

29th ANNUAL REPORT ***URBANA LANDFILL COMPLEX***

GROUNDWATER MONITORING ACTIVITIES **MONITORING YEAR 2020**

Prepared for

CHAMPAIGN-URBANA
SOLID WASTE DISPOSAL SYSTEM

Prepared by

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April 2021

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EXECUTIVE SUMMARY

This Annual Report is the 29th in a series of annual reports that began circa 1990 reporting on environmental conditions at the Urbana Landfill Complex (ULC). Principal among the reported conditions is the quality of groundwater. The monitored groundwater or “target” zone is a geological formation known as the Glasford Formation that underlies the more near-surface Wedron Formation into which municipal solid waste has been buried.

Groundwater was collected from seven (7) Glasford Formation monitoring wells and the groundwater samples were analyzed for a suite of fifteen (15) parameters in the 2nd and 4th Quarters. Field parameters were measured at each of the monitoring wells during each of the four quarters of 2020.

Water level measurements for the 2020 monitoring period vary as has been observed in years past. The water level measurements indicated that the hydraulic head in the upper Glasford Formation appears to have rebounded above 2000 levels based on the geomean of the data. Groundwater movement in the Glasford Formation is generally from east to west beneath the ULC area at a relatively low gradient of 0.002 ft/ft: essentially unchanged over the years of record.

Groundwater quality of Glasford Formation groundwater is essentially unchanged from previous years. Concentrations of listed parameters are normal and are generally below the Illinois Class I Groundwater Standard except for manganese in groundwater which is considered naturally occurring. Monitoring Well 4G105 continues to show signs of physical deterioration and is scheduled to be replaced.

Surface water sampled in 2020 appears normal. None of the data indicates any significant water quality change between upstream and downstream sampling locations for the reach of the Saline Ditch adjacent to the ULC. In fact, concentrations of measured inorganics decline downstream.

Leachate levels at the 10-acre site are being monitored in order to identify any accumulation and evaluate the need for pumping to reduce hydrostatic pressure and lower the risk of seepage.

Based on the laboratory analyses of groundwater collected from the monitoring wells at the Urbana Landfill Complex during the year 2020, there is no indication of any impact to - Glasford Formation groundwater.

URBANA LANDFILL COMPLEX MONITORING ACTIVITIES 2019

1.0 BACKGROUND

This is the **29th Annual Report** on groundwater monitoring activities at the Urbana Landfill Complex (ULC). The status of groundwater quality conditions at the ULC has been made available through various reporting entities since about 1989. For twenty-five (25) consecutive years these reports have been prepared by the same environmental consultant now associated with Midwest Engineering & Testing, Inc. (MET). - This continuity results in a comprehensive understanding of groundwater conditions underlying the ULC.

The agreement under which the present monitoring system was developed, the Hoesman Agreement (1989), expired in November 2018 after 30 years following final emplacement of waste at the 10-acre site. Nonetheless, members of the Champaign Urbana Solid Waste Disposal System (CUSWDS), the entity responsible for the ULC, have indicated that it is in the public's best interest to continue groundwater and surface water monitoring beyond the expiration date. The 25th Annual Report, published in 2017, provides a reasonably complete history of monitoring activities over the last 26 years.

The 28th Annual Report presented findings and recommendations from the 2019 Monitoring Year and included, in brief:

- 1) The potentiometric surface for groundwater in the upper Glasford Formation appears to continue to have stabilized to previous high levels as interpreted from the geomean of the combined monitoring well water level data.
- 2) Groundwater in up-gradient well 4G105 and down-gradient wells 6G103 and 8G101 continue to exhibit dissolved manganese concentrations above Class I Groundwater Standards; this exceedence is likely naturally occurring.
- 3) Monitoring Well 4G105 parameters continue to indicate that the well may be compromised and should be replaced immediately as it provides comparative water quality data for down-gradient locations.
- 4) Based on laboratory analyses of groundwater collected from monitoring wells at the ULC and statistical evaluation of those data, there is no indication of a leachate release from the ULC into the monitored aquifer, the

Glasford Formation Aquifer.

- 5) Based on laboratory analyses of surface water samples collected from the Saline Ditch reach adjacent to the ULC, there is no indication of a release to surface water from activities at the ULC or from buried waste.
- 6) The ten (10) acre site needs cover repair as changes in surface topography is likely creating opportunities for infiltration of precipitation.
- 7) Leachate level monitoring at the 10-acre site should continue so as to determine whether pumping of leachate (as at the 24- and 17-acre sites) is necessary.

2.0 2020 MONITORING RESULTS

The purpose of the Annual Report is to report on water level and water quality data collected during the calendar year, January through December 2020 and provide an evaluation of those data. Environmental Monitoring and Technologies, Inc. (EMT) performed data collection and sampling activities as well as analytical laboratory services for the 2020 monitoring year. Those activities were provided under the supervision of MET.

2.1 GROUNDWATER ELEVATION DATA

Groundwater elevation data along with three (3) field parameters (temperature, pH, and specific conductance) are collected on a quarterly schedule from the closed facility's groundwater monitoring network. For 2020 this network consisted of seven (7) monitoring wells screened in and open to the Glasford Formation (Figure 1). Monitoring well 4G102, is open to an elevation interval of approximately 562 to 600 feet National Geodetic Vertical Datum (NGVD), while 4G104A, 4G105, 5G101, 5G102, 6G102, and 8G101 span an interval of approximately 606 to 641 feet (NGVD).

Monitoring well water level data have been and continue to be generally consistent over the past several years. Excursions from the norm for water levels in specific monitoring wells have been discussed in previous annual reports. Figure 2 depicts water level data for the last twenty (20) years, from 2000 (Q120) through 2020 (Q220) for all wells open to the Glasford Formation. The apparent drop in water

levels illustrated by certain 4th Quarter, 2014 and 1st Quarter 2015 monitoring wells depicted in Figure 2 is not clearly understood as it is atypical for the years of record. It is not known if this reflects measurement error or actual drop in hydraulic head at those measuring points. Nonetheless, the hydraulic head appears to have recovered by 2nd Quarter 2015.

Figure 3 shows the interpreted groundwater/potentiometric contours using 2020 water level data that approximate the hydraulic head within the upper Glasford Formation. The general direction of groundwater flow in the Glasford Formation continues to appear to be west to west-northwest as in previous years with some variability across the ULC footprint due to the variability of the interval depth to which the monitoring wells are open.

Figure 2 also includes geomean data for each Quarter and the trend line for those data. This geometric mean indicates the central tendency or typical value of a set of numbers. It is similar to the arithmetic mean, except that instead of adding the set of numbers and then dividing the sum by the count of numbers in the set, n , the numbers are multiplied and then the n th root of the resulting product is taken. For example, if there are three (3) numbers in the set, the cube root of the resulting product is taken.

The calculated groundwater gradient for 2020 using the drop in the geomean hydraulic head between up-gradient monitoring well 4G105 and down gradient monitoring well 4G102, a distance of approximately 4060 ft, is essentially the same as previous years, about 0.002. This compares quite favorably with water level data reported for the region in the past (e.g., Roadcap, G, Pers. Comm., 2006). The geomean for all Upper Glasford Formation water level data beneath the site appears to have stabilized and recovered through the most recent period of record. The maximum difference over the period noted in Figure 2 as given by the geomean for all groundwater elevations is 7.6 ft. based on the geomean difference between the elevations at monitoring well 4G105 and monitoring well 4G102. Based on the geomean calculated for 2020, the apparent potentiometric surface of groundwater in the Glasford Formation has apparently recovered above that for 2000 from 645.57 ft. to 649.46 ft (NGVD) as of the Fourth Quarter 2020.

2.2 WATER QUALITY DATA

Groundwater samples were collected during the 2nd Quarter from the Glasford Formation monitoring wells and analyzed for several basic parameters. The list of parameters consist of

Alkalinity, Arsenic, Hardness, N-Ammonia,
Nitrate/Nitrite, Boron, Chloride, Sulfate,
Total Dissolved Solids, Total Organic Carbon, Total Organic Halides,

and the dissolved concentrations of

Iron, Magnesium, Calcium, Manganese, Sodium. and Potassium.

Appendix A contains laboratory data from both sampling events and are supported by full quality control data. Tables 1 and 2 list exceedence data for those well locations where laboratory data exceeded Class I Groundwater Standards or monitoring system action levels as reported following 2nd Quarter or 4th Quarter sampling events. Class I Groundwater Standards are given in 35 IL, Subpart F, Part 620. The monitoring system action levels were established based on generally known and expected Glasford groundwater chemical constituent levels and using accepted USEPA statistical methods. Appendix A also contains detailed field measurement data.

Table 1 Exceedence Values (*mg/L*) 2nd Quarter

Analyte/ Well	4G102	4G104 A	4G105	5G101	5G102	6G102	8G101	Limit
Arsenic	<10	<10	<10	<10	28.1	<10	<10	10.0
Chloride	<15.93	17.2	<15.93	<15.93	<15.93	<15.93	<15.93	15.93
Iron	<2.85	<2.85	<2.85	<2.85	<2.85	3.57	<2.85	2.85
Manganese	<0.15	<0.15	0.17	<0.15	<0.15	0.156	0.183	0.15

Table 2 Exceedence Values (mg/L) 4th Quarter

Analyte/ Well	4G102	4G104 A	4G105	5G101	5G102	6G102	8G101	Limit
Iron	<2.85	<2.85	<2.85	<2.85	<2.85	3.01	<2.85	2.85
Magnesium	47.5	<45.75	<45.75	47.2	<45.75	<45.75	<45.75	45.75
Manganese	<0.15	<0.15	0.166	<0.15	<0.15	<0.15	<0.15	0.15
Sulfate	<63.71	<63.71	65.5	<63.71	<63.71	<63.71	<63.71	63.71

3.0 SALINE DITCH

Surface water sampling from the reach of the Saline Ditch flowing adjacent to the ULC had been performed for several years prior to about 1999. It was discontinued for a brief period and then resumed in Fall 2004 when a release of an unknown tar-like substance from the adjacent landfill cell into the Saline Ditch was discovered. Based on chemical analysis, the substance was simply described as a petroleum-based substance (PBS). Following discovery of the release, surface water sampling was resumed until July 2008 when the regional office of the Illinois EPA advised the City of Urbana that quarterly sampling was no longer required as mitigation efforts proved effective. Since that time, periodic semi-annual samples of the surface water in the Ditch have been obtained to verify water quality.

When scheduled, surface water samples are collected from an upstream and a downstream location, usually scheduled for 3rd Quarter when it is more likely that low-flow conditions are present. The upstream location is at the approximate upstream boundary of the landfill to the west-southwest at the site of the Urbana Champaign Sanitary District (UCSD) facility and the downstream boundary is where the stream flows under the I-74 bridge to the northeast. Surface water samples collected during 3rd Quarter 2020 were analyzed for a suite of twenty-two (22) elemental and sixty-seven (67) organic parameters (Appendix A).

4.0 SEEPAGE/LEACHATE CONDITIONS

Periodic seepage of leachate along the north and south slopes of the 24-acre and 17-acre has occurred over the past decade or more. Leachate samples

collected from the northern seeps were analyzed several years ago for inorganic and organic parameters and found to pose no significant threat to human health or the environment. In 2009 a 4-inch diameter leachate recovery well was installed on the north side to check leachate levels and, based on the leachate level observed, is used to reduce hydrostatic pressure within the buried waste by pumping and disposing of excess leachate as it accumulates. The solar-powered pump and associated piping fitted to the well required repairs following piping issues discovered in 2019 when pumping resumed following winter month shutdown. Problems with extraction continued, however, and as of December 2020 had not been resolved. Nonetheless, leachate from the well could be sampled and samples were collected and analyzed during the 3rd Quarter. Results are included in Appendix A. There are no chemical requirements for leachate except upon disposal to the Urbana-Champaign Sanitary District Facility through a connection at the ULC. No leachate was sent to the UCSD in 2020 due to pipeline issues at the former landfill.

The 10-acre site may also be accumulating leachate as evidenced by levels reported from three leachate monitoring wells and minor seeps associated with the site. Groundwater sampled from Monitoring Well 3G102 also reflects leachate increases. An upsurge in leachate levels can lead to increased hydrostatic pressure on side walls thereby increasing the risk for seepage. While limited and minor, some evidence of seepage in the past, both liquid and gas has been observed in various areas of the 10-acre site.

5.0 Solar Energy Development

Preparations for the installation of an array of photovoltaic cells on the surface of the 24 and 17-acre sites began following an agreement between the solar provider, Nexamp, CUSWDS, and City of Urbana. Nexamp contracted with MET to provide a survey of landfill cover thickness. This information was needed in order to properly prepare for future construction activities. It is believed that installation of the photovoltaic array will begin in 2021.

6.0 DISCUSSION

Groundwater Elevations - Groundwater elevation data for 2020 are interpreted to suggest an increase in potentiometric head over that observed in 2019. This is consistent with the observation that the potentiometric/hydraulic head continues upward according to the polynomial trend line of the geomean. That interpretation seems to be supported by the data collected since about 2008 (Figure 2) that appear to indicate recovery following the decline observed in the geomean from 1998 through 2007. Water level elevations for 2020 as given by the year's four quarters of data are generally synchronous as they were in prior years. The apparent asynchronous character of the hydraulic head over the monitoring well array observed in the period between about 2005 and 2008 diminishes and is not observed beyond the 1st Quarter 2015. The 4th Quarter data show a slight decline in the overall hydraulic head.

The hydraulic head in the monitored zone has recovered over the years of record and is now situated slightly above that reported for 2000. The 2000 geomean was calculated at 645.57 ft MSL and that for the 4th Quarter, 2020 at 649.46, a difference of close to 4 feet. The calculated geomean low occurred in the 4th Quarter 2007 at 642.19 and the high geomean in the 2nd Quarter, 2017 at 649.60. While this appears to reflect recharge of the aquifer it more likely reflects pumping rate variability and public water use associated with Illinois American Water groundwater withdrawals at their former facility just west of Lincoln Avenue. That facility has discontinued withdrawals and the facility has been dismantled which would explain an equilibrium rebound of the apparent hydraulic head.

The polynomial trend line, used when data fluctuates such as that observed in water level data for the ULC, is determined by the number of fluctuations in the data or by how many bends appear in the curve. The trend line in Figure 2 is a fourth order computation with an R^2 value of 0.90, slightly higher than that reported for 2019. The R^2 value is a measure of the correlation for a set of data; in this case it is based on the square of the Pearson correlation coefficient between the observed and predicted values. In statistics, the Pearson correlation coefficient or the bivariate correlation, is a statistic that measures linear correlation between two variables X and Y. In this case the observed and predicted values. It is widely used in the sciences.

