	10.0	µg/L			76.3-119	10.0	µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	105	80.0-120	10.0	µg/L			82.0-121	10.0	µg/L	**	11.3
Trichloroethylene	ND(0.5)	95.6	80.0-120	10.0	µg/L			79.3-120	10.0	µg/L	**	13.7
Vinyl chloride	ND(0.5)	107	76.2-128	10.0	µg/L			78.0-130	10.0	µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	91.1	79.5-120	10.0	µg/L			81.7-117	10.0	µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	104	104	76.2-126	10.0	µg/L	MN	MN	76.2-126	10.0	µg/L	**	
TOLUENE-d8	100.	104	80.0-120	10.0	µg/L	MN	MN	80.0-120	10.0	µg/L	**	
QC Batch: 1MS8135	**For sample analyzed on: 05/15/2017**					**Spiked sample: 17051075**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	102	80.0-120	10.0	µg/L			83.0-121	1000	µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	105	75.6-120	10.0	µg/L			77.5-122	1000	µg/L	**	9.5
Benzene	ND(0.5)	93.8	80.0-120	10.0	µg/L			82.7-117	1000	µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	107	79.9-125	10.0	µg/L			79.0-125	1000	µg/L	**	13.6
Chloroform	ND(0.5)	97.8	79.6-120	10.0	µg/L			78.4-117	1000	µg/L	**	9.2
Chloromethane	ND(0.5)	102	70.2-127	10.0	µg/L			69.7-129	1000	µg/L	**	15.9
Methylene chloride	ND(0.5)	94.7	77.1-120	10.0	µg/L			76.3-119	1000	µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	115	80.0-120	10.0	µg/L			82.0-121	1000	µg/L	**	11.3
Trichloroethylene	ND(0.5)	95.0	80.0-120	10.0	µg/L			79.3-120	1000	µg/L	**	13.7
Vinyl chloride	ND(0.5)	93.8	76.2-128	10.0	µg/L			78.0-130	1000	µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	86.4	79.5-120	10.0	µg/L			81.7-117	1000	µg/L	**	10.1

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 1MS8135	**For sample analyzed on: 05/15/2017**					**Spiked sample: 17051075**						
Surrogate Data:												
1,2-DICHLOROETHANE-d4	99.7	98.6	76.2-126	10.0	µg/L	MN	MN	76.2-126	1000	µg/L	**	
TOLUENE-d8	97.5	104	80.0-120	10.0	µg/L	MN	MN	80.0-120	1000	µg/L	**	
QC Batch: 1MS8137	**For sample analyzed on: 05/17/2017**					**Spiked sample: 17051075R**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	101	80.0-120	10.0	µg/L			83.0-121	10000	µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	99.0	75.6-120	10.0	µg/L			77.5-122	10000	µg/L	**	9.5
Benzene	ND(0.5)	99.6	80.0-120	10.0	µg/L			82.7-117	10000	µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	100.	79.9-125	10.0	µg/L			79.0-125	10000	µg/L	**	13.6
Chloroform	ND(0.5)	97.7	79.6-120	10.0	µg/L			78.4-117	10000	µg/L	**	9.2
Chloromethane	ND(0.5)	99.5	70.2-127	10.0	µg/L			69.7-129	10000	µg/L	**	15.9
Methylene chloride	ND(0.5)	96.0	77.1-120	10.0	µg/L			76.3-119	10000	µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	106	80.0-120	10.0	µg/L			82.0-121	10000	µg/L	**	11.3
Trichloroethylene	ND(0.5)	102	80.0-120	10.0	µg/L			79.3-120	10000	µg/L	**	13.7
Vinyl chloride	ND(0.5)	94.7	76.2-128	10.0	µg/L			78.0-130	10000	µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	97.7	79.5-120	10.0	µg/L			81.7-117	10000	µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	97.2	95.5	76.2-126	10.0	µg/L	MN	MN	76.2-126	10000	µg/L	**	
TOLUENE-d8	99.2	104	80.0-120	10.0	µg/L	MN	MN	80.0-120	10000	µg/L	**	
QC Batch: 1MS8138	**For sample analyzed on: 05/18/2017**					**Spiked sample: 17051174**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	100.	80.0-120	10.0	µg/L	108	105	83.0-121	50.0	µg/L	2.80	9.8
1,2-Dichloroethane	ND(0.5)	106	75.6-120	10.0	µg/L	117	103 MP	77.5-122	50.0	µg/L	12.7	9.5
Benzene	ND(0.5)	88.3	80.0-120	10.0	µg/L	93.3	83.3 MP	82.7-117	50.0	µg/L	11.3	8.3
Carbon tetrachloride	ND(0.5)	108	79.9-125	10.0	µg/L	110.	105	79.0-125	50.0	µg/L	4.70	13.6
Chloroform	ND(0.5)	96.4	79.6-120	10.0	µg/L	107	101	78.4-117	50.0	µg/L	5.80	9.2
Chloromethane	ND(0.5)	87.8	70.2-127	10.0	µg/L	88.4	88.7	69.7-129	50.0	µg/L	0.340	15.9
Methylene chloride	ND(0.5)	88.4	77.1-120	10.0	µg/L	98.1	92.0	76.3-119	50.0	µg/L	6.40	9.6
Tetrachloroethylene	ND(0.5)	117	80.0-120	10.0	µg/L	112	110.	82.0-121	50.0	µg/L	1.80	11.3
Trichloroethylene	ND(0.5)	91.1	80.0-120	10.0	µg/L	89.4	87.4	79.3-120	50.0	µg/L	2.30	13.7
Vinyl chloride	ND(0.5)	81.8	76.2-128	10.0	µg/L	83.9	86.6	78.0-130	50.0	µg/L	3.20	14.6
1,2-Dichloropropane	ND(0.5)	81.3	79.5-120	10.0	µg/L	85.7	81.6 ML	81.7-117	50.0	µg/L	4.90	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	106	103	76.2-126	10.0	µg/L	111	105	76.2-126	50.0	µg/L		
TOLUENE-d8	94.7	102	80.0-120	10.0	µg/L	102	104	80.0-120	50.0	µg/L		
QC Batch: 1MS9137	**For sample analyzed on: 05/17/2017**					**Spiked sample: 17051164**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	98.3	80.0-120	10.0	µg/L	100.	102	83.0-121	50.0	µg/L	2.00	9.8
1,2-Dichloroethane	ND(0.5)	87.0	75.6-120	10.0	µg/L	88.4	87.5	77.5-122	50.0	µg/L	1.00	9.5
Benzene	ND(0.5)	107	80.0-120	10.0	µg/L	113	111	82.7-117	50.0	µg/L	1.80	8.3
Carbon tetrachloride	ND(0.5)	108	79.9-125	10.0	µg/L	95.3	101	79.0-125	50.0	µg/L	5.80	13.6
Chloroform	ND(0.5)	97.0	79.6-120	10.0	µg/L	97.7	89.7	78.4-117	50.0	µg/L	8.50	9.2
Chloromethane	ND(0.5)	115	70.2-127	10.0	µg/L	122	130. MH	69.7-129	50.0	µg/L	6.30	15.9
Methylene chloride	ND(0.5)	106	77.1-120	10.0	µg/L	105	101	76.3-119	50.0	µg/L	3.90	9.6
Tetrachloroethylene	ND(0.5)	96.9	80.0-120	10.0	µg/L	94.2	88.5	82.0-121	50.0	µg/L	6.20	11.3
Trichloroethylene	ND(0.5)	104	80.0-120	10.0	µg/L	115	112	79.3-120	50.0	µg/L	2.60	13.7
Vinyl chloride	ND(0.5)	96.5	76.2-128	10.0	µg/L	105	107	78.0-130	50.0	µg/L	1.90	14.6
1,2-Dichloropropane	ND(0.5)	93.0	79.5-120	10.0	µg/L	101	93.7	81.7-117	50.0	µg/L	7.50	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	87.6	97.0	76.2-126	10.0	µg/L	92.9	87.5	76.2-126	50.0	µg/L		

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 1MS9137	**For sample analyzed on: 05/17/2017**					**Spiked sample: 17051164**						
Surrogate Data:												
TOLUENE-d8	101	106	80.0-120	10.0	µg/L	104	107	80.0-120	50.0	µg/L		
QC Batch: 2IC2143	**For sample analyzed on: 05/23/2017**					**Spiked sample: 17051164**						
Chloride	ND(1.0)	107	90.0-110	4.0	mg/L	I	I	68.4-120	40.0	mg/L	**	21.6
QC Batch: 3IC2143	**For sample analyzed on: 05/23/2017**					**Spiked sample: 17051174**						
Chloride	ND(1.0)	101	90.0-110	4.0	mg/L	I	I	68.4-120	400	mg/L	**	21.6
QC Batch: 3IC2144	**For sample analyzed on: 05/24/2017**					**Spiked sample: 17051173**						
Chloride	ND(1.0)	102	90.0-110	4.0	mg/L	97.2	93.8	68.4-120	4.0	mg/L	3.60	21.6

Data Qualifiers:

MI - Due to sample heterogeneity and/or sample matrix interferences, the MS and/or MSD recovery for this analyte did not meet the method or laboratory control limits. The reported sample concentration is estimated.

MH - The matrix spike and/or matrix spike duplicate recovery for this analyte was above the method or laboratory control limit. See LCS data for the basis for acceptance of this sample. The reported sample concentration is estimated.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

MP - The MS/MSD recoveries for this analyte exceeded the method or laboratory precision control limit. The reported sample concentration is estimated.

ML - The matrix spike and/or matrix spike duplicate recovery for this analyte was below the method or laboratory control limit. See LCS data for the basis for acceptance of this sample. The reported sample concentration is estimated.

I - Due to the concentration of analyte in the sample, the spike level is too low to allow accurate quantification of the spike recovery.

LL - The Laboratory Control Sample (LCS) recovery for this analyte was below the method or laboratory quality control limit. The reported sample concentration may be biased low.

MN - The MS/MSD sample analyses were not performed on a sample from this Pace order number.

LH - The Laboratory Control Sample (LCS) recovery for this analyte was above the method or laboratory quality control limit. The reported sample concentration may be biased high.

** - RPD calculation not applicable/not available for this analysis.

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051137		**Sample Description: WG-05112017-DF-MW133S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/19/2017	5.0	µg/L	67.3	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/19/2017	5.0	µg/L	67.3	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	87.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	29.6	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	47.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	101	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	108	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	96.7	80.0-120
Lab Number: 17051138		**Sample Description: WG-05112017-DF-MW004S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	86.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	86.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	81.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	28.2	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	44.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	89.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	107	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	95.0	80.0-120
Lab Number: 17051139		**Sample Description: WG-05112017-DF-MW004S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/19/2017	5.0	µg/L	62.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/19/2017	5.0	µg/L	62.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	84.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	31.0	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	50.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	100.	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	101	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	94.9	80.0-120
Lab Number: 17051140		**Sample Description: WG-05112017-DF-MW013S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	98.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	98.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	87.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	30.1	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051140		**Sample Description: WG-05112017-DF-MW013S3**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	48.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	97.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/15/2017	10	µg/L	109	76.2-126
TOLUENE-d8		05/15/2017	10	µg/L	91.4	80.0-120
Lab Number: 17051141		**Sample Description: WG-05112017-DF-MW013S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	63.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	63.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	78.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	29.3	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	46.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	89.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/16/2017	10	µg/L	113	76.2-126
TOLUENE-d8		05/16/2017	10	µg/L	93.5	80.0-120
Lab Number: 17051142		**Sample Description: WG-05112017-DF-MW139S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	96.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	96.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	81.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	31.3	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	50.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	94.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/16/2017	10	µg/L	113	76.2-126
TOLUENE-d8		05/16/2017	10	µg/L	95.3	80.0-120
Lab Number: 17051143		**Sample Description: WG-05112017-DF-MW031S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	93.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	93.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	88.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	32.2	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	51.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	92.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/16/2017	40	µg/L	114	76.2-126
TOLUENE-d8		05/16/2017	40	µg/L	92.8	80.0-120
Lab Number: 17051144		**Sample Description: WG-05112017-DF-FD8**				

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051144		**Sample Description: WG-05112017-DF-FD8**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	64.2	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	64.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	84.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	28.8	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	45.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	80.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	10	µg/L	97.4	76.2-126
TOLUENE-d8		05/17/2017	10	µg/L	100.	80.0-120
Lab Number: 17051145		**Sample Description: WG-05112017-DF-ER13**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	95.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	95.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	86.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	33.5	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	52.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	71.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/16/2017	10	µg/L	112	76.2-126
TOLUENE-d8		05/16/2017	10	µg/L	96.4	80.0-120
Lab Number: 17051146		**Sample Description: WG-05122017-DF-IW45**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	67.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	67.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	87.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	28.0	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	44.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	82.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/16/2017	10	µg/L	119	76.2-126
TOLUENE-d8		05/16/2017	10	µg/L	98.0	80.0-120
Lab Number: 17051147		**Sample Description: WG-05122017-DF-IW43**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	102	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/22/2017	5.0	µg/L	104	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/22/2017	8.0	µg/L	81.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	28.4	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051147		**Sample Description: WG-05122017-DF-IW43**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	46.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	104	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	400	µg/L	97.2	76.2-126
TOLUENE-d8		05/17/2017	400	µg/L	101	80.0-120
Lab Number: 17051147R		**Sample Description: WG-05122017-DF-IW43**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/26/2017	5.0	µg/L	89.2	62.2-119
Lab Number: 17051148		**Sample Description: WG-05122017-DF-FD10**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/22/2017	5.0	µg/L	101	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/22/2017	5.0	µg/L	101	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	78.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	29.3	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	47.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	101	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	10	µg/L	105	76.2-126
TOLUENE-d8		05/18/2017	10	µg/L	94.5	80.0-120
Lab Number: 17051148R		**Sample Description: WG-05122017-DF-FD10**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	79.2	62.2-119
Lab Number: 17051149		**Sample Description: WG-05122017-DF-MW010S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/22/2017	5.0	µg/L	96.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/22/2017	5.0	µg/L	96.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	82.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	28.6	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	43.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	98.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	10	µg/L	95.3	76.2-126
TOLUENE-d8		05/18/2017	10	µg/L	92.5	80.0-120
Lab Number: 17051149R		**Sample Description: WG-05122017-DF-MW010S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	82.4	62.2-119
Lab Number: 17051150		**Sample Description: WG-05122017-JR-MW010S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/22/2017	5.0	µg/L	96.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/22/2017	5.0	µg/L	96.9	62.2-119

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051150		**Sample Description: WG-05122017-JR-MW010S1**				
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	81.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	29.0	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	45.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	96.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	10	µg/L	95.1	76.2-126
TOLUENE-d8		05/17/2017	10	µg/L	99.3	80.0-120
Lab Number: 17051150R		**Sample Description: WG-05122017-JR-MW010S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	85.2	62.2-119
Lab Number: 17051151		**Sample Description: WG-05122017-JR-MW005S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/22/2017	5.0	µg/L	103	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/22/2017	5.0	µg/L	103	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	85.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	30.7	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	47.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	95.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	10	µg/L	94.2	76.2-126
TOLUENE-d8		05/17/2017	10	µg/L	103	80.0-120
Lab Number: 17051151R		**Sample Description: WG-05122017-JR-MW005S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	86.8	62.2-119
Lab Number: 17051152		**Sample Description: WG-05122017-JR-MW019S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	C	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	161 SI	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	C	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/25/2017	150	µg/L	28.8	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/25/2017	150	µg/L	43.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/25/2017	150	µg/L	112	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	1000	µg/L	89.2	76.2-126
TOLUENE-d8		05/17/2017	1000	µg/L	103	80.0-120
Lab Number: 17051152R		**Sample Description: WG-05122017-JR-MW019S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	C	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	C	65.9-110

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051153		**Sample Description: WG-05122017-JR-MW027S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	104	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	104	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	C	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	32.5	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	45.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	110.	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	1000	µg/L	87.0	76.2-126
TOLUENE-d8		05/17/2017	1000	µg/L	100.	80.0-120
Lab Number: 17051153R		**Sample Description: WG-05122017-JR-MW027S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	99.1	62.2-119
Lab Number: 17051154		**Sample Description: WG-05122017-JR-MW027S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	111	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	111	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	C	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/25/2017	150	µg/L	29.5	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/25/2017	150	µg/L	46.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/25/2017	150	µg/L	122	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	1000	µg/L	99.5	76.2-126
TOLUENE-d8		05/17/2017	1000	µg/L	102	80.0-120
Lab Number: 17051154R		**Sample Description: WG-05122017-JR-MW027S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	99.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	C	65.9-110
Lab Number: 17051155		**Sample Description: WG-05122017-JR-MW018S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/26/2017	5.0	µg/L	93.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	C	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	340. SI	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	29.1	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	44.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	114	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	20000	µg/L	101	76.2-126
TOLUENE-d8		05/17/2017	20000	µg/L	102	80.0-120

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051155R		**Sample Description: WG-05122017-JR-MW018S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/26/2017	5.0	µg/L	88.2	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	C	65.9-110
Lab Number: 17051156		**Sample Description: WG-05122017-JR-MW018S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	84.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	84.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	85.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	30.3	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	47.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	108	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	500	µg/L	100.	76.2-126
TOLUENE-d8		05/18/2017	500	µg/L	96.0	80.0-120
Lab Number: 17051156R		**Sample Description: WG-05122017-JR-MW018S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	81.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/24/2017	8.0	µg/L	88.6	65.9-110
Lab Number: 17051157		**Sample Description: WG-05122017-DF-IW41**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	77.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	77.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	83.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	27.5	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	42.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	94.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	10	µg/L	103	76.2-126
TOLUENE-d8		05/17/2017	10	µg/L	99.6	80.0-120
Lab Number: 17051157R		**Sample Description: WG-05122017-DF-IW41**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	71.0	62.2-119
Lab Number: 17051158		**Sample Description: WG-05122017-DF-IW42**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	86.3	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	86.3	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	80.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	28.6	25.6-44.5

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051158		**Sample Description: WG-05122017-DF-IW42**				
OXY GC/MS Acids						
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	45.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	98.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	10	µg/L	106	76.2-126
TOLUENE-d8		05/17/2017	10	µg/L	96.7	80.0-120
Lab Number: 17051158R		**Sample Description: WG-05122017-DF-IW42**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	78.5	62.2-119
Lab Number: 17051159		**Sample Description: WG-05122017-DF-IW46**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	82.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	82.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	80.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	28.4	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	44.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	89.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	10	µg/L	102	76.2-126
TOLUENE-d8		05/17/2017	10	µg/L	101	80.0-120
Lab Number: 17051159R		**Sample Description: WG-05122017-DF-IW46**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	76.7	62.2-119
Lab Number: 17051160		**Sample Description: WG-05122017-DF-IW44**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	84.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	84.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	77.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	28.5	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	45.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	90.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	100	µg/L	103	76.2-126
TOLUENE-d8		05/18/2017	100	µg/L	95.6	80.0-120
Lab Number: 17051160R		**Sample Description: WG-05122017-DF-IW44**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	78.9	62.2-119
Lab Number: 17051161		**Sample Description: WG-05122017-DF-IW31**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	C	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	113	62.2-119

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051161		**Sample Description: WG-05122017-DF-IW31**				
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	C	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/24/2017	150	µg/L	29.4	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/24/2017	150	µg/L	43.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/24/2017	150	µg/L	112	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	4000	µg/L	105	76.2-126
TOLUENE-d8		05/18/2017	4000	µg/L	94.0	80.0-120
Lab Number: 17051161R		**Sample Description: WG-05122017-DF-IW31**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	C	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/24/2017	8.0	µg/L	C	65.9-110
Lab Number: 17051162		**Sample Description: WG-05122017-DF-IW30**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	123 SI	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	C	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	C	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/25/2017	150	µg/L	15.0 SI	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/25/2017	150	µg/L	26.6 SI	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/25/2017	150	µg/L	101	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	4000	µg/L	102	76.2-126
TOLUENE-d8		05/18/2017	4000	µg/L	95.7	80.0-120
Lab Number: 17051162R		**Sample Description: WG-05122017-DF-IW30**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	101	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/24/2017	8.0	µg/L	C	65.9-110
Lab Number: 17051163		**Sample Description: WG-05122017-DF-IW36**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	80.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	80.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	84.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/25/2017	150	µg/L	29.8	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/25/2017	150	µg/L	47.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/25/2017	150	µg/L	99.3	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	10	µg/L	110.	76.2-126
TOLUENE-d8		05/18/2017	10	µg/L	93.9	80.0-120
Lab Number: 17051163R		**Sample Description: WG-05122017-DF-IW36**				

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051163R		**Sample Description: WG-05122017-DF-IW36**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	71.4	62.2-119
Lab Number: 17051164		**Sample Description: WG-05122017-DF-IW35A**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	104	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	104	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/22/2017	8.0	µg/L	88.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/25/2017	150	µg/L	30.2	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/25/2017	150	µg/L	48.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/25/2017	150	µg/L	105	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/17/2017	50	µg/L	91.4	76.2-126
TOLUENE-d8		05/17/2017	50	µg/L	103	80.0-120
Lab Number: 17051164R		**Sample Description: WG-05122017-DF-IW35A**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/25/2017	5.0	µg/L	72.6	62.2-119
Lab Number: 17051165		**Sample Description: WG-05122017-DF-IW29**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/24/2017	5.0	µg/L	83.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	97.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	93.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/25/2017	150	µg/L	30.2	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/25/2017	150	µg/L	47.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/25/2017	150	µg/L	107	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	1000	µg/L	113	76.2-126
TOLUENE-d8		05/18/2017	1000	µg/L	93.4	80.0-120
Lab Number: 17051165R		**Sample Description: WG-05122017-DF-IW29**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/26/2017	5.0	µg/L	68.3	62.2-119
Lab Number: 17051166		**Sample Description: WG-05122017-DF-IW35B**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	87.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/17/2017	05/23/2017	5.0	µg/L	87.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/18/2017	05/23/2017	8.0	µg/L	85.1	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/18/2017	05/25/2017	150	µg/L	28.9	25.6-44.5
2-FLUOROPHENOL	05/18/2017	05/25/2017	150	µg/L	46.6	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/18/2017	05/25/2017	150	µg/L	101	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	1000	µg/L	111	76.2-126

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051166		**Sample Description: WG-05122017-DF-IW35B**				
OXY Volatiles by 8260						
TOLUENE-d8		05/18/2017	1000	µg/L	94.8	80.0-120
Lab Number: 17051166R		**Sample Description: WG-05122017-DF-IW35B**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/24/2017	05/26/2017	5.0	µg/L	76.3	62.2-119
Lab Number: 17051167		**Sample Description: WG-05122017-DF-IW40**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/23/2017	5.0	µg/L	86.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/23/2017	5.0	µg/L	86.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	88.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/24/2017	150	µg/L	36.3	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/24/2017	150	µg/L	57.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/24/2017	150	µg/L	91.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	10	µg/L	116	76.2-126
TOLUENE-d8		05/18/2017	10	µg/L	94.9	80.0-120
Lab Number: 17051168		**Sample Description: WG-05122017-DF-IW32**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	111	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	C	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/25/2017	8.0	µg/L	111 SI	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/24/2017	150	µg/L	40.7	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/24/2017	150	µg/L	62.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/24/2017	150	µg/L	96.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	40	µg/L	108	76.2-126
TOLUENE-d8		05/18/2017	40	µg/L	94.3	80.0-120
Lab Number: 17051169		**Sample Description: WG-05122017-BS-MW019S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	87.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	87.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	C	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/24/2017	150	µg/L	38.7	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/24/2017	150	µg/L	61.5	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/24/2017	150	µg/L	85.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	400	µg/L	116	76.2-126
TOLUENE-d8		05/18/2017	400	µg/L	94.7	80.0-120
Lab Number: 17051170		**Sample Description: WG-05122017-BS-MW019S4**				

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051170		**Sample Description: WG-05122017-BS-MW019S4**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/23/2017	5.0	µg/L	117	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/23/2017	5.0	µg/L	117	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	C	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/24/2017	150	µg/L	35.6	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/24/2017	150	µg/L	55.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/24/2017	150	µg/L	94.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	4000	µg/L	105	76.2-126
TOLUENE-d8		05/18/2017	4000	µg/L	93.5	80.0-120
Lab Number: 17051170R		**Sample Description: WG-05122017-BS-MW019S4**				
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	C	65.9-110
Lab Number: 17051171		**Sample Description: WG-05122017-BS-AMW101S**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/23/2017	5.0	µg/L	90.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/23/2017	5.0	µg/L	90.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	95.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/24/2017	150	µg/L	34.2	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/24/2017	150	µg/L	58.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/24/2017	150	µg/L	81.3	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	10	µg/L	110.	76.2-126
TOLUENE-d8		05/18/2017	10	µg/L	92.2	80.0-120
Lab Number: 17051172		**Sample Description: WG-05122017-BS-AMW101I**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/23/2017	5.0	µg/L	90.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/23/2017	5.0	µg/L	90.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	97.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/24/2017	150	µg/L	30.8	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/24/2017	150	µg/L	52.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/24/2017	150	µg/L	89.3	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	10	µg/L	109	76.2-126
TOLUENE-d8		05/18/2017	10	µg/L	94.4	80.0-120
Lab Number: 17051173		**Sample Description: WG-05122017-BS-AMW101D**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/23/2017	5.0	µg/L	93.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/23/2017	5.0	µg/L	93.0	62.2-119

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051173		**Sample Description: WG-05122017-BS-AMW101D**				
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	90.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/24/2017	150	µg/L	35.8	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/24/2017	150	µg/L	55.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/24/2017	150	µg/L	95.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	103	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	101	80.0-120
Lab Number: 17051174		**Sample Description: WG-05112017-JR-MW029S2**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	66.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	66.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/19/2017	8.0	µg/L	88.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/22/2017	150	µg/L	32.2	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/22/2017	150	µg/L	51.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/22/2017	150	µg/L	106	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	50	µg/L	112	76.2-126
TOLUENE-d8		05/19/2017	50	µg/L	93.4	80.0-120
Lab Number: 17051175		**Sample Description: WG-05112017-JR-MW029S1**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	92.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	92.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/20/2017	8.0	µg/L	87.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/23/2017	150	µg/L	31.9	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/23/2017	150	µg/L	49.4	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/23/2017	150	µg/L	93.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	109	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	98.6	80.0-120
Lab Number: 17051176		**Sample Description: WG-05112017-JR-MW149S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	69.5	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	69.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/20/2017	8.0	µg/L	85.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/23/2017	150	µg/L	32.2	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/23/2017	150	µg/L	49.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/23/2017	150	µg/L	104	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	108	76.2-126

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051176		**Sample Description: WG-05112017-JR-MW149S2/S3**				
OXY Volatiles by 8260						
TOLUENE-d8		05/19/2017	10	µg/L	98.2	80.0-120
Lab Number: 17051177		**Sample Description: WG-05112017-BS-AMW104**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	65.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	65.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/20/2017	8.0	µg/L	85.8	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/23/2017	150	µg/L	31.4	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/23/2017	150	µg/L	50.8	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/23/2017	150	µg/L	100.	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/18/2017	10	µg/L	113	76.2-126
TOLUENE-d8		05/18/2017	10	µg/L	93.9	80.0-120
Lab Number: 17051178		**Sample Description: WG-05112017-BS-AMW003**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	94.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/22/2017	5.0	µg/L	94.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/20/2017	8.0	µg/L	83.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/23/2017	150	µg/L	32.4	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/23/2017	150	µg/L	52.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/23/2017	150	µg/L	93.7	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	114	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	94.3	80.0-120
Lab Number: 17051179		**Sample Description: WG-05112017-BS-AMW108S**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	64.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	64.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/20/2017	8.0	µg/L	89.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/23/2017	150	µg/L	32.9	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/23/2017	150	µg/L	52.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/23/2017	150	µg/L	94.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	114	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	94.4	80.0-120
Lab Number: 17051180		**Sample Description: WG-05112017-BS-FD009**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	69.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/15/2017	05/20/2017	5.0	µg/L	69.4	62.2-119

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051180		**Sample Description: WG-05112017-BS-FD009**				
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/16/2017	05/20/2017	8.0	µg/L	88.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/16/2017	05/23/2017	150	µg/L	32.1	25.6-44.5
2-FLUOROPHENOL	05/16/2017	05/23/2017	150	µg/L	49.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/16/2017	05/23/2017	150	µg/L	96.5	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	116	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	87.5	80.0-120
Lab Number: 17051181		**Sample Description: TB-10**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	114	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	91.3	80.0-120
Lab Number: 17051182		**Sample Description: TB-11**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	117	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	90.5	80.0-120

Data Qualifiers:
C - Due to matrix interference(s) and/or high concentration(s) of analyte(s) present in the sample, dilution was required causing the spike level for this analyte to be below the reporting limit and/or below the lowest point of the calibration curve.

SI - One or more surrogate recoveries for this analysis were not within the laboratory or method control limits. The sample result(s) or reporting limit(s) for this analysis are estimated due to sample matrix interferences.

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
2,4-Dichlorophenoxyacetic Acid	05/19/2017	1NX5139	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/19/2017	2NX5139	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/20/2017	3NX5139	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/20/2017	4NX5139	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/22/2017	1NX5142	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/22/2017	2NX5142	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/23/2017	3NX5142	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/23/2017	4NX5142	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/23/2017	5NX5142	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/23/2017	1NX5143	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/24/2017	2NX5143	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/24/2017	3NX5143	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/24/2017	4NX5143	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/24/2017	5NX5143	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/25/2017	1NX5145	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/25/2017	2NX5145	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/25/2017	3NX5145	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/26/2017	4NX5145	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/26/2017	5NX5145	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/26/2017	6NX5145	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/19/2017	1NX5139	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/19/2017	2NX5139	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/20/2017	3NX5139	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/20/2017	4NX5139	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/22/2017	1NX5142	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/22/2017	2NX5142	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/23/2017	3NX5142	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/23/2017	4NX5142	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/23/2017	5NX5142	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/23/2017	1NX5143	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/24/2017	2NX5143	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/24/2017	3NX5143	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/24/2017	4NX5143	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/24/2017	5NX5143	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/19/2017	1EX3139	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/19/2017	2EX3139	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/20/2017	3EX3139	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/20/2017	4EX3139	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/22/2017	2EX3142	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/23/2017	3EX3142	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/23/2017	4EX3142	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/23/2017	5EX3142	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/23/2017	1EX3143	CCV recovery acceptable for this Instrument Batch.			

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

OXY Chlorinated Hyd.	05/23/2017	2EX3143	CCV recovery acceptable for this Instrument Batch.
OXY Chlorinated Hyd.	05/24/2017	3EX3143	CCV recovery acceptable for this Instrument Batch.
OXY Chlorinated Hyd.	05/24/2017	4EX3143	CCV recovery acceptable for this Instrument Batch.
OXY Chlorinated Hyd.	05/24/2017	5EX3143	CCV recovery acceptable for this Instrument Batch.
OXY Chlorinated Hyd.	05/25/2017	2EX3144	CCV recovery acceptable for this Instrument Batch.
OXY Chlorinated Hyd.	05/25/2017	3EX3144	CCV recovery acceptable for this Instrument Batch.
Chloride	05/23/2017	1IC2143	CCV recovery acceptable for this Instrument Batch.
Chloride	05/23/2017	2IC2143	CCV recovery acceptable for this Instrument Batch.
Chloride	05/23/2017	3IC2143	CCV recovery acceptable for this Instrument Batch.
Chloride	05/23/2017	4IC2143	CCV recovery acceptable for this Instrument Batch.
Chloride	05/23/2017	5IC2143	CCV recovery acceptable for this Instrument Batch.
Chloride	05/23/2017	6IC2143	CCV recovery acceptable for this Instrument Batch.
Chloride	05/23/2017	7IC2143	CCV recovery acceptable for this Instrument Batch.
Chloride	05/25/2017	9IC2144	CCV recovery acceptable for this Instrument Batch.
Chloride	05/25/2017	10IC2144	CCV recovery acceptable for this Instrument Batch.
OXY GC/MS Acids	05/22/2017	1MS6142	CCV recovery acceptable for this Instrument Batch.
OXY GC/MS Acids	05/22/2017	2MS6142	CCV recovery acceptable for this Instrument Batch.
OXY GC/MS Acids	05/23/2017	3MS6142	CCV recovery acceptable for this Instrument Batch.
OXY GC/MS Acids	05/24/2017	1MS6144	CCV recovery acceptable for this Instrument Batch.
OXY GC/MS Acids	05/24/2017	2MS6144	CCV recovery acceptable for this Instrument Batch.
OXY GC/MS Acids	05/25/2017	3MS6144	CCV recovery acceptable for this Instrument Batch.
OXY GC/MS Acids	05/24/2017	1MS7144	CCV recovery acceptable for this Instrument Batch.
OXY GC/MS Acids	05/25/2017	2MS7144	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/19/2017	1MS5139	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/20/2017	2MS5139	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/15/2017	1MS8135	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/15/2017	2MS8135	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/16/2017	3MS8135	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/17/2017	1MS8137	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/18/2017	2MS8137	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/18/2017	3MS8137	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/18/2017	1MS8138	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/19/2017	2MS8138	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/19/2017	3MS8138	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/17/2017	1MS9137	CCV recovery acceptable for this Instrument Batch.
OXY Volatiles by 8260	05/17/2017	2MS9137	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/23/2017	12IP4142	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/23/2017	13IP4142	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/23/2017	14IP4142	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/23/2017	15IP4142	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/23/2017	16IP4142	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/23/2017	17IP4142	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/23/2017	5IP4143	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/23/2017	6IP4143	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/23/2017	7IP4143	CCV recovery acceptable for this Instrument Batch.

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/26/2017
Date Received: 05/12/2017
Pace File No: 7775
Pace Order No: 140470

Hardness (Calculated)	05/24/2017	13IP4144	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/24/2017	14IP4144	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/25/2017	15IP4144	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/26/2017	18IP4145	CCV recovery acceptable for this Instrument Batch.
Hardness (Calculated)	05/26/2017	19IP4145	CCV recovery acceptable for this Instrument Batch.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Order: 140470

Discrepancies See C/S RF 5/12/17 Edits made prior to sample receipt

Page: 1 of 5

2059256

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Kogl	Attention:
Address: 2626 Pawnee Ste D Wichita KS	Copy To:	Company Name:
Email To: travis.kogl@ghd.com	Purchase Order No.:	Address:
Phone: Fax:	Project Name: Ott Spring 2017 GWM	Pace Quote Reference:
Requested Due Date/TAT:	Project Number: 11137148	Pace Project Manager: Greg Grove
		Pace Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER _____

Site Location STATE: _____

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Matrix Codes: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOCs	SVOCs	Herb/Pest	Chloride Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05112017-DF-MW033s2/s3						5/11/17	0855		8	5			3					X	X	X	X		
2	WG-05112017-DF-MW004s3							0945		8	5			3					X	X	X	X		
3	WG-05112017-DF-MW004s1							1035		8	5			3					X	X	X	X		
4	WG-05112017-DF-MW013s3							1145		8	5			3					X	X	X	X		
5	WG-05112017-DF-MW013s1							1235		8	5			3					X	X	X	X		
6	WG-05112017-DF-MW039s2/s3							1325		8	5			3					X	X	X	X		
7	WG-05112017-DF-MW031s1							1435		8	5			3					X	X	X	X		
8	WG-05112017-DF-FD8							0000		8	5			3					X	X	X	X		
9	WG-05112017-DF-ER13							1630		8	5			3					X	X	X	X		
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	GHD	5/12/17	1530		5/12/17	1530	
		5/12/17	1655		5/12/17	1655	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeremy Rape

SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): 5/12/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

PACE Order 140470

2059260

Section A Required Client Information:

Company:	GHD
Address:	2626 Pawnee Ste. D
Email To:	travis.kogl@ghd.com
Phone:	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Travis Kogl
Copy To:	
Purchase Order No.:	
Project Name:	Oxy Spring 2017 GWM
Project Number:	11137148

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Greg Groene
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOCs	SVOCs	Pest/Herb	Chloride, Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05122017-DF-IW45	WT	G			5/12/17	1100		8	5			3						X	X	X	X		
2	WG-05122017-DF-IW43	↓	↓			↓	1040		8	5			3						X	X	X	X		
3	WG-05122017-DF-FD10	↓	↓			↓	0000		8	5			3						X	X	X	X		
4	WG-05122017-DF-MW010s3	↓	↓			↓	1415		8	5			3						X	X	X	X		
5	WG-05122017-JR-MW010s1						945		8	5			3						X	X	X	X		
6	WG-05122017-JR-MW005s3						1050		8	5			3						X	X	X	X		
7	WG-05122017-JR-MW019s2						1240		8	5			3						X	X	X	X		
8	WG-05122017-JR-MW027s1						1230		8	5			3						X	X	X	X		
9	WG-05122017-JR-MW027s2						1245		8	5			3						X	X	X	X		
10	WG-05122017-JR-MW018s1						1350		8	5			3						X	X	X	X		
11	WG-05122017-JR-MW018s3						1415		8	5			3						X	X	X	X		
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] GHD	5/12/17	1530	[signature]	5/12/17	1530	
	[signature]	5/12/17	1655	[signature]	5/12/17	1655	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeremy Raye

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 5/12/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

PACE Order 140470

2059259

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Hoyl	Attention:
Address: 2626 Pawnee Ste. D	Copy To:	Company Name:
		Address:
Email To: travis.hoyl@ghd.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: OU Spring 2017 GWM	Pace Project Manager: Greg Groene
Requested Due Date/TAT:	Project Number: 11137148	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOCs	SVOCs	Pest / Herb	Chloride Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05122017-DF-IW41	WT	G			5/12/17	1005		8	5			3						X	X	X	X		
2	WG-05122017-DF-IW42						0945		8	5			3						X	X	X	X		
3	WG-05122017-DF-IW46						1020		8	5			3						X	X	X	X		
4	WG-05122017-DF-IW44						1050		8	5			3						X	X	X	X		
5	WG-05122017-DF-IW31						1320		8	5			3						X	X	X	X		
6	WG-05122017-DF-IW30						1340		8	5			3						X	X	X	X		
7	WG-05122017-DF-IW36						1240		8	5			3						X	X	X	X		
8	WG-05122017-DF-IW35A						1145		24	15			9						X	X	X	X		
9	WG-05122017-DF-IW29						1125		8	5			3						X	X	X	X		
10	WG-05122017-DF-IW35B						1200		8	5			3						X	X	X	X		
11	WG-05122017-DF-IW40						1030		8	5			3						X	X	X	X		
12	WG-05122017-DF-IW32						1305		8	5			3						X	X	X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	GHD	5/12/17	1530		5/12/17	1530	
		5/12/17	1655		5/12/17	1655	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeremy Raye

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 5/12/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

PACE Order 140470

Page: 4 of 5

2059261

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Kogl	Attention:
Address: 2626 W. Pawnee Wichita, KS	Copy To: Paul McMahon	Company Name:
		Address:
Email To: Travis.kogl	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Oxy Spring 2017 GWM	Pace Project Manager:
Requested Due Date/TAT:	Project Number: 11137148	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: KS

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes — MATRIX / CODE

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOCs	SVOCs	PEST / Herbs	Chlorides / Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05122017-BS-MW019 S1	WT	G			5/12/17	1340		8	5			3						X	X	X	X		
2	WG-05122017-BS-MW019 S4					5/12/17	1330		8	5			3						X	X	X	X		
3	WG-05122017-BS-AMW101 S					5/12/17	1405		8	5			3						X	X	X	X		
4	WG-05122017-BS-AMW101 I					5/12/17	1040		8	5			3						X	X	X	X		
5	WG-05122017-BS-AMW101 D	WT	G			5/12/17	1015		8	5			3						X	X	X	X		
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		5/12/17	1530		5/12/17	1530	
		5/12/17	1655		5/12/17	1650	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Brian Schaub

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 5/12/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Order 140470

Page: 5 of 5

2059257

Section A Required Client Information:

Company: GHD
Address: 2626 W. Pawnee Ste D. Wichita, KS
Email To: Travis Kogl
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Travis Kogl
Copy To: Paul McMahon
Purchase Order No.:
Project Name: Oxy Spring 2017 GWM
Project Number: 11137148

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Grey Groene
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Requested Analysis Filtered (Y/N)

Section D Required Client Information

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

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOCs	SVOCs	Pest / Herb	Chloride Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-0511 2017-JR-MW029s2	WT	G			5/11/17	1320		24	15			9					X	X	X	X		MS/MSD
2	WG-0511 2017-JR-MW029s1					5/11/17	1400		8	5			3					X	X	X	X		
3	WG-0511 2017-JR-MW149s2/s3					5/11/17	1500		8	5			3					X	X	X	X		
4	WG-0511 2017-BS-AMW104					5/11/17	1225		8	5			3					X	X	X	X		
5	WG-0511 2017-BS-AMW003					5/11/17	1315		8	5			3					X	X	X	X		
6	WG-0511 2017-BS-AMW108s					5/11/17	1518		8	5			3					X	X	X	X		
7	WG-0511 2017-BS-FD009	↓	↓			5/11/17	0000		8	5			3					X	X	X			
8	TB-10					5/12/17	-		3				3					X					
9	TB-11					5/12/17	-		3				3					X					
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		5/12/17	1530		5/12/17	1535	
		5/12/17	1655		5/12/17	1650	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Brian Schawe

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 5/12/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, Inc. Pace Order No.: 140470

Cooler/Sample Receipt Form (C/S RF) 140470 5-12-17

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

3 LTA 250P WC 05112017 JR mw029s2

2 LTA 1 250P ↓ DF - ER13

3 LTA 1 250P ↓ JR mw149 s2/SB

LTA 250P

23 Sep NOC Trip Blank (TB-10)

Cooler 1 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4017 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.4 Corrected Reading (°C) 2.0
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-12-17

Pace Analytical Services, Inc. **Pace Order No.:** 140470
Cooler/Sample Receipt Form (C/S RF) 140705R17

Client Name: Qy **Pace File No.:** 7775.

Sample ID's in cooler: 1-250p each . WC05122017DF IW41, DF, IW36, IW44, IW46, IW42, MW0183, FD10, IW45, IW35B, IW31, IW40, IW30, IW43 IW29, IW32.
2-250p - WC-05122017-DF-IW35A.

25 Sets VOC 1-Set T.B. (TB-11)

Cooler 2 **of** 21 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 2027 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/2/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ____ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.6 Corrected Reading (°C) 3.2.
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☑ **No** ☐ **Yes** **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SK **Date Completed:** 5-12-17.

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140470

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

1 LTA 250P WG0511 2017 DF - FD8
2 LTA 250P WG0511 2017 DF - ER13
1 LTA 250P WG 0511 2017 DF - MW03S1
3 LTA 1 250P WG 0511 2017 JR MW - MW029S1
VOC 1 - LTA - WG 0511 2017 JR MW149 S2/S3.
6 LTA WG 0511 2017 DF - MW004S1

Cooler 3 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 09984 / Client's Cooler / Box / Letter / Hand-delivered
Other:

3 250P WG0511 2017 JR MW029S2.

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other:

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No:
Seal Name: Seal Date:
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other:

Cooler Temperature (°C): Original Reading (°C) 2.9 Corrected Reading (°C) 2.5
Temperature. By: Temperature Blank / Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies:

Detail to discrepancies/comments:

Completed by: STR Date Completed: 5-12-17

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140470

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P WC05122017 JR mw018s3

___ LTA ___ 250P

___ LTA ___ 250P

___ LTA ___ 250P

VOC

Cooler 4 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 12058 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____

Seal Name: _____ Seal Date: _____

Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.6 Corrected Reading (°C) 2.2

Temperature. By: (Temperature Blank) Surface Temperature

Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐

☐ Container label absent

☐ Chain of Custody incomplete [see detail below]

☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)

☐ Date or Time sampled obtained from container label

☐ Chain of Custody missing sampler's name

☐ Chain of Custody missing matrix (sample type)

☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody

☐ Sample listed on Chain of Custody, not received

☐ Sample identification on container and Chain of Custody do not agree

☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]

☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]

☐ Broken or leaking containers (detail actions below)

☐ Sample container type or labeled chemical preservation inappropriate

☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: STR Date Completed: 5-12-17

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140470

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

10 LTA ___ 250P WC-05112017 JR-mw029s2

___ LTA ___ 250P

___ LTA ___ 250P

___ LTA ___ 250P

VOC

Cooler 5 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4297 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.8 Corrected Reading (°C) 2.4
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-12-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140470
14070

Client Name: Oxy

Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P WC-05122017JK-MW019S2
4 LTA 1 250P WG 05122017 JK MW027S1
___ LTA ___ 250P
___ LTA ___ 250P
VOC

Cooler 6 **of** 21 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4329 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 2.5 Corrected Reading (°C) 2.1
Temperature. By: Temperature Blank Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR **Date Completed:** 5-12-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140470
140470

Client Name: Oxy

Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P WG 05122017JR MW005S3
4 LTA 1 250P ↓ MW010S1
___ LTA ___ 250P
___ LTA ___ 250P
VOC

Cooler 7 **of** 21 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4339 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____

Seal Name: _____ Seal Date: _____

Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.7 Corrected Reading (°C) 1.3

Temperature. By: Temperature Blank Surface Temperature

Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from:
  - Cover Letter ☐ Container ☐
  - PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR **Date Completed:** 5-12-17

Pace Analytical Services, Inc. Pace Order No.: 140470

Cooler/Sample Receipt Form (C/S RF) 140470

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

10 LTA 250P WG05122017 DF-TW35A

1 LTA 250P ↓ FA10

LTA 250P

LTA 250P

VOC

Cooler 8 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4662 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 4.6 Corrected Reading (°C) 4.2
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-12-17

Pace Analytical Services, Inc. Pace Order No.: 14407 140470

Cooler/Sample Receipt Form (C/S RF) 140470 Rev 17

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P WG05122017JR - MW027S2
4 LTA 250P ↓ MW018S1
LTA 250P
LTA 250P
VOC

Cooler 9 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4156 / Client's Cooler / Box / Letter / Hand-delivered
Other:

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / (Field Svc) / Mail / Walk-In / Other:

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No:
Seal Name: Seal Date:
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other:

Cooler Temperature (°C): Original Reading (°C) 2.8 Corrected Reading (°C) 2.4
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies:

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-12-17.

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140470

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P WG05112017 BS-FD009
4 LTA 1 250P ↓ AMW108s
2 LTA 250P WG05112017 DF-MW139-2/S3
1 LTA 250P WG05112017 DF-MW03/S1
VOC

Cooler 10 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4334 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Svc~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / ~~N/A~~

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.7 Corrected Reading (°C) 3.3
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-12-17.

Pace Analytical Services, Inc. **Pace Order No.:** 140470 / 140470

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

1 LTA	250P	WG-0512017-DF-FD10
2 LTA	250P	DF-IW40
4 LTA	250P	DF-IW43
4 LTA	250P	DF-IW44
VOC		

Cooler 11 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 3034 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / (Field Svc) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 4.5 Corrected Reading (°C) 4.1
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-12-17

Pace Analytical Services, Inc. Pace Order No.: 140470

Cooler/Sample Receipt Form (C/S RF) 140470

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LTA — 250P WG-05/2-2017 AF-IW32
2 LTA — 250P ↓ AF-IW36
1 LTA — 250P ↓ AF IW46
1 LTA — 250P ↓ AF - FD10
VOC 2 LTA ↓ IW40

Cooler 12 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 67 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / (Field Svc) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.3 Corrected Reading (°C) 2.9
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-12-17.

Pace Analytical Services, Inc. Pace Order No.: 140470 / 140470

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

1 LTA	250P . WC051217 DF	IW46.
2 LTA	250P	IW45
1 LTA	250P	IW35A
1 LTA	250P	IW35B ~~IW35B~~ 5-12-17
VOC	4 LTA	IW 29.

Cooler 13 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: AS / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 4.0 Corrected Reading (°C) 3.6
Temperature, By: Temperature Blank / Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and ~~date received~~ = date sampled T

Sample Receipt Discrepancies: ☐ No ☑ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

IW45- Lid Loose, -Lost Est 500mls.

Completed by: SKR Date Completed: 5-12-17.

Pace Analytical Services, Inc. Pace Order No.: 140470 / 14070

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LTA 250P WG05/22/17 OF - EW30
4 LTA 250P ↓ EW31
2 LTA 250P ↓ OF - EW36
LTA 250P
VOC

Cooler 14 of 22 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4337 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 4.2 Corrected Reading (°C) 3.8
Temperature. By: Temperature Blank / Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-12-17

Pace Analytical Services, Inc. Pace Order No.: 140470

Cooler/Sample Receipt Form (C/S RF) 140470

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4 LTA 1 250P WG-051201) - BS - ANW 101D
4 LTA 1 250P BS - ANW 101T
1 LTA 250P RI - ANW 101S
LTA 250P
VOC

Cooler 15 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 14352 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 5.7 Corrected Reading (°C) 5.3
Temperature. By: Temperature Blank / Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☒ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-12-17

Pace Analytical Services, Inc. Pace Order No.: 140470

Cooler/Sample Receipt Form (C/S RF) 140470

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

2 LTA 0 250P - WG - 05/17/17 - DF - FD8
4 LTA 1 250P DF - MW00453
4 LTA 1 250P DF - MW13315/5
1 LTA 1 250P DF - MW00451
VOC

Cooler 16 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 11278 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / (Field Svc) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: _____
Seal Name: _____ Seal Date: _____
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.5 Corrected Reading (°C) 3.1
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☒ No ☐ Yes (See below for discrepancies.)

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-12-17.