Water level variability in monitoring wells as measured quarterly is systemically consistent and the direction of groundwater flow in the upper Glasford Formation remains generally east to west as it has for the period of record. The general direction and gradient of groundwater flow, as interpreted from mean water

level data observed in all Glasford Formation monitoring wells, have not changed in any significant manner over the years these data have been collected. The generalized contours of the Upper Glasford potentiometric surface as interpreted from the geomean of 2020 water level data measured are shown on Figure 3 along with the projected flow path(s) of groundwater across the gradient of that surface. This is essentially the same interpretation given for several years and Figure 2 has not changed in any statistically significant way over the past few years.

Differences in the elevation span(s) to which monitoring well screens are placed in Glasford monitoring wells result in a general interpretation as to the position of the equipotential lines. The resultant “bowed” nature of these lines as depicted in Figure 3 is due, in part, to the variance in the lithological character of the Glasford Formation to which the individual monitoring well screens are open. However, the generally west direction of movement is an accurate depiction of groundwater flow and this has been the case for the period of record.

Groundwater Quality - Groundwater quality data collected for monitoring year 2020 were evaluated using statistical methods for normality, Non-parametric Prediction Interval analyses, and Parametric Analyses of Variance (ANOVA). The data for most constituents exhibits a non-normal distribution as they have over the period of record. There were no significant deviations in the data from expected results that would indicate impacts to Glasford Formation groundwater from materials contained within the ULC. The chemical character of groundwater collected from the monitoring wells open to the Glasford Formation remains typical for the formation. The laboratory data are compared to Class I Groundwater Standards and to statistically determined limits based on long-term groundwater data to evaluate water quality impacts, if any.

Groundwater quality is evaluated by assessing the concentrations of several constituents of concern as originally determined by the Hoesman Agreement and by recommendations over the past several years. More specifically, statistical comparisons are made by comparing groundwater quality in up-gradient monitoring wells to that collected from down-gradient wells using a statistical model based on inter-well comparisons. At the ULC the primary up gradient well is monitoring well 4G105.

Glasford Formation groundwater as determined from laboratory analyses for the selected suite of parameters has been consistent and predictable from the earliest measurements. For example, manganese generally exceeds the Class I

Groundwater Standard in the up-gradient monitoring well 4G105 as well as in down-gradient monitoring wells 5G102 and 8G101. As noted in prior reports, manganese is a natural occurring elemental source in Glasford Formation sediments in which and through which groundwater flows. While Tables 1 and 2 indicate several exceedences various locations, the exceedence values are small and are generally non-repetitive except for those of manganese in monitoring wells 4G105, 5G102 and 8G101.. In addition, statistical evaluation of the data do not indicate impact from anthropogenic sources as no other exceedences of typical leachate constituents were observed.

Surface Water Quality –In 2020 a complete analytical suite of both elemental and organic chemicals was performed following sample collection during the 3rd Quarter. Samples were collected at both upstream and downstream sampling points. Six elemental, inorganic substances were measured including barium, boron, chloride, iron, sulfate and phosphorus along with total dissolved solids. No organic compound out of more than 100 compounds analyzed was measured above detection levels. All of the elements measured were below surface water standards and diminished in concentrations downstream. This indicates that no base flow contribution from the area of the landfill to the Saline Ditch has occurred that would impact the water flowing through that reach of the stream.

Leachate Disposal – In 2020, no leachate was conveyed to the Urbana Champaign Sanitary District due to yet-to-be identified issues with the solar powered pump and leachate pipeline at the ULC.

7.0 FINDINGS and RECOMMENDATIONS

Monitoring activities at the ULC through December 2020 have resulted in the following findings and recommendations:

- 1) The potentiometric surface for groundwater in the upper Glasford Formation appears to have stabilized to previous high levels as interpreted from the geomean of the combined monitoring well water level data;
- 2) Groundwater in up-gradient well 4G105 and down-gradient wells 5G102 and 8G101 continue to exhibit dissolved manganese concentrations above Class I Groundwater Standards; this exceedence is likely naturally occurring;
- 3) Monitoring Well 4G105 parameters continue to indicate that the well may be compromised and should be replaced immediately as it provides comparative water quality data for downgradient locations;
- 4) Based on laboratory analyses of groundwater collected from monitoring wells at the ULC and statistical evaluation of those data, there is no indication of a leachate release from the ULC into the monitored aquifer, the Glasford Formation Aquifer;.
- 5) Based on laboratory analyses of surface water samples collected from the Saline Ditch reach adjacent to the ULC, there is no indication of a release to surface water from activities at the ULC or from buried waste;.
- 6) The ten (10) acre site needs cover repair as changes in surface topography is likely creating opportunities for infiltration of precipitation;.
- 7) Continue leachate level monitoring at the 10-acre site to determine whether pumping of leachate (as at the 24- and 17-acre sites) is necessary;
- 8) Issues with the leachate pump and pipeline on the 24- and 17-acre sites need be further investigated and resolved.

8.0 REFERENCES & BIBLIOGRAPHY

Hoesman Agreement, August 1986

Midwest Engineering and Testing, Inc.,

March 2017. *25th Annual Report, Urbana Landfill Complex: Groundwater Monitoring Activities, Monitoring Year 2016.*

March 2018, *26th Annual Report, Urbana Landfill Complex: Groundwater Monitoring Activities, Monitoring Year 2017*

March 2019, *27th Annual Report, Urbana Landfill Complex: Groundwater Monitoring Activities, Monitoring Year 2018*

May 2020, *28th Annual Report, Urbana Landfill Complex: Groundwater Monitoring Activities, Monitoring Year 2019*

P.E. LaMoreaux and Associates, Inc.,

June 1996. *First Report on Assessment Procedures.*

March 1998. *Sixth Annual Report, Urbana Landfill Complex, Vols. 1 & 2*

April 1999. *Seventh Annual Report, Groundwater Monitoring Activities October 1997 through January 1999.*

Rapps Engineering and Applied Science, Inc.,

February 2008. *16th Annual Report, Urbana Landfill Complex: Groundwater Monitoring Activities, Monitoring Year 2007.*

February 2010. *18th Annual Report, Urbana Landfill Complex: Groundwater Monitoring Activities, Monitoring Year 2009.*

Schneider Geoscience, P.C. April 2000. *Eighth Annual Report, Urbana Landfill Complex*

FIGURES

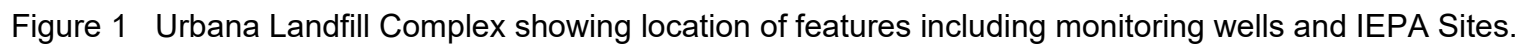


Figure 1 Urbana Landfill Complex showing location of features including monitoring wells and IEPA Sites.

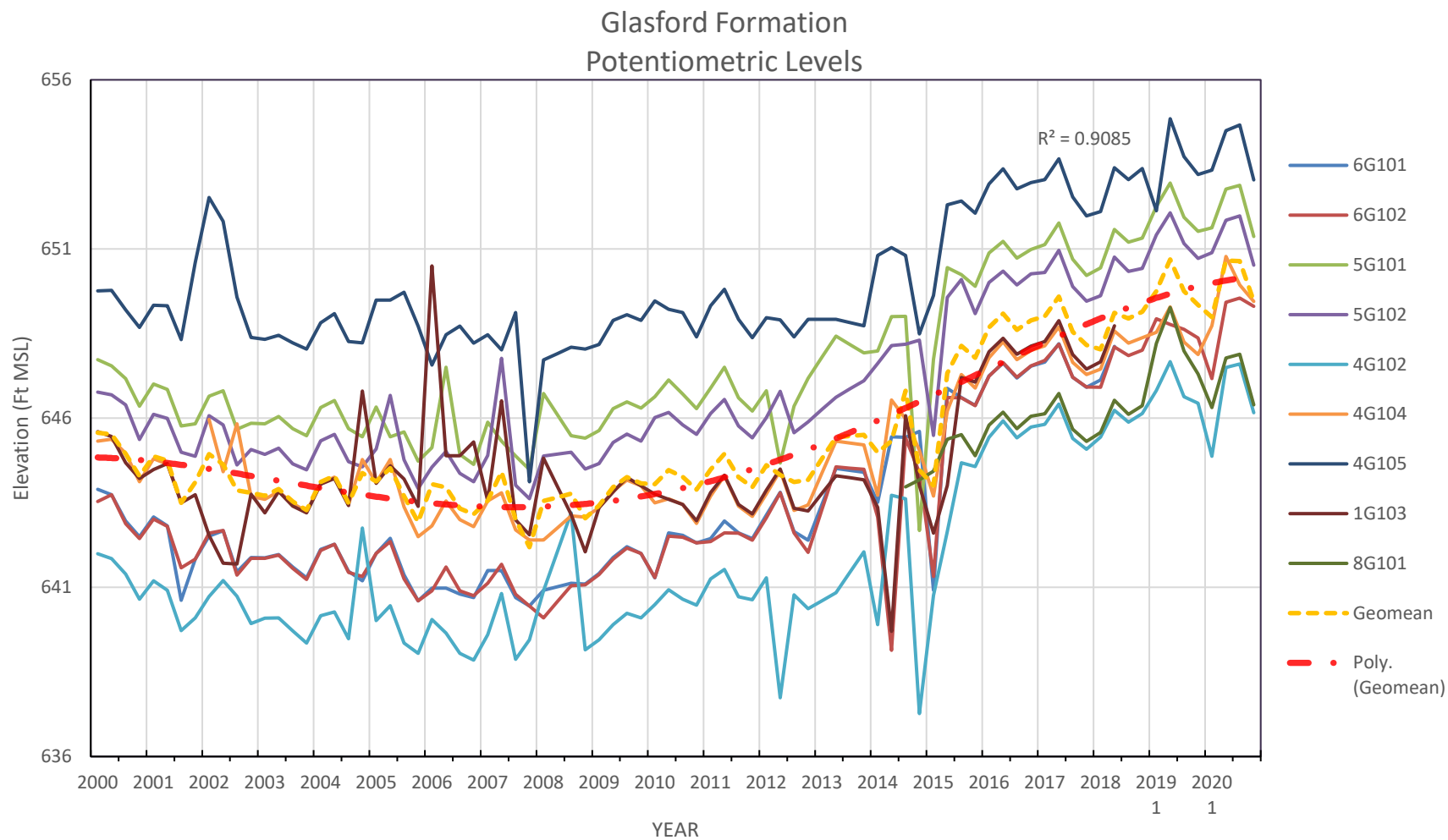


Figure 2. Upper Glasford Formation potentiometric data: 2000 through 2020.
Geomean plotted and 4th order polynomial regression line added.

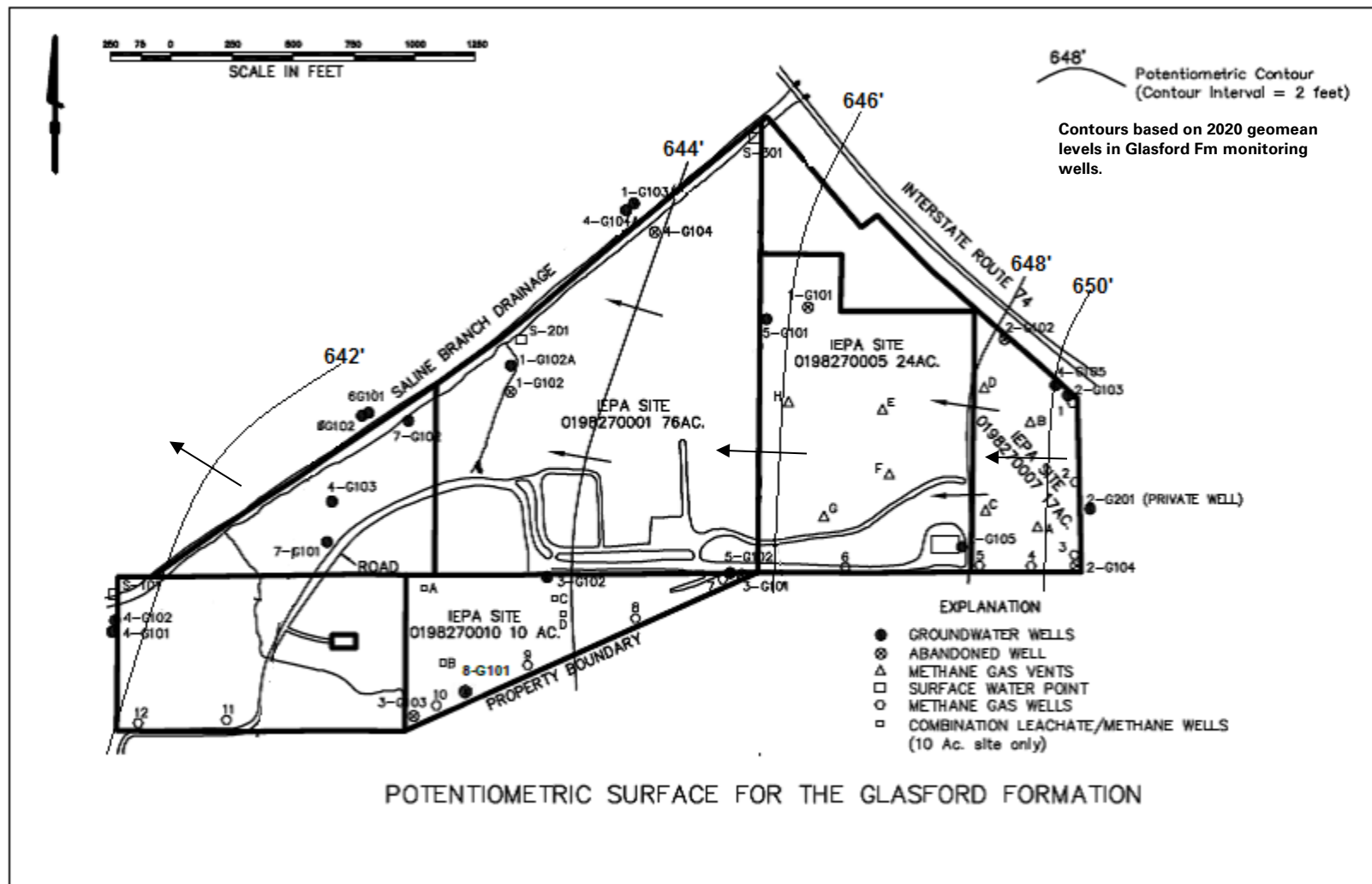


Figure 3. Potentiometric contour map of the Upper Glasford Formation. Arrows indicate general direction of groundwater flow in the upper Glasford Formation monitored and is essentially the same as in previous years.

APPENDIX A

Laboratory Reports

Analytical Report

Scott Tess
City of Urbana
706 S Glover Ave
Urbana, IL 61802

June 22, 2020

Work Order: 20E0546

RE: Second Quarter Groundwater
2Q20

Dear Scott Tess:

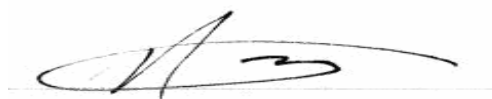
Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

Sincerely,



Jacoby Jackson
Project Manager
847.967.6666
jjackson@emt.com
Approved for release: 6/22/2020 2:45:20PM

Approved by,



Nathan Fey
Laboratory Operations Manager

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Illinois, NELAP Accredited Lab No. 100256, Cert No. 1002562020-1



Client Sample Results

Client: City of Urbana
Project: Second Quarter Groundwater
2Q20
Work Order: 20E0546

Client Sample ID: 4G102
Report Date: 06/22/2020
Collection Date: 05/26/2020 09:40
Matrix: Groundwater
Lab ID: 20E0546-01

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	561.1200			No unit		05/26/20 09:40	B0F0736	CD
Depth to water (feet below land surface)	50.5500			No unit		05/26/20 09:40	B0F0736	CD
Depth to water (feet from measuring point)	52.5500			No unit		05/26/20 09:40	B0F0736	CD
Elevation of groundwater surface (Feet)	647.5000			No unit		05/26/20 09:40	B0F0736	CD
Method: SM2510B								
Specific Conductance	725			uS/cm		05/26/20 09:40	B0F0736	CD
Method: SM2550-B								
Temperature	61.2			°F	0.00	05/26/20 09:40	B0F0736	CD
Method: SM4500-H								
pH	7.48	0.05		pH Units	0.04	05/26/20 09:40	B0F0736	CD
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	73.5	25.0		ug/L	2.00	06/11/20 17:21	B0E0836	AG
Boron	0.135	0.0125		mg/L	0.00500	06/11/20 17:21	B0E0836	AG
Chromium	< 25.0	25.0		ug/L	2.50	06/11/20 17:21	B0E0836	AG
Iron	0.178	0.125		mg/L	0.0500	06/11/20 17:21	B0E0836	AG
Magnesium	43.4	1.25		mg/L	0.200	06/11/20 18:13	B0E0836	AG
Manganese	0.0764	0.0250		mg/L	0.00250	06/11/20 17:21	B0E0836	AG
Sodium	13.8	1.25	Q, S3	mg/L	0.500	06/11/20 18:13	B0E0836	AG
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	06/10/20 17:50	B0E0834	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	6.77	0.500		mg/L	0.200	05/27/20 18:58	B0E0814	MM7
Nitrogen, Nitrate	< 0.250	0.250		mg/L	0.100	05/27/20 18:58	B0E0814	MM7
Nitrogen, Nitrite	< 0.250	0.250	Q, S2	mg/L	0.100	05/27/20 18:58	B0E0814	MM7
Sulfate	32.8	1.50		mg/L	0.500	05/27/20 18:58	B0E0814	MM7
Wet Chemistry								
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	438	10.0		mg/L	1.00	05/28/20 09:44	B0E0843	MKP
Method: SM4500-NH3-B-C								
Ammonia	< 0.980	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	4G102
Project:	Second Quarter Groundwater 2Q20	Report Date:	06/22/2020
Work Order:	20E0546	Collection Date:	05/26/2020 09:40
		Matrix:	Groundwater
		Lab ID:	20E0546-01 (Continued)

Analyses	Result	EMT Reporting		Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
		Limit							
Wet Chemistry (Continued)									
Method: SW9014 / SW9010B									
Cyanide	< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 11:57	B0E0844	SP1	
Method: SW9060									
Organic Carbon, Total	1.57	1.00		mg/L	0.400	05/29/20 15:26	B0E0913	TB2	

Keystone Laboratory, Subcontract

Subcontracted Analyses

Method: SW9020B									
Total Organic Halogens	< 0.01	0.01		mg/L	0.01	06/04/20 00:00	20E0546-01	EYSTONE	

Client Sample Results

(Continued)

Client: City of Urbana
Project: Second Quarter Groundwater
 2Q20
Work Order: 20E0546

Client Sample ID: 4G104A
Report Date: 06/22/2020
Collection Date: 05/26/2020 11:45
Matrix: Groundwater
Lab ID: 20E0546-02

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	655.0900			No unit		05/26/20 11:45	B0F0736	CD
Depth to water (feet below land surface)	44.9200			No unit		05/26/20 11:45	B0F0736	CD
Depth to water (feet from measuring point)	46.9200			No unit		05/26/20 11:45	B0F0736	CD
Elevation of groundwater surface (Feet)	670.3600			No unit		05/26/20 11:45	B0F0736	CD
Method: SM2510B								
Specific Conductance	824			uS/cm		05/26/20 11:45	B0F0736	CD
Method: SM2550-B								
Temperature	58.3			°F	0.00	05/26/20 11:45	B0F0736	CD
Method: SM4500-H								
pH	7.33	0.05		pH Units	0.04	05/26/20 11:45	B0F0736	CD
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	99.0	25.0		ug/L	2.00	06/11/20 17:23	B0E0836	AG
Boron	0.227	0.0125		mg/L	0.00500	06/11/20 17:23	B0E0836	AG
Chromium	< 25.0	25.0		ug/L	2.50	06/11/20 17:23	B0E0836	AG
Iron	0.137	0.125		mg/L	0.0500	06/11/20 17:23	B0E0836	AG
Magnesium	41.9	1.25		mg/L	0.200	06/11/20 18:14	B0E0836	AG
Manganese	0.122	0.0250		mg/L	0.00250	06/11/20 17:23	B0E0836	AG
Sodium	21.0	1.25	Q, S3	mg/L	0.500	06/11/20 18:14	B0E0836	AG
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	06/10/20 17:58	B0E0834	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	17.2	0.500		mg/L	0.200	05/27/20 19:27	B0E0814	MM7
Nitrogen, Nitrate	< 0.250	0.250		mg/L	0.100	05/27/20 19:27	B0E0814	MM7
Nitrogen, Nitrite	< 0.250	0.250	Q, S2	mg/L	0.100	05/27/20 19:27	B0E0814	MM7
Sulfate	1.64	1.50		mg/L	0.500	05/27/20 19:27	B0E0814	MM7
Wet Chemistry								
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	481	10.0		mg/L	1.00	05/28/20 09:44	B0E0843	MKP
Method: SM4500-NH3-B-C								
Ammonia	5.04	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3

Client Sample Results

(Continued)

Client: City of Urbana
Project: Second Quarter Groundwater
 2Q20
Work Order: 20E0546

Client Sample ID: 4G104A
Report Date: 06/22/2020
Collection Date: 05/26/2020 11:45
Matrix: Groundwater
Lab ID: 20E0546-02 (Continued)

Analyses	Result	EMT Reporting		Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
		Limit							
Wet Chemistry (Continued)									
Method: SW9014 / SW9010B									
Cyanide	< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 11:59	B0E0844	SP1	
Method: SW9060									
Organic Carbon, Total	3.45	1.00		mg/L	0.400	05/29/20 15:48	B0E0913	TB2	

Keystone Laboratory, Subcontract

Subcontracted Analyses

Method: SW9020B									
Total Organic Halogens	< 0.01	0.01		mg/L	0.01	06/05/20 00:00	20E0546-02	EYSTONE	

Client Sample Results

(Continued)

Client: City of Urbana
Project: Second Quarter Groundwater
 2Q20
Work Order: 20E0546

Client Sample ID: 4G105
Report Date: 06/22/2020
Collection Date: 05/26/2020 12:40
Matrix: Groundwater
Lab ID: 20E0546-03

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	610.1900			No unit		05/26/20 12:40	B0F0736	PB
Depth to water (feet below land surface)	86.2200			No unit		05/26/20 12:40	B0F0736	PB
Depth to water (feet from measuring point)	88.2200			No unit		05/26/20 12:40	B0F0736	PB
Elevation of groundwater surface (Feet)	654.5000			No unit		05/26/20 12:40	B0F0736	PB
Method: SM2510B								
Specific Conductance	818			uS/cm		05/26/20 12:40	B0F0736	PB
Method: SM2550-B								
Temperature	56.8			°F	0.00	05/26/20 12:40	B0F0736	PB
Method: SM4500-H								
pH	7.17	0.05		pH Units	0.04	05/26/20 12:40	B0F0736	PB
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	111	25.0		ug/L	2.00	06/11/20 17:25	B0E0836	AG
Boron	1.49	0.0125		mg/L	0.00500	06/11/20 17:25	B0E0836	AG
Chromium	< 25.0	25.0		ug/L	2.50	06/11/20 17:25	B0E0836	AG
Iron	0.234	0.125		mg/L	0.0500	06/11/20 17:25	B0E0836	AG
Magnesium	38.1	1.25		mg/L	0.200	06/11/20 18:16	B0E0836	AG
Manganese	0.170	0.0250		mg/L	0.00250	06/11/20 17:25	B0E0836	AG
Sodium	52.5	1.25	Q, S3	mg/L	0.500	06/11/20 18:16	B0E0836	AG
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	06/10/20 18:00	B0E0834	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	10.1	0.500		mg/L	0.200	05/27/20 21:21	B0E0814	MM7
Nitrogen, Nitrate	< 0.250	0.250		mg/L	0.100	05/27/20 21:21	B0E0814	MM7
Nitrogen, Nitrite	< 0.250	0.250	Q, S2	mg/L	0.100	05/27/20 21:21	B0E0814	MM7
Sulfate	16.2	1.50		mg/L	0.500	05/27/20 21:21	B0E0814	MM7
Wet Chemistry								
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	516	10.0		mg/L	1.00	05/28/20 09:44	B0E0843	MKP
Method: SM4500-NH3-B-C								
Ammonia	5.47	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	4G105
Project:	Second Quarter Groundwater 2Q20	Report Date:	06/22/2020
Work Order:	20E0546	Collection Date:	05/26/2020 12:40
		Matrix:	Groundwater
		Lab ID:	20E0546-03 (Continued)

Analyses	Result	EMT Reporting		Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
		Limit							
Wet Chemistry (Continued)									
Method: SW9014 / SW9010B									
Cyanide	< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 12:00	B0E0844	SP1	
Method: SW9060									
Organic Carbon, Total	5.81	1.00		mg/L	0.400	05/29/20 16:09	B0E0913	TB2	

Keystone Laboratory, Subcontract

Subcontracted Analyses

Method: SW9020B									
Total Organic Halogens	< 0.01	0.01		mg/L	0.01	06/05/20 00:00	20E0546-03	EYSTONE	

Client Sample Results

(Continued)

Client: City of Urbana
Project: Second Quarter Groundwater
 2Q20
Work Order: 20E0546

Client Sample ID: 5G101
Report Date: 06/22/2020
Collection Date: 05/26/2020 11:25
Matrix: Groundwater
Lab ID: 20E0546-04

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	608.0300			No unit		05/26/20 11:25	B0F0736	PB
Depth to water (feet below land surface)	74.3600			No unit		05/26/20 11:25	B0F0736	PB
Depth to water (feet from measuring point)	76.8600			No unit		05/26/20 11:25	B0F0736	PB
Elevation of groundwater surface (Feet)	652.7700			No unit		05/26/20 11:25	B0F0736	PB
Method: SM2510B								
Specific Conductance	666			uS/cm		05/26/20 11:25	B0F0736	PB
Method: SM2550-B								
Temperature	57.0			°F	0.00	05/26/20 11:25	B0F0736	PB
Method: SM4500-H								
pH	7.71	0.05		pH Units	0.04	05/26/20 11:25	B0F0736	PB
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	53.8	25.0		ug/L	2.00	06/11/20 17:26	B0E0836	AG
Boron	0.0913	0.0125		mg/L	0.00500	06/11/20 17:26	B0E0836	AG
Chromium	< 25.0	25.0		ug/L	2.50	06/11/20 17:26	B0E0836	AG
Iron	< 0.125	0.125		mg/L	0.0500	06/11/20 17:26	B0E0836	AG
Magnesium	43.3	1.25		mg/L	0.200	06/11/20 18:18	B0E0836	AG
Manganese	< 0.0250	0.0250		mg/L	0.00250	06/11/20 17:26	B0E0836	AG
Sodium	11.2	1.25	Q, S3	mg/L	0.500	06/11/20 18:18	B0E0836	AG
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	06/10/20 18:02	B0E0834	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	4.22	0.500		mg/L	0.200	05/27/20 21:50	B0E0814	MM7
Nitrogen, Nitrate	0.940	0.250		mg/L	0.100	05/27/20 21:50	B0E0814	MM7
Nitrogen, Nitrite	< 0.250	0.250	Q, S2	mg/L	0.100	05/27/20 21:50	B0E0814	MM7
Sulfate	41.7	1.50		mg/L	0.500	05/27/20 21:50	B0E0814	MM7
Wet Chemistry								
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	426	10.0		mg/L	1.00	05/28/20 09:44	B0E0843	MKP
Method: SM4500-NH3-B-C								
Ammonia	< 0.980	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	5G101
Project:	Second Quarter Groundwater 2Q20	Report Date:	06/22/2020
Work Order:	20E0546	Collection Date:	05/26/2020 11:25
		Matrix:	Groundwater
		Lab ID:	20E0546-04 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
Wet Chemistry (Continued)								
Method: SW9014 / SW9010B								
Cyanide	< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 12:02	B0E0844	SP1
Method: SW9060								
Organic Carbon, Total	< 1.00	1.00		mg/L	0.400	05/29/20 16:29	B0E0913	TB2

Keystone Laboratory, Subcontract

Subcontracted Analyses

Method: SW9020B								
Total Organic Halogens	< 0.01	0.01		mg/L	0.01	06/05/20 00:00	20E0546-04 EYSTONE	

Client Sample Results

(Continued)

Client: City of Urbana
Project: Second Quarter Groundwater
 2Q20
Work Order: 20E0546

Client Sample ID: 5G102
Report Date: 06/22/2020
Collection Date: 05/26/2020 10:25
Matrix: Groundwater
Lab ID: 20E0546-05

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	608.6000			No unit		05/26/20 10:25	B0F0736	PB
Depth to water (feet below land surface)	84.4200			No unit		05/26/20 10:25	B0F0736	PB
Depth to water (feet from measuring point)	86.9200			No unit		05/26/20 10:25	B0F0736	PB
Elevation of groundwater surface (Feet)	651.8500			No unit		05/26/20 10:25	B0F0736	PB
Method: SM2510B								
Specific Conductance	653			uS/cm		05/26/20 10:25	B0F0736	PB
Method: SM2550-B								
Temperature	56.2			°F	0.00	05/26/20 10:25	B0F0736	PB
Method: SM4500-H								
pH	7.66	0.05		pH Units	0.04	05/26/20 10:25	B0F0736	PB
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	52.5	25.0		ug/L	2.00	06/11/20 17:28	B0E0836	AG
Boron	0.419	0.0125		mg/L	0.00500	06/11/20 17:28	B0E0836	AG
Chromium	< 25.0	25.0		ug/L	2.50	06/11/20 17:28	B0E0836	AG
Iron	1.46	0.125		mg/L	0.0500	06/11/20 17:28	B0E0836	AG
Magnesium	38.2	1.25		mg/L	0.200	06/11/20 18:20	B0E0836	AG
Manganese	0.0371	0.0250		mg/L	0.00250	06/11/20 17:28	B0E0836	AG
Sodium	22.1	1.25	Q, S3	mg/L	0.500	06/11/20 18:20	B0E0836	AG
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	28.1	22.2		ug/L	1.78	06/10/20 18:03	B0E0834	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	2.34	0.500		mg/L	0.200	05/27/20 22:18	B0E0814	MM7
Nitrogen, Nitrate	< 0.250	0.250		mg/L	0.100	05/27/20 22:18	B0E0814	MM7
Nitrogen, Nitrite	< 0.250	0.250	Q, S2	mg/L	0.100	05/27/20 22:18	B0E0814	MM7
Sulfate	< 1.50	1.50		mg/L	0.500	05/27/20 22:18	B0E0814	MM7
Wet Chemistry								
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	386	10.0		mg/L	1.00	05/28/20 09:44	B0E0843	MKP
Method: SM4500-NH3-B-C								
Ammonia	1.78	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3