Pace Analytical Services, Inc. Pace Order No.: 146470 / 14090

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4	LTA 1 250P - W6 - 05112017	DP - MW 0135 1
4	LTA 1 250P	DP - MW 0135 3
2	LTA 1 250P	DP - MW 139 S2/S3
0	LTA 1 250P	DP - MW 0315 1
4	VOC 1 250P	DP - FDX

Cooler 17 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: 1216 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / Field Svc / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 4.7 Corrected Reading (°C) 4.3
Temperature. By: Temperature Blank / Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR Date Completed: 5-12-17

Pace Analytical Services, Inc. Pace Order No.: 140470 / 140470

Cooler/Sample Receipt Form (C/S RF)

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 0 250P WG-05122017-DF-IW41
4 LTA 0 250P DF-IW42
2 LTA 0 250P DF-IW46
— LTA — 250P
VOC 15-12m

Cooler 18 **of** 21 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4109 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / Field Svc / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 6.0 Corrected Reading (°C) 5.6
Temperature. By: Temperature Blank / Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☒ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: STR **Date Completed:** 5-12-17

Pace Analytical Services, Inc. **Pace Order No.:** 140470

Cooler/Sample Receipt Form (C/S RF) 140470

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 0 250P WG - OJ 122013 DF MW010 53
1 LTA 0 250P ↓ DF-IW35A
2 LTA 0 250P ↓ DF-IW45
3 LTA 0 250P ↓ DF-IW35B
1 VOC 0 250P DF-IW46

Cooler 19 **of** 21 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 1238 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 6.0 Corrected Reading (°C) 5.6
Temperature. By: Temperature Blank Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☑ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time

☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: SKR **Date Completed:** 5-12-17

Pace Analytical Services, Inc. Pace Order No.: 140470

Cooler/Sample Receipt Form (C/S RF) 140470

Client Name: Oxy Pace File No.: 7775

Sample ID's in cooler:

4	LTA 1 250P	- WG - 5/12/2017	- BS - MW 01951
4	LTA 1 250P	-	BS - MW 01954
3	LTA 1 250P	-	BS - AMW 1015
	LTA 1 250P	- Unknown	
	VOC		

Cooler 20 of 21 for this Pace Order No.

Cooler Identification: Pace Cooler #: MW / Client's Cooler / Box / Letter / Hand-delivered
Other:

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other:

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No:
Seal Name: Seal Date:
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other:

Cooler Temperature (°C): Original Reading (°C) 4.4 Corrected Reading (°C) 4.0
Temperature. By: Temperature Blank / Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☐ No ☒ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☒ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies:

Detail to discrepancies/comments: 250 mL - No information on label
Possibly - BS-MW 01954

Completed by: SKR Date Completed: 5-12-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140470 140470

Client Name: Oxy **Pace File No.:** 7775

Sample ID's in cooler:

4 LTA 1 250P WG-05 | 2017-BS AMW003
1 LTA G 250P | BS AMW 105
1 LTA 0 250P | -DC MW00451
3 LTA 1 250P | BS AMW 104
2 ~~VOC~~ LTA 0 250P | DF MW 03151
1LTA - DF - FD8

Cooler 21 **of** 21 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4338 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/12/17 16:55

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.5 Corrected Reading (°C) 3.1
Temperature. By: Temperature Blank Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☒ No ☒ Yes 16:27 **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from:
  - Cover Letter ☐ Container ☐
  - PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

1- LTA Mark AMW105 - 10C AMW104, No 105 Sample.

Completed by: SKR **Date Completed:** 5-12-17

Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date and Time Received: 05/17/2017 1700
Pace File No.: 7775
Pace Order No.: 140565
P.O./Project No: 4502201562-11119420
Project ID: OXY WICHITA GWM
Purchase Auth: SSOW251-402-D02-3100

Dear Ms. Thurman:

This laboratory report, containing the samples indicated below, includes 26 pages for the analytical report, 1 page(s) for the chain of custody and/or analysis request, and 4 page(s) for the sample receipt form.

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17051590	WG-05152017-JR-ER14	Liquid	5/15/2017
17051591	WG-05152017-JR-ER15	Liquid	5/15/2017
17051592	WG-05172017-JR-AP2800	Liquid	5/17/2017
17051592R	WG-05172017-JR-AP2800	Liquid	5/17/2017
17051593	WG-05172017-JR-DW5	Liquid	5/17/2017
17051594	WG-05172017-JR-DW6	Liquid	5/17/2017
17051595	WG-05172017-JR-DW7	Liquid	5/17/2017
17051596	WG-05172017-JR-FD11	Liquid	5/17/2017
17051597	TB12	Liquid	

The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

Samples will be retained for thirty days unless Pace is otherwise notified. Pace is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Pace's Standard Operating Procedures. These procedures are in substantial compliance with the approved methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.

Thank you for choosing Pace for this project.

Gregory J. Groene
Project Manager
Gregory.Groene@pacelabs.com

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Lab Number: 17051590
Sample Description: WG-05152017-JR-ER14

Date Sampled: 05/15/2017
Time Sampled: 1100

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/209
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/209
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/209
Hexachloroethane	0.25	µg/L	1.0	0.02	7460/209
Hexachlorobutadiene	1.22	µg/L	1.0	0.02	7460/209
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/209
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/398
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/398
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/267

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/24/17 0051	170518-3	2NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/24/17 0051	170518-3	2NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 1038	170519-2	3EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/25/17 0325	170519-1	2MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 1540	1MS5139	1MS5139	RKR	8260B
Hardness (Calculated)	05/23/17 1015	05/24/17 2348	170523-4	14IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/27/17 0150	1IC2146	2IC2146	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051590

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Lab Number: 17051591
Sample Description: WG-05152017-JR-ER15

Date Sampled: 05/15/2017
Time Sampled: 1130

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/209
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/209
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/209
Hexachloroethane	0.21	µg/L	1.0	0.02	7460/209
Hexachlorobutadiene	0.28	µg/L	1.0	0.02	7460/209
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/209
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/398
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/398
Hardness (Calculated)	ND(5.0)	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	ND(1.0)	mg/L	1.0	1.0	7551/267

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/24/17 0130	170518-3	2NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/24/17 0130	170518-3	2NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 1118	170519-2	3EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/25/17 0405	170519-1	2MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 1606	1MS5139	1MS5139	RKR	8260B
Hardness (Calculated)	05/23/17 1015	05/24/17 2352	170523-4	14IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/27/17 0201	1IC2146	2IC2146	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051591

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Lab Number: 17051592
Sample Description: WG-05172017-JR-AP2800

Date Sampled: 05/17/2017
Time Sampled: 1235

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.					
A-BHC	ND(0.011) QC	µg/L	1.0	0.011	7460/209
B-BHC	ND(0.037) QC	µg/L	1.0	0.037	7460/209
G-BHC	ND(0.052) QC	µg/L	1.0	0.052	7460/209
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/209
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/209
Hexachlorobenzene	ND(0.10) QC	µg/L	1.0	0.10	7460/209
D-BHC	ND(0.05) QC	µg/L	1.0	0.05	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE QC	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE QC	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/398
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/398
Hardness (Calculated)	313	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	46	mg/L	10	10	7551/267

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/24/17 0209	170518-3	2NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/24/17 0209	170518-3	2NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 0125	170519-2	2EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/24/17 2311	170519-1	1MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 1632	1MS5139	1MS5139	RKR	8260B
Hardness (Calculated)	05/23/17 1015	05/24/17 2356	170523-4	14IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/27/17 0212	1IC2146	2IC2146	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051592

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Lab Number: 17051592R
Sample Description: WG-05172017-JR-AP2800

Date Sampled: 05/17/2017
Time Sampled: 1235

A laboratory number ending with R is from a second preparation and/or analysis of the sample.

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY GC/MS Acids	HP				
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
2,4-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/333
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/333
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY GC/MS Acids	05/26/17 0800	05/26/17 1646	170526-2	1MS6146	JMM	8270C
Acid Preparation Method						625/3510C

Conclusion of Lab Number: 17051592R

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Lab Number: 17051593
Sample Description: WG-05172017-JR-DW5

Date Sampled: 05/17/2017
Time Sampled: 1315

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/209
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/209
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/209
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/209
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/209
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/209
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/398
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/398
Hardness (Calculated)	186	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	78	mg/L	10	10	7551/267

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/24/17 0407	170518-3	2NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/24/17 0407	170518-3	2NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 1157	170519-2	3EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/25/17 0445	170519-1	2MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 1751	1MS5139	1MS5139	RKR	8260B
Hardness (Calculated)	05/23/17 1015	05/25/17 0013	170523-4	14IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/27/17 0246	1IC2146	2IC2146	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051593

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Lab Number: 17051594
Sample Description: WG-05172017-JR-DW6

Date Sampled: 05/17/2017
Time Sampled: 1325

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/209
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/209
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/209
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/209
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/209
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/209
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/398
Carbon tetrachloride	2.7	µg/L	1.0	0.5	7464/398
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/398
Hardness (Calculated)	215	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	38.5	mg/L	1.0	1.0	7551/267

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/24/17 0446	170518-3	2NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/24/17 0446	170518-3	2NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 1357	170519-2	4EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/25/17 0525	170519-1	2MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 1816	1MS5139	1MS5139	RKR	8260B
Hardness (Calculated)	05/23/17 1015	05/25/17 0018	170523-4	14IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/27/17 0258	1IC2146	2IC2146	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051594

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Lab Number: 17051595
Sample Description: WG-05172017-JR-DW7

Date Sampled: 05/17/2017
Time Sampled: 1335

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/209
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/209
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/209
Hexachloroethane	0.12	µg/L	1.0	0.02	7460/209
Hexachlorobutadiene	0.60	µg/L	1.0	0.02	7460/209
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/209
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/209
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/398
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/398
Hardness (Calculated)	201	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	55	mg/L	10	10	7551/267

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/24/17 0525	170518-3	2NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/24/17 0525	170518-3	2NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/24/17 1436	170519-2	4EX3143	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/25/17 0605	170519-1	2MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 1843	1MS5139	1MS5139	RKR	8260B
Hardness (Calculated)	05/23/17 1015	05/25/17 0022	170523-4	14IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/27/17 0309	1IC2146	2IC2146	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051595

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Lab Number: 17051596
Sample Description: WG-05172017-JR-FD11

Date Sampled: 05/17/2017
Time Sampled: 0000

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/185
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/185
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/210
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/210
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/210
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/210
Hexachlorobutadiene	0.08	µg/L	1.0	0.02	7460/210
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/210
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/210
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,4,5-Trichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7470/442
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7470/442
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7470/442
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/398
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/398
Hardness (Calculated)	186	mg/L as CaCO3	1.0	5.0	7443/998
Chloride	79	mg/L	10	10	7551/267

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/18/17 1600	05/24/17 0604	170518-3	2NX5143	JMM	8151A(M)
Pentachlorophenol	05/18/17 1600	05/24/17 0604	170518-3	2NX5143	JMM	8151A(M)
OXY Chlorinated Hyd.	05/19/17 1100	05/25/17 0153	170519-2	1EX3144	SPA	8121
OXY GC/MS Acids	05/19/17 0900	05/25/17 0645	170519-1	2MS7144	JMM	8270C
OXY Volatiles by 8260	N/A	05/19/17 1909	1MS5139	1MS5139	RKR	8260B
Hardness (Calculated)	05/23/17 1015	05/25/17 0035	170523-4	15IP4144	KMW	6010B & SM 2340B
Chloride	N/A	05/27/17 0343	1IC2146	3IC2146	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17051596

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Lab Number: 17051597
Sample Description: TB12

Date Sampled:
Time Sampled:

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Benzene	ND(0.5)	µg/L	1.0	0.5	7464/398
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloroform	ND(0.5)	µg/L	1.0	0.5	7464/398
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7464/398
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7464/398
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7464/398
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7464/398

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/19/17 1935	1MS5139	1MS5139	RKR	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17051597

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Appendix

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

ND indicates not detected with the LOQ (Limit of Quantitation) in parentheses. The LOQ value has been adjusted for the dilution factor and percent solids, as applicable. Due to rounding of significant figures, the LOQ value may vary slightly from the reported concentration. The LOQ is the lowest concentration of the analytical standard that was used for calibrating the instrument. If an analytical standard is analyzed at the LOQ, an error of as much as +/- 50% can be expected. N/A, if present, indicates not applicable.

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

No analysis with a holding time of seventy-two hours or less was performed in this Pace order.

Due to the absence of sampling date and/or time information, the holding time for preparation and/or analysis may not have been qualified correctly for applicable samples within this order number. The data may or may not be useable for compliance purposes.

QC - QC data qualifiers were noted. See the Quality Control Report.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

HP - Regulatory preparation holding time for this analysis was exceeded.

Following is the full name of each analyst that performed analysis(es) on this Pace order number:

Analyst Initials	Analyst Full Name
JMM	Julie M. McCullough
KMW	Keegan M. Wilson
MLL	Melissa L. Lundgrin
RKR	Rhonda K. Reilly
SPA	Stephen P. Albin

Accreditation Summary

Client: Occidental Chemical Corporation_Oxy
Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Pace is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Pace is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Pace's full NELAP accreditation status may be viewed at www.kdheks.gov/envlab. Note that unless qualified otherwise in the Laboratory Report, Pace performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

Test	Analysis	Matrix-Regulatory Program	Method	Pace NELAP Accredited in Other Reg. Program
CL351	OXY Chlorinated Hyd.	L-RCRA	8121	
CL351	Hexachloroethane	L-RCRA	8121	No
CL351	Hexachlorobutadiene	L-RCRA	8121	No
MS302	OXY GC/MS Acids	L-RCRA	8270C	
MS302	3-& 4-Chlorophenol	L-RCRA	8270C	No
MS302	2,5-Dichlorophenol	L-RCRA	8270C	No
MS302	2,3,4,5-Tetrachlorophenol	L-RCRA	8270C	No

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170518-3	170518BLK3 05/23/17 1819	170518LCS3 05/23/17 1858	17051592MS 05/24/17 0249
Lab numbers associated with this batch: 17051590 17051591 17051592 17051593 17051594 17051595 17051596					
CL350	Pentachlorophenol	170518-3	170518BLK3 05/23/17 1819	170518LCS3 05/23/17 1858	17051592MS 05/24/17 0249
Lab numbers associated with this batch: 17051590 17051591 17051592 17051593 17051594 17051595 17051596					
CL351	OXY Chlorinated Hyd.	170519-2	170519BLK2 05/24/17 0006	170519LCS2 05/24/17 0045	17051592MS 05/24/17 0204
Lab numbers associated with this batch: 17051590 17051591 17051592 17051593 17051594 17051595 17051596					
MS302	OXY GC/MS Acids	170519-1	170519BLK1 05/24/17 1707	170519LCS1 05/24/17 1747	17051592MS 05/24/17 2351
Lab numbers associated with this batch: 17051590 17051591 17051592 17051593 17051594 17051595 17051596					
MS302	OXY GC/MS Acids	170526-2	170526BLK2 05/26/17 1525	170526LCS2 05/26/17 1606	17051592RS 05/26/17 1727
Lab numbers associated with this batch: 17051592R					
MS350	OXY Volatiles by 8260	1MS5139	BLK1MS5139 05/19/17 1423	LCS1MS5139 05/19/17 1331	17051592MS 05/19/17 1658
Lab numbers associated with this batch: 17051590 17051591 17051592 17051593 17051594 17051595 17051596 17051597					
SL423	Hardness (Calculated)	170523-4	170523BLK4 05/24/17 2302	170523LCS4 05/24/17 2306	17051592MS 05/25/17 0001
Lab numbers associated with this batch: 17051590 17051591 17051592 17051593 17051594 17051595 17051596					
GL502	Chloride	1IC2146	BLK1IC2146 05/26/17 2234	LCS1IC2146 05/26/17 2323	17051592MS 05/27/17 0224
Lab numbers associated with this batch: 17051590 17051591 17051592 17051593 17051594 17051595 17051596					

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170518-3	**For samples prepared on: 05/18/2017 1600**					**Spiked sample: 17051592**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	65.1	58.8-127	4.0	µg/L	93.6	94.6	64.6-126	4.0	µg/L	1.10	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	89.1	95.1	62.2-119	5.0	µg/L	99.8	102	62.2-119	5.0	µg/L		
QC Batch: 170518-3	**For samples prepared on: 05/18/2017 1600**					**Spiked sample: 17051592**						
Pentachlorophenol	ND(0.5)	85.0	66.3-127	4.0	µg/L	23.2	21.0	7.60-144	4.0	µg/L	10.0	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	89.1	95.1	62.2-119	5.0	µg/L	99.8	102	62.2-119	5.0	µg/L		
QC Batch: 170519-1	**For samples prepared on: 05/19/2017**					**Spiked sample: 17051592**						
1,4-DICHLOROBENZENE-d4	94.71	100.11	#	N/A	SVOA	104.88	102	#	N/A	SVOA		
ACENAPHTHENE-d10	93.85	86.13	#	N/A	SVOA	105.22	101.02	#	N/A	SVOA		
NAPHTHALENE-d8	94.45	88.21	#	N/A	SVOA	103.95	93.75	#	N/A	SVOA		
PHENANTHRENE-d10	82.73	80.98	#	N/A	SVOA	98.37	97.62	#	N/A	SVOA		
CHRYSENE-d12	70.25	73.99	#	N/A	SVOA	79.95	82.55	#	N/A	SVOA		
PERYLENE-d12	68.8	71.14	#	N/A	SVOA	71.47	72.06	#	N/A	SVOA		
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	83.7	75.9-99.3	150	µg/L	0.0 SE	0.0 SE	75.1-100	50.0	µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	72.4	56.0-90.2	150	µg/L	0.0 SE	0.0 SE	58.8-91.2	50.0	µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	93.9	68.2-106	150	µg/L	0.0 SE	0.0 SE	65.6-112	50.0	µg/L	**	21.2
2,5-Dichlorophenol	ND(5.0)	94.9	73.9-103	150	µg/L	0.0 SE	0.0 SE	65.4-106	50.0	µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	95.9	78.3-104	150	µg/L	0.0 SE	0.0 SE	76.7-107	50.0	µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	110. LH	75.3-109	150	µg/L	0.0 SE	0.0 SE	72.4-114	50.0	µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	101	77.1-110	150	µg/L	0.0 SE	0.0 SE	75.0-116	50.0	µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	96.0 CE	72.5-115	300	µg/L	0.0 CE SE	0.0 CE SE	74.5-120	100	µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0) CE	96.0 CE	71.6-118	300	µg/L	0.0 CE SE	0.0 CE SE	73.7-122	100	µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	39.3	40.5	25.6-44.5	150	µg/L	37.3	22.3 SL	25.6-44.5	150	µg/L		
2-FLUOROPHENOL	58.4	63.8	42.2-68.2	150	µg/L	54.9	35.5 SL	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	89.9	105	53.9-131	150	µg/L	89.5	73.3	53.9-131	150	µg/L		
QC Batch: 170519-2	**For samples prepared on: 05/19/2017 1100**					**Spiked sample: 17051592**						
OXY Chlorinated Hyd.												
A-BHC	ND(0.011)	105	75.0-125	0.50	µg/L	106	83.2 MP	76.1-127	0.50	µg/L	24.1	16.0
B-BHC	ND(0.037)	109	68.0-125	0.50	µg/L	112	87.8 MP	71.5-125	0.50	µg/L	24.2	18.0
G-BHC	ND(0.052)	105	72.5-123	0.50	µg/L	109	86.6 MP	73.9-126	0.50	µg/L	22.9	17.4
Hexachloroethane	ND(0.02)	102	55.1-115	0.50	µg/L	104	88.6	45.8-118	0.50	µg/L	16.0	33.4
Hexachlorobutadiene	ND(0.02)	102	35.3-134	0.50	µg/L	104	88.0	36.7-122	0.50	µg/L	16.7	37.9
Hexachlorobenzene	ND(0.10)	105	63.7-119	0.50	µg/L	107	85.6 MP	62.9-119	0.50	µg/L	22.2	20.7
D-BHC	ND(0.05)	110	70.6-126	0.50	µg/L	114	87.6 MP	71.7-131	0.50	µg/L	26.2	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	92.8	89.0	65.9-110	8.0	µg/L	92.0	74.5	65.9-110	8.0	µg/L		
QC Batch: 170523-4	**For samples prepared on: 05/23/2017 1015**					**Spiked sample: 17051592**						
Hardness (Calculated)	ND(5.0)	93.2	80.0-120	357	mg/L a	84.8	86.7	80.0-120	357	mg/L a	2.20	20.0
QC Batch: 170526-2	**For samples prepared on: 05/26/2017**					**Spiked sample: 17051592R**						
1,4-DICHLOROBENZENE-d4	93.56	111	#	N/A	SVOA	116.75	74.13	#	N/A	SVOA		
ACENAPHTHENE-d10	98.57	115.71	#	N/A	SVOA	119.98	77.15	#	N/A	SVOA		
NAPHTHALENE-d8	95.05	111.07	#	N/A	SVOA	116.88	76.87	#	N/A	SVOA		
PHENANTHRENE-d10	93.77	119.87	#	N/A	SVOA	120.45	81.73	#	N/A	SVOA		
CHRYSENE-d12	94.01	125.35	#	N/A	SVOA	118.96	88.24	#	N/A	SVOA		

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170526-2	**For samples prepared on: 05/26/2017**					**Spiked sample: 17051592R**						
PERYLENE-d12	86.36	114.58	#	N/A	SVOA	104.61	78.93	#	N/A	SVOA		
OXY GC/MS Acids												
2-Chlorophenol	ND(5.0)	90.3	75.9-99.3	50.0	µg/L	90.0	81.4	75.1-100	50.0	µg/L	10.0	13.9
3-& 4-Chlorophenol	ND(5.0)	82.0	56.0-90.2	50.0	µg/L	78.2	68.9	58.8-91.2	50.0	µg/L	12.6	14.5
2,4-Dichlorophenol	ND(5.0)	108 LH	68.2-106	50.0	µg/L	96.3	80.8	65.6-112	50.0	µg/L	17.5	21.2
2,5-Dichlorophenol	ND(5.0)	93.9	73.9-103	50.0	µg/L	102	93.4	65.4-106	50.0	µg/L	8.80	27.7
2,6-Dichlorophenol	ND(5.0)	102	78.3-104	50.0	µg/L	99.7	90.5	76.7-107	50.0	µg/L	9.70	13.4
2,4,5-Trichlorophenol	ND(5.0)	101	75.3-109	50.0	µg/L	103	91.4	72.4-114	50.0	µg/L	11.9	12.9
2,4,6-Trichlorophenol	ND(5.0)	103	77.1-110	50.0	µg/L	100.	90.1	75.0-116	50.0	µg/L	10.4	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	106 CE	72.5-115	100	µg/L	104 CE	93.1 CE	74.5-120	100	µg/L	11.1	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	113	71.6-118	50.0	µg/L	106	99.8	73.7-122	50.0	µg/L	6.00	13.4
Surrogate Data:												
PHENOL-d6	36.5	36.2	25.6-44.5	150	µg/L	34.2	31.1	25.6-44.5	150	µg/L		
2-FLUOROPHENOL	58.2	58.3	42.2-68.2	150	µg/L	53.7	49.7	42.2-68.2	150	µg/L		
2,4,6-TRIBROMOPHENOL	111	127	53.9-131	150	µg/L	127	108	53.9-131	150	µg/L		
QC Batch: 1IC2146	**For sample analyzed on: 05/26/2017**					**Spiked sample: 17051592**						
Chloride	ND(1.0)	92.9	90.0-110	4.0	mg/L	89.0	86.6	68.4-120	40.0	mg/L	2.70	21.6
QC Batch: 1MS5139	**For sample analyzed on: 05/19/2017**					**Spiked sample: 17051592**						
PENTAFLUOROBENZENE	110.34	118.4	#	N/A	VOA	105.59	109	#	N/A	VOA		
CHLOROBENZENE-d5	106.52	117.13	#	N/A	VOA	111.04	110.62	#	N/A	VOA		
1,4-DCB-d4	101.12	119.02	#	N/A	VOA	111.06	111.04	#	N/A	VOA		
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	101	80.0-120	10.0	µg/L	104	102	83.0-121	10.0	µg/L	1.90	9.8
1,2-Dichloroethane	ND(0.5)	94.6	75.6-120	10.0	µg/L	101	95.8	77.5-122	10.0	µg/L	5.30	9.5
Benzene	ND(0.5)	91.4	80.0-120	10.0	µg/L	95.6	94.6	82.7-117	10.0	µg/L	1.10	8.3
Carbon tetrachloride	ND(0.5)	107	79.9-125	10.0	µg/L	106	107	79.0-125	10.0	µg/L	0.940	13.6
Chloroform	ND(0.5)	93.1	79.6-120	10.0	µg/L	94.8	94.9	78.4-117	10.0	µg/L	0.110	9.2
Chloromethane	ND(0.5)	94.3	70.2-127	10.0	µg/L	98.2	101	69.7-129	10.0	µg/L	2.80	15.9
Methylene chloride	ND(0.5)	96.3	77.1-120	10.0	µg/L	102	100.	76.3-119	10.0	µg/L	2.00	9.6
Tetrachloroethylene	ND(0.5)	105	80.0-120	10.0	µg/L	108	105	82.0-121	10.0	µg/L	2.80	11.3
Trichloroethylene	ND(0.5)	95.6	80.0-120	10.0	µg/L	103	98.2	79.3-120	10.0	µg/L	4.80	13.7
Vinyl chloride	ND(0.5)	107	76.2-128	10.0	µg/L	117	113	78.0-130	10.0	µg/L	3.50	14.6
1,2-Dichloropropane	ND(0.5)	91.1	79.5-120	10.0	µg/L	101	97.7	81.7-117	10.0	µg/L	3.30	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	104	104	76.2-126	10.0	µg/L	105	100.	76.2-126	10.0	µg/L		
TOLUENE-d8	100.	104	80.0-120	10.0	µg/L	102	103	80.0-120	10.0	µg/L		

Data Qualifiers:
SE - Does not meet QC criteria. A spiking error is suspected.

LH - The Laboratory Control Sample (LCS) recovery for this analyte was above the method or laboratory quality control limit. The reported sample concentration may be biased high.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

SL - The surrogate recovery for this analysis was below the method or laboratory control limits. The reported sample concentration may be biased low.

MP - The MS/MSD recoveries for this analyte exceeded the method or laboratory precision control limit. The reported sample concentration is estimated.

- Limits not applicable/not available for this analysis.

** - RPD calculation not applicable/not available for this analysis.

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051590		**Sample Description: WG-05152017-JR-ER14**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	85.6	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	85.6	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	89.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/25/2017	150	µg/L	36.2	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/25/2017	150	µg/L	57.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/25/2017	150	µg/L	84.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	107	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	98.0	80.0-120
Lab Number: 17051591		**Sample Description: WG-05152017-JR-ER15**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	83.4	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	83.4	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	87.7	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/25/2017	150	µg/L	38.9	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/25/2017	150	µg/L	59.1	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/25/2017	150	µg/L	91.2	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	107	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	101	80.0-120
Lab Number: 17051592		**Sample Description: WG-05172017-JR-AP2800**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	85.1	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	85.1	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	86.2	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/24/2017	150	µg/L	39.0	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/24/2017	150	µg/L	58.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/24/2017	150	µg/L	96.9	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	106	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	98.4	80.0-120
Lab Number: 17051592R		**Sample Description: WG-05172017-JR-AP2800**				
OXY GC/MS Acids						
PHENOL-d6	05/26/2017	05/26/2017	150	µg/L	33.9	25.6-44.5
2-FLUOROPHENOL	05/26/2017	05/26/2017	150	µg/L	56.2	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/26/2017	05/26/2017	150	µg/L	111	53.9-131
Lab Number: 17051593		**Sample Description: WG-05172017-JR-DW5**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	89.5	62.2-119

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051593		**Sample Description: WG-05172017-JR-DW5**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	89.5	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	89.6	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/25/2017	150	µg/L	36.7	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/25/2017	150	µg/L	56.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/25/2017	150	µg/L	89.0	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	101	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	100.	80.0-120
Lab Number: 17051594		**Sample Description: WG-05172017-JR-DW6**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	86.8	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	86.8	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	87.9	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/25/2017	150	µg/L	37.9	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/25/2017	150	µg/L	57.0	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/25/2017	150	µg/L	90.6	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	102	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	100.	80.0-120
Lab Number: 17051595		**Sample Description: WG-05172017-JR-DW7**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	87.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	87.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/24/2017	8.0	µg/L	77.0	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/25/2017	150	µg/L	38.3	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/25/2017	150	µg/L	58.7	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/25/2017	150	µg/L	92.1	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	97.6	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	102	80.0-120
Lab Number: 17051596		**Sample Description: WG-05172017-JR-FD11**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	81.9	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/18/2017	05/24/2017	5.0	µg/L	81.9	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/19/2017	05/25/2017	8.0	µg/L	86.4	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/19/2017	05/25/2017	150	µg/L	36.0	25.6-44.5
2-FLUOROPHENOL	05/19/2017	05/25/2017	150	µg/L	54.9	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/19/2017	05/25/2017	150	µg/L	92.2	53.9-131

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17051596		**Sample Description: WG-05172017-JR-FD11**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	102	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	101	80.0-120
Lab Number: 17051597		**Sample Description: TB12**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/19/2017	10	µg/L	97.0	76.2-126
TOLUENE-d8		05/19/2017	10	µg/L	100.	80.0-120

Quality Control Report
Continuing Calibration Report

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 05/31/2017
Date Received: 05/17/2017
Pace File No: 7775
Pace Order No: 140565

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
2,4-Dichlorophenoxyacetic Acid	05/24/2017	2NX5143	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/24/2017	3NX5143	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/24/2017	2NX5143	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/24/2017	3NX5143	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/23/2017	2EX3143	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/24/2017	3EX3143	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/24/2017	4EX3143	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/24/2017	5EX3143	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/24/2017	1EX3144	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/25/2017	2EX3144	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/27/2017	2IC2146	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/27/2017	3IC2146	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/27/2017	4IC2146	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/26/2017	1MS6146	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/24/2017	1MS7144	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/25/2017	2MS7144	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/25/2017	3MS7144	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/19/2017	1MS5139	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/20/2017	2MS5139	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/24/2017	14IP4144	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/25/2017	15IP4144	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	05/25/2017	16IP4144	CCV recovery acceptable for this Instrument Batch.			

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Discrepancies
See C/S RF
Edits made prior to sample receipt

140565

Page: of

2059263

Section A Required Client Information:

Company:	GHD
Address:	2626 W. Pawnee Wichita, KS
Email To:	Travis Kogl
Phone:	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Travis Kogl
Copy To:	Paul McMahon
Purchase Order No.:	
Project Name:	11137148
Project Number:	Oxy Spring 2017 GWM

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOCs	SVOCs	Pest/Herb	Chloride/Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05152017-JR-ER14	WT	G			5/15	1100		8	5			3						X	X	X	X		
2	WG-05152017-JR-ER15					5/15	1130		8	5			3						X	X	X	X		
3	WG-05172017-JR-AP2800					5/17	1235		24	15			9						X	X	X	X		
4	WG-05172017-JR-DW5						1315		8	5			3						X	X	X	X		
5	WG-05172017-JR-DW6						1325		8	5			3						X	X	X	X		
6	WG-05172017-JR-DW7						1335		8	5			3						X	X	X	X		
7	WG-05172017-JR-FD11						0:00		8	5			3						X	X	X	X		
8	TB12						–		3				3						X					
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] GHD	5/17/17	1445	[signature]	5/17/17	1445	
	[signature]	5/17/17	1700	[signature]	5/17/17	1700	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeremy Raye

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 5/17/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical Services, Inc. Pace Order No.: 140565

Cooler/Sample Receipt Form (C/S RF)

Client Name: Occidental Pace File No.: 7775

Sample ID's in cooler:

10 LHA, 3-250mL WG-05172017-JR-AP2800.

Cooler 1 of 4 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4335 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/17/17 17:00

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: (no) Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 4.9 Corrected Reading (°C) 4.5
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 5-85 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☒ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: [signature] Date Completed: 5-17-17

Pace Analytical Services, Inc. Pace Order No.:

Cooler/Sample Receipt Form (C/S RF) 140565

Client Name: Occidental Pace File No.: 7775

Sample ID's *in cooler*: 4 LTA, 1-250mL WG05172017JR-DW5
2 LTA, 1-250mL WG0517 2017 JR DW6
4 LTA, 1-250mL WG05172017 JR FD11

Cooler 2 of 4 for this Pace Order No.

Cooler Identification: Pace Cooler #: 4334 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/17/17 17:00

Delivered By: UPS / FedX / AB Express / ~~Field Svcs~~ / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ~~X~~ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / ~~Ice~~ / Melted Ice / ~~Bubble~~ / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 3.8 Corrected Reading (°C) 3.4
Temperature. By: ~~Temperature Blank~~ Surface Temperature
Thermo. ID No.: 568 5/17/17 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ☒ No ☐ Yes **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from: Cover Letter ☐ Container ☐ PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: [signature] Date Completed: 5-17-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140565

Client Name: OCC Intl

Pace File No.: 7775

Sample ID's in cooler: 4-LTA · WG05152017IR-ER15, 2-250mL
2-LTA WG05172017IR -AP2800
~~250mL~~ 5-18-17.
4-LTA WG05152017IR- ER14

Cooler 3 **of** 4 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4338 / Client's Cooler / Box / Letter / Hand-delivered
Other:

Date/Time Cooler Received: 5 / 17 / 17 17:00

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other:

Custody Seal: Present: Intact / Broken Absent Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other:

Cooler Temperature (°C): Original Reading (°C) 4.3 Corrected Reading (°C) 3.9
Temperature. By: Temperature Blank Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled T

Sample Receipt Discrepancies: ~~☐~~ No ☑ Yes **(See below for discrepancies.)**
5-18-17

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from:
  - Cover Letter ☐ Container ☐
  - PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☑ Other discrepancies: Sample ID.

Detail to discrepancies/comments:
Recd 2-250mL Labeled WG05152017IR-ER15, PM Called Client. Separate the 2-250mL PI between the ER14 and ER15 samples. - [illegible] 5/18/17

Completed by: [illegible] **Date Completed:** 5-17-17

Pace Analytical Services, Inc.
Cooler/Sample Receipt Form (C/S RF)

Pace Order No.: 140565

Client Name: Occidental **Pace File No.:** 7775

Sample ID's in cooler:

4-LTA, 1-250mL WG-05172017 JR-DW7
2-LTA WG05172017JR-DW6
9-VOC Sets 1-Set T. Blank.

Cooler 4 **of** 4 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 4332 / Client's Cooler / Box / Letter / Hand-delivered
Other:

Date/Time Cooler Received: 5 / 17 / 17 17 : 00

Delivered By: UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other:

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other:

Cooler Temperature (°C): Original Reading (°C) 4.2 Corrected Reading (°C) 3.8
Temperature. By: Temperature Blank Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4
☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ~~☐ No~~ ☑ Yes **(See below for discrepancies.)** 5-18-17

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

- ☐ Chain of Custody not present - information taken from:
  - Cover Letter ☐ Container ☐
  - PO ☐ Pace Proj. Mgr. ☐
- ☐ Container label absent
- ☐ Chain of Custody incomplete [see detail below]
- ☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
- ☐ Date or Time sampled obtained from container label
- ☐ Chain of Custody missing sampler's name
- ☐ Chain of Custody missing matrix (sample type)
- ☐ Missing relinquished information: signature date time
- ☐ Sample excluded from Chain of Custody
- ☐ Sample listed on Chain of Custody, not received
- ☐ Sample identification on container and Chain of Custody do not agree
- ☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
- ☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement [Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
- ☐ Broken or leaking containers (detail actions below)
- ☐ Sample container type or labeled chemical preservation inappropriate
- ☑ Other discrepancies: Sample ID.

Detail ~~to~~ discrepancies/comments:

Rec'd 4-VOC Labeled ER-14. 1-VOC marked ~~[illegible]~~ 5-18-17 over the hardness with VOC written on it. Per AMC Client. ran out of labeles using this one has the ER-15.

Completed by: [illegible] **Date Completed:** 5-17-17

Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date and Time Received: 05/23/2017 1630
Pace File No.: 7775
Pace Order No.: 140671
P.O./Project No: 4502201562-11119420
Project ID: OXY WICHITA GWM
Purchase Auth: SSOW251-402-D02-3100

Dear Ms. Thurman:

This laboratory report, containing the samples indicated below, includes 11 pages for the analytical report, 1 page(s) for the chain of custody and/or analysis request, and 1 page(s) for the sample receipt form.

PACE LAB ID #	SAMPLE DESCRIPTION	SAMPLE TYPE	DATE SAMPLED
17052046	WG-05222017-JR-MW144S2/S3	Liquid	5/22/2017
17052047	TB-13	Liquid	

The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

Samples will be retained for thirty days unless Pace is otherwise notified. Pace is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Pace's Standard Operating Procedures. These procedures are in substantial compliance with the approved methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.

Thank you for choosing Pace for this project.

Gregory J. Groene
Project Manager
Gregory.Groene@pacelabs.com

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 06/05/2017
Date Received: 05/23/2017
Pace File No: 7775
Pace Order No: 140671

Lab Number: 17052046
Sample Description: WG-05222017-JR-MW144S2/S3

Date Sampled: 05/22/2017
Time Sampled: 1350

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
2,4-Dichlorophenoxyacetic Acid	ND(1.0)	µg/L	1.0	1.0	7462/189
Pentachlorophenol	ND(0.5)	µg/L	1.0	0.5	7462/189
OXY Chlorinated Hyd.					
A-BHC	ND(0.011)	µg/L	1.0	0.011	7460/211
B-BHC	ND(0.037)	µg/L	1.0	0.037	7460/211
G-BHC	ND(0.052)	µg/L	1.0	0.052	7460/211
Hexachloroethane	ND(0.02)	µg/L	1.0	0.02	7460/211
Hexachlorobutadiene	ND(0.02)	µg/L	1.0	0.02	7460/211
Hexachlorobenzene	ND(0.10)	µg/L	1.0	0.10	7460/211
D-BHC	ND(0.05)	µg/L	1.0	0.05	7460/211
OXY GC/MS Acids					
2-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
3-& 4-Chlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
2,4-Dichlorophenol	ND(5.0) QC	µg/L	1.0	5.0	7471/333
2,5-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
2,6-Dichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
2,4,5-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
2,4,6-Trichlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	µg/L	1.0	5.0	7471/333
2,3,4,6-Tetrachlorophenol	ND(5.0)	µg/L	1.0	5.0	7471/333
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/532
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/532
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/532
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/532
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/532
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/532
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/532
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/532
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/532
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/532
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/532
Hardness (Calculated)	325	mg/L as CaCO3	5.0	25	7594/7
Chloride	33.7	mg/L	1.0	1.0	7551/267

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)

-Continued-

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 06/05/2017
Date Received: 05/23/2017
Pace File No: 7775
Pace Order No: 140671

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
2,4-Dichlorophenoxyacetic Ac	05/25/17 1745	05/26/17 1926	170525-3	1NX5146	JMM	8151A(M)
Pentachlorophenol	05/25/17 1745	05/26/17 1926	170525-3	1NX5146	JMM	8151A(M)
OXY Chlorinated Hyd.	05/26/17 1130	05/31/17 0036	170526-1	1EX3150	SPA	8121
OXY GC/MS Acids	05/26/17 0800	05/26/17 1848	170526-2	1MS6146	JMM	8270C
OXY Volatiles by 8260	N/A	05/24/17 2245	1MS8144	1MS8144	GMA	8260B
Hardness (Calculated)	06/02/17 0952	06/02/17 1417	170602-4	2IP4153	KMW	6010B & SM 2340B
Chloride	N/A	05/27/17 0354	1IC2146	3IC2146	MLL	300.0/9056A
Volatile Analysis Preparation Method						5030B
Acid Preparation Method						625/3510C
Herbicides Preparation Method						8151A(M)
Chlorinated Hydrocarbons Preparation Method						3510C
ICP Metals Total. Preparation Method						200.7/6010B

Conclusion of Lab Number: 17052046

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Sample Results

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 06/05/2017
Date Received: 05/23/2017
Pace File No: 7775
Pace Order No: 140671

Lab Number: 17052047
Sample Description: TB-13

Date Sampled:
Time Sampled:

Analysis	Concentration	Units	Dilution Factor	LOQ	Book/Page
OXY Volatiles by 8260					
1,1,1-Trichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/534
1,2-Dichloroethane	ND(0.5)	µg/L	1.0	0.5	7466/534
Benzene	ND(0.5)	µg/L	1.0	0.5	7466/534
Carbon tetrachloride	ND(0.5)	µg/L	1.0	0.5	7466/534
Chloroform	ND(0.5)	µg/L	1.0	0.5	7466/534
Chloromethane	ND(0.5)	µg/L	1.0	0.5	7466/534
Methylene chloride	ND(0.5)	µg/L	1.0	0.5	7466/534
Tetrachloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/534
Trichloroethylene	ND(0.5)	µg/L	1.0	0.5	7466/534
Vinyl chloride	ND(0.5)	µg/L	1.0	0.5	7466/534
1,2-Dichloropropane	ND(0.5)	µg/L	1.0	0.5	7466/534

Analysis	Date/Time Prepared	Date/Time Analyzed	QC Batch	Inst. Batch	Analyst	Method(s)
OXY Volatiles by 8260	N/A	05/25/17 1757	1MS8145	1MS8145	GMA	8260B
Volatile Analysis Preparation Method						5030B

Conclusion of Lab Number: 17052047

Pace Analytical Services, Inc.
525 N. Eighth St. - Salina, KS 67401
785-827-1273 800-535-3076 Fax 785-823-7830

Appendix

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 06/05/2017
Date Received: 05/23/2017
Pace File No: 7775
Pace Order No: 140671

ND indicates not detected with the LOQ (Limit of Quantitation) in parentheses. The LOQ value has been adjusted for the dilution factor and percent solids, as applicable. Due to rounding of significant figures, the LOQ value may vary slightly from the reported concentration. The LOQ is the lowest concentration of the analytical standard that was used for calibrating the instrument. If an analytical standard is analyzed at the LOQ, an error of as much as +/- 50% can be expected. N/A, if present, indicates not applicable.

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

No analysis with a holding time of seventy-two hours or less was performed in this Pace order.

Due to the absence of sampling date and/or time information, the holding time for preparation and/or analysis may not have been qualified correctly for applicable samples within this order number. The data may or may not be useable for compliance purposes.

QC - QC data qualifiers were noted. See the Quality Control Report.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

Following is the full name of each analyst that performed analysis(es) on this Pace order number:

Analyst Initials	Analyst Full Name
GMA	Guy Allen
JMM	Julie M. McCullough
KMW	Keegan M. Wilson
MLL	Melissa L. Lundgrin
SPA	Stephen P. Albin

Accreditation Summary

Client: Occidental Chemical Corporation_Oxy
Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 06/05/2017
Date Received: 05/23/2017
Pace File No: 7775
Pace Order No: 140671

NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Pace is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Pace is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Pace's full NELAP accreditation status may be viewed at www.kdheks.gov/envlab. Note that unless qualified otherwise in the Laboratory Report, Pace performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

Test	Analysis	Matrix-Regulatory Program	Method	Pace NELAP Accredited in Other Reg. Program
CL351	OXY Chlorinated Hyd.	L-RCRA	8121	
CL351	Hexachloroethane	L-RCRA	8121	No
CL351	Hexachlorobutadiene	L-RCRA	8121	No
MS302	OXY GC/MS Acids	L-RCRA	8270C	
MS302	3-& 4-Chlorophenol	L-RCRA	8270C	No
MS302	2,5-Dichlorophenol	L-RCRA	8270C	No
MS302	2,3,4,5-Tetrachlorophenol	L-RCRA	8270C	No

Quality Control Report
Batch Summary

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 06/05/2017
Date Received: 05/23/2017
Pace File No: 7775
Pace Order No: 140671

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
CL223	2,4-Dichlorophenoxyacetic Acid	170525-3	170525BLK3 05/26/17 1807	170525LCS3 05/26/17 1847	17052046MS 05/25/17
	Lab numbers associated with this batch: 17052046				
CL350	Pentachlorophenol	170525-3	170525BLK3 05/26/17 1807	170525LCS3 05/26/17 1847	17052046MS 05/25/17
	Lab numbers associated with this batch: 17052046				
CL351	OXY Chlorinated Hyd.	170526-1	170526BLK1 05/30/17 1840	170526LCS1 05/30/17 1919	
	Lab numbers associated with this batch: 17052046				
MS302	OXY GC/MS Acids	170526-2	170526BLK2 05/26/17 1525	170526LCS2 05/26/17 1606	17051592RS 05/26/17 1727
	Lab numbers associated with this batch: 17052046				
MS350	OXY Volatiles by 8260	1MS8144	BLK1MS8144 05/24/17 1500	LCS1MS8144 05/24/17 1349	17052046MS 05/24/17 2321
	Lab numbers associated with this batch: 17052046				
MS350	OXY Volatiles by 8260	1MS8145	BLK1MS8145 05/25/17 1347	LCS1MS8145 05/25/17 1235	
	Lab numbers associated with this batch: 17052047				
SL423	Hardness (Calculated)	170602-4	170602BLK4 06/02/17 1408	170602LCS4 06/02/17	17052046MS 06/02/17 1421
	Lab numbers associated with this batch: 17052046				
GL502	Chloride	1IC2146	BLK1IC2146 05/26/17 2234	LCS1IC2146 05/26/17 2323	17051592MS 05/27/17 0224
	Lab numbers associated with this batch: 17052046				

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 06/05/2017
Date Received: 05/23/2017
Pace File No: 7775
Pace Order No: 140671

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 170525-3	**For samples prepared on: 05/25/2017 1745**					**Spiked sample: 17052046**						
2,4-Dichlorophenoxyacetic Aci	ND(1.0)	94.5	58.8-127	4.0	µg/L	F	F	64.6-126		µg/L	**	18.9
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	89.0	99.1	62.2-119	5.0	µg/L			62.2-119		µg/L	**	
QC Batch: 170525-3	**For samples prepared on: 05/25/2017 1745**					**Spiked sample: 17052046**						
Pentachlorophenol	ND(0.5)	93.8	66.3-127	4.0	µg/L	F	F	7.60-144		µg/L	**	26.3
Surrogate Data:												
2,4-DICHLOROPHENYLACETIC ACID	89.0	99.1	62.2-119	5.0	µg/L			62.2-119		µg/L	**	
QC Batch: 170526-1	**For samples prepared on: 05/26/2017 1130**					**Spiked sample:**						
OXY Chlorinated Hyd.						MN	MN					
A-BHC	ND(0.011)	102	75.0-125	0.50	µg/L			76.1-127		µg/L	**	16.0
B-BHC	ND(0.037)	109	68.0-125	0.50	µg/L			71.5-125		µg/L	**	18.0
G-BHC	ND(0.052)	107	72.5-123	0.50	µg/L			73.9-126		µg/L	**	17.4
Hexachloroethane	ND(0.02)	97.2	55.1-115	0.50	µg/L			45.8-118		µg/L	**	33.4
Hexachlorobutadiene	0.04 BK	105	35.3-134	0.50	µg/L			36.7-122		µg/L	**	37.9
Hexachlorobenzene	ND(0.10)	99.2	63.7-119	0.50	µg/L			62.9-119		µg/L	**	20.7
D-BHC	ND(0.05)	110	70.6-126	0.50	µg/L			71.7-131		µg/L	**	20.8
Surrogate Data:												
1,4-DICHLORONAPHTHALENE	82.5	92.4	65.9-110	8.0	µg/L	MN	MN	65.9-110		µg/L	**	
QC Batch: 170526-2	**For samples prepared on: 05/26/2017 0800**					**Spiked sample: 17051592R**						
OXY GC/MS Acids						MN	MN					
2-Chlorophenol	ND(5.0)	90.3	75.9-99.3	50.0	µg/L			75.1-100	50.0	µg/L	**	13.9
3-& 4-Chlorophenol	ND(5.0)	82.0	56.0-90.2	50.0	µg/L			58.8-91.2	50.0	µg/L	**	14.5
2,4-Dichlorophenol	ND(5.0)	108 LH	68.2-106	50.0	µg/L			65.6-112	50.0	µg/L	**	21.2
2,5-Dichlorophenol	ND(5.0)	93.9	73.9-103	50.0	µg/L			65.4-106	50.0	µg/L	**	27.7
2,6-Dichlorophenol	ND(5.0)	102	78.3-104	50.0	µg/L			76.7-107	50.0	µg/L	**	13.4
2,4,5-Trichlorophenol	ND(5.0)	101	75.3-109	50.0	µg/L			72.4-114	50.0	µg/L	**	12.9
2,4,6-Trichlorophenol	ND(5.0)	103	77.1-110	50.0	µg/L			75.0-116	50.0	µg/L	**	15.7
2,3,4,5-Tetrachlorophenol	ND(5.0) CE	106 CE	72.5-115	100	µg/L			74.5-120	100	µg/L	**	13.1
2,3,4,6-Tetrachlorophenol	ND(5.0)	113	71.6-118	50.0	µg/L			73.7-122	50.0	µg/L	**	13.4
Surrogate Data:												
PHENOL-d6	36.5	36.2	25.6-44.5	150	µg/L	MN	MN	25.6-44.5	150	µg/L	**	
2-FLUOROPHENOL	58.2	58.3	42.2-68.2	150	µg/L	MN	MN	42.2-68.2	150	µg/L	**	
2,4,6-TRIBROMOPHENOL	111	127	53.9-131	150	µg/L	MN	MN	53.9-131	150	µg/L	**	
QC Batch: 170602-4	**For samples prepared on: 06/02/2017 0952**					**Spiked sample: 17052046**						
Hardness (Calculated)	ND(5.0)	87.0	80.0-120	357	mg/L a	89.3	86.1	80.0-120	1790	mg/L a	2.90	20.0
QC Batch: 1IC2146	**For sample analyzed on: 05/26/2017**					**Spiked sample: 17051592**						
Chloride	ND(1.0)	92.9	90.0-110	4.0	mg/L	MN	MN	68.4-120	40.0	mg/L	**	21.6
QC Batch: 1MS8144	**For sample analyzed on: 05/24/2017**					**Spiked sample: 17052046**						
OXY Volatiles by 8260												
1,1,1-Trichloroethane	ND(0.5)	90.8	80.0-120	10.0	µg/L	98.4	F	83.0-121	10.0	µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	88.9	75.6-120	10.0	µg/L	109	F	77.5-122	10.0	µg/L	**	9.5
Benzene	ND(0.5)	91.8	80.0-120	10.0	µg/L	84.6	F	82.7-117	10.0	µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	91.3	79.9-125	10.0	µg/L	104	F	79.0-125	10.0	µg/L	**	13.6
Chloroform	ND(0.5)	87.6	79.6-120	10.0	µg/L	98.3	F	78.4-117	10.0	µg/L	**	9.2
Chloromethane	ND(0.5)	89.7	70.2-127	10.0	µg/L	84.0	F	69.7-129	10.0	µg/L	**	15.9
Methylene chloride	ND(0.5)	86.7	77.1-120	10.0	µg/L	83.3	F	76.3-119	10.0	µg/L	**	9.6

Quality Control Report
Method Blank, LCS, MS/MSD Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 06/05/2017
Date Received: 05/23/2017
Pace File No: 7775
Pace Order No: 140671

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery) MS	MSD	MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data RPD	Limit
QC Batch: 1MS8144	**For sample analyzed on: 05/24/2017**					**Spiked sample: 17052046**						
Tetrachloroethylene	ND(0.5)	111	80.0-120	10.0	µg/L	112	F	82.0-121	10.0	µg/L	**	11.3
Trichloroethylene	ND(0.5)	95.2	80.0-120	10.0	µg/L	89.4	F	79.3-120	10.0	µg/L	**	13.7
Vinyl chloride	ND(0.5)	89.8	76.2-128	10.0	µg/L	80.3	F	78.0-130	10.0	µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	89.9	79.5-120	10.0	µg/L	82.8	F	81.7-117	10.0	µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	93.4	91.3	76.2-126	10.0	µg/L	101	F	76.2-126	10.0	µg/L	**	
TOLUENE-d8	103	106	80.0-120	10.0	µg/L	102	F	80.0-120	10.0	µg/L	**	
QC Batch: 1MS8145	**For sample analyzed on: 05/25/2017**					**Spiked sample:**						
OXY Volatiles by 8260						MN	MN					
1,1,1-Trichloroethane	ND(0.5)	94.5	80.0-120	10.0	µg/L			83.0-121		µg/L	**	9.8
1,2-Dichloroethane	ND(0.5)	90.5	75.6-120	10.0	µg/L			77.5-122		µg/L	**	9.5
Benzene	ND(0.5)	92.3	80.0-120	10.0	µg/L			82.7-117		µg/L	**	8.3
Carbon tetrachloride	ND(0.5)	94.8	79.9-125	10.0	µg/L			79.0-125		µg/L	**	13.6
Chloroform	ND(0.5)	91.0	79.6-120	10.0	µg/L			78.4-117		µg/L	**	9.2
Chloromethane	ND(0.5)	91.3	70.2-127	10.0	µg/L			69.7-129		µg/L	**	15.9
Methylene chloride	ND(0.5)	91.7	77.1-120	10.0	µg/L			76.3-119		µg/L	**	9.6
Tetrachloroethylene	ND(0.5)	110.	80.0-120	10.0	µg/L			82.0-121		µg/L	**	11.3
Trichloroethylene	ND(0.5)	94.9	80.0-120	10.0	µg/L			79.3-120		µg/L	**	13.7
Vinyl chloride	ND(0.5)	92.2	76.2-128	10.0	µg/L			78.0-130		µg/L	**	14.6
1,2-Dichloropropane	ND(0.5)	92.2	79.5-120	10.0	µg/L			81.7-117		µg/L	**	10.1
Surrogate Data:												
1,2-DICHLOROETHANE-d4	92.5	89.6	76.2-126	10.0	µg/L	MN	MN	76.2-126		µg/L	**	
TOLUENE-d8	103	104	80.0-120	10.0	µg/L	MN	MN	80.0-120		µg/L	**	

Data Qualifiers:

F - MS and/or MSD sample data are not available due to insufficient sample volume.