Client Sample Results

(Continued)

Client: City of Urbana
Project: Second Quarter Groundwater
2Q20
Work Order: 20E0546

Client Sample ID: 5G102
Report Date: 06/22/2020
Collection Date: 05/26/2020 10:25
Matrix: Groundwater
Lab ID: 20E0546-05 (Continued)

Analyses	Result	EMT Reporting		Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
		Limit							
Wet Chemistry (Continued)									
Method: SW9014 / SW9010B									
Cyanide	< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 12:04	B0E0844	SP1	
Method: SW9060									
Organic Carbon, Total	1.58	1.00		mg/L	0.400	05/29/20 16:47	B0E0913	TB2	

Keystone Laboratory, Subcontract

Subcontracted Analyses

Method: SW9020B									
Total Organic Halogens	< 0.01	0.01		mg/L	0.01	06/05/20 00:00	20E0546-05	EYSTONE	

Client Sample Results

(Continued)

Client: City of Urbana
Project: Second Quarter Groundwater
 2Q20
Work Order: 20E0546

Client Sample ID: 6G102
Report Date: 06/22/2020
Collection Date: 05/26/2020 10:55
Matrix: Groundwater
Lab ID: 20E0546-06

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	610.6700			No unit		05/26/20 10:55	B0F0736	CD
Depth to water (feet below land surface)	59.6700			No unit		05/26/20 10:55	B0F0736	CD
Depth to water (feet from measuring point)	61.1700			No unit		05/26/20 10:55	B0F0736	CD
Elevation of groundwater surface (Feet)	649.4300			No unit		05/26/20 10:55	B0F0736	CD
Method: SM2510B								
Specific Conductance	776			uS/cm		05/26/20 10:55	B0F0736	CD
Method: SM2550-B								
Temperature	58.7			°F	0.00	05/26/20 10:55	B0F0736	CD
Method: SM4500-H								
pH	7.27	0.05		pH Units	0.04	05/26/20 10:55	B0F0736	CD
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	137	25.0		ug/L	2.00	06/11/20 17:30	B0E0836	AG
Boron	0.281	0.0125		mg/L	0.00500	06/11/20 17:30	B0E0836	AG
Chromium	< 25.0	25.0		ug/L	2.50	06/11/20 17:30	B0E0836	AG
Iron	3.57	0.125		mg/L	0.0500	06/11/20 17:30	B0E0836	AG
Magnesium	35.8	1.25		mg/L	0.200	06/11/20 18:22	B0E0836	AG
Manganese	0.156	0.0250		mg/L	0.00250	06/11/20 17:30	B0E0836	AG
Sodium	18.7	1.25	Q, S3	mg/L	0.500	06/11/20 18:22	B0E0836	AG
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	06/10/20 18:05	B0E0834	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	2.56	0.500		mg/L	0.200	05/27/20 22:47	B0E0814	MM7
Nitrogen, Nitrate	< 0.250	0.250		mg/L	0.100	05/27/20 22:47	B0E0814	MM7
Nitrogen, Nitrite	< 0.250	0.250	Q, S2	mg/L	0.100	05/27/20 22:47	B0E0814	MM7
Sulfate	< 1.50	1.50		mg/L	0.500	05/27/20 22:47	B0E0814	MM7
Wet Chemistry								
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	431	10.0		mg/L	1.00	05/28/20 09:44	B0E0843	MKP
Method: SM4500-NH3-B-C								
Ammonia	6.41	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	6G102
Project:	Second Quarter Groundwater 2Q20	Report Date:	06/22/2020
Work Order:	20E0546	Collection Date:	05/26/2020 10:55
		Matrix:	Groundwater
		Lab ID:	20E0546-06 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
Wet Chemistry (Continued)								
Method: SW9014 / SW9010B								
Cyanide	< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 12:06	B0E0844	SP1
Method: SW9060								
Organic Carbon, Total	3.91	1.00		mg/L	0.400	05/29/20 17:06	B0E0913	TB2

Keystone Laboratory, Subcontract

Subcontracted Analyses

Method: SW9020B								
Total Organic Halogens	< 0.01	0.01		mg/L	0.01	06/05/20 00:00	20E0546-06 EYSTONE	

Client Sample Results

(Continued)

Client: City of Urbana
Project: Second Quarter Groundwater
 2Q20
Work Order: 20E0546

Client Sample ID: 8G101
Report Date: 06/22/2020
Collection Date: 05/26/2020 09:35
Matrix: Groundwater
Lab ID: 20E0546-07

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	0.0000			No unit		05/26/20 09:35	B0F0736	PB
Depth to water (feet below land surface)	69.7200			No unit		05/26/20 09:35	B0F0736	PB
Depth to water (feet from measuring point)	71.2200			No unit		05/26/20 09:35	B0F0736	PB
Elevation of groundwater surface (Feet)	0.0000			No unit		05/26/20 09:35	B0F0736	PB
Method: SM2510B								
Specific Conductance	639			uS/cm		05/26/20 09:35	B0F0736	PB
Method: SM2550-B								
Temperature	58.1			°F	0.00	05/26/20 09:35	B0F0736	PB
Method: SM4500-H								
pH	7.30	0.05		pH Units	0.04	05/26/20 09:35	B0F0736	PB
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	125	25.0		ug/L	2.00	06/11/20 17:32	B0E0836	AG
Boron	0.542	0.0125		mg/L	0.00500	06/11/20 17:32	B0E0836	AG
Chromium	< 25.0	25.0		ug/L	2.50	06/11/20 17:32	B0E0836	AG
Iron	1.63	0.125		mg/L	0.0500	06/11/20 17:32	B0E0836	AG
Magnesium	34.0	1.25	J2	mg/L	0.200	06/11/20 18:23	B0E0836	AG
Manganese	0.183	0.0250		mg/L	0.00250	06/11/20 17:32	B0E0836	AG
Sodium	29.3	1.25	J2, Q, S3	mg/L	0.500	06/11/20 18:23	B0E0836	AG
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	06/10/20 18:07	B0E0834	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	3.38	0.500		mg/L	0.200	05/27/20 23:16	B0E0814	MM7
Nitrogen, Nitrate	< 0.250	0.250		mg/L	0.100	05/27/20 23:16	B0E0814	MM7
Nitrogen, Nitrite	< 0.250	0.250	Q, S2	mg/L	0.100	05/27/20 23:16	B0E0814	MM7
Sulfate	2.09	1.50		mg/L	0.500	05/27/20 23:16	B0E0814	MM7
Wet Chemistry								
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	381	10.0		mg/L	1.00	05/28/20 09:44	B0E0843	MKP
Method: SM4500-NH3-B-C								

Client Sample Results

(Continued)

Client: City of Urbana
Project: Second Quarter Groundwater
 2Q20
Work Order: 20E0546

Client Sample ID: 8G101
Report Date: 06/22/2020
Collection Date: 05/26/2020 09:35
Matrix: Groundwater
Lab ID: 20E0546-07 (Continued)

Analyses	Result	EMT Reporting		Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
		Limit							
Wet Chemistry (Continued)									
Method: SM4500-NH3-B-C (Continued)									
Ammonia	2.97	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3	
Method: SW9014 / SW9010B									
Cyanide	< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 12:08	B0E0844	SP1	
Method: SW9060									
Organic Carbon, Total	1.77	1.00		mg/L	0.400	05/29/20 17:26	B0E0913	TB2	

Keystone Laboratory, Subcontract

Subcontracted Analyses

Method: SW9020B									
Total Organic Halogens	< 0.01	0.01			mg/L	0.01	06/05/20 00:00	20E0546-07 EYSTONE	

Analytical Report

Scott Tess
City of Urbana
706 S Glover Ave
Urbana, IL 61802

December 17, 2020

Work Order: 20K0552

RE: Fourth Quarter Groundwater
4Q20

Dear Scott Tess:

Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

Sincerely,



Jacoby Jackson
Project Manager
847.967.6666
jjackson@emt.com
Approved for release: 12/16/2020 4:58:25PM

Approved by,



Gerald L. Bagnowski Jr.
Laboratory Special Projects Manager

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Illinois, NELAP Accredited Lab No. 100256, Cert No. 1002562020-3



Client Sample Results

Client: City of Urbana
Project: Fourth Quarter Groundwater
 4Q20
Work Order: 20K0552

Client Sample ID: 4G102
Report Date: 12/17/2020
Collection Date: 11/24/2020 09:55
Matrix: Groundwater
Lab ID: 20K0552-01

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	561.1200			No unit		11/24/20 09:55	B0L0470	CD
Depth to water (feet below land surface)	51.8900			No unit		11/24/20 09:55	B0L0470	CD
Depth to water (feet from measuring point)	53.8900			No unit		11/24/20 09:55	B0L0470	CD
Elevation of groundwater surface (Feet)	646.1600			No unit		11/24/20 09:55	B0L0470	CD
Method: SM2510B								
Specific Conductance	731			uS/cm		11/24/20 09:55	B0L0470	CD
Method: SM2550-B								
Temperature	57.8			°F	0.00	11/24/20 09:55	B0L0470	CD
Method: SM4500-H								
pH	7.55	0.05		pH Units	0.04	11/24/20 09:55	B0L0470	CD
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	74.5	25.0		ug/L	2.00	12/01/20 11:45	B0K0679	KJ1
Boron	0.121	0.0125		mg/L	0.00500	12/01/20 11:45	B0K0679	KJ1
Chromium	< 25.0	25.0		ug/L	2.50	12/01/20 11:45	B0K0679	KJ1
Iron	0.479	0.125		mg/L	0.0500	12/01/20 11:45	B0K0679	KJ1
Magnesium	47.5	1.25		mg/L	0.200	12/01/20 12:57	B0K0679	KJ1
Manganese	0.0553	0.0250		mg/L	0.00250	12/01/20 11:45	B0K0679	KJ1
Sodium	22.2	0.125		mg/L	0.0500	12/01/20 11:45	B0K0679	KJ1
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	12/03/20 12:28	B0L0101	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	5.15	0.500		mg/L	0.200	11/25/20 12:45	B0K0683	MM7
Nitrogen, Nitrate	< 0.250	0.250		mg/L	0.100	11/25/20 12:45	B0K0683	MM7
Nitrogen, Nitrite	< 0.250	0.250		mg/L	0.100	11/25/20 12:45	B0K0683	MM7
Sulfate	31.3	1.50		mg/L	0.500	11/25/20 12:45	B0K0683	MM7
Wet Chemistry								
Method: E350.1								
Nitrogen, Ammonia (As N)	< 0.0400	0.0400		mg/L	0.00600	12/08/20 12:46	B0L0255	MM7
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	322	10.0		mg/L	1.00	11/28/20 10:16	B0K0706	MKP

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	4G102
Project:	Fourth Quarter Groundwater 4Q20	Report Date:	12/17/2020
Work Order:	20K0552	Collection Date:	11/24/2020 09:55
		Matrix:	Groundwater
		Lab ID:	20K0552-01 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
Wet Chemistry (Continued)								
Method: SW9014 / SW9010B								
Cyanide	< 0.010	0.010		mg/L	0.003	12/02/20 14:12	B0L0055	JE1
Method: SW9060								
Organic Carbon, Total	1.50	1.00		mg/L	0.400	12/09/20 23:05	B0L0309	TB2

Keystone Laboratories, Inc. - Newton

Determination of Conventional Chemistry Parameters

Method: EPA 9020 / TOX/TX/EOX								
Total Organic Halogens (TOX)	< 0.006	0.010		mg/L	0.006	12/04/20 10:06	1DL0075	AJM

Client Sample Results

(Continued)

Client: City of Urbana
Project: Fourth Quarter Groundwater
 4Q20
Work Order: 20K0552

Client Sample ID: 4G104A
Report Date: 12/17/2020
Collection Date: 11/24/2020 10:25
Matrix: Groundwater
Lab ID: 20K0552-02

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	655.0900			No unit		11/24/20 10:25	B0L0470	CL1
Depth to water (feet below land surface)	45.2400			No unit		11/24/20 10:25	B0L0470	CL1
Depth to water (feet from measuring point)	47.2400			No unit		11/24/20 10:25	B0L0470	CL1
Elevation of groundwater surface (Feet)	670.0400			No unit		11/24/20 10:25	B0L0470	CL1
Method: SM2510B								
Specific Conductance	783			uS/cm		11/24/20 10:25	B0L0470	CL1
Method: SM2550-B								
Temperature	55.3			°F	0.00	11/24/20 10:25	B0L0470	CL1
Method: SM4500-H								
pH	7.44	0.05		pH Units	0.04	11/24/20 10:25	B0L0470	CL1
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	91.5	25.0		ug/L	2.00	12/01/20 11:47	B0K0679	KJ1
Boron	0.215	0.0125		mg/L	0.00500	12/01/20 11:47	B0K0679	KJ1
Chromium	< 25.0	25.0		ug/L	2.50	12/01/20 11:47	B0K0679	KJ1
Iron	< 0.125	0.125		mg/L	0.0500	12/01/20 11:47	B0K0679	KJ1
Magnesium	43.6	1.25		mg/L	0.200	12/01/20 12:59	B0K0679	KJ1
Manganese	0.126	0.0250		mg/L	0.00250	12/01/20 11:47	B0K0679	KJ1
Sodium	28.7	1.25		mg/L	0.500	12/01/20 12:59	B0K0679	KJ1
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	12/03/20 12:30	B0L0101	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	14.3	0.500		mg/L	0.200	11/25/20 13:13	B0K0683	MM7
Nitrogen, Nitrate	< 0.250	0.250		mg/L	0.100	11/25/20 13:13	B0K0683	MM7
Nitrogen, Nitrite	< 0.250	0.250		mg/L	0.100	11/25/20 13:13	B0K0683	MM7
Sulfate	< 1.50	1.50		mg/L	0.500	11/25/20 13:13	B0K0683	MM7
Wet Chemistry								
Method: E350.1								
Nitrogen, Ammonia (As N)	3.27	0.200		mg/L	0.0300	12/08/20 12:46	B0L0255	MM7
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	443	10.0		mg/L	1.00	11/28/20 10:16	B0K0706	MKP