MN - The MS/MSD sample analyses were not performed on a sample from this Pace order number.

BK - The concentration of this analyte, if present in an associated sample, is considered an estimated value if the sample concentration is less than ten times the amount present in this method blank.

LH - The Laboratory Control Sample (LCS) recovery for this analyte was above the method or laboratory quality control limit. The reported sample concentration may be biased high.

CE - Compound coelutes. The value and/or spike level reported is a sum of coeluting compounds.

** - RPD calculation not applicable/not available for this analysis.

Quality Control Report
Sample Surrogate Data

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 06/05/2017
Date Received: 05/23/2017
Pace File No: 7775
Pace Order No: 140671

Surrogate	Date Prepared	Date Analyzed	Spike Level	Units	% Recovery	Acceptable % Limits
Lab Number: 17052046		**Sample Description: WG-05222017-JR-MW144S2/S3**				
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/25/2017	05/26/2017	5.0	µg/L	87.0	62.2-119
Herbicides						
2,4-DICHLOROPHENYLACETIC ACID	05/25/2017	05/26/2017	5.0	µg/L	87.0	62.2-119
OXY Chlorinated Hyd.						
1,4-DICHLORONAPHTHALENE	05/26/2017	05/31/2017	8.0	µg/L	92.5	65.9-110
OXY GC/MS Acids						
PHENOL-d6	05/26/2017	05/26/2017	150	µg/L	29.7	25.6-44.5
2-FLUOROPHENOL	05/26/2017	05/26/2017	150	µg/L	47.3	42.2-68.2
2,4,6-TRIBROMOPHENOL	05/26/2017	05/26/2017	150	µg/L	96.8	53.9-131
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/24/2017	10	µg/L	101	76.2-126
TOLUENE-d8		05/24/2017	10	µg/L	92.7	80.0-120
Lab Number: 17052047		**Sample Description: TB-13**				
OXY Volatiles by 8260						
1,2-DICHLOROETHANE-d4		05/25/2017	10	µg/L	94.9	76.2-126
TOLUENE-d8		05/25/2017	10	µg/L	101	80.0-120

Quality Control Report
Continuing Calibration Report

Client: Occidental Chemical Corporation_Oxy
Attn: Lisa Thurman
P.O. Box 12283
Wichita, KS 67277

Date Reported: 06/05/2017
Date Received: 05/23/2017
Pace File No: 7775
Pace Order No: 140671

Analysis	Date of Analysis	Instrument Batch ID	Amount in Standard	Amount Detected	Units	Percent Recovery
2,4-Dichlorophenoxyacetic Acid	05/26/2017	1NX5146	CCV recovery acceptable for this Instrument Batch.			
2,4-Dichlorophenoxyacetic Acid	05/26/2017	2NX5146	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/26/2017	1NX5146	CCV recovery acceptable for this Instrument Batch.			
Pentachlorophenol	05/26/2017	2NX5146	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/30/2017	1EX3150	CCV recovery acceptable for this Instrument Batch.			
OXY Chlorinated Hyd.	05/31/2017	2EX3150	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/27/2017	3IC2146	CCV recovery acceptable for this Instrument Batch.			
Chloride	05/27/2017	4IC2146	CCV recovery acceptable for this Instrument Batch.			
OXY GC/MS Acids	05/26/2017	1MS6146	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/24/2017	1MS8144	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/25/2017	2MS8144	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/25/2017	1MS8145	CCV recovery acceptable for this Instrument Batch.			
OXY Volatiles by 8260	05/25/2017	2MS8145	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	06/02/2017	2IP4153	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	06/02/2017	3IP4153	CCV recovery acceptable for this Instrument Batch.			

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

140671

Page: of

2059264

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GHD	Report To: Travis Koyl	Attention:
Address: 2626 W. Pawnee Wichita, KS	Copy To: Paul McMahon	Company Name:
		Address:
Email To: Travis Koyl	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: 0x4 Spring 2017 GWM	Pace Project Manager: Grey Groene
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOC	SVOC	Pest/Herb	Chloride/Hardness	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WG-05222017-JR-MW144s2/s3	WT	G			5/22/17	1350		8	5			3						X	X	X	X		
2	TB-13	-	-			-	-		3				3						X					
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]	52317	1500	[signature]	52317	1500	
	[signature]	52317	1630	[signature]	52317	1630	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeremy Rage

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 5/23/17

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical Services, Inc. **Pace Order No.:** 140671

Cooler/Sample Receipt Form (C/S RF)

Client Name: OXY **Pace File No.:** 7775

Sample ID's in cooler: see COC

4 LTA-1 250P-3 VOC's: MW144 S2/S3
Trip Blank

Cooler 1 **of** 1 **for this Pace Order No.**

Cooler Identification: Pace Cooler #: 0724 / Client's Cooler / Box / Letter / Hand-delivered
Other: _____

Date/Time Cooler Received: 5/23/17 15:00

Delivered By: UPS / FedX / AB Express / (Field Svcs) / Mail / Walk-In / Other: _____

Custody Seal: Present: Intact / Broken Absent: ✓ Seal No: —
Seal Name: — Seal Date: —
Seal matches Chain of Custody: Yes / No / (N/A)

Type of Packing Material: Blue Ice / (Ice) / Melted Ice / (Bubble) / Foam / Paper / Peanuts / Vermiculite / None / Other: _____

Cooler Temperature (°C): Original Reading (°C) 1.7 Corrected Reading (°C) 1.3
Temperature. By: (Temperature Blank) Surface Temperature
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.4

☐ Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies: ☑ **No** ☐ **Yes** **(See below for discrepancies.)**

Note: If discrepancies are present, Pace will proceed with analyses until/unless directed otherwise by the client.

☐ Chain of Custody not present - information taken from:
Cover Letter ☐ Container ☐
PO ☐ Pace Proj. Mgr. ☐
☐ Container label absent
☐ Chain of Custody incomplete [see detail below]
☐ Chain of Custody missing date/time sampled (excl. TB or Dup.)
☐ Date or Time sampled obtained from container label
☐ Chain of Custody missing sampler's name
☐ Chain of Custody missing matrix (sample type)
☐ Missing relinquished information: signature date time
☐ Sample excluded from Chain of Custody
☐ Sample listed on Chain of Custody, not received
☐ Sample identification on container and Chain of Custody do not agree
☐ Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]
☐ Cooler temperature exceeded 0.1 - 6.0 °C requirement
[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.]
☐ Broken or leaking containers (detail actions below)
☐ Sample container type or labeled chemical preservation inappropriate
☐ Other discrepancies: _____

Detail to discrepancies/comments:

Completed by: HAC **Date Completed:** 5-23-17

Appendix C
Data Quality Assessment and Validation Report

E-mail date: July 6, 2017

E-mail to: Charles Janson, Travis Kogl

Analytical Results and Reduced Data Validation

Semiannual Groundwater Sampling

Occidental Chemical Corporation

Wichita, Kansas

May 2017

Prepared by:
GHD | 2055 Niagara Falls Boulevard Niagara Falls New York 14304 USA
T 716 297 6150 **F** 716 297 2265 **W** www.ghd.com

042407-DV-60 | July 6, 2017

for

Contact: Paul McMahon/adh

Table of Contents

1. Introduction 1
2. Sample Holding Time and Preservation 1
3. Laboratory Method Blank Analyses 1
4. Surrogate Spike Recoveries 2
5. Laboratory Control Sample Analyses 2
   - 5.1 Organic Analyses 2
   - 5.2 Inorganic Analyses 2
6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses 3
   - 6.1 Organic Analyses 3
   - 6.2 Inorganic Analyses 3
7. Field QA/QC Samples 3
   - 7.1 Trip Blank Sample Analysis 3
   - 7.2 Equipment Blank Sample Analysis 3
   - 7.3 Field Duplicate Sample Analysis 4
8. Analyte Reporting 4
9. Conclusion 4

Table Index

Table 1 Sample Collection and Analysis Summary
Table 2 Analytical Results Summary
Table 3 Summary of Analytical Methods
Table 4 Qualified Sample Results Due to Holding Time Exceedance
Table 5 Qualified Sample Results Due to Outlying Surrogate Recoveries
Table 6 Qualified Sample Results Due to Outlying Laboratory Control Sample Results
Table 7 Qualified Sample Results Due to Outlying Matrix Spike/Matrix Spike Duplicate Recoveries
Table 8 Qualified Sample Data Due to Analyte Concentrations in the Rinse Blanks
Table 9 Qualified Sample Results Due to Differences in Dual Column Results

1. Introduction

The following document details a reduced validation of analytical results for groundwater samples collected in support of the Semiannual Groundwater Monitoring Program at the Wichita, Kansas Site in May 2017. The samples were submitted to Pace Analytical, located in Salina, Kansas. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented 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 (LCS), matrix spikes (MS), and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and the documents entitled:

i) Quality Assurance Project Plan, Facility-related Investigative Activities, Resource Conservation and Recovery Act (RCRA) Corrective Action Program", Occidental Chemical Corporation, Wichita, Kansas, EPA ID No. KSD007482029, June 2009

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99-008, October 1999

iii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, February 1994

Items ii) and iii) will subsequently be referred to as the "Guidelines" in this Memorandum.

2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in the methods. The sample chain of custody documents and analytical reports were used to determine sample holding times. Samples were prepared and analyzed within the required holding times with the exception of one sample extracted outside of holding time for semi-volatile organic compounds (SVOCs). The associated sample results were qualified as estimated (see Table 4).

Samples 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.

4. Surrogate Spike Recoveries

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

All samples submitted for organic determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the laboratory control limits with the exception of SVOCs analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the acid fraction is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against laboratory control limits. Most surrogate recoveries met the above criteria. Sample results associated with outlying recoveries were qualified as estimated (see Table 5).

5. Laboratory Control Sample Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods 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.

5.1 Organic Analyses

The LCS contained all compounds of interest. All LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy with the exception of a low herbicide recovery. The associated sample results were qualified as estimated (see Table 6).

5.2 Inorganic Analyses

The LCS contained the analytes of interest. LCS recoveries were assessed per the "Guidelines". All LCS recoveries were within the laboratory 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 MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision. If the original sample concentration is significantly greater than the spike concentration, the recovery is not assessed.

Non-detect sample results associated with high MS/MSD recoveries or RPDs were not qualified. Non-detect data would not be impacted by the indicated high bias/variability. If only the MS or MSD recovery was outside of control limits, no qualification of the data was performed based on the acceptable recovery of the companion spike.

MS/MSD analyses were performed as specified in Table 1. The laboratory performed additional MS/MSD analyses internally.

6.1 Organic Analyses

The MS/MSD samples were spiked with all compounds of interest. Most recoveries and RPDs were acceptable or met the above criteria, demonstrating good analytical accuracy and precision. All remaining sample results associated with outlying MS/MSD recoveries or RPDs were qualified as estimated (see Table 7).

6.2 Inorganic Analyses

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

7. Field QA/QC Samples

The field QA/QC consisted of 11 trip blank samples, 15 equipment blank samples, and 8 field duplicate sample sets.

7.1 Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, 11 trip blank samples were submitted to the laboratory for volatile organic compounds (VOCs) analysis. All results were non-detect for the compounds of interest.

7.2 Equipment Blank Sample Analysis

To assess field decontamination procedures and cleanliness of sample containers, 15 equipment blank samples were submitted for analysis, as identified in Table 1. Results were non-detect for the

analytes of interest with the exception of some SVOCs. Associated sample results with concentrations similar to those found in the equipment blanks were qualified non-detect (see Table 8).

7.3 Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, eight field duplicate samples were collected and submitted "blind" to the laboratory, as specified in Table 1.The RPDs associated with these duplicate samples must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is 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

Non-detect results were presented as non-detect at the RL in Table 2.

The laboratory reported that some sample results with sufficient analyte concentrations did not meet the dual column percent difference criteria of less than 40 percent. The associated sample results were qualified as estimated (see Table 9).

For the following samples and compounds, the laboratory stated that due to low analyte concentrations, the analysis did not meet qualitative criteria or was subject to chromatographic peak distortion, and the results were reported as estimated (J) in Table 2:

i) WG-105042017-DF-MW016S2SS for tetrachloroethene

ii) WG-05062017-JR-MW030S1 for tetrachloroethene and trichloroethene

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable with the specific exceptions and qualifications noted herein.

Table 1

Sample Collection and Analysis Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Identification	Location I.D.	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: VOCs	SVOCs	Chlorinated Hydrocarbons	Herbicides	Chloride	Hardness	Comments
WG-05042017-BS-AMW001	AMW1	05/04/2017	16:25	X	X	X	X	X	X	
WG-05112017-BS-AMW003	AMW3	05/11/2017	13:15	X	X	X	X	X	X	
WG-05032017-BS-AMW4D	AMW4D	05/03/2017	14:55	X	X	X	X	X	X	
WG-05032017-BS-AMW4S	AMW4S	05/03/2017	15:35	X	X	X	X	X	X	
WG-05062017-BS-AMW005D	AMW5D	05/06/2017	11:40	X	X	X	X	X	X	
WG-05042017-BS-AMW005S	AMW5S	05/04/2017	13:30	X	X	X	X	X	X	
WG-05112017-BS-AMW008D	AMW8D	05/11/2017	10:35	X	X	X	X	X	X	
WG-05112017-BS-AMW008S	AMW8S	05/11/2017	11:15	X	X	X	X	X	X	
WG-05032017-BS-AMW16D	AMW16D	05/03/2017	14:30	X	X	X	X	X	X	
WG-05032017-BS-AMW16S	AMW16S	05/03/2017	14:00	X	X	X	X	X	X	
WG-05122017-BS-AMW101D	AMW101D	05/12/2017	10:15	X	X	X	X	X	X	
WG-05122017-BS-AMW101I	AMW101I	05/12/2017	10:40	X	X	X	X	X	X	
WG-05122017-BS-AMW101S	AMW101S	05/12/2017	14:05	X	X	X	X	X	X	
WG-05092017-BS-AMW102D	AMW102D	05/09/2017	09:15	X	X	X	X	X	X	
WG-05092017-BS-AMW102S	AMW102S	05/09/2017	17:00	X	X	X	X	X	X	
WG-05112017-BS-AMW104	AMW104	05/11/2017	12:25	X	X	X	X	X	X	
WG-05042017-BS-AMW105D	AMW105D	05/04/2017	10:50	X	X	X	X	X	X	
WG-05042017-BS-AMW105S	AMW105S	05/04/2017	11:25	X	X	X	X	X	X	
WG-05042017-BS-FD02	AMW105S	05/04/2017	00:00	X	X	X	X	X	X	Field Duplicate of WG-05042017-BS-AMW105S 05/04/17-001
WG-05062017-BS-AMW106D	AMW106D	05/06/2017	11:05	X	X	X	X	X	X	
WG-05042017-BS-AMW106S	AMW106S	05/04/2017	14:25	X	X	X	X	X	X	
WG-05042017-BS-AMW107D	AMW107D	05/04/2017	14:25	X	X	X	X	X	X	
WG-05042017-BS-AMW107S	AMW107S	05/04/2017	13:45	X	X	X	X	X	X	
WG-05112017-BS-AMW108D	AMW108D	05/11/2017	09:35	X	X	X	X	X	X	
WG-05112017-BS-AMW108S	AMW108S	05/11/2017	15:18	X	X	X	X	X	X	
WG-05112017-BS-FD009	AMW108S	05/11/2017	00:00	X	X	X	X	X	X	Field Duplicate of WG-05112017-BS-AMW108S 05/11/17-001
WG-05172017-JR-AP2800	AP2800	05/17/2017	12:35	X	X	X	X	X	X	
WG-05102017-BS-APMW302S1	APMW302S1	05/10/2017	09:00	X	X	X	X	X	X	
WG-05102017-BS-APMW302S2	APMW302S2	05/10/2017	08:50	X	X	X	X	X	X	
WG-05102017-BS-APMW302S3	APMW302S3	05/10/2017	09:30	X	X	X	X	X	X	
WG-05042017-JR-Builders	Builders Well	05/04/2017	11:00	X	X	X	X	X	X	
WG-05172017-JR-DW5	DW-5	05/17/2017	13:15	X	X	X	X	X	X	
WG-05172017-JR-FD11	DW-5	05/17/2017	00:00	X	X	X	X	X	X	Field Duplicate of WG-05172017-JR-DW5 05/17/17-001
WG-05172017-JR-DW6	DW-6	05/17/2017	13:25	X	X	X	X	X	X	

Table 1

Sample Collection and Analysis Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

				Analysis/Parameters						
Sample Identification	**Location I.D.**	**Collection Date (mm/dd/yyyy)**	**Collection Time (hr:min)**	**VOCs**	**SVOCs**	**Chlorinated Hydrocarbons**	**Herbicides**	**Chloride**	**Hardness**	**Comments**
WG-05172017-JR-DW7	DW-7	05/17/2017	13:35	X	X	X	X	X	X	
WG-05012017-JD-ER1	EQUIPMENTBLANK	05/01/2017	13:00	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05012017-JD-ER2	EQUIPMENTBLANK	05/01/2017	14:30	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05012017-JD-ER3	EQUIPMENTBLANK	05/01/2017	17:00	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05012017-JD-ER4	EQUIPMENTBLANK	05/01/2017	17:30	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05022017-JD-ER5	EQUIPMENTBLANK	05/02/2017	12:30	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05022017-JD-ER6	EQUIPMENTBLANK	05/02/2017	13:00	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05022017-JD-ER7	EQUIPMENTBLANK	05/02/2017	17:15	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05022017-JD-ER8	EQUIPMENTBLANK	05/02/2017	17:20	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05042017-DF-ER9	EQUIPMENTBLANK	05/04/2017	13:15	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05052017-JD-ER10	EQUIPMENTBLANK	05/05/2017	17:00	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05092017-JD-ER12	EQUIPMENTBLANK	05/09/2017	18:00	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05092017-DF-ER11	EQUIPMENTBLANK	05/09/2017	08:40	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05112017-DF-ER13	EQUIPMENTBLANK	05/11/2017	16:30	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05152017-JR-ER14	EQUIPMENTBLANK	05/15/2017	11:00	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05152017-JR-ER15	EQUIPMENTBLANK	05/15/2017	11:30	X	X	X	X	X	X	EQUIPMENTBLANK
WG-05122017-DF-IW29	IW29	05/12/2017	11:25	X	X	X	X	X	X	
WG-05122017-DF-IW30	IW30	05/12/2017	13:40	X	X	X	X	X	X	
WG-05122017-DF-IW30	IW30	05/12/2017	13:40			X				
WG-05122017-DF-IW31	IW31	05/12/2017	13:20	X	X	X	X	X	X	
WG-05122017-DF-IW31	IW31	05/12/2017	13:20			X				
WG-05122017-DF-IW32	IW32	05/12/2017	13:05	X	X	X	X	X	X	
WG-05122017-DF-IW35A	IW35A	05/12/2017	11:45	X	X	X	X	X	X	
WG-05122017-DF-FD10	IW35A	05/12/2017	00:00	X	X	X	X	X	X	Field Duplicate of WG-05122017-DF-IW35A 05/12/17-001
WG-05122017-DF-IW35B	IW35B	05/12/2017	12:00	X	X	X	X	X	X	
WG-05122017-DF-IW36	IW36	05/12/2017	12:40	X	X	X	X	X	X	
WG-05122017-DF-IW40	IW40	05/12/2017	10:30	X	X	X	X	X	X	
WG-05122017-DF-IW41	IW41	05/12/2017	10:05	X	X	X	X	X	X	
WG-05122017-DF-IW42	IW42	05/12/2017	09:45	X	X	X	X	X	X	
WG-05122017-DF-IW43	IW43	05/12/2017	10:40	X	X	X	X	X	X	
WG-05122017-DF-IW44	IW44	05/12/2017	10:50	X	X	X	X	X	X	
WG-05122017-DF-IW45	IW45	05/12/2017	11:00	X	X	X	X	X	X	
WG-05122017-DF-IW46	IW46	05/12/2017	10:20	X	X	X	X	X	X	
WG-05052017-BS-MW02S1	MW02S1	05/05/2017	11:35	X	X	X	X	X	X	