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	4G104A
Project:	Fourth Quarter Groundwater 4Q20	Report Date:	12/17/2020
Work Order:	20K0552	Collection Date:	11/24/2020 10:25
		Matrix:	Groundwater
		Lab ID:	20K0552-02 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
Wet Chemistry (Continued)								
Method: SW9014 / SW9010B								
Cyanide	< 0.010	0.010		mg/L	0.003	12/02/20 14:14	B0L0055	JE1
Method: SW9060								
Organic Carbon, Total	2.84	1.00		mg/L	0.400	12/10/20 01:25	B0L0309	TB2

Keystone Laboratories, Inc. - Newton

Determination of Conventional Chemistry Parameters

Method: EPA 9020 / TOX/TX/EOX

Total Organic Halogens (TOX)	0.013	0.010		mg/L	0.006	12/04/20 10:06	1DL0075	AJM
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Client Sample Results

(Continued)

Client: City of Urbana
Project: Fourth Quarter Groundwater
 4Q20
Work Order: 20K0552

Client Sample ID: 4G105
Report Date: 12/17/2020
Collection Date: 11/24/2020 09:10
Matrix: Groundwater
Lab ID: 20K0552-03

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	610.1900			No unit		11/24/20 09:10	B0L0470	ST1
Depth to water (feet below land surface)	87.6800			No unit		11/24/20 09:10	B0L0470	ST1
Depth to water (feet from measuring point)	89.6800			No unit		11/24/20 09:10	B0L0470	ST1
Elevation of groundwater surface (Feet)	653.0400			No unit		11/24/20 09:10	B0L0470	ST1
Method: SM2510B								
Specific Conductance	876			uS/cm		11/24/20 09:10	B0L0470	ST1
Method: SM2550-B								
Temperature	54.3			°F	0.00	11/24/20 09:10	B0L0470	ST1
Method: SM4500-H								
pH	7.08	0.05		pH Units	0.04	11/24/20 09:10	B0L0470	ST1
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	127	25.0		ug/L	2.00	12/01/20 11:49	B0K0679	KJ1
Boron	1.69	0.0125		mg/L	0.00500	12/01/20 11:49	B0K0679	KJ1
Chromium	< 25.0	25.0		ug/L	2.50	12/01/20 11:49	B0K0679	KJ1
Iron	< 0.125	0.125		mg/L	0.0500	12/01/20 11:49	B0K0679	KJ1
Magnesium	39.5	1.25		mg/L	0.200	12/01/20 13:01	B0K0679	KJ1
Manganese	0.166	0.0250		mg/L	0.00250	12/01/20 11:49	B0K0679	KJ1
Sodium	65.5	1.25		mg/L	0.500	12/01/20 13:01	B0K0679	KJ1
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	12/03/20 12:32	B0L0101	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	8.34	0.500		mg/L	0.200	11/25/20 13:41	B0K0683	MM7
Nitrogen, Nitrate	< 0.250	0.250		mg/L	0.100	11/25/20 13:41	B0K0683	MM7
Nitrogen, Nitrite	< 0.250	0.250		mg/L	0.100	11/25/20 13:41	B0K0683	MM7
Sulfate	12.7	1.50		mg/L	0.500	11/25/20 13:41	B0K0683	MM7
Wet Chemistry								
Method: E350.1								
Nitrogen, Ammonia (As N)	4.46	0.200		mg/L	0.0300	12/08/20 12:46	B0L0255	MM7
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	450	10.0		mg/L	1.00	11/28/20 10:16	B0K0706	MKP

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	4G105
Project:	Fourth Quarter Groundwater 4Q20	Report Date:	12/17/2020
Work Order:	20K0552	Collection Date:	11/24/2020 09:10
		Matrix:	Groundwater
		Lab ID:	20K0552-03 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
Wet Chemistry (Continued)								
Method: SW9014 / SW9010B								
Cyanide	< 0.010	0.010		mg/L	0.003	12/02/20 14:16	B0L0055	JE1
Method: SW9060								
Organic Carbon, Total	7.40	5.00		mg/L	2.00	12/10/20 01:42	B0L0309	TB2

Keystone Laboratories, Inc. - Newton

Determination of Conventional Chemistry Parameters

Method: EPA 9020 / TOX/TX/EOX

Total Organic Halogens (TOX)	< 0.006	0.010		mg/L	0.006	12/04/20 10:06	1DL0075	AJM
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Client Sample Results

(Continued)

Client: City of Urbana
Project: Fourth Quarter Groundwater
 4Q20
Work Order: 20K0552

Client Sample ID: 5G101
Report Date: 12/17/2020
Collection Date: 11/24/2020 10:45
Matrix: Groundwater
Lab ID: 20K0552-04

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	608.0300			No unit		11/24/20 10:45	B0L0470	PB
Depth to water (feet below land surface)	75.7600			No unit		11/24/20 10:45	B0L0470	PB
Depth to water (feet from measuring point)	78.2600			No unit		11/24/20 10:45	B0L0470	PB
Elevation of groundwater surface (Feet)	651.3700			No unit		11/24/20 10:45	B0L0470	PB
Method: SM2510B								
Specific Conductance	661			uS/cm		11/24/20 10:45	B0L0470	PB
Method: SM2550-B								
Temperature	54.3			°F	0.00	11/24/20 10:45	B0L0470	PB
Method: SM4500-H								
pH	7.63	0.05		pH Units	0.04	11/24/20 10:45	B0L0470	PB
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	55.1	25.0		ug/L	2.00	12/01/20 11:51	B0K0679	KJ1
Boron	0.0889	0.0125		mg/L	0.00500	12/01/20 11:51	B0K0679	KJ1
Chromium	< 25.0	25.0		ug/L	2.50	12/01/20 11:51	B0K0679	KJ1
Iron	< 0.125	0.125		mg/L	0.0500	12/01/20 11:51	B0K0679	KJ1
Magnesium	47.2	1.25		mg/L	0.200	12/01/20 13:03	B0K0679	KJ1
Manganese	< 0.0250	0.0250		mg/L	0.00250	12/01/20 11:51	B0K0679	KJ1
Sodium	20.1	0.125		mg/L	0.0500	12/01/20 11:51	B0K0679	KJ1
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	12/03/20 12:34	B0L0101	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	3.77	0.500		mg/L	0.200	11/25/20 14:09	B0K0683	MM7
Nitrogen, Nitrate	1.02	0.250		mg/L	0.100	11/25/20 14:09	B0K0683	MM7
Nitrogen, Nitrite	< 0.250	0.250		mg/L	0.100	11/25/20 14:09	B0K0683	MM7
Sulfate	39.2	1.50		mg/L	0.500	11/25/20 14:09	B0K0683	MM7
Wet Chemistry								
Method: E350.1								
Nitrogen, Ammonia (As N)	0.364	0.0400		mg/L	0.00600	12/08/20 12:46	B0L0255	MM7
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	474	10.0		mg/L	1.00	11/28/20 10:16	B0K0706	MKP

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	5G101
Project:	Fourth Quarter Groundwater 4Q20	Report Date:	12/17/2020
Work Order:	20K0552	Collection Date:	11/24/2020 10:45
		Matrix:	Groundwater
		Lab ID:	20K0552-04 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
Wet Chemistry (Continued)								
Method: SW9014 / SW9010B								
Cyanide	< 0.010	0.010		mg/L	0.003	12/02/20 14:17	B0L0055	JE1
Method: SW9060								
Organic Carbon, Total	< 1.00	1.00		mg/L	0.400	12/10/20 03:03	B0L0309	TB2

Keystone Laboratories, Inc. - Newton

Determination of Conventional Chemistry Parameters

Method: EPA 9020 / TOX/TX/EOX								
Total Organic Halogens (TOX)	< 0.006	0.010		mg/L	0.006	12/04/20 10:06	1DL0075	AJM

Client Sample Results

(Continued)

Client: City of Urbana
Project: Fourth Quarter Groundwater
 4Q20
Work Order: 20K0552

Client Sample ID: 5G102
Report Date: 12/17/2020
Collection Date: 11/24/2020 09:55
Matrix: Groundwater
Lab ID: 20K0552-05

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	608.6000			No unit		11/24/20 09:55	B0L0470	PB
Depth to water (feet below land surface)	85.7500			No unit		11/24/20 09:55	B0L0470	PB
Depth to water (feet from measuring point)	88.2500			No unit		11/24/20 09:55	B0L0470	PB
Elevation of groundwater surface (Feet)	650.5200			No unit		11/24/20 09:55	B0L0470	PB
Method: SM2510B								
Specific Conductance	656			uS/cm		11/24/20 09:55	B0L0470	PB
Method: SM2550-B								
Temperature	54.1			°F	0.00	11/24/20 09:55	B0L0470	PB
Method: SM4500-H								
pH	7.69	0.05		pH Units	0.04	11/24/20 09:55	B0L0470	PB
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	60.2	25.0		ug/L	2.00	12/01/20 11:53	B0K0679	KJ1
Boron	0.415	0.0125		mg/L	0.00500	12/01/20 11:53	B0K0679	KJ1
Chromium	< 25.0	25.0		ug/L	2.50	12/01/20 11:53	B0K0679	KJ1
Iron	1.66	0.125		mg/L	0.0500	12/01/20 11:53	B0K0679	KJ1
Magnesium	44.3	1.25		mg/L	0.200	12/01/20 13:05	B0K0679	KJ1
Manganese	0.0407	0.0250		mg/L	0.00250	12/01/20 11:53	B0K0679	KJ1
Sodium	30.5	1.25		mg/L	0.500	12/01/20 13:05	B0K0679	KJ1
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	12/03/20 12:36	B0L0101	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	2.16	0.500		mg/L	0.200	11/25/20 14:36	B0K0683	MM7
Nitrogen, Nitrate	0.375	0.250		mg/L	0.100	11/25/20 14:36	B0K0683	MM7
Nitrogen, Nitrite	< 0.250	0.250		mg/L	0.100	11/25/20 14:36	B0K0683	MM7
Sulfate	< 1.50	1.50		mg/L	0.500	11/25/20 14:36	B0K0683	MM7
Wet Chemistry								
Method: E350.1								
Nitrogen, Ammonia (As N)	1.00	0.0400		mg/L	0.00600	12/08/20 12:46	B0L0255	MM7
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	367	10.0		mg/L	1.00	11/28/20 10:16	B0K0706	MKP

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	5G102
Project:	Fourth Quarter Groundwater 4Q20	Report Date:	12/17/2020
Work Order:	20K0552	Collection Date:	11/24/2020 09:55
		Matrix:	Groundwater
		Lab ID:	20K0552-05 (Continued)

Analyses	Result	EMT Reporting		Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
		Limit							
Wet Chemistry (Continued)									
Method: SW9014 / SW9010B									
Cyanide	< 0.010	0.010	J2	mg/L	0.003	12/02/20 14:19	B0L0055	JE1	
Method: SW9060									
Organic Carbon, Total	1.50	1.00		mg/L	0.400	12/10/20 03:26	B0L0309	TB2	

Keystone Laboratories, Inc. - Newton

Determination of Conventional Chemistry Parameters

Method: EPA 9020 / TOX/TX/EOX									
Total Organic Halogens (TOX)	< 0.006	0.010		mg/L	0.006	12/04/20 10:10	1DL0222	AJM	

Client Sample Results

(Continued)

Client: City of Urbana
Project: Fourth Quarter Groundwater
 4Q20
Work Order: 20K0552

Client Sample ID: 6G102
Report Date: 12/17/2020
Collection Date: 11/24/2020 09:45
Matrix: Groundwater
Lab ID: 20K0552-06

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	610.6700			No unit		11/24/20 09:45	B0L0470	CL1
Depth to water (feet below land surface)	59.7900			No unit		11/24/20 09:45	B0L0470	CL1
Depth to water (feet from measuring point)	61.2900			No unit		11/24/20 09:45	B0L0470	CL1
Elevation of groundwater surface (Feet)	649.3100			No unit		11/24/20 09:45	B0L0470	CL1
Method: SM2510B								
Specific Conductance	745			uS/cm		11/24/20 09:45	B0L0470	CL1
Method: SM2550-B								
Temperature	54.2			°F	0.00	11/24/20 09:45	B0L0470	CL1
Method: SM4500-H								
pH	7.38	0.05		pH Units	0.04	11/24/20 09:45	B0L0470	CL1
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	143	25.0		ug/L	2.00	12/01/20 11:54	B0K0679	KJ1
Boron	0.266	0.0125		mg/L	0.00500	12/01/20 11:54	B0K0679	KJ1
Chromium	< 25.0	25.0		ug/L	2.50	12/01/20 11:54	B0K0679	KJ1
Iron	3.01	0.125		mg/L	0.0500	12/01/20 11:54	B0K0679	KJ1
Magnesium	38.6	1.25		mg/L	0.200	12/01/20 13:07	B0K0679	KJ1
Manganese	0.145	0.0250		mg/L	0.00250	12/01/20 11:54	B0K0679	KJ1
Sodium	27.0	1.25		mg/L	0.500	12/01/20 13:07	B0K0679	KJ1
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	12/03/20 12:44	B0L0101	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	2.66	0.500		mg/L	0.200	11/25/20 15:04	B0K0683	MM7
Nitrogen, Nitrate	1.30	0.250		mg/L	0.100	11/25/20 15:04	B0K0683	MM7
Nitrogen, Nitrite	< 0.250	0.250		mg/L	0.100	11/25/20 15:04	B0K0683	MM7
Sulfate	< 1.50	1.50		mg/L	0.500	11/25/20 15:04	B0K0683	MM7
Wet Chemistry								
Method: E350.1								
Nitrogen, Ammonia (As N)	3.66	0.200		mg/L	0.0300	12/08/20 12:46	B0L0255	MM7
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	450	10.0		mg/L	1.00	11/28/20 10:16	B0K0706	MKP

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	6G102
Project:	Fourth Quarter Groundwater 4Q20	Report Date:	12/17/2020
Work Order:	20K0552	Collection Date:	11/24/2020 09:45
		Matrix:	Groundwater
		Lab ID:	20K0552-06 (Continued)

Analyses	Result	EMT	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
		Reporting Limit						
Wet Chemistry (Continued)								
Method: SW9014 / SW9010B								
Cyanide	< 0.010	0.010		mg/L	0.003	12/02/20 14:21	B0L0055	JE1
Method: SW9060								
Organic Carbon, Total	3.11	1.00		mg/L	0.400	12/10/20 03:54	B0L0309	TB2

Keystone Laboratories, Inc. - Newton

Determination of Conventional Chemistry Parameters

Method: EPA 9020 / TOX/TX/EOX								
Total Organic Halogens (TOX)	< 0.006	0.010		mg/L	0.006	12/04/20 10:10	1DL0222	AJM

Client Sample Results

(Continued)

Client: City of Urbana
Project: Fourth Quarter Groundwater
 4Q20
Work Order: 20K0552

Client Sample ID: 8G101
Report Date: 12/17/2020
Collection Date: 11/24/2020 09:05
Matrix: Groundwater
Lab ID: 20K0552-07

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysis								
Method: Non-Analytical Data								
Bottom of well elevation (Feet)	0.0000			No unit		11/24/20 09:05	B0L0470	PB
Depth to water (feet below land surface)	71.1100			No unit		11/24/20 09:05	B0L0470	PB
Depth to water (feet from measuring point)	72.6100			No unit		11/24/20 09:05	B0L0470	PB
Elevation of groundwater surface (Feet)	0.0000			No unit		11/24/20 09:05	B0L0470	PB
Method: SM2510B								
Specific Conductance	641			uS/cm		11/24/20 09:05	B0L0470	PB
Method: SM2550-B								
Temperature	55.7			°F	0.00	11/24/20 09:05	B0L0470	PB
Method: SM4500-H								
pH	7.54	0.05		pH Units	0.04	11/24/20 09:05	B0L0470	PB
Metals by ICP-MS								
Method: SW6020A / SW3015								
Barium	116	25.0		ug/L	2.00	12/01/20 11:56	B0K0679	KJ1
Boron	0.505	0.0125		mg/L	0.00500	12/01/20 11:56	B0K0679	KJ1
Chromium	< 25.0	25.0		ug/L	2.50	12/01/20 11:56	B0K0679	KJ1
Iron	0.446	0.125		mg/L	0.0500	12/01/20 11:56	B0K0679	KJ1
Magnesium	40.8	1.25		mg/L	0.200	12/01/20 13:08	B0K0679	KJ1
Manganese	0.127	0.0250		mg/L	0.00250	12/01/20 11:56	B0K0679	KJ1
Sodium	37.3	1.25		mg/L	0.500	12/01/20 13:08	B0K0679	KJ1
Dissolved Metals by ICP-MS								
Method: SW6020A / SW3005								
Arsenic, Dissolved	< 22.2	22.2		ug/L	1.78	12/03/20 12:46	B0L0101	AG
Anions by Ion Chromatography								
Method: SW9056A								
Chloride	5.22	0.500		mg/L	0.200	11/25/20 15:32	B0K0683	MM7
Nitrogen, Nitrate	0.280	0.250		mg/L	0.100	11/25/20 15:32	B0K0683	MM7
Nitrogen, Nitrite	< 0.250	0.250		mg/L	0.100	11/25/20 15:32	B0K0683	MM7
Sulfate	1.96	1.50		mg/L	0.500	11/25/20 15:32	B0K0683	MM7
Wet Chemistry								
Method: E350.1								
Nitrogen, Ammonia (As N)	1.24	0.200		mg/L	0.0300	12/08/20 12:46	B0L0255	MM7
Method: SM2540C								
Total Dissolved Solids (Residue, Filterable)	394	10.0		mg/L	1.00	11/28/20 10:16	B0K0706	MKP

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	8G101
Project:	Fourth Quarter Groundwater 4Q20	Report Date:	12/17/2020
Work Order:	20K0552	Collection Date:	11/24/2020 09:05
		Matrix:	Groundwater
		Lab ID:	20K0552-07 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
Wet Chemistry (Continued)								
Method: SW9014 / SW9010B								
Cyanide	< 0.010	0.010		mg/L	0.003	12/02/20 14:23	B0L0055	JE1
Method: SW9060								
Organic Carbon, Total	2.24	1.00		mg/L	0.400	12/10/20 04:18	B0L0309	TB2

Keystone Laboratories, Inc. - Newton

Determination of Conventional Chemistry Parameters

Method: EPA 9020 / TOX/TX/EOX

Total Organic Halogens (TOX)	< 0.006	0.010		mg/L	0.006	12/04/20 10:10	1DL0222	AJM
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Analytical Report

Scott Tess
City of Urbana
706 S Glover Ave
Urbana, IL 61802

July 24, 2020

Work Order: 20F0815

RE: 3Q Annual Surface Water
3Q20

Dear Scott Tess:

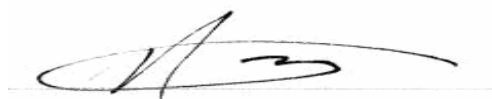
Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

Sincerely,



Jacoby Jackson
Project Manager
847.967.6666
jjackson@emt.com
Approved for release: 7/24/2020 10:56:59AM

Approved by,



Nathan Fey
Laboratory Operations Manager

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Illinois, NELAP Accredited Lab No. 100256, Cert No. 1002562020-1



Client Sample Results

Client: City of Urbana
Project: 3Q Annual Surface Water
 3Q20
Work Order: 20F0815

Client Sample ID: Upstream Saline Ditch
Report Date: 07/24/2020
Collection Date: 07/01/2020 10:30
Matrix: Water
Lab ID: 20F0815-01

Analyses	Result	EMT Reporting Limit	Qual	Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
On Site Analysis										
Method: SM2510B										
Specific Conductance	839			uS/cm			07/01/20 10:30	B0G0399	ST1	1
Method: SM2550-B										
Temperature	71.5			°F		0.00	07/01/20 10:30	B0G0399	ST1	1
Method: SM4500-H										
pH	8.14	0.05		pH Units		0.04	07/01/20 10:30	B0G0399	ST1	1
Metals by ICP-AES										
Method: Calculated result										
Trivalent Chromium	< 0.0600	0.0600		mg/L		0.00800	07/07/20 09:12	[CALC]	SP1	4
Method: E200.7 / SW3015										
Arsenic	< 0.0500	0.0500		mg/L		0.0150	07/06/20 16:06	B0G0129	KJ1	1
Barium	0.0625	0.0500		mg/L		0.00700	07/07/20 14:45	B0G0129	KJ1	1
Boron	0.450	0.0500		mg/L		0.0120	07/06/20 16:06	B0G0129	KJ1	1
Cadmium	< 0.00140	0.00140		mg/L		0.00140	07/06/20 16:06	B0G0129	KJ1	1
Chromium	< 0.0500	0.0500		mg/L		0.00400	07/06/20 16:06	B0G0129	KJ1	1
Copper	< 0.00500	0.00500		mg/L		0.00500	07/06/20 16:06	B0G0129	KJ1	1
Lead	< 0.0500	0.0500		mg/L		0.0120	07/06/20 16:06	B0G0129	KJ1	1
Manganese	< 0.0500	0.0500		mg/L		0.00800	07/06/20 16:06	B0G0129	KJ1	1
Nickel	< 0.0500	0.0500		mg/L		0.00900	07/06/20 16:06	B0G0129	KJ1	1
Selenium	< 0.0500	0.0500		mg/L		0.0170	07/06/20 16:06	B0G0129	KJ1	1
Silver	< 0.00500	0.00500		mg/L		0.00200	07/06/20 16:06	B0G0129	KJ1	1
Zinc	< 0.0500	0.0500		mg/L		0.0120	07/06/20 16:06	B0G0129	KJ1	1
Dissolved Metals by ICP-AES										
Method: E200.7 / SW3005										
Iron, Dissolved	< 0.0889	0.0889		mg/L		0.0320	07/06/20 15:46	B0G0148	KJ1	1
Mercury by CVAA										
Method: E245.1										
Mercury	< 0.00050	0.00050		mg/L		0.00020	07/16/20 13:37	B0G0469	MB1	1
Anions by Ion Chromatography										
Method: E300										
Chloride	73.1	0.500	Q, S2	mg/L		0.200	07/02/20 23:15	B0G0097	MM7	10
Fluoride	0.427	0.250		mg/L		0.100	07/02/20 23:15	B0G0097	MM7	10
Sulfate	41.1	1.50	Q, S2	mg/L		0.500	07/02/20 23:15	B0G0097	MM7	10
Wet Chemistry										
Method: E420.1 Rev.1978 by Discrete/MIDI										

Client Sample Results

(Continued)

Client: City of Urbana
Project: 3Q Annual Surface Water
 3Q20
Work Order: 20F0815

Client Sample ID: Upstream Saline Ditch
Report Date: 07/24/2020
Collection Date: 07/01/2020 10:30
Matrix: Water
Lab ID: 20F0815-01 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
Wet Chemistry (Continued)										
Method: E420.1 Rev.1978 by Discrete/MIDI (Continued)										
Phenolics, Total Recoverable	< 0.0500	0.0500		mg/L		0.00500	07/06/20 15:20	B0G0149	SP1	1
Method: SM2540C										
Total Dissolved Solids (Residue, Filterable)	515	10.0		mg/L		1.00	07/07/20 09:48	B0G0137	MKP	1
Method: SM3500-Cr B by Discrete										
Chromium, Hexavalent	< 0.0100	0.0100		mg/L		0.00400	07/07/20 09:12	B0G0177	SP1	4
Method: SM4500-CN										
Cyanide	< 0.0100	0.0100		mg/L		0.00300	07/13/20 14:38	B0G0359	SP1	1
Method: SM4500-P E										
Phosphorus, Total (As P)	0.640	0.500	J2	mg/L		0.0900	07/15/20 18:35	B0G0458	ER1	5
Alcohols & Glycols by GC/FID										
Method: 8015B										
Ethanol	< 10.0	10.0		mg/L		2.27	07/02/20 16:55	B0G0136	CS2	1
Isopropanol	< 10.0	10.0		mg/L		2.29	07/02/20 16:55	B0G0136	CS2	1
Methanol	< 8.00	8.00		mg/L		1.99	07/02/20 16:55	B0G0136	CS2	1
Polychlorinated Biphenyls (PCBs) by GC/ECD										
Method: E608 / SW3510										
Aroclor 1016	< 1.04	1.04		ug/L		0.220	07/06/20 14:30	B0G0124	CS2	1
Aroclor 1221	< 0.621	0.621		ug/L		0.198	07/06/20 14:30	B0G0124	CS2	1
Aroclor 1232	< 0.621	0.621		ug/L		0.168	07/06/20 14:30	B0G0124	CS2	1
Aroclor 1242	< 2.07	2.07		ug/L		0.363	07/06/20 14:30	B0G0124	CS2	1
Aroclor 1248	< 0.621	0.621		ug/L		0.166	07/06/20 14:30	B0G0124	CS2	1
Aroclor 1254	< 0.621	0.621		ug/L		0.182	07/06/20 14:30	B0G0124	CS2	1
Aroclor 1260	< 0.414	0.414		ug/L		0.116	07/06/20 14:30	B0G0124	CS2	1
Surrogate: Decachlorobiphenyl					Recovery: 67%	Limits: 40-135	07/06/20 14:30	B0G0124	CS2	1
Surrogate: 2,4,5,6-Tetrachloro-m-xylene					Recovery: 38%	Limits: 13-133	07/06/20 14:30	B0G0124	CS2	1
Volatile Organic Compounds by GC/MS										
Method: E624 / SW5030										
1,1,1-Trichloroethane	< 4.00	4.00		ug/L		0.719	07/10/20 14:35	B0G0357	WZZ	1
1,1,2,2-Tetrachloroethane	< 4.00	4.00		ug/L		0.713	07/10/20 14:35	B0G0357	WZZ	1
1,1,2-Trichloroethane	< 2.00	2.00		ug/L		0.198	07/10/20 14:35	B0G0357	WZZ	1
1,1-Dichloroethane	< 4.00	4.00		ug/L		0.691	07/10/20 14:35	B0G0357	WZZ	1
1,1-Dichloroethene	< 8.00	8.00		ug/L		1.10	07/10/20 14:35	B0G0357	WZZ	1
1,2-Dichloroethane	< 4.00	4.00		ug/L		0.731	07/10/20 14:35	B0G0357	WZZ	1
1,2-Dichloropropane	< 4.00	4.00		ug/L		0.557	07/10/20 14:35	B0G0357	WZZ	1
2-Chloroethyl vinyl ether	< 4.00	4.00	2-CVE,	ug/L		0.740	07/10/20 14:35	B0G0357	WZZ	1

J1

Client Sample Results

(Continued)

Client: City of Urbana
Project: 3Q Annual Surface Water
 3Q20
Work Order: 20F0815

Client Sample ID: Upstream Saline Ditch
Report Date: 07/24/2020
Collection Date: 07/01/2020 10:30
Matrix: Water
Lab ID: 20F0815-01 (Continued)

Analyses	EMT Reporting				Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
	Result	Limit	Qual	Units						
Volatile Organic Compounds by GC/MS (Continued)										
Method: E624 / SW5030 (Continued)										
Acrolein	< 80.0	80.0		ug/L		10.4	07/10/20 14:35	B0G0357	WZZ	1
Acrylonitrile	< 4.00	4.00		ug/L		0.628	07/10/20 14:35	B0G0357	WZZ	1
Benzene	< 2.00	2.00		ug/L		0.362	07/10/20 14:35	B0G0357	WZZ	1
Bromodichloromethane	< 2.00	2.00		ug/L		0.458	07/10/20 14:35	B0G0357	WZZ	1
Bromoform	< 4.00	4.00		ug/L		0.570	07/10/20 14:35	B0G0357	WZZ	1
Bromomethane	< 8.00	8.00		ug/L		1.61	07/10/20 14:35	B0G0357	WZZ	1
Carbon tetrachloride	< 4.00	4.00		ug/L		0.710	07/10/20 14:35	B0G0357	WZZ	1
Chlorobenzene	< 2.00	2.00		ug/L		0.170	07/10/20 14:35	B0G0357	WZZ	1
Chloroethane	< 4.00	4.00		ug/L		0.621	07/10/20 14:35	B0G0357	WZZ	1
Chloroform	< 8.00	8.00		ug/L		1.06	07/10/20 14:35	B0G0357	WZZ	1
Chloromethane	< 8.00	8.00		ug/L		1.30	07/10/20 14:35	B0G0357	WZZ	1
cis-1,3-Dichloropropene	< 4.00	4.00		ug/L		0.408	07/10/20 14:35	B0G0357	WZZ	1
Dibromochloromethane	< 4.00	4.00		ug/L		0.632	07/10/20 14:35	B0G0357	WZZ	1
Ethylbenzene	< 2.00	2.00		ug/L		0.268	07/10/20 14:35	B0G0357	WZZ	1
m,p-Xylene	< 8.00	8.00		ug/L		1.58	07/10/20 14:35	B0G0357	WZZ	1
Methylene chloride	< 8.00	8.00		ug/L		1.02	07/10/20 14:35	B0G0357	WZZ	1
o-Xylene	< 2.00	2.00		ug/L		0.324	07/10/20 14:35	B0G0357	WZZ	1
Tetrachloroethene	< 4.00	4.00		ug/L		0.646	07/10/20 14:35	B0G0357	WZZ	1
Toluene	< 4.00	4.00		ug/L		0.510	07/10/20 14:35	B0G0357	WZZ	1
trans-1,2-Dichloroethene	< 4.00	4.00		ug/L		0.566	07/10/20 14:35	B0G0357	WZZ	1
trans-1,3-Dichloropropene	< 8.00	8.00		ug/L		1.17	07/10/20 14:35	B0G0357	WZZ	1
Trichloroethene	< 4.00	4.00		ug/L		0.939	07/10/20 14:35	B0G0357	WZZ	1
Trichlorofluoromethane	< 4.00	4.00		ug/L		0.503	07/10/20 14:35	B0G0357	WZZ	1
Vinyl chloride	< 4.00	4.00		ug/L		0.582	07/10/20 14:35	B0G0357	WZZ	1
Xylenes, Total	< 12.0	12.0		ug/L		1.62	07/10/20 14:35	B0G0357	WZZ	1
Surrogate: Dibromofluoromethane				Recovery: 103%		Limits: 83-135	07/10/20 14:35	B0G0357	WZZ	1
Surrogate: 1,2-Dichloroethane-d4				Recovery: 99%		Limits: 77-140	07/10/20 14:35	B0G0357	WZZ	1
Surrogate: Fluorobenzene				Recovery: 101%		Limits: 90-105	07/10/20 14:35	B0G0357	WZZ	1
Surrogate: Toluene-d8				Recovery: 102%		Limits: 75-112	07/10/20 14:35	B0G0357	WZZ	1
Surrogate: 4-Bromofluorobenzene				Recovery: 101%		Limits: 89-128	07/10/20 14:35	B0G0357	WZZ	1
Surrogate: 1,2-Dichlorobenzene-d4				Recovery: 98%		Limits: 91-127	07/10/20 14:35	B0G0357	WZZ	1