Table 1

Sample Collection and Analysis Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Identification	Location I.D.	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: VOCs	SVOCs	Chlorinated Hydrocarbons	Herbicides	Chloride	Hardness	Comments
WG-05052017-BS-MW02S2	MW02S2	05/05/2017	11:20	X	X	X	X	X	X	
WG-05042017-DF-MW003S1	MW03S1	05/04/2017	14:00	X	X	X	X	X	X	
WG-05112017-DF-MW004S1	MW04S1	05/11/2017	10:35	X	X	X	X	X	X	
WG-05112017-DF-MW004S3	MW04S3	05/11/2017	09:55	X	X	X	X	X	X	
WG-05112017-DF-FD8	MW04S3	05/11/2017	00:00	X	X	X	X	X	X	Field Duplicate of WG-05112017-DF-MW004S3 05/11/17-001
WG-05122017-JR-MW005S3	MW05S3	05/12/2017	10:50	X	X	X	X	X	X	
WG-05082017-JR-MW006BR	MW06BR	05/08/2017	17:00	X	X	X	X	X	X	
WG-05042017-JR-MW06S1	MW06S1	05/04/2017	11:20	X	X	X	X	X	X	
WG-05042017-JR-MW06S3	MW06S3	05/04/2017	10:20	X	X	X	X	X	X	
WG-05092017-BS-MW007S1	MW07S1	05/09/2017	14:05	X	X	X	X	X	X	
WG-05092017-BS-MW007S2	MW07S2	05/09/2017	14:50	X	X	X	X	X	X	
WG-05092017-BS-MW007S3	MW07S3	05/09/2017	15:15	X	X	X	X	X	X	
WG-05052017-JR-MW008S1	MW08S1	05/05/2017	11:35	X	X	X	X	X	X	
WG-05052017-JR-MW008S2	MW08S2	05/05/2017	10:20	X	X	X	X	X	X	
WG-05052017-JR-MW008S2	MW08S2	05/05/2017	10:20	X						
WG-05052017-JR-MW008S3	MW08S3	05/05/2017	12:40	X	X	X	X	X	X	
WG-05052017-BS-MW09S1	MW09S1	05/05/2017	10:25	X	X	X	X	X	X	
WG-05052017-BS-MW09S1	MW09S1	05/05/2017	10:25	X						
WG-05052017-BS-MW09S3	MW09S3	05/05/2017	08:50	X	X	X	X	X	X	
WG-05122017-JR-MW010S1	MW10S1	05/12/2017	09:45	X	X	X	X	X	X	
WG-05102017-DF-MW010S2	MW10S2	05/10/2017	09:35	X	X	X	X	X	X	
WG-05122017-DF-MW010S3	MW10S3	05/12/2017	14:15	X	X	X	X	X	X	
WG-05052017-DF-MW011S1	MW11S1	05/05/2017	15:25	X	X	X	X	X	X	
WG-05052017-DF-MW011S3A	MW11S3A	05/05/2017	16:15	X	X	X	X	X	X	
WG-05052017-DF-MW011S3B	MW11S3B	05/05/2017	14:20	X	X	X	X	X	X	
WG-05052017-BS-MW012S1A	MW12S1A	05/05/2017	16:40	X	X	X	X	X	X	
WG-05052017-BS-MW012S1A	MW12S1A	05/05/2017	16:40			X				
WG-05052017-BS-MW012S3	MW12S3	05/05/2017	16:40	X	X	X	X	X	X	
WG-05052017-BS-MW012S3	MW12S3	05/05/2017	16:40			X				
WG-05112017-DF-MW013S1	MW13S1	05/11/2017	12:35	X	X	X	X	X	X	
WG-05112017-DF-MW013S3	MW13S3	05/11/2017	11:45	X	X	X	X	X	X	
WG-05052017-BS-MW014S1	MW14S1	05/05/2017	15:30	X	X	X	X	X	X	
WG-05052017-BS-MW014S3	MW14S3	05/05/2017	15:40	X	X	X	X	X	X	
WG-05052017-BS-MW014S3	MW14S3	05/05/2017	15:40			X				

Table 1

Sample Collection and Analysis Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Identification	Location I.D.	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: VOCs	SVOCs	Chlorinated Hydrocarbons	Herbicides	Chloride	Hardness	Comments
WG-05062017-BS-MW015S1	MW15S1	05/06/2017	09:50	X	X	X	X	X	X	
WG-05062017-BS-MW015S2	MW15S2	05/06/2017	10:10	X	X	X	X	X	X	
WG-05092017-JR-MW015S4	MW15S4	05/09/2017	11:55	X	X	X	X	X	X	
WG-05042017-DF-MW016BR	MW16BR	05/04/2017	12:25	X	X	X	X	X	X	
WG-05042017-DF-MW016S1	MW16S1	05/04/2017	11:25	X	X	X	X	X	X	
WG-05042017-DF-MW016S2SS	MW16S2SS	05/04/2017	10:25	X	X	X	X	X	X	
WG-05042017-DF-MW016S4R	MW16S4R	05/04/2017	09:30	X	X	X	X	X	X	
WG-05082017-JR-MW017S1	MW17S1	05/08/2017	11:45	X	X	X	X	X	X	
WG-050817-JR-MW017S1	MW17S1	05/08/2017	11:45		X					
WG-05082017-JR-MW017S3A	MW17S3A	05/08/2017	13:05	X	X	X	X	X	X	
WG-050817-JR-MW017S3A	MW17S3A	05/08/2017	13:05		X					
WG-05082017-JR-MW017S3B	MW17S3B	05/08/2017	12:20	X	X	X	X	X	X	
WG-050817-JR-MW017S3B	MW17S3B	05/08/2017	12:20		X					
WG-05122017-JR-MW018S1	MW18S1	05/12/2017	13:50	X	X	X	X	X	X	
WG-05122017-JR-MW018S1	MW18S1	05/12/2017	13:50			X				
WG-05122017-JR-MW018S3	MW18S3	05/12/2017	14:15	X	X	X	X	X	X	
WG-05122017-JR-MW018S3	MW18S3	05/12/2017	14:15			X				
WG-05122017-BS-MW019S1	MW19S1	05/12/2017	13:40	X	X	X	X	X	X	
WG-05122017-JR-MW019S2	MW19S2	05/12/2017	12:40	X	X	X	X	X	X	
WG-05122017-JR-MW019S2	MW19S2	05/12/2017	12:40			X				
WG-05122017-BS-MW019S4	MW19S4	05/12/2017	13:30	X	X	X	X	X	X	
WG-05122017-BS-MW019S4	MW19S4	05/12/2017	13:30			X				
WG-05082017-DF-MW020S1	MW20S1	05/08/2017	17:00	X	X	X	X	X	X	
WG-05082017-DF-MW020S3	MW20S3	05/08/2017	17:30	X	X	X	X	X	X	
WG-05052017-DF-MW021S1	MW21S1	05/05/2017	11:50	X	X	X	X	X	X	
WG-05052017-DF-MW021S1	MW21S1	05/05/2017	11:50			X				
WG-05042017-DF-MW021S3	MW21S3	05/04/2017	15:05	X	X	X	X	X	X	
WG-05062017-DF-MW022S1	MW22S1	05/06/2017	10:30	X	X	X	X	X	X	
WG-05062017-DF-FD4	MW22S1	05/06/2017	12:00	X	X	X	X	X	X	Field Duplicate of WG-05062017-DF-MW022S1 05/06/17-001
WG-05082017-DF-MW022S2	MW22S2	05/08/2017	10:55	X	X	X	X	X	X	
WG-05082017-DF-MW022S4	MW22S4	05/08/2017	11:35	X	X	X	X	X	X	
WG-05052017-BS-MW23BR	MW23BR	05/05/2017	18:10	X	X	X	X	X	X	
WG-05092017-JR-MW024S1	MW24S1	05/09/2017	14:00	X	X	X	X	X	X	
WG-05092017-JR-MW024S3	MW24S3	05/09/2017	14:45	X	X	X	X	X	X	

Table 1

Sample Collection and Analysis Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Identification	Location I.D.	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: VOCs	SVOCs	Chlorinated Hydrocarbons	Herbicides	Chloride	Hardness	Comments
WG-05092017-JR-MW024S4	MW24S4	05/09/2017	15:20	X	X	X	X	X	X	
WG-05032017-BS-MW25S1	MW25S1	05/03/2017	11:25	X	X	X	X	X	X	
WG-05092017-BS-MW26S1	MW26S1	05/09/2017	10:45	X	X	X	X	X	X	
WG-05092017-BS-MW26S3	MW26S3	05/09/2017	10:55	X	X	X	X	X	X	
WG-05122017-JR-MW027S1	MW27S1	05/12/2017	12:30	X	X	X	X	X	X	
WG-05122017-JR-MW027S2	MW27S2	05/12/2017	12:45	X	X	X	X	X	X	
WG-05122017-JR-MW027S2	MW27S2	05/12/2017	12:45			X				
WG-05042017-JR-MW028S1	MW28S1	05/04/2017	15:05	X	X	X	X	X	X	
WG-05042017-JR-MW028S2	MW28S2	05/04/2017	15:50	X	X	X	X	X	X	
WG-05042017-JR-MW028S3	MW28S3	05/04/2017	16:50	X	X	X	X	X	X	
WG-05112017-JR-MW029S1	MW29S1	05/11/2017	14:00	X	X	X	X	X	X	
WG-05112017-JR-MW029S2	MW29S2	05/11/2017	13:20	X	X	X	X	X	X	
WG-05092017-JR-MW029S3	MW29S3	05/09/2017	11:40	X	X	X	X	X	X	
WG-05092017-JR-MW029S3	MW29S3	05/09/2017	11:40	X						
WG-05062017-JR-MW030S1	MW30S1	05/06/2017	09:55	X	X	X	X	X	X	
WG-05062017-JR-MW030S2	MW30S2	05/06/2017	10:55	X	X	X	X	X	X	
WG-05062017-JR-MW030S3	MW30S3	05/06/2017	11:35	X	X	X	X	X	X	
WG-05112017-DF-MW031S1	MW31S1	05/11/2017	14:35	X	X	X	X	X	X	
WG-05102017-JR-MW032S1	MW32S1	05/10/2017	09:35	X	X	X	X	X	X	
WG-05112017-JR-MW113S3	MW113S3	05/11/2017	10:10	X	X	X	X	X	X	
WG-05112017-JR-MW113S3	MW113S3	05/11/2017	10:10	X						
WG-05112017-JR-MW114S1	MW114S1	05/11/2017	09:35	X	X	X	X	X	X	
WG-05092017-DF-MW130S1	MW130S1	05/09/2017	09:15	X	X	X	X	X	X	
WG-05092017-DF-FD7	MW130S1	05/09/2017	12:00	X	X	X	X	X	X	Field Duplicate of WG-05092017-DF-MW130S1 05/09/17-001
WG-05092017-DF-MW130S2	MW130S2	05/09/2017	10:20	X	X	X	X	X	X	
WG-05092017-DF-MW130S3	MW130S3	05/09/2017	10:40	X	X	X	X	X	X	
WG-05082017-DF-MW131S2	MW131S2	05/08/2017	14:05	X	X	X	X	X	X	
WG-05082017-DF-MW131S3	MW131S3	05/08/2017	13:10	X	X	X	X	X	X	
WG-05092017-DF-MW132S1	MW132S1	05/09/2017	13:15	X	X	X	X	X	X	
WG-05092017-DF-MW132S2/S3	MW132S2/S3	05/09/2017	12:05	X	X	X	X	X	X	
WG-05112017-DF-MW133S2/S3	MW133S2/S3	05/11/2017	08:55	X	X	X	X	X	X	
WG-05032017-DF-MW134S2	MW134S2	05/03/2017	11:25	X	X	X	X	X	X	
WG-05032017-DF-MW134S3	MW134S3	05/03/2017	12:00	X	X	X	X	X	X	
WG-05042017-DF-MW135S1	MW135S1	05/04/2017	16:50	X	X	X	X	X	X	

Table 1

Sample Collection and Analysis Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Identification	Location I.D.	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: VOCs	SVOCs	Chlorinated Hydrocarbons	Herbicides	Chloride	Hardness	Comments
WG-05042017-DF-MW135S2/S3	MW135S2/S3	05/04/2017	16:05	X	X	X	X	X	X	
WG-05052017-DF-MW136S2/S3	MW136S2/S3	05/05/2017	10:30	X	X	X	X	X	X	
WG-05032017-DF-MW137S1	MW137S1	05/03/2017	16:05	X	X	X	X	X	X	
WG-05052017-DF-MW137S2	MW137S2	05/05/2017	13:46	X	X	X	X	X	X	
WG-05032017-DF-MW137S3	MW137S3	05/03/2017	14:45	X	X	X	X	X	X	
WG-05082017-DF-MW138S1	MW138S1	05/08/2017	15:35	X	X	X	X	X	X	
WG-05082017-DF-MW138S2/S3	MW138S2/S3	05/08/2017	14:50	X	X	X	X	X	X	
WG-05112017-DF-MW139S2/S3	MW139S2/S3	05/11/2017	13:25	X	X	X	X	X	X	
WG-05062017-DF-MW140S1	MW140S1	05/06/2017	12:40	X	X	X	X	X	X	
WG-05062017-DF-MW140S2/S3	MW140S2/S3	05/06/2017	13:15	X	X	X	X	X	X	
WG-05042017-BS-MW141S2/S3	MW141S2/S3	05/04/2017	15:15	X	X	X	X	X	X	
WG-05092017-JR-MW142S2/S3	MW142S2/S3	05/09/2017	10:10	X	X	X	X	X	X	
WG-05052017-JR-MW143S2/S3	MW143S2/S3	05/05/2017	15:35	X	X	X	X	X	X	
WG-05222017-JR-MW144S2/S3	MW144S2/S3	05/22/2017	13:50	X	X	X	X	X	X	
WG-05092017-DF-MW145S2/S3	MW145S2/S3	05/09/2017	13:50	X	X	X	X	X	X	
WG-05102017-BS-MW146S1	MW146S1	05/10/2017	14:35	X	X	X	X	X	X	
WG-05082017-JR-MW147S1	MW147S1	05/08/2017	14:05	X	X	X	X	X	X	
WG-050817-JR-MW147S1	MW147S1	05/08/2017	14:05		X					
WG-05082017-JR-MW147S2/S3	MW147S2/S3	05/08/2017	15:00	X	X	X	X	X	X	
WG-050817-JR-MW147S2/S3	MW147S2/S3	05/08/2017	15:00		X					
WG-05082017-JR-MW148S1	MW148S1	05/08/2017	15:40	X	X	X	X	X	X	
WG-05082017-JR-MW148S1	MW148S1	05/08/2017	15:40		X					
WG-05082017-JR-FD6	MW148S1	05/08/2017	00:00	X	X	X	X	X	X	Field Duplicate of WG-05082017-JR-MW148S1 05/08/17-001
WG-05082017-JR-MW148S2/S3	MW148S2/S3	05/08/2017	16:20	X	X	X	X	X	X	
WG-05082017-JR-MW148S2/S3	MW148S2/S3	05/08/2017	16:20	X						
WG-05112017-JR-MW149S2/S3	MW149S2/S3	05/11/2017	15:00	X	X	X	X	X	X	
TB-01	TRIPBLANK	05/02/2017	-	X						
TB-03	TRIPBLANK	05/04/2017	-	X						
TB-4	TRIPBLANK	05/05/2017	-	X						
TB-5	TRIPBLANK	05/06/2017	-	X						
TB-7	TRIPBLANK	05/09/2017	-	X						
TB-8	TRIPBLANK	05/09/2017	-	X						
TB-09	TRIPBLANK	05/10/2017	-	X						
TB-10	TRIPBLANK	05/12/2017	-	X						

Table 1

Sample Collection and Analysis Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Identification	Location I.D.	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: VOCs	SVOCs	Chlorinated Hydrocarbons	Herbicides	Chloride	Hardness	Comments
TB-11	TRIPBLANK	05/12/2017	-	X						
TB12	TRIPBLANK	05/17/2017	-	X						
TB-13	TRIPBLANK	05/22/2017	-	X						

Notes:

VOCs - Volatile Organic Compounds
SVOCs - Semi-volatile Organic Compounds
FD - Field Duplicate
- - Not applicable

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW1	AMW3	AMW4D	AMW4S
Sample ID:		WG-05042017-BS-AMW001	WG-05112017-BS-AMW003	WG-05032017-BS-AMW4D	WG-05032017-BS-AMW4S
Sample Date:		05/04/2017	5/11/2017	5/3/2017	5/3/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	5.1	0.7
Trichloroethene	µg/L	0.5 U	0.5 U	0.8	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW1	AMW3	AMW4D	AMW4S
Sample ID:		WG-05042017-BS-AMW001	WG-05112017-BS-AMW003	WG-05032017-BS-AMW4D	WG-05032017-BS-AMW4S
Sample Date:		05/04/2017	5/11/2017	5/3/2017	5/3/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	82	79	148	241
Hardness, calculation	mgCaCO3/L	257	330	729	539

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW5D	AMW5S	AMW8D	AMW8S
Sample ID:		WG-05062017-BS-AMW005D	WG-05042017-BS-AMW005S	WG-05112017-BS-AMW008D	WG-05112017-BS-AMW008S
Sample Date:		5/6/2017	5/4/2017	5/11/2017	5/11/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	1.5	0.5 U	0.5 U	3.6
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	20.5	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW5D	AMW5S	AMW8D	AMW8S
Sample ID:		WG-05062017-BS-AMW005D	WG-05042017-BS-AMW005S	WG-05112017-BS-AMW008D	WG-05112017-BS-AMW008S
Sample Date:		5/6/2017	5/4/2017	5/11/2017	5/11/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	101	77	213	132
Hardness, calculation	mgCaCO3/L	282	382	564	310

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW16D	AMW16S	AMW101D	AMW101I
Sample ID:		WG-05032017-BS-AMW16D	WG-05032017-BS-AMW16S	WG-05122017-BS-AMW101D	WG-05122017-BS-AMW101I
Sample Date:		5/3/2017	5/3/2017	5/12/2017	5/12/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.014 J
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.34	0.02
Hexachloroethane	µg/L	0.02 U	0.02 U	0.04	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW16D	AMW16S	AMW101D	AMW101I
Sample ID:		WG-05032017-BS-AMW16D	WG-05032017-BS-AMW16S	WG-05122017-BS-AMW101D	WG-05122017-BS-AMW101I
Sample Date:		5/3/2017	5/3/2017	5/12/2017	5/12/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	60	26	1.0 U	56
Hardness, calculation	mgCaCO3/L	288	164	203	280

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW101S	AMW102D	AMW102S	AMW104
Sample ID:		WG-05122017-BS-AMW101S	WG-05092017-BS-AMW102D	WG-05092017-BS-AMW102S	WG-05112017-BS-AMW104
Sample Date:		5/12/2017	5/9/2017	5/9/2017	5/11/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.012 J	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.25	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.16	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.04	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW101S	AMW102D	AMW102S	AMW104
Sample ID:		WG-05122017-BS-AMW101S	WG-05092017-BS-AMW102D	WG-05092017-BS-AMW102S	WG-05112017-BS-AMW104
Sample Date:		5/12/2017	5/9/2017	5/9/2017	5/11/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	82	73	62	102
Hardness, calculation	mgCaCO3/L	158	263	255	390

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW105D	AMW105S	AMW105S	AMW106D
Sample ID:		WG-05042017-BS-AMW105D	WG-05042017-BS-AMW105S	WG-05042017-BS-FD02	WG-05062017-BS-AMW106D
Sample Date:		5/4/2017	5/4/2017	5/4/2017 (Duplicate)	5/6/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	1.3
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.14	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW105D	AMW105S	AMW105S	AMW106D
Sample ID:		WG-05042017-BS-AMW105D	WG-05042017-BS-AMW105S	WG-05042017-BS-FD02	WG-05062017-BS-AMW106D
Sample Date:		5/4/2017	5/4/2017	5/4/2017 (Duplicate)	5/6/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	23.8	20.7	23.7	129
Hardness, calculation	mgCaCO3/L	254	211	247	449

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW106S	AMW107D	AMW107S	AMW108D
Sample ID:		WG-05042017-BS-AMW106S	WG-05042017-BS-AMW107D	WG-05042017-BS-AMW107S	WG-05112017-BS-AMW108D
Sample Date:		5/4/2017	5/4/2017	5/4/2017	5/11/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.6	0.8	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.9	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.8	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.048	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW106S	AMW107D	AMW107S	AMW108D
Sample ID:		WG-05042017-BS-AMW106S	WG-05042017-BS-AMW107D	WG-05042017-BS-AMW107S	WG-05112017-BS-AMW108D
Sample Date:		5/4/2017	5/4/2017	5/4/2017	5/11/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	88	119	83	111
Hardness, calculation	mgCaCO3/L	366	412	423	454

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW108S	AMW108S	AP2800	APMW302S1
Sample ID:		WG-05112017-BS-AMW108S	WG-05112017-BS-FD009	WG-05172017-JR-AP2800	WG-05102017-BS-APMW302S1
Sample Date:		5/11/2017	5/11/2017 (Duplicate)	5/17/2017	5/10/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	9.9
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	17.5
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	4.8
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.37	0.28	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		AMW108S	AMW108S	AP2800	APMW302S1
Sample ID:		WG-05112017-BS-AMW108S	WG-05112017-BS-FD009	WG-05172017-JR-AP2800	WG-05102017-BS-APMW302S1
Sample Date:		5/11/2017	5/11/2017 (Duplicate)	5/17/2017	5/10/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	94	93	46	45
Hardness, calculation	mgCaCO3/L	366	376	313	274

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		APMW302S2	APMW302S3	Builders Well	DW-5	DW-5
Sample ID:		WG-05102017-BS-APMW302S2	WG-05102017-BS-APMW302S3	WG-05042017-JR-Builders	WG-05172017-JR-DW5	WG-05172017-JR-FD11
Sample Date:		5/10/2017	5/10/2017	5/4/2017	5/17/2017	5/17/2017 (Duplicate)
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	15.1	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	2.1	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	2.1	0.7	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds						
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.30	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.69	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.08 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides						
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		APMW302S2	APMW302S3	Builders Well	DW-5	DW-5
Sample ID:		WG-05102017-BS-APMW302S2	WG-05102017-BS-APMW302S3	WG-05042017-JR-Builders	WG-05172017-JR-DW5	WG-05172017-JR-FD11
Sample Date:		5/10/2017	5/10/2017	5/4/2017	5/17/2017	5/17/2017 (Duplicate)
Parameters	**Units**					
General Chemistry						
Chloride	mg/L	47	45	92	78	79
Hardness, calculation	mgCaCO3/L	291	280	267	186	186

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		DW-6	DW-7	IW29	IW30	IW31
Sample ID:		WG-05172017-JR-DW6	WG-05172017-JR-DW7	WG-05122017-DF-IW29	WG-05122017-DF-IW30	WG-05122017-DF-IW31
Sample Date:		5/17/2017	5/17/2017	5/12/2017	5/12/2017	5/12/2017
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	50 U	200 U	200 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	50 U	400	1300
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	50 U	1300	1000
Benzene	µg/L	0.5 U	0.5 U	50 U	200 U	200
Carbon tetrachloride	µg/L	2.7	0.5 U	210	30800	9980
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	670	28600	10600
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	50 U	200 U	200 U
Methylene chloride	µg/L	0.5 U	0.5 U	100	640	2700
Tetrachloroethene	µg/L	0.5 U	0.5 U	420	11200	8990
Trichloroethene	µg/L	0.5 U	0.5 U	50 U	620	860
Vinyl chloride	µg/L	0.5 U	0.5 U	50 U	200 U	200 U
Semi-volatile Organic Compounds						
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	6.4	89.4 J	44.3
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	39.8	87.7 J	109
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	45.9	5.0 UJ	74.2
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	10.7	5.0 UJ	35.9
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	6.5 J	8.6
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ	7.4
alpha-BHC	µg/L	0.011 U	0.011 U	0.45	1.8	13
beta-BHC	µg/L	0.037 U	0.037 U	0.74 U	4.3	7.4 U
delta-BHC	µg/L	0.05 U	0.05 U	1 U	5 U	29
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	1.0 U	5.2 U	24.0
Hexachlorobenzene	µg/L	0.10 U	0.10 U	2.0 U	10 U	20 U
Hexachlorobutadiene	µg/L	0.02 U	0.60 U	64.6	1060	822
Hexachloroethane	µg/L	0.02 U	0.12 U	7.1	1180	1050
Herbicides						
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	44 J	30 J	220 J
Pentachlorophenol	µg/L	0.5 U	0.5 U	11	100	73

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		DW-6	DW-7	IW29	IW30	IW31
Sample ID:		WG-05172017-JR-DW6	WG-05172017-JR-DW7	WG-05122017-DF-IW29	WG-05122017-DF-IW30	WG-05122017-DF-IW31
Sample Date:		5/17/2017	5/17/2017	5/12/2017	5/12/2017	5/12/2017
Parameters	**Units**					
General Chemistry						
Chloride	mg/L	38.5	55	890	3320	2590
Hardness, calculation	mgCaCO3/L	215	201	547	353	752

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		IW32	IW35A	IW35A	IW35B	IW36
Sample ID:		WG-05122017-DF-IW32	WG-05122017-DF-FD10	WG-05122017-DF-IW35A	WG-05122017-DF-IW35B	WG-05122017-DF-IW36
Sample Date:		5/12/2017	5/12/2017 (Duplicate)	5/12/2017	5/12/2017	5/12/2017
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	2 U	0.5 U	3 U	50 U	0.5 U
1,2-Dichloroethane	µg/L	34	0.5 U	3 U	50 U	0.5 U
1,2-Dichloropropane	µg/L	2 U	0.5 U	3 U	50 U	0.5 U
Benzene	µg/L	151	0.5 U	3 U	50 U	0.5 U
Carbon tetrachloride	µg/L	180	90.8	78.0	870	25.5
Chloroform (Trichloromethane)	µg/L	277	7.7	93.2	1020	6.5
Chloromethane (Methyl chloride)	µg/L	2 U	0.5 U	3 U	50 U	0.5 U
Methylene chloride	µg/L	36	0.5 U	3 U	50 U	0.5 U
Tetrachloroethene	µg/L	158	0.5 U	21	500	0.9
Trichloroethene	µg/L	27	0.5 U	3 U	50 U	0.5 U
Vinyl chloride	µg/L	2 U	0.5 U	3 U	50 U	0.5 U
Semi-volatile Organic Compounds						
2,3,4,5-Tetrachlorophenol	µg/L	43.8	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	43.8	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	52.7	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	92.6	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	16.6	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	3.60	0.011 U	0.020	0.060	0.021
beta-BHC	µg/L	2.0 J	0.037 U	1.12 J	1.60	0.344
delta-BHC	µg/L	1	0.05 U	0.05 U	0.06	0.05 U
gamma-BHC (lindane)	µg/L	3.15	0.052 U	0.052 U	0.055	0.052 U
Hexachlorobenzene	µg/L	2.0 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	11	0.02 U	0.37	0.75	0.04
Hexachloroethane	µg/L	17	0.02 U	0.23	2.16	0.02
Herbicides						
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	39	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Pentachlorophenol	µg/L	140	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		IW32	IW35A	IW35A	IW35B	IW36
Sample ID:		WG-05122017-DF-IW32	WG-05122017-DF-FD10	WG-05122017-DF-IW35A	WG-05122017-DF-IW35B	WG-05122017-DF-IW36
Sample Date:		5/12/2017	5/12/2017 (Duplicate)	5/12/2017	5/12/2017	5/12/2017
Parameters	**Units**					
General Chemistry						
Chloride	mg/L	1400	139	185	418	900
Hardness, calculation	mgCaCO3/L	518	301	327	416	685

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		IW40	IW41	IW42	IW43	IW44
Sample ID:		WG-05122017-DF-IW40	WG-05122017-DF-IW41	WG-05122017-DF-IW42	WG-05122017-DF-IW43	WG-05122017-DF-IW44
Sample Date:		5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	20 U	5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	20 U	5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	20 U	5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	20 U	5 U
Carbon tetrachloride	µg/L	92.5	0.5 U	0.5 U	974	219
Chloroform (Trichloromethane)	µg/L	8.4	0.5 U	0.5 U	42	6
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	20 U	5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	20 U	5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	20 U	5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	20 U	5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	20 U	5 U
Semi-volatile Organic Compounds						
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	9.2	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	18.5	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	6.0	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.032	0.011 U
beta-BHC	µg/L	0.037 U	0.314	0.111	0.204	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.29	0.02 U
Herbicides						
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 UJ	1.0 UJ	10 J	1.0 UJ
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		IW40	IW41	IW42	IW43	IW44
Sample ID:		WG-05122017-DF-IW40	WG-05122017-DF-IW41	WG-05122017-DF-IW42	WG-05122017-DF-IW43	WG-05122017-DF-IW44
Sample Date:		5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
Parameters	**Units**					
General Chemistry						
Chloride	mg/L	136	88	71	361	150
Hardness, calculation	mgCaCO3/L	312	267	178	355	298

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		IW45	IW46	MW02S1	MW02S2	MW03S1
Sample ID:		WG-05122017-DF-IW45	WG-05122017-DF-IW46	WG-05052017-BS-MW02S1	WG-05052017-BS-MW02S2	WG-05042017-DF-MW003S1
Sample Date:		5/12/2017	5/12/2017	5/5/2017	5/5/2017	5/4/2017
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	5.0	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	6.9	0.5 U
Carbon tetrachloride	µg/L	61.1	6.5	12.6	124	0.5 U
Chloroform (Trichloromethane)	µg/L	1.9	0.5 U	6.0	18	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	3.5	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U
Semi-volatile Organic Compounds						
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	113	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	8.8	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.094	0.015
beta-BHC	µg/L	0.037 U	0.037 U	0.199	2.09	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.03	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides						
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		IW45	IW46	MW02S1	MW02S2	MW03S1
Sample ID:		WG-05122017-DF-IW45	WG-05122017-DF-IW46	WG-05052017-BS-MW02S1	WG-05052017-BS-MW02S2	WG-05042017-DF-MW003S1
Sample Date:		5/12/2017	5/12/2017	5/5/2017	5/5/2017	5/4/2017
Parameters	**Units**					
General Chemistry						
Chloride	mg/L	48	115	87	970	2.8
Hardness, calculation	mgCaCO3/L	223	289	293	245	117

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW04S1	MW04S3	MW04S3	MW05S3	MW06BR
Sample ID:		WG-05112017-DF-MW004S1	WG-05112017-DF-MW004S3	WG-05112017-DF-FD8	WG-05122017-JR-MW005S3	WG-05082017-JR-MW006BR
Sample Date:		5/11/2017	5/11/2017	5/11/2017 (Duplicate)	5/12/2017	5/8/2017
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds						
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U	0.013
beta-BHC	µg/L	0.037 U	0.111	0.108	0.145	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.15
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.24
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.18
Herbicides						
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW04S1	MW04S3	MW04S3	MW05S3	MW06BR
Sample ID:		WG-05112017-DF-MW004S1	WG-05112017-DF-MW004S3	WG-05112017-DF-FD8	WG-05122017-JR-MW005S3	WG-05082017-JR-MW006BR
Sample Date:		5/11/2017	5/11/2017	5/11/2017 (Duplicate)	5/12/2017	5/8/2017
Parameters	**Units**					
General Chemistry						
Chloride	mg/L	30.4	35.1	35	146	66
Hardness, calculation	mgCaCO3/L	127	127	125	146	1680

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW06S1	MW06S3	MW07S1	MW07S2
Sample ID:		WG-05042017-JR-MW06S1	WG-05042017-JR-MW06S3	WG-05092017-BS-MW007S1	WG-05092017-BS-MW007S2
Sample Date:		5/4/2017	5/4/2017	5/9/2017	5/9/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	50 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	190	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	50 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	80	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	1460	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	1760	0.7
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	50 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	770	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	350	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	50 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	50 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	13.4	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	96.5	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	10.6	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	6.8	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.38	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.19 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.3	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.41	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.50 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	1.9	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	8.79	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	220	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW06S1	MW06S3	MW07S1	MW07S2
Sample ID:		WG-05042017-JR-MW06S1	WG-05042017-JR-MW06S3	WG-05092017-BS-MW007S1	WG-05092017-BS-MW007S2
Sample Date:		5/4/2017	5/4/2017	5/9/2017	5/9/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	37.8	303	970	176
Hardness, calculation	mgCaCO3/L	226	428	1300	459

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW07S3	MW08S1	MW08S2	MW08S3
Sample ID:		WG-05092017-BS-MW007S3	WG-05052017-JR-MW008S1	WG-05052017-JR-MW008S2	WG-05052017-JR-MW008S3
Sample Date:		5/9/2017	5/5/2017	5/5/2017	5/5/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	3.8	107	6.9
Chloroform (Trichloromethane)	µg/L	0.5 U	9.9	15.1	6.3
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.6	3.0	1.9
Trichloroethene	µg/L	0.5 U	0.8	2.9	1.5
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.1	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	36.5	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	21.3	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.036	0.038	0.020
beta-BHC	µg/L	0.037 U	0.687	0.675	1.05
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW07S3	MW08S1	MW08S2	MW08S3
Sample ID:		WG-05092017-BS-MW007S3	WG-05052017-JR-MW008S1	WG-05052017-JR-MW008S2	WG-05052017-JR-MW008S3
Sample Date:		5/9/2017	5/5/2017	5/5/2017	5/5/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	158	1280	500	220
Hardness, calculation	mgCaCO3/L	421	697	567	271

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW09S1	MW09S3	MW10S1	MW10S2
Sample ID:		WG-05052017-BS-MW09S1	WG-05052017-BS-MW09S3	WG-05122017-JR-MW010S1	WG-05102017-DF-MW010S2
Sample Date:		5/5/2017	5/5/2017	5/12/2017	5/10/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	113	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5	0.5 U	0.5 U	0.5 U
Benzene	µg/L	21.7	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	4.9	2.2	36.8
Chloroform (Trichloromethane)	µg/L	0.7	4.8	2.6	2.1
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	49.3	1.4	0.7	0.9
Trichloroethene	µg/L	174	0.5 U	0.5	0.5 U
Vinyl chloride	µg/L	1.2	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.306	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.060	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.27	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.079	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.68	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.70	0.02 U	0.32	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW09S1	MW09S3	MW10S1	MW10S2
Sample ID:		WG-05052017-BS-MW09S1	WG-05052017-BS-MW09S3	WG-05122017-JR-MW010S1	WG-05102017-DF-MW010S2
Sample Date:		5/5/2017	5/5/2017	5/12/2017	5/10/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	480	91	231	118
Hardness, calculation	mgCaCO3/L	781	298	380	323

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW10S3	MW11S1	MW11S3A	MW11S3B
Sample ID:		WG-05122017-DF-MW010S3	WG-05052017-DF-MW011S1	WG-05052017-DF-MW011S3A	WG-05052017-DF-MW011S3B
Sample Date:		5/12/2017	5/5/2017	5/5/2017	5/5/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	2.3	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	1.5	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.025	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.152	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.17	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 UJ	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW10S3	MW11S1	MW11S3A	MW11S3B
Sample ID:		WG-05122017-DF-MW010S3	WG-05052017-DF-MW011S1	WG-05052017-DF-MW011S3A	WG-05052017-DF-MW011S3B
Sample Date:		5/12/2017	5/5/2017	5/5/2017	5/5/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	4.0	145	87	78
Hardness, calculation	mgCaCO3/L	204	313	260	153

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW12S1A	MW12S3	MW13S1	MW13S3
Sample ID:		WG-05052017-BS-MW012S1A	WG-05052017-BS-MW012S3	WG-05112017-DF-MW013S1	WG-05112017-DF-MW013S3
Sample Date:		5/5/2017	5/5/2017	5/11/2017	5/11/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	50 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	50 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	50 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	50 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	1390	54.0	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	4260	19.0	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	50 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	50 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	560	50.8	0.5 U	0.5 U
Trichloroethene	µg/L	50	0.6	0.5 U	0.5 U
Vinyl chloride	µg/L	50 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	20.3	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	110	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	64.2	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	13.8	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.636	0.025	0.011 U	0.011 U
beta-BHC	µg/L	0.525 J	11.3	0.037 U	0.037 U
delta-BHC	µg/L	0.71	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.744	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	4.29	1.56	0.02 U	0.02 U
Hexachloroethane	µg/L	7.61	0.60	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.9	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW12S1A	MW12S3	MW13S1	MW13S3
Sample ID:		WG-05052017-BS-MW012S1A	WG-05052017-BS-MW012S3	WG-05112017-DF-MW013S1	WG-05112017-DF-MW013S3
Sample Date:		5/5/2017	5/5/2017	5/11/2017	5/11/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	830	148	34.1	1.0 U
Hardness, calculation	mgCaCO3/L	411	229	395	98.8

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW14S1	MW14S3	MW15S1	MW15S2
Sample ID:		WG-05052017-BS-MW014S1	WG-05052017-BS-MW014S3	WG-05062017-BS-MW015S1	WG-05062017-BS-MW015S2
Sample Date:		5/5/2017	5/5/2017	5/6/2017	5/6/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	50 U	0.5 U	2 U
1,2-Dichloroethane	µg/L	0.5 U	50 U	0.5 U	2 U
1,2-Dichloropropane	µg/L	0.5 U	50 U	0.5 U	2 U
Benzene	µg/L	0.5 U	50 U	0.5 U	2 U
Carbon tetrachloride	µg/L	0.6	2620	45.4	208
Chloroform (Trichloromethane)	µg/L	1.4	4730	64.1	8.1
Chloromethane (Methyl chloride)	µg/L	0.5 U	50 U	0.5 U	2 U
Methylene chloride	µg/L	0.5 U	50 U	0.5 U	2 U
Tetrachloroethene	µg/L	0.7	440	0.7	2 U
Trichloroethene	µg/L	0.5 U	50	0.5 U	2 U
Vinyl chloride	µg/L	0.5 U	50 U	0.5 U	2 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.095	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.473	0.037 U	0.108
delta-BHC	µg/L	0.05 U	0.14	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.148	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.14	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	1.26	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	5.41	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.9	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW14S1	MW14S3	MW15S1	MW15S2
Sample ID:		WG-05052017-BS-MW014S1	WG-05052017-BS-MW014S3	WG-05062017-BS-MW015S1	WG-05062017-BS-MW015S2
Sample Date:		5/5/2017	5/5/2017	5/6/2017	5/6/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	29.4	720	282	229
Hardness, calculation	mgCaCO3/L	342	724	464	344

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW15S4	MW16BR	MW16S1	MW16S2SS
Sample ID:		WG-05092017-JR-MW015S4	WG-05042017-DF-MW016BR	WG-05042017-DF-MW016S1	WG-05042017-DF-MW016S2SS
Sample Date:		5/9/2017	5/4/2017	5/4/2017	5/4/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	4.1
Carbon tetrachloride	µg/L	0.5 U	0.5 U	10.6	29.0
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	5.0	7.4
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 J
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	34.0
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	31.8
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	15.4
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.059
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.273
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.12	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.06	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		**MW15S4**	**MW16BR**	**MW16S1**	**MW16S2SS**
Sample ID:		**WG-05092017-JR-MW015S4**	**WG-05042017-DF-MW016BR**	**WG-05042017-DF-MW016S1**	**WG-05042017-DF-MW016S2SS**
Sample Date:		**5/9/2017**	**5/4/2017**	**5/4/2017**	**5/4/2017**
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	4.2	55	150	375
Hardness, calculation	mgCaCO3/L	53.8	1450	362	58.8

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW16S4R	MW17S1	MW17S3A	MW17S3B
Sample ID:		WG-05042017-DF-MW016S4R	WG-05082017-JR-MW017S1	WG-05082017-JR-MW017S3A	WG-05082017-JR-MW017S3B
Sample Date:		5/4/2017	5/8/2017	5/8/2017	5/8/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.84	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW16S4R	MW17S1	MW17S3A	MW17S3B
Sample ID:		WG-05042017-DF-MW016S4R	WG-05082017-JR-MW017S1	WG-05082017-JR-MW017S3A	WG-05082017-JR-MW017S3B
Sample Date:		5/4/2017	5/8/2017	5/8/2017	5/8/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	3.7	24.5	26.2	269
Hardness, calculation	mgCaCO3/L	177	349	241	461

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW18S1	MW18S3	MW19S1	MW19S2
Sample ID:		WG-05122017-JR-MW018S1	WG-05122017-JR-MW018S3	WG-05122017-BS-MW019S1	WG-05122017-JR-MW019S2
Sample Date:		5/12/2017	5/12/2017	5/12/2017	5/12/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	1000 U	30 U	43	170
1,2-Dichloroethane	µg/L	1000 U	30 U	20 U	50 U
1,2-Dichloropropane	µg/L	1000 U	30 U	20 U	50 U
Benzene	µg/L	1000 U	30 U	20 U	50 U
Carbon tetrachloride	µg/L	55000	2310	750	4710
Chloroform (Trichloromethane)	µg/L	22200	1240	470	3860
Chloromethane (Methyl chloride)	µg/L	1000 U	30 U	20 U	50 U
Methylene chloride	µg/L	1000 U	30	20 U	50 U
Tetrachloroethene	µg/L	23300	1020	1430	3850
Trichloroethene	µg/L	1000 U	30 U	30	460
Vinyl chloride	µg/L	1000 U	30 U	20 U	50 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	37.3	5.0 U	5.0 U	6.4
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	44.7	5.0 U	5.0 U	88.1
2,4-Dichlorophenol	µg/L	13.4	5.0 U	5.0 U	64.4
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	17.2
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	4.34	0.095	0.55 U	2.6
beta-BHC	µg/L	4.21 J	12.0	16.4	40.0
delta-BHC	µg/L	1	0.05 U	3 U	10 U
gamma-BHC (lindane)	µg/L	1.1	0.052 U	2.6 U	10 U
Hexachlorobenzene	µg/L	33.9	0.20	17	339
Hexachlorobutadiene	µg/L	290	7.2	145	1220
Hexachloroethane	µg/L	1120	25.3	209	666
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	3.2 J	1.0 UJ	1.0 U	410 J
Pentachlorophenol	µg/L	250	3.2	0.5 U	17 J

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW18S1	MW18S3	MW19S1	MW19S2
Sample ID:		WG-05122017-JR-MW018S1	WG-05122017-JR-MW018S3	WG-05122017-BS-MW019S1	WG-05122017-JR-MW019S2
Sample Date:		5/12/2017	5/12/2017	5/12/2017	5/12/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	177	23	716	3220
Hardness, calculation	mgCaCO3/L	265	130	475	864

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW19S4	MW20S1	MW20S3	MW21S1
Sample ID:		WG-05122017-BS-MW019S4	WG-05082017-DF-MW020S1	WG-05082017-DF-MW020S3	WG-05052017-DF-MW021S1
Sample Date:		5/12/2017	5/8/2017	5/8/2017	5/5/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	1200	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	200	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	200 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	200 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	24000	0.5 U	45.3	1.6
Chloroform (Trichloromethane)	µg/L	14600	0.5 U	1.5	1.5
Chloromethane (Methyl chloride)	µg/L	200 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	200 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	8190	0.5 U	0.5 U	3.0
Trichloroethene	µg/L	640	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	200 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
alpha-BHC	µg/L	5.5 U	0.011 U	0.011 U	0.015
beta-BHC	µg/L	19 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	30 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	26 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	190	0.10 U	0.10 U	0.50
Hexachlorobutadiene	µg/L	3270	0.03	0.02 U	11.1
Hexachloroethane	µg/L	1690	0.02 U	0.02 U	1.01
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1.5	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW19S4	MW20S1	MW20S3	MW21S1
Sample ID:		WG-05122017-BS-MW019S4	WG-05082017-DF-MW020S1	WG-05082017-DF-MW020S3	WG-05052017-DF-MW021S1
Sample Date:		5/12/2017	5/8/2017	5/8/2017	5/5/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	2930	25.1	71	590
Hardness, calculation	mgCaCO3/L	1420	219	247	478

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW21S3	MW22S1	MW22S1	MW22S2	MW22S4
Sample ID:		WG-05042017-DF-MW021S3	WG-05062017-DF-MW022S1	WG-05062017-DF-FD4	WG-05082017-DF-MW022S2	WG-05082017-DF-MW022S4
Sample Date:		5/4/2017	5/6/2017	5/6/2017 (Duplicate)	5/8/2017	5/8/2017
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	20 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	20 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	20 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	20 U	0.5 U
Carbon tetrachloride	µg/L	11.4	21.3	14.1	522	0.5 U
Chloroform (Trichloromethane)	µg/L	0.6	3.0	2.2	30	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	20 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	20 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	20 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	20 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	20 U	0.5 U
Semi-volatile Organic Compounds						
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.14	0.02 U
Herbicides						
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW21S3	MW22S1	MW22S1	MW22S2	MW22S4
Sample ID:		WG-05042017-DF-MW021S3	WG-05062017-DF-MW022S1	WG-05062017-DF-FD4	WG-05082017-DF-MW022S2	WG-05082017-DF-MW022S4
Sample Date:		5/4/2017	5/6/2017	5/6/2017 (Duplicate)	5/8/2017	5/8/2017
Parameters	**Units**					
General Chemistry						
Chloride	mg/L	86	138	139	223	19.4
Hardness, calculation	mgCaCO3/L	257	311	311	360	60.8

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW23BR	MW24S1	MW24S3	MW24S4
Sample ID:		WG-05052017-BS-MW23BR	WG-05092017-JR-MW024S1	WG-05092017-JR-MW024S3	WG-05092017-JR-MW024S4
Sample Date:		5/5/2017	5/9/2017	5/9/2017	5/9/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	1 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	8.6	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	1 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	1 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	82.6	14.7	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	182	14.0	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	1 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	1	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	26.7	4.0	0.5 U
Trichloroethene	µg/L	0.5 U	2.7	0.6	0.5 U
Vinyl chloride	µg/L	0.5 U	1 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.033	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.22	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.31	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		**MW23BR**	**MW24S1**	**MW24S3**	**MW24S4**
Sample ID:		**WG-05052017-BS-MW23BR**	**WG-05092017-JR-MW024S1**	**WG-05092017-JR-MW024S3**	**WG-05092017-JR-MW024S4**
Sample Date:		**5/5/2017**	**5/9/2017**	**5/9/2017**	**5/9/2017**
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	92	57	86	13.9
Hardness, calculation	mgCaCO3/L	1770	298	307	31.1

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW25S1	MW26S1	MW26S3	MW27S1
Sample ID:		WG-05032017-BS-MW25S1	WG-05092017-BS-MW26S1	WG-05092017-BS-MW26S3	WG-05122017-JR-MW027S1
Sample Date:		5/3/2017	5/9/2017	5/9/2017	5/12/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	50 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	50 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	50 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	50 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	830
Chloroform (Trichloromethane)	µg/L	0.5 U	0.9	0.5 U	380
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	50 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	50 U
Tetrachloroethene	µg/L	0.5 U	7.5	0.5 U	2660
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	370
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	50 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	11 U
beta-BHC	µg/L	0.037 U	0.037 U	0.075	37 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	50 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	52 U
Hexachlorobenzene	µg/L	0.49	0.10 U	0.10 U	100 U
Hexachlorobutadiene	µg/L	0.05	0.02	0.02 U	2310
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	1730
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	4 UJ
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	1.6

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		**MW25S1**	**MW26S1**	**MW26S3**	**MW27S1**
Sample ID:		**WG-05032017-BS-MW25S1**	**WG-05092017-BS-MW26S1**	**WG-05092017-BS-MW26S3**	**WG-05122017-JR-MW027S1**
Sample Date:		**5/3/2017**	**5/9/2017**	**5/9/2017**	**5/12/2017**
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	11.8	57	107	634
Hardness, calculation	mgCaCO3/L	133	274	335	699

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW27S2	MW28S1	MW28S2	MW28S3
Sample ID:		WG-05122017-JR-MW027S2	WG-05042017-JR-MW028S1	WG-05042017-JR-MW028S2	WG-05042017-JR-MW028S3
Sample Date:		5/12/2017	5/4/2017	5/4/2017	5/4/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	50 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	50 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	50 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	50 U	0.5 U	9.3	0.5 U
Carbon tetrachloride	µg/L	270	0.5 U	0.5 U	0.9
Chloroform (Trichloromethane)	µg/L	50 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	50 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	50 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	2000	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	50 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	50 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	4.4 U	0.020	0.082	0.011 U
beta-BHC	µg/L	15 U	0.037 U	0.189	0.037 U
delta-BHC	µg/L	20 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	21 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	570	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	3150	0.12	0.02 U	0.14
Hexachloroethane	µg/L	1590	0.08	0.02 U	0.19
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 UJ	2.0	1.0 U	1.0 U
Pentachlorophenol	µg/L	1.3 J	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW27S2	MW28S1	MW28S2	MW28S3
Sample ID:		WG-05122017-JR-MW027S2	WG-05042017-JR-MW028S1	WG-05042017-JR-MW028S2	WG-05042017-JR-MW028S3
Sample Date:		5/12/2017	5/4/2017	5/4/2017	5/4/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	450	112	672	1.9
Hardness, calculation	mgCaCO3/L	535	317	391	64.1

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW29S1	MW29S2	MW29S3	MW30S1
Sample ID:		WG-05112017-JR-MW029S1	WG-05112017-JR-MW029S2	WG-05092017-JR-MW029S3	WG-05062017-JR-MW030S1
Sample Date:		5/11/2017	5/11/2017	5/9/2017	5/6/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	3 U	3.7	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	48 J	133 J	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	3 U	1 U	0.5 U
Benzene	µg/L	0.5 U	57.4 J	3.3	0.5 U
Carbon tetrachloride	µg/L	34.1	3 U	0.5 U	6.3
Chloroform (Trichloromethane)	µg/L	8.9	3 U	0.5 U	5.0
Chloromethane (Methyl chloride)	µg/L	0.5 U	3 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	3	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.9	3	55.9	0.7 J
Trichloroethene	µg/L	0.9	14	114 J	0.7 J
Vinyl chloride	µg/L	0.5 U	3 U	1.3	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	8.7	5.0 UJ
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.2	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
2,4,6-Trichlorophenol	µg/L	5.0 U	8.3	10.8	5.0 UJ
2,4-Dichlorophenol	µg/L	5.0 U	28.4	31.1	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	13.3	5.7	5.0 UJ
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
3/4-Chlorophenol	µg/L	5.0 U	6.8	5.0 U	5.0 UJ
alpha-BHC	µg/L	0.018	0.350	0.035	0.013
beta-BHC	µg/L	0.232	1.68 J	1.32 J	0.184
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.06	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	4.2 J	1.0 U
Pentachlorophenol	µg/L	0.5 U	R	6.1	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW29S1	MW29S2	MW29S3	MW30S1
Sample ID:		WG-05112017-JR-MW029S1	WG-05112017-JR-MW029S2	WG-05092017-JR-MW029S3	WG-05062017-JR-MW030S1
Sample Date:		5/11/2017	5/11/2017	5/9/2017	5/6/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	861	4620	1080	700
Hardness, calculation	mgCaCO3/L	574	1690	424	589

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW30S2	MW30S3	MW31S1	MW32S1
Sample ID:		WG-05062017-JR-MW030S2	WG-05062017-JR-MW030S3	WG-05112017-DF-MW031S1	WG-05102017-JR-MW032S1
Sample Date:		5/6/2017	5/6/2017	5/11/2017	5/10/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	100 U	2 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	100 U	2 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	100 U	2 U	0.5 U
Benzene	µg/L	0.5 U	100 U	2 U	0.5 U
Carbon tetrachloride	µg/L	47.6	11700	68.0	34.5
Chloroform (Trichloromethane)	µg/L	1.7	200	6.4	17.2
Chloromethane (Methyl chloride)	µg/L	0.5 U	100 U	2 U	0.5 U
Methylene chloride	µg/L	0.5 U	100 U	2 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	100 U	2 U	4.4
Trichloroethene	µg/L	0.5 U	100 U	2 U	5.2
Vinyl chloride	µg/L	0.5 U	100 U	2 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.096	0.023	0.033
beta-BHC	µg/L	0.037 U	0.439	0.336	1.06
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.06
gamma-BHC (lindane)	µg/L	0.052 U	0.075	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.06	0.04	0.02 U
Hexachloroethane	µg/L	0.02 U	3.78	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW30S2	MW30S3	MW31S1	MW32S1
Sample ID:		WG-05062017-JR-MW030S2	WG-05062017-JR-MW030S3	WG-05112017-DF-MW031S1	WG-05102017-JR-MW032S1
Sample Date:		5/6/2017	5/6/2017	5/11/2017	5/10/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	74	521	258	1170
Hardness, calculation	mgCaCO3/L	239	539	299	1080