Semivolatile Organic Compounds by GC/MS

Method: E625 / SW3510

1,2,4-Trichlorobenzene	< 2.05	2.05		ug/L		0.287	07/08/20 17:10	B0G0214	CP1	1
1,2-Dichlorobenzene	< 2.05	2.05		ug/L		0.307	07/08/20 17:10	B0G0214	CP1	1
1,3-Dichlorobenzene	< 2.05	2.05		ug/L		0.318	07/08/20 17:10	B0G0214	CP1	1
1,4-Dichlorobenzene	< 2.05	2.05		ug/L		0.287	07/08/20 17:10	B0G0214	CP1	1
2,4,6-Trichlorophenol	< 1.02	1.02		ug/L		0.250	07/08/20 17:10	B0G0214	CP1	1
2,4-Dichlorophenol	< 1.02	1.02		ug/L		0.0807	07/08/20 17:10	B0G0214	CP1	1
2,4-Dimethylphenol	< 2.05	2.05		ug/L		0.120	07/08/20 17:10	B0G0214	CP1	1
2,4-Dinitrophenol	< 30.7	30.7		ug/L		3.39	07/08/20 17:10	B0G0214	CP1	1
2,4-Dinitrotoluene	< 2.05	2.05		ug/L		0.258	07/08/20 17:10	B0G0214	CP1	1

Client Sample Results

(Continued)

Client: City of Urbana

Client Sample ID: Upstream Saline Ditch

Project: 3Q Annual Surface Water
3Q20

Report Date: 07/24/2020

Work Order: 20F0815

Collection Date: 07/01/2020 10:30

Matrix: Water

Lab ID: 20F0815-01 (Continued)

Analyses	EMT Reporting				Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
	Result	Limit	Qual	Units						
Semivolatile Organic Compounds by GC/MS (Continued)										
Method: E625 / SW3510 (Continued)										
2,6-Dinitrotoluene	< 1.02	1.02		ug/L		0.235	07/08/20 17:10	B0G0214	CP1	1
2-Chloronaphthalene	< 0.615	0.615		ug/L		0.108	07/08/20 17:10	B0G0214	CP1	1
2-Chlorophenol	< 1.02	1.02		ug/L		0.157	07/08/20 17:10	B0G0214	CP1	1
3,3'-Dichlorobenzidine	< 20.5	20.5		ug/L		3.24	07/08/20 17:10	B0G0214	CP1	1
4,6-Dinitro-2-methylphenol	< 15.4	15.4		ug/L		2.51	07/08/20 17:10	B0G0214	CP1	1
4-Bromophenyl-phenylether	< 1.02	1.02		ug/L		0.164	07/08/20 17:10	B0G0214	CP1	1
4-Chloro-3-methylphenol	< 0.512	0.512		ug/L		0.0730	07/08/20 17:10	B0G0214	CP1	1
4-Chlorophenyl-phenylether	< 1.02	1.02		ug/L		0.149	07/08/20 17:10	B0G0214	CP1	1
4-Nitrophenol	< 15.4	15.4		ug/L		1.47	07/08/20 17:10	B0G0214	CP1	1
Acenaphthene	< 0.615	0.615		ug/L		0.107	07/08/20 17:10	B0G0214	CP1	1
Acenaphthylene	< 0.615	0.615		ug/L		0.133	07/08/20 17:10	B0G0214	CP1	1
Anthracene	< 0.615	0.615		ug/L		0.114	07/08/20 17:10	B0G0214	CP1	1
Azobenzene as 1,2-Diphenylhydrazine	< 1.02	1.02		ug/L		0.0786	07/08/20 17:10	B0G0214	CP1	1
Benzidine	< 81.9	81.9		ug/L		17.0	07/08/20 17:10	B0G0214	CP1	1
Benzo(a)anthracene	< 0.615	0.615		ug/L		0.126	07/08/20 17:10	B0G0214	CP1	1
Benzo(a)pyrene	< 2.05	2.05		ug/L		0.385	07/08/20 17:10	B0G0214	CP1	1
Benzo(b)fluoranthene	< 2.05	2.05		ug/L		0.381	07/08/20 17:10	B0G0214	CP1	1
Benzo(g,h,i)perylene	< 2.05	2.05		ug/L		0.409	07/08/20 17:10	B0G0214	CP1	1
Benzo(k)fluoranthene	< 2.05	2.05		ug/L		0.255	07/08/20 17:10	B0G0214	CP1	1
Bis(2-chloroethoxy)methane	< 1.02	1.02		ug/L		0.139	07/08/20 17:10	B0G0214	CP1	1
Bis(2-chloroethyl)ether	< 1.02	1.02		ug/L		0.180	07/08/20 17:10	B0G0214	CP1	1
Bis(2-chloroisopropyl)ether	< 1.02	1.02		ug/L		0.131	07/08/20 17:10	B0G0214	CP1	1
Bis(2-ethylhexyl)phthalate	< 20.5	20.5		ug/L		3.72	07/08/20 17:10	B0G0214	CP1	1
Butyl benzyl phthalate	< 1.02	1.02		ug/L		0.240	07/08/20 17:10	B0G0214	CP1	1
Chrysene	< 0.615	0.615		ug/L		0.130	07/08/20 17:10	B0G0214	CP1	1
Dibenzo(a,h)anthracene	< 2.05	2.05		ug/L		0.453	07/08/20 17:10	B0G0214	CP1	1
Diethyl phthalate	< 6.15	6.15		ug/L		1.19	07/08/20 17:10	B0G0214	CP1	1
Dimethyl phthalate	< 0.615	0.615		ug/L		0.0904	07/08/20 17:10	B0G0214	CP1	1
Di-n-butyl phthalate	< 10.2	10.2		ug/L		2.95	07/08/20 17:10	B0G0214	CP1	1
Di-n-octyl phthalate	< 10.2	10.2		ug/L		1.93	07/08/20 17:10	B0G0214	CP1	1
Fluoranthene	< 1.02	1.02		ug/L		0.201	07/08/20 17:10	B0G0214	CP1	1
Fluorene	< 0.615	0.615		ug/L		0.127	07/08/20 17:10	B0G0214	CP1	1
Hexachlorobenzene	< 1.02	1.02		ug/L		0.169	07/08/20 17:10	B0G0214	CP1	1
Hexachlorobutadiene	< 1.02	1.02		ug/L		0.256	07/08/20 17:10	B0G0214	CP1	1
Hexachlorocyclopentadiene	< 15.4	15.4		ug/L		2.24	07/08/20 17:10	B0G0214	CP1	1
Hexachloroethane	< 1.02	1.02		ug/L		0.225	07/08/20 17:10	B0G0214	CP1	1
Indeno(1,2,3-cd)pyrene	< 2.05	2.05		ug/L		0.515	07/08/20 17:10	B0G0214	CP1	1
Isophorone	< 0.615	0.615		ug/L		0.113	07/08/20 17:10	B0G0214	CP1	1
Naphthalene	< 4.10	4.10		ug/L		0.836	07/08/20 17:10	B0G0214	CP1	1
Nitrobenzene	< 0.615	0.615		ug/L		0.143	07/08/20 17:10	B0G0214	CP1	1
N-Nitrosodimethylamine	< 1.02	1.02		ug/L		0.160	07/08/20 17:10	B0G0214	CP1	1
N-Nitrosodi-n-propylamine	< 2.05	2.05		ug/L		0.327	07/08/20 17:10	B0G0214	CP1	1
N-Nitrosodiphenylamine	< 0.615	0.615		ug/L		0.107	07/08/20 17:10	B0G0214	CP1	1

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	Upstream Saline Ditch
Project:	3Q Annual Surface Water 3Q20	Report Date:	07/24/2020
Work Order:	20F0815	Collection Date:	07/01/2020 10:30
		Matrix:	Water
		Lab ID:	20F0815-01 (Continued)

Analyses	EMT Reporting			Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
	Result	Limit	Qual Units						
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: E625 / SW3510 (Continued)									
Pentachlorophenol	< 30.7	30.7	ug/L		2.58	07/08/20 17:10	B0G0214	CP1	1
Phenanthrene	< 1.02	1.02	ug/L		0.211	07/08/20 17:10	B0G0214	CP1	1
Phenol	< 1.02	1.02	ug/L		0.175	07/08/20 17:10	B0G0214	CP1	1
Pyrene	< 1.02	1.02	ug/L		0.213	07/08/20 17:10	B0G0214	CP1	1
Surrogate: 2-Fluorophenol			Recovery: 50%	Limits: 16-87	07/08/20 17:10	B0G0214	CP1	1	
Surrogate: Phenol-d5			Recovery: 41%	Limits: 7-68	07/08/20 17:10	B0G0214	CP1	1	
Surrogate: Nitrobenzene-d5			Recovery: 55%	Limits: 26-117	07/08/20 17:10	B0G0214	CP1	1	
Surrogate: 2-Fluorobiphenyl			Recovery: 60%	Limits: 23-105	07/08/20 17:10	B0G0214	CP1	1	
Surrogate: 2,4,6-Tribromophenol			Recovery: 81%	Limits: 20-128	07/08/20 17:10	B0G0214	CP1	1	
Surrogate: 4-Terphenyl-d14			Recovery: 77%	Limits: 35-144	07/08/20 17:10	B0G0214	CP1	1	

Client Sample Results

(Continued)

Client: City of Urbana
Project: 3Q Annual Surface Water
 3Q20
Work Order: 20F0815

Client Sample ID: Downstream Saline Ditch
Report Date: 07/24/2020
Collection Date: 07/01/2020 13:50
Matrix: Water
Lab ID: 20F0815-02

Analyses	Result	EMT Reporting Limit	Qual	Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
On Site Analysis										
Method: SM2510B										
Specific Conductance	771			uS/cm			07/01/20 13:50	B0G0399	ST1	1
Method: SM2550-B										
Temperature	72.5			°F		0.00	07/01/20 13:50	B0G0399	ST1	1
Method: SM4500-H										
pH	8.06	0.05		pH Units		0.04	07/01/20 13:50	B0G0399	ST1	1
Metals by ICP-AES										
Method: Calculated result										
Trivalent Chromium	< 0.0600	0.0600		mg/L		0.00800	07/07/20 09:15	[CALC]	SP1	4
Method: E200.7 / SW3015										
Arsenic	< 0.0500	0.0500		mg/L		0.0150	07/06/20 16:10	B0G0129	KJ1	1
Barium	0.0642	0.0500		mg/L		0.00700	07/07/20 14:57	B0G0129	KJ1	1
Boron	0.254	0.0500		mg/L		0.0120	07/06/20 16:10	B0G0129	KJ1	1
Cadmium	< 0.00140	0.00140		mg/L		0.00140	07/06/20 16:10	B0G0129	KJ1	1
Chromium	< 0.0500	0.0500		mg/L		0.00400	07/06/20 16:10	B0G0129	KJ1	1
Copper	< 0.00500	0.00500		mg/L		0.00500	07/06/20 16:10	B0G0129	KJ1	1
Lead	< 0.0500	0.0500		mg/L		0.0120	07/06/20 16:10	B0G0129	KJ1	1
Manganese	< 0.0500	0.0500		mg/L		0.00800	07/06/20 16:10	B0G0129	KJ1	1
Nickel	< 0.0500	0.0500		mg/L		0.00900	07/06/20 16:10	B0G0129	KJ1	1
Selenium	< 0.0500	0.0500		mg/L		0.0170	07/06/20 16:10	B0G0129	KJ1	1
Silver	< 0.00500	0.00500		mg/L		0.00200	07/06/20 16:10	B0G0129	KJ1	1
Zinc	< 0.0500	0.0500		mg/L		0.0120	07/06/20 16:10	B0G0129	KJ1	1
Dissolved Metals by ICP-AES										
Method: E200.7 / SW3005										
Iron, Dissolved	< 0.0889	0.0889		mg/L		0.0320	07/06/20 15:50	B0G0148	KJ1	1
Mercury by CVAA										
Method: E245.1										
Mercury	< 0.00050	0.00050		mg/L		0.00020	07/16/20 13:43	B0G0469	MB1	1
Anions by Ion Chromatography										
Method: E300										
Chloride	58.3	0.500	Q, S2	mg/L		0.200	07/03/20 02:03	B0G0097	MM7	10
Fluoride	0.371	0.250		mg/L		0.100	07/03/20 02:03	B0G0097	MM7	10
Sulfate	30.6	1.50	Q, S2	mg/L		0.500	07/03/20 02:03	B0G0097	MM7	10
Wet Chemistry										
Method: E420.1 Rev.1978 by Discrete/MIDI										

Client Sample Results

(Continued)

Client: City of Urbana
Project: 3Q Annual Surface Water
 3Q20
Work Order: 20F0815