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW113S3	MW114S1	MW130S1	MW130S1	MW130S2
Sample ID:		WG-05112017-JR-MW113S3	WG-05112017-JR-MW114S1	WG-05092017-DF-MW130S1	WG-05092017-DF-FD7	WG-05092017-DF-MW130S2
Sample Date:		5/11/2017	5/11/2017	5/9/2017	5/9/2017 (Duplicate)	5/9/2017
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	500 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	500 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	500 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	500 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	27900	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	25200	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	500 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	1200	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	5700	2.8	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	500 U	0.9	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	500 U	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds						
2,3,4,5-Tetrachlorophenol	µg/L	R	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	26.6 J	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	R	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	95.8 J	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	34.3 J	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	R	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	11.2 J	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	R	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	R	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.44 U	0.014	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	4.24	0.494	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	2 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	2.1 U	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	4.0 U	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	59.0	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	114	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides						
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	42 J	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	31 J	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW113S3	MW114S1	MW130S1	MW130S1	MW130S2
Sample ID:		WG-05112017-JR-MW113S3	WG-05112017-JR-MW114S1	WG-05092017-DF-MW130S1	WG-05092017-DF-FD7	WG-05092017-DF-MW130S2
Sample Date:		5/11/2017	5/11/2017	5/9/2017	5/9/2017 (Duplicate)	5/9/2017
Parameters	**Units**					
General Chemistry						
Chloride	mg/L	5900	1370	51	50	61
Hardness, calculation	mgCaCO3/L	98.3	836	153	161	133

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW130S3	MW131S2	MW131S3	MW132S1
Sample ID:		WG-05092017-DF-MW130S3	WG-05082017-DF-MW131S2	WG-05082017-DF-MW131S3	WG-05092017-DF-MW132S1
Sample Date:		5/9/2017	5/8/2017	5/8/2017	5/9/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.383	0.188	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW130S3	MW131S2	MW131S3	MW132S1
Sample ID:		WG-05092017-DF-MW130S3	WG-05082017-DF-MW131S2	WG-05082017-DF-MW131S3	WG-05092017-DF-MW132S1
Sample Date:		5/9/2017	5/8/2017	5/8/2017	5/9/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	59	77	96	56
Hardness, calculation	mgCaCO3/L	176	236	204	289

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW132S2/S3	MW133S2/S3	MW134S2	MW134S3
Sample ID:		WG-05092017-DF-MW132S2/S3	WG-05112017-DF-MW133S2/S3	WG-05032017-DF-MW134S2	WG-05032017-DF-MW134S3
Sample Date:		5/9/2017	5/11/2017	5/3/2017	5/3/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.04	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW132S2/S3	MW133S2/S3	MW134S2	MW134S3
Sample ID:		WG-05092017-DF-MW132S2/S3	WG-05112017-DF-MW133S2/S3	WG-05032017-DF-MW134S2	WG-05032017-DF-MW134S3
Sample Date:		5/9/2017	5/11/2017	5/3/2017	5/3/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	24.2	30.9	54	41.5
Hardness, calculation	mgCaCO3/L	192	253	202	205

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW135S1	MW135S2/S3	MW136S2/S3	MW137S1
Sample ID:		WG-05042017-DF-MW135S1	WG-05042017-DF-MW135S2/S3	WG-05052017-DF-MW136S2/S3	WG-05032017-DF-MW137S1
Sample Date:		5/4/2017	5/4/2017	5/5/2017	5/3/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW135S1	MW135S2/S3	MW136S2/S3	MW137S1
Sample ID:		WG-05042017-DF-MW135S1	WG-05042017-DF-MW135S2/S3	WG-05052017-DF-MW136S2/S3	WG-05032017-DF-MW137S1
Sample Date:		5/4/2017	5/4/2017	5/5/2017	5/3/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	44.2	45.9	77	16.7
Hardness, calculation	mgCaCO3/L	217	230	229	216

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW137S2	MW137S3	MW138S1	MW138S2/S3
Sample ID:		WG-05052017-DF-MW137S2	WG-05032017-DF-MW137S3	WG-05082017-DF-MW138S1	WG-05082017-DF-MW138S2/S3
Sample Date:		5/5/2017	5/3/2017	5/8/2017	5/8/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		**MW137S2**	**MW137S3**	**MW138S1**	**MW138S2/S3**
Sample ID:		**WG-05052017-DF-MW137S2**	**WG-05032017-DF-MW137S3**	**WG-05082017-DF-MW138S1**	**WG-05082017-DF-MW138S2/S3**
Sample Date:		**5/5/2017**	**5/3/2017**	**5/8/2017**	**5/8/2017**
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	23.7	85	59	67
Hardness, calculation	mgCaCO3/L	246	284	268	268

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW139S2/S3	MW140S1	MW140S2/S3	MW141S2/S3
Sample ID:		WG-05112017-DF-MW139S2/S3	WG-05062017-DF-MW140S1	WG-05062017-DF-MW140S2/S3	WG-05042017-BS-MW141S2/S3
Sample Date:		5/11/2017	5/6/2017	5/6/2017	5/4/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	10 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	10 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	10 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	10 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	578	22.1
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	20	23.4
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	10 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	10 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	10 U	2.5
Trichloroethene	µg/L	0.5 U	0.5 U	10 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	10 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.04	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW139S2/S3	MW140S1	MW140S2/S3	MW141S2/S3
Sample ID:		WG-05112017-DF-MW139S2/S3	WG-05062017-DF-MW140S1	WG-05062017-DF-MW140S2/S3	WG-05042017-BS-MW141S2/S3
Sample Date:		5/11/2017	5/6/2017	5/6/2017	5/4/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	227	18.1	613	25.2
Hardness, calculation	mgCaCO3/L	478	275	757	157

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW142S2/S3	MW143S2/S3	MW144S2/S3	MW145S2/S3
Sample ID:		WG-05092017-JR-MW142S2/S3	WG-05052017-JR-MW143S2/S3	WG-05222017-JR-MW144S2/S3	WG-05092017-DF-MW145S2/S3
Sample Date:		5/9/2017	5/5/2017	5/22/2017	5/9/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	4.2	0.5 U	0.5 U
Chloroform (Trichloromethane)	µg/L	0.5 U	2.5	0.5 U	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.013
beta-BHC	µg/L	0.037 U	0.038	0.037 U	1.03
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.03	0.02 U	0.02 U	0.04
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		**MW142S2/S3**	**MW143S2/S3**	**MW144S2/S3**	**MW145S2/S3**
Sample ID:		**WG-05092017-JR-MW142S2/S3**	**WG-05052017-JR-MW143S2/S3**	**WG-05222017-JR-MW144S2/S3**	**WG-05092017-DF-MW145S2/S3**
Sample Date:		**5/9/2017**	**5/5/2017**	**5/22/2017**	**5/9/2017**
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	19.9	203	33.7	180
Hardness, calculation	mgCaCO3/L	191	422	325	250

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW146S1	MW147S1	MW147S2/S3	MW148S1
Sample ID:		WG-05102017-BS-MW146S1	WG-05082017-JR-MW147S1	WG-05082017-JR-MW147S2/S3	WG-05082017-JR-MW148S1
Sample Date:		5/10/2017	5/8/2017	5/8/2017	5/8/2017
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 UJ	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	µg/L	0.5 U	0.5 U	34.5	0.7
Chloroform (Trichloromethane)	µg/L	0.5 U	0.5 U	9.3	3.1
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.5 U	0.5 U	1.8	0.6
Trichloroethene	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds					
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.037 U	0.037 U	0.037 U	0.186
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U	0.02 U
Herbicides					
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW146S1	MW147S1	MW147S2/S3	MW148S1
Sample ID:		WG-05102017-BS-MW146S1	WG-05082017-JR-MW147S1	WG-05082017-JR-MW147S2/S3	WG-05082017-JR-MW148S1
Sample Date:		5/10/2017	5/8/2017	5/8/2017	5/8/2017
Parameters	**Units**				
General Chemistry					
Chloride	mg/L	25.0	51	62	970
Hardness, calculation	mgCaCO3/L	305	388	228	753

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW148S1	MW148S2/S3	MW149S2/S3
Sample ID:		WG-05082017-JR-FD6	WG-05082017-JR-MW148S2/S3	WG-05112017-JR-MW149S2/S3
Sample Date:		5/8/2017 (Duplicate)	5/8/2017	5/11/2017
Parameters	**Units**			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	µg/L	0.5 U	0.5 U	10.1
1,2-Dichloropropane	µg/L	0.5 U	0.5 U	0.7
Benzene	µg/L	0.5 U	0.5 U	2.0
Carbon tetrachloride	µg/L	0.9	261	0.5 U
Chloroform (Trichloromethane)	µg/L	3.1	40.1	0.5 U
Chloromethane (Methyl chloride)	µg/L	0.5 U	0.5 U	0.5 U
Methylene chloride	µg/L	0.5 U	0.5 U	0.5 U
Tetrachloroethene	µg/L	0.7	4.4	29.4
Trichloroethene	µg/L	0.5 U	3.0	12.9
Vinyl chloride	µg/L	0.5 U	0.5 U	0.5 U
Semi-volatile Organic Compounds				
2,3,4,5-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	µg/L	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U
2,6-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U
3/4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U
alpha-BHC	µg/L	0.011 U	0.026	0.096
beta-BHC	µg/L	0.218	1.23	0.594
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.02 U	0.02 U	0.02 U
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U
Herbicides				
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	0.5 U	0.5 U	0.5 U

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Sample Location:		MW148S1	MW148S2/S3	MW149S2/S3
Sample ID:		WG-05082017-JR-FD6	WG-05082017-JR-MW148S2/S3	WG-05112017-JR-MW149S2/S3
Sample Date:		5/8/2017 (Duplicate)	5/8/2017	5/11/2017
Parameters	**Units**			
General Chemistry				
Chloride	mg/L	980	1130	1060
Hardness, calculation	mgCaCO3/L	695	819	741

Notes:

J - Estimated concentration
R - Rejected
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated

Table 3

Summary of Analytical Methods
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Parameter	Method
Volatile Organic Compounds	SW-846 8260B[(1)]
Chlorinated Phenols	SW-846 8270C[(1)]
Chlorinated Hydrocarbons	SW-846 8121[(1)]
Pentachlorophenol & 2,4-D	SW-846 8151A[(1)]
Chloride	EPA 300.0[(2)]
Hardness	SM 2340B[(3)]

Notes:

(1) - "Test Methods for Solid Waste/Physical Chemical Methods," SW-846, 3rd Edition, September 1986

(2) - "Methods for Chemical Analysis of Water and Wastes," USEPA 600/4-79-220, March 1983

(3) - "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992

USEPA - United States Environmental Protection Agency

Table 4

Qualified Sample Results Due to Holding Time Exceedance
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Parameter	Sample ID	Holding Time (days)	Holding Time Criteria (to Extraction) (days)	Analyte	Qualified Sample Results	Units
SVOCs	WG-05052017-DF-MW021S1	12	7	2,3,4,5-Tetrachlorophenol	5.0 UJ	µg/L
				2,3,4,6-Tetrachlorophenol	5.0 UJ	µg/L
				2,4,5-Trichlorophenol	5.0 UJ	µg/L
				2,4,6-Trichlorophenol	5.0 UJ	µg/L
				2,4-Dichlorophenol	5.0 UJ	µg/L
				2,5-Dichlorophenol	5.0 UJ	µg/L
				2,6-Dichlorophenol	5.0 UJ	µg/L
				2-Chlorophenol	5.0 UJ	µg/L
				3/4-Chlorophenol	5.0 UJ	µg/L

Notes:

UJ - Not detected; associated reporting limit is estimated
SVOCs - Semi-volatile Organic Compounds

Table 5

Qualified Sample Results Due to Outlying Surrogate Recoveries
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Parameter	Sample ID	Surrogate	Surrogate Recovery (percent)	Control Limits (percent)	Analyte	Qualified Result		Units
SVOCs	WG-05092017-DF-MW130S3	Phenol-d6	22.5	25.6-44.5	2,3,4,5-Tetrachlorophenol	5.0	UJ	µg/L
		2 Fluorophenol	36.1	42.2-68.2	2,3,4,6-Tetrachlorophenol	5.0	UJ	µg/L
					2,4,5-Trichlorophenol	5.0	UJ	µg/L
					2,4,6-Trichlorophenol	5.0	UJ	µg/L
					2,4-Dichlorophenol	5.0	UJ	µg/L
					2,5-Dichlorophenol	5.0	UJ	µg/L
					2,6-Dichlorophenol	5.0	UJ	µg/L
					2-Chlorophenol	5.0	UJ	µg/L
					3/4-Chlorophenol	5.0	UJ	µg/L
SVOCs	WG-05112017-JR-MW113S3	Phenol-d6	0	25.6-44.5	2,3,4,5-Tetrachlorophenol		R	µg/L
		2 Fluorophenol	8.8	42.2-68.2	2,3,4,6-Tetrachlorophenol	26.6	J	µg/L
					2,4,5-Trichlorophenol		R	µg/L
					2,4,6-Trichlorophenol	95.8	J	µg/L
					2,4-Dichlorophenol	34.3	J	µg/L
					2,5-Dichlorophenol		R	µg/L
					2,6-Dichlorophenol	11.2	J	µg/L
					2-Chlorophenol		R	µg/L
					3/4-Chlorophenol		R	µg/L
SVOCs	WG-05122017-DF-IW30	Phenol-d6	15	25.6-44.5	2,3,4,5-Tetrachlorophenol	5.0	UJ	µg/L
		2 Fluorophenol	26.6	42.2-68.2	2,3,4,6-Tetrachlorophenol	89.4	J	µg/L
					2,4,5-Trichlorophenol	5.0	UJ	µg/L
					2,4,6-Trichlorophenol	87.7	J	µg/L
					2,4-Dichlorophenol	5.0	UJ	µg/L
					2,5-Dichlorophenol	5.0	UJ	µg/L
					2,6-Dichlorophenol	5.0	UJ	µg/L
					2-Chlorophenol	6.5	J	µg/L
					3/4-Chlorophenol	5.0	UJ	µg/L
Herbicides	WG-05112017-JR-MW113S3	2,4-Dichlorophenoxyacetic acid (2,4-D)	137	62.2-119	2,4-Dichlorophenoxyacetic acid (2,4-D)	42	J	µg/L
					Pentachlorophenol	31	J	µg/L

Notes:

SVOCs - Semi-volatile Organic Compounds
J - Estimated concentration
UJ - Not detected; associated reporting limit is estimated
R - Rejected

Table 6

Qualified Sample Results Due to Outlying Laboratory Control Sample Results
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Parameter	Analyte	LCS Date (mm/dd/yyyy)	LCS % Recovery	Control Limits % Recovery	Associated Sample ID	Qualified Results	Units
Herbicides	2,4-Dichlorophenoxyacetic acid (2,4-D)	05/17/2017	44.7	58.8-127	WG-05122017-DF-IW43	10 J	µg/L
					WG-05122017-DF-FD10	1.0 UJ	µg/L
					WG-05122017-DF-MW010S3	1.0 UJ	µg/L
					WG-05122017-JR-MW010S1	1.0 UJ	µg/L
					WG-05122017-JR-MW005S3	1.0 UJ	µg/L
					WG-05122017-JR-MW019S2	410 J	µg/L
					WG-05122017-JR-MW027S1	4 UJ	µg/L
					WG-05122017-JR-MW027S2	1.0 UJ	µg/L
					WG-05122017-JR-MW018S1	3.2 J	µg/L
					WG-05122017-JR-MW018S3	1.0 UJ	µg/L
					WG-05122017-DF-IW41	1.0 UJ	µg/L
					WG-05122017-DF-IW42	1.0 UJ	µg/L
					WG-05122017-DF-IW46	1.0 UJ	µg/L
					WG-05122017-DF-IW44	1.0 UJ	µg/L
					WG-05122017-DF-IW31	220 J	µg/L
					WG-05122017-DF-IW30	30. J	µg/L
					WG-05122017-DF-IW36	1.0 UJ	µg/L
					WG-05122017-DF-IW35A	1.0 UJ	µg/L
					WG-05122017-DF-IW29	44 J	µg/L
					WG-05122017-DF-IW35B	1.0 UJ	µg/L

Notes:

LCS - Laboratory Control Sample
J - Estimated concentration
UJ - Not detected; associated reporting limit is estimated

Table 7

Qualified Sample Results Due to Outlying Matrix Spike/Matrix Spike Duplicate Recoveries
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Parameter	Sample ID	Analyte	MS % Recovery	MSD % Recovery	RPD (percent)	Control Limits % Recovery	Control Limits RPD	Qualified Result	Units
SVOCs	WG-05062017-JR-MW030S1	2,3,4,5-Tetrachlorophenol	95.1	70.5	29.7	74.5-120	13.1	5.0 UJ	µg/L
		2,4,5-Trichlorophenol	95.7	70.5	30.3	72.4-114	12.9	5.0 UJ	µg/L
		2,4,6-Trichlorophenol	95.9	67.4	35	75.0-116	15.7	5.0 UJ	µg/L
		2,6-Dichlorophenol	97.5	68.9	34.4	76.7-107	13.4	5.0 UJ	µg/L
		2-Chlorophenol	87.8	63.1	32.7	75.1-100	13.9	5.0 UJ	µg/L
		3/4-Chlorophenol	76.9	56.4	30.8	58.8-91.2	14.5	5.0 UJ	µg/L
	WG-05122017-DF-IW35A	beta-BHC	101	72.00	33.5	71.5-125	18	1.12 J	µg/L
	WG-05112017-JR-MW029S2	beta-BHC	86.7	116	28.9	71.5-125	18	1.68 J	µg/L
VOCs	WG-05082017-JR-MW147S1	1,2-Dichloroethane	72.6	75.5	3.9	77.5-122	9.5	0.5 UJ	µg/L
	WG-05092017-JR-MW029S3	1,2-Dichloroethane	72.4	57.5	22.9	77.5-122	9.5	133 J	µg/L
	WG-05092017-JR-MW029S3	Trichloroethene	101	81.7	21	79.3-120	13.7	114 J	µg/L
	WG-05112017-JR-MW029S2	1,2-Dichloroethane	117	103	12.7	77.5-122	9.5	48 J	µg/L
	WG-05112017-JR-MW029S2	Benzene	93.3	83.3	11.3	82.7-117	8.3	57.4 J	µg/L
Herbicides	WG-05112017-JR-MW029S2	Pentachlorophenol	1.6	3.7	79.2	7.60-144	26.3	R	µg/L

Notes:

MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
SVOCs - Semi-Volatile Organic Compounds
VOCs - Volatile Organic Compounds
J - Estimated concentration
UJ - Not detected; associated reporting limit is estimated
R - Rejected

Table 8

Qualified Sample Data Due to Analyte Concentrations in the Rinse Blanks
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Parameter	Rinse Blank ID	Blank Date (dd/mm/yyyy)	Analyte	Blank Result	Associated Sample ID	Original Result	Qualified Result	Units
SVOCs	WG-05152017-JR-ER14	05/15/2017	Hexachlorobutadiene	1.22	WG-05172017-JR-DW7	0.60	0.60 U	µg/L
					WG-05172017-JR-FD11	0.08	0.08 U	µg/L
			Hexachloroethane	0.25	WG-05172017-JR-DW7	0.12	0.12 U	µg/L

Notes:

U - Not detected at the associated reporting limit
SVOCs - Semi-Volatile Organic Compounds

Table 9

Qualified Sample Results Due to Differences in Dual Column Results
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
May 2017

Parameter	Analyte	Associated Sample ID	Qualified Result	Units
SVOCs	beta-BHC	WG-05052017-BS-MW012S1A	0.525 J	µg/L
	beta-BHC	WG-05092017-JR-MW029S3	1.32 J	µg/L
	beta-BHC	WG-05122017-JR-MW018S1	4.21 J	µg/L
	beta-BHC	WG-05122017-DF-IW32	2.0 J	µg/L
	alpha-BHC	WG-05122017-BS-AMW101S	0.012 J	µg/L
	alpha-BHC	WG-05122017-BS-AMW101I	0.014 J	µg/L
Herbicides	2,4-Dichlorophenoxyacetic acid (2,4-D)	WG-05092017-JR-MW029S3	4.2 J	µg/L
	Pentachlorophenol	WG-05122017-JR-MW019S2	17 J	µg/L
	Pentachlorophenol	WG-05122017-JR-MW027S2	1.3 J	µg/L

Notes:

J - Estimated concentration
SVOCs - Semi-Volatile Organic Compounds

E-mail date: July 24, 2017

E-mail to: Charles Janson, Travis Kogl

Analytical Results and Reduced Data Validation

Semiannual Groundwater Sampling

Occidental Chemical Corporation

Wichita, Kansas

July 2017

Prepared by:
GHD | 2055 Niagara Falls Boulevard Niagara Falls New York 14304 USA
T 716 297 6150 **F** 716 297 2265 **W** www.ghd.com

042407-DV-61 | July 24 2017

Contact: Paul McMahon/adh

Table of Contents

1. Introduction 1
2. Sample Holding Time and Preservation 1
3. Laboratory Method Blank Analyses 1
4. Surrogate Spike Recoveries 2
5. Laboratory Control Sample Analyses 2
6. Field QA/QC Samples 2
   - 6.1 Equipment Blank Sample Analysis 2
   - 6.2 Field Duplicate Sample Analysis 2
7. Analyte Reporting 3
8. Conclusion 3

Table Index

Table 1 Sample Collection and Analysis Summary

Table 2 Analytical Results Summary

Table 3 Summary of Analytical Method

1. Introduction

The following document details a reduced validation of analytical results for groundwater samples collected in support of the Semiannual Groundwater Monitoring Program at the Wichita, Kansas Site in July 2017. The samples were submitted to Pace Analytical, located in Salina, Kansas. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented 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 and laboratory control samples (LCS), and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and the documents entitled:

i) Quality Assurance Project Plan, Facility-related Investigative Activities, Resource Conservation and Recovery Act (RCRA) Corrective Action Program", Occidental Chemical Corporation, Wichita, Kansas, EPA ID No. KSD007482029, June 2009

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99-008, October 1999

Item ii) will subsequently be referred to as the "Guidelines" in this Memorandum.

2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in the method. The sample chain of custody document and analytical report were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

Samples 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.

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 extraction and analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for organic determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries were acceptable, demonstrating good analytical efficiency.

5. Laboratory Control Sample Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods 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 compounds of interest. All LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy.

6. Field QA/QC Samples

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

6.1 Equipment Blank Sample Analysis

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

6.2 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 relative percent differences (RPDs) associated with these duplicate samples must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is 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.

7. Analyte Reporting

Non-detect results were presented as non-detect at the RL in Table 2.

8. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable without qualification.

Table 1

Sample Collection and Analysis Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
July 2017

Sample Identification	Location I.D.	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: Chlorinated Hydrocarbons	Comments
WG-07192017-JR-MW10S1	MW10S1	07/19/2017	12:10	X	
WG-07192017-JR-MW21S1	MW21S1	07/19/2017	13:25	X	
WG-07192017-JR-FD1	MW21S1	07/19/2017	00:00	X	Duplicate of WG-07192017-JR-MW21S1
WG-07192017-JR-ER1	-	07/19/2017	12:25	X	Equipment Blank

Notes:

- Not applicable

Table 2

Analytical Results Summary
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
July 2017

Location ID:		**MW10S1**	**MW21S1**	**MW21S1**
Sample Name:		**WG-07192017-JR-MW10S1**	**WG-07192017-JR-MW21S1**	**WG-07192017-JR-FD1**
Sample Date:		**07/19/2017**	**07/19/2017**	**07/19/2017**
				Duplicate
Parameters	**Unit**			
Semi-volatile Organic Compounds				
alpha-BHC	µg/L	0.011 U	0.011 U	0.011 U
beta-BHC	µg/L	0.043	0.037 U	0.037 U
delta-BHC	µg/L	0.05 U	0.05 U	0.05 U
gamma-BHC (lindane)	µg/L	0.052 U	0.052 U	0.052 U
Hexachlorobenzene	µg/L	0.10 U	0.10 U	0.10 U
Hexachlorobutadiene	µg/L	0.17	0.52	0.49
Hexachloroethane	µg/L	0.02 U	0.02 U	0.02 U

Notes:

U - Not detected at the associated reporting limit

Table 3

Summary of Analytical Method
Semiannual Groundwater Sampling
Occidental Chemical Corporation
Wichita, Kansas
July 2017

Parameter	Method
Chlorinated Hydrocarbons	SW-846 8121[(1)]

Notes:

(1) - "Test Methods for Solid Waste/Physical Chemical Methods," SW-846, 3rd Edition, September 1986 and subsequent revisions

www.ghd.com