Client Sample ID: Downstream Saline Ditch
Report Date: 07/24/2020
Collection Date: 07/01/2020 13:50
Matrix: Water
Lab ID: 20F0815-02 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
Wet Chemistry (Continued)										
Method: E420.1 Rev.1978 by Discrete/MIDI (Continued)										
Phenolics, Total Recoverable	< 0.0500	0.0500		mg/L		0.00500	07/07/20 11:26	B0G0183	SP1	1
Method: SM2540C										
Total Dissolved Solids (Residue, Filterable)	487	10.0		mg/L		1.00	07/07/20 09:48	B0G0137	MKP	1
Method: SM3500-Cr B by Discrete										
Chromium, Hexavalent	< 0.0100	0.0100		mg/L		0.00400	07/07/20 09:15	B0G0177	SP1	4
Method: SM4500-CN										
Cyanide	< 0.0100	0.0100		mg/L		0.00300	07/13/20 14:40	B0G0359	SP1	1
Method: SM4500-P E										
Phosphorus, Total (As P)	0.377	0.100		mg/L		0.0180	07/15/20 18:35	B0G0458	ER1	1
Alcohols & Glycols by GC/FID										
Method: 8015B										
Ethanol	< 10.0	10.0		mg/L		2.27	07/02/20 17:28	B0G0136	CS2	1
Isopropanol	< 10.0	10.0		mg/L		2.29	07/02/20 17:28	B0G0136	CS2	1
Methanol	< 8.00	8.00		mg/L		1.99	07/02/20 17:28	B0G0136	CS2	1
Polychlorinated Biphenyls (PCBs) by GC/ECD										
Method: E608 / SW3510										
Aroclor 1016	< 1.04	1.04		ug/L		0.220	07/06/20 14:47	B0G0124	CS2	1
Aroclor 1221	< 0.622	0.622		ug/L		0.199	07/06/20 14:47	B0G0124	CS2	1
Aroclor 1232	< 0.622	0.622		ug/L		0.168	07/06/20 14:47	B0G0124	CS2	1
Aroclor 1242	< 2.07	2.07		ug/L		0.363	07/06/20 14:47	B0G0124	CS2	1
Aroclor 1248	< 0.622	0.622		ug/L		0.166	07/06/20 14:47	B0G0124	CS2	1
Aroclor 1254	< 0.622	0.622		ug/L		0.182	07/06/20 14:47	B0G0124	CS2	1
Aroclor 1260	< 0.415	0.415		ug/L		0.116	07/06/20 14:47	B0G0124	CS2	1
Surrogate: Decachlorobiphenyl					Recovery: 81%	Limits: 40-135	07/06/20 14:47	B0G0124	CS2	1
Surrogate: 2,4,5,6-Tetrachloro-m-xylene					Recovery: 38%	Limits: 13-133	07/06/20 14:47	B0G0124	CS2	1
Volatile Organic Compounds by GC/MS										
Method: E624 / SW5030										
1,1,1-Trichloroethane	< 4.00	4.00		ug/L		0.719	07/10/20 15:00	B0G0357	WZZ	1
1,1,2,2-Tetrachloroethane	< 4.00	4.00		ug/L		0.713	07/10/20 15:00	B0G0357	WZZ	1
1,1,2-Trichloroethane	< 2.00	2.00		ug/L		0.198	07/10/20 15:00	B0G0357	WZZ	1
1,1-Dichloroethane	< 4.00	4.00		ug/L		0.691	07/10/20 15:00	B0G0357	WZZ	1
1,1-Dichloroethene	< 8.00	8.00		ug/L		1.10	07/10/20 15:00	B0G0357	WZZ	1
1,2-Dichloroethane	< 4.00	4.00		ug/L		0.731	07/10/20 15:00	B0G0357	WZZ	1
1,2-Dichloropropane	< 4.00	4.00		ug/L		0.557	07/10/20 15:00	B0G0357	WZZ	1
2-Chloroethyl vinyl ether	< 4.00	4.00	2-CVE	ug/L		0.740	07/10/20 15:00	B0G0357	WZZ	1

Client Sample Results

(Continued)

Client: City of Urbana

Client Sample ID: Downstream Saline Ditch

Project: 3Q Annual Surface Water
3Q20

Report Date: 07/24/2020

Work Order: 20F0815

Collection Date: 07/01/2020 13:50

Matrix: Water

Lab ID: 20F0815-02 (Continued)

Analyses	EMT Reporting				Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
	Result	Limit	Qual	Units						
Volatile Organic Compounds by GC/MS (Continued)										
Method: E624 / SW5030 (Continued)										
Acrolein	< 80.0	80.0		ug/L		10.4	07/10/20 15:00	B0G0357	WZZ	1
Acrylonitrile	< 4.00	4.00		ug/L		0.628	07/10/20 15:00	B0G0357	WZZ	1
Benzene	< 2.00	2.00		ug/L		0.362	07/10/20 15:00	B0G0357	WZZ	1
Bromodichloromethane	< 2.00	2.00		ug/L		0.458	07/10/20 15:00	B0G0357	WZZ	1
Bromoform	< 4.00	4.00		ug/L		0.570	07/10/20 15:00	B0G0357	WZZ	1
Bromomethane	< 8.00	8.00		ug/L		1.61	07/10/20 15:00	B0G0357	WZZ	1
Carbon tetrachloride	< 4.00	4.00		ug/L		0.710	07/10/20 15:00	B0G0357	WZZ	1
Chlorobenzene	< 2.00	2.00		ug/L		0.170	07/10/20 15:00	B0G0357	WZZ	1
Chloroethane	< 4.00	4.00		ug/L		0.621	07/10/20 15:00	B0G0357	WZZ	1
Chloroform	< 8.00	8.00		ug/L		1.06	07/10/20 15:00	B0G0357	WZZ	1
Chloromethane	< 8.00	8.00		ug/L		1.30	07/10/20 15:00	B0G0357	WZZ	1
cis-1,3-Dichloropropene	< 4.00	4.00		ug/L		0.408	07/10/20 15:00	B0G0357	WZZ	1
Dibromochloromethane	< 4.00	4.00		ug/L		0.632	07/10/20 15:00	B0G0357	WZZ	1
Ethylbenzene	< 2.00	2.00		ug/L		0.268	07/10/20 15:00	B0G0357	WZZ	1
m,p-Xylene	< 8.00	8.00		ug/L		1.58	07/10/20 15:00	B0G0357	WZZ	1
Methylene chloride	< 8.00	8.00		ug/L		1.02	07/10/20 15:00	B0G0357	WZZ	1
o-Xylene	< 2.00	2.00		ug/L		0.324	07/10/20 15:00	B0G0357	WZZ	1
Tetrachloroethene	< 4.00	4.00		ug/L		0.646	07/10/20 15:00	B0G0357	WZZ	1
Toluene	< 4.00	4.00		ug/L		0.510	07/10/20 15:00	B0G0357	WZZ	1
trans-1,2-Dichloroethene	< 4.00	4.00		ug/L		0.566	07/10/20 15:00	B0G0357	WZZ	1
trans-1,3-Dichloropropene	< 8.00	8.00		ug/L		1.17	07/10/20 15:00	B0G0357	WZZ	1
Trichloroethene	< 4.00	4.00		ug/L		0.939	07/10/20 15:00	B0G0357	WZZ	1
Trichlorofluoromethane	< 4.00	4.00		ug/L		0.503	07/10/20 15:00	B0G0357	WZZ	1
Vinyl chloride	< 4.00	4.00		ug/L		0.582	07/10/20 15:00	B0G0357	WZZ	1
Xylenes, Total	< 12.0	12.0		ug/L		1.62	07/10/20 15:00	B0G0357	WZZ	1
Surrogate: Dibromofluoromethane				Recovery: 102%		Limits: 83-135	07/10/20 15:00	B0G0357	WZZ	1
Surrogate: 1,2-Dichloroethane-d4				Recovery: 101%		Limits: 77-140	07/10/20 15:00	B0G0357	WZZ	1
Surrogate: Fluorobenzene				Recovery: 100%		Limits: 90-105	07/10/20 15:00	B0G0357	WZZ	1
Surrogate: Toluene-d8				Recovery: 99%		Limits: 75-112	07/10/20 15:00	B0G0357	WZZ	1
Surrogate: 4-Bromofluorobenzene				Recovery: 101%		Limits: 89-128	07/10/20 15:00	B0G0357	WZZ	1
Surrogate: 1,2-Dichlorobenzene-d4				Recovery: 102%		Limits: 91-127	07/10/20 15:00	B0G0357	WZZ	1

Semivolatile Organic Compounds by GC/MS

Method: E625 / SW3510

1,2,4-Trichlorobenzene	< 2.31	2.31		ug/L		0.323	07/08/20 17:36	B0G0214	CP1	1
1,2-Dichlorobenzene	< 2.31	2.31		ug/L		0.346	07/08/20 17:36	B0G0214	CP1	1
1,3-Dichlorobenzene	< 2.31	2.31		ug/L		0.358	07/08/20 17:36	B0G0214	CP1	1
1,4-Dichlorobenzene	< 2.31	2.31		ug/L		0.323	07/08/20 17:36	B0G0214	CP1	1
2,4,6-Trichlorophenol	< 1.15	1.15		ug/L		0.281	07/08/20 17:36	B0G0214	CP1	1
2,4-Dichlorophenol	< 1.15	1.15		ug/L		0.0910	07/08/20 17:36	B0G0214	CP1	1
2,4-Dimethylphenol	< 2.31	2.31		ug/L		0.136	07/08/20 17:36	B0G0214	CP1	1
2,4-Dinitrophenol	< 34.6	34.6		ug/L		3.82	07/08/20 17:36	B0G0214	CP1	1
2,4-Dinitrotoluene	< 2.31	2.31		ug/L		0.291	07/08/20 17:36	B0G0214	CP1	1

Client Sample Results

(Continued)

Client: City of Urbana

Client Sample ID: Downstream Saline Ditch

Project: 3Q Annual Surface Water
3Q20

Report Date: 07/24/2020

Work Order: 20F0815

Collection Date: 07/01/2020 13:50

Matrix: Water

Lab ID: 20F0815-02 (Continued)

Analyses	EMT Reporting			Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
	Result	Limit	Qual Units						
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: E625 / SW3510 (Continued)									
2,6-Dinitrotoluene	< 1.15	1.15	ug/L		0.265	07/08/20 17:36	B0G0214	CP1	1
2-Chloronaphthalene	< 0.693	0.693	ug/L		0.122	07/08/20 17:36	B0G0214	CP1	1
2-Chlorophenol	< 1.15	1.15	ug/L		0.177	07/08/20 17:36	B0G0214	CP1	1
3,3'-Dichlorobenzidine	< 23.1	23.1	ug/L		3.65	07/08/20 17:36	B0G0214	CP1	1
4,6-Dinitro-2-methylphenol	< 17.3	17.3	ug/L		2.83	07/08/20 17:36	B0G0214	CP1	1
4-Bromophenyl-phenylether	< 1.15	1.15	ug/L		0.185	07/08/20 17:36	B0G0214	CP1	1
4-Chloro-3-methylphenol	< 0.577	0.577	ug/L		0.0823	07/08/20 17:36	B0G0214	CP1	1
4-Chlorophenyl-phenylether	< 1.15	1.15	ug/L		0.168	07/08/20 17:36	B0G0214	CP1	1
4-Nitrophenol	< 17.3	17.3	ug/L		1.66	07/08/20 17:36	B0G0214	CP1	1
Acenaphthene	< 0.693	0.693	ug/L		0.120	07/08/20 17:36	B0G0214	CP1	1
Acenaphthylene	< 0.693	0.693	ug/L		0.150	07/08/20 17:36	B0G0214	CP1	1
Anthracene	< 0.693	0.693	ug/L		0.129	07/08/20 17:36	B0G0214	CP1	1
Azobenzene as 1,2-Diphenylhydrazine	< 1.15	1.15	ug/L		0.0885	07/08/20 17:36	B0G0214	CP1	1
Benidine	< 92.3	92.3	ug/L		19.1	07/08/20 17:36	B0G0214	CP1	1
Benzo(a)anthracene	< 0.693	0.693	ug/L		0.142	07/08/20 17:36	B0G0214	CP1	1
Benzo(a)pyrene	< 2.31	2.31	ug/L		0.434	07/08/20 17:36	B0G0214	CP1	1
Benzo(b)fluoranthene	< 2.31	2.31	ug/L		0.430	07/08/20 17:36	B0G0214	CP1	1
Benzo(g,h,i)perylene	< 2.31	2.31	ug/L		0.461	07/08/20 17:36	B0G0214	CP1	1
Benzo(k)fluoranthene	< 2.31	2.31	ug/L		0.287	07/08/20 17:36	B0G0214	CP1	1
Bis(2-chloroethoxy)methane	< 1.15	1.15	ug/L		0.156	07/08/20 17:36	B0G0214	CP1	1
Bis(2-chloroethyl)ether	< 1.15	1.15	ug/L		0.203	07/08/20 17:36	B0G0214	CP1	1
Bis(2-chloroisopropyl)ether	< 1.15	1.15	ug/L		0.148	07/08/20 17:36	B0G0214	CP1	1
Bis(2-ethylhexyl)phthalate	< 23.1	23.1	ug/L		4.19	07/08/20 17:36	B0G0214	CP1	1
Butyl benzyl phthalate	< 1.15	1.15	ug/L		0.270	07/08/20 17:36	B0G0214	CP1	1
Chrysene	< 0.693	0.693	ug/L		0.146	07/08/20 17:36	B0G0214	CP1	1
Dibenzo(a,h)anthracene	< 2.31	2.31	ug/L		0.510	07/08/20 17:36	B0G0214	CP1	1
Diethyl phthalate	< 6.93	6.93	ug/L		1.34	07/08/20 17:36	B0G0214	CP1	1
Dimethyl phthalate	< 0.693	0.693	ug/L		0.102	07/08/20 17:36	B0G0214	CP1	1
Di-n-butyl phthalate	< 11.5	11.5	ug/L		3.32	07/08/20 17:36	B0G0214	CP1	1
Di-n-octyl phthalate	< 11.5	11.5	ug/L		2.18	07/08/20 17:36	B0G0214	CP1	1
Fluoranthene	< 1.15	1.15	ug/L		0.227	07/08/20 17:36	B0G0214	CP1	1
Fluorene	< 0.693	0.693	ug/L		0.143	07/08/20 17:36	B0G0214	CP1	1
Hexachlorobenzene	< 1.15	1.15	ug/L		0.190	07/08/20 17:36	B0G0214	CP1	1
Hexachlorobutadiene	< 1.15	1.15	ug/L		0.289	07/08/20 17:36	B0G0214	CP1	1
Hexachlorocyclopentadiene	< 17.3	17.3	ug/L		2.52	07/08/20 17:36	B0G0214	CP1	1
Hexachloroethane	< 1.15	1.15	ug/L		0.254	07/08/20 17:36	B0G0214	CP1	1
Indeno(1,2,3-cd)pyrene	< 2.31	2.31	ug/L		0.580	07/08/20 17:36	B0G0214	CP1	1
Isophorone	< 0.693	0.693	ug/L		0.127	07/08/20 17:36	B0G0214	CP1	1
Naphthalene	< 4.62	4.62	ug/L		0.942	07/08/20 17:36	B0G0214	CP1	1
Nitrobenzene	< 0.693	0.693	ug/L		0.161	07/08/20 17:36	B0G0214	CP1	1
N-Nitrosodimethylamine	< 1.15	1.15	ug/L		0.180	07/08/20 17:36	B0G0214	CP1	1
N-Nitrosodi-n-propylamine	< 2.31	2.31	ug/L		0.368	07/08/20 17:36	B0G0214	CP1	1
N-Nitrosodiphenylamine	< 0.693	0.693	ug/L		0.120	07/08/20 17:36	B0G0214	CP1	1

Client Sample Results

(Continued)

Client:	City of Urbana	Client Sample ID:	Downstream Saline Ditch
Project:	3Q Annual Surface Water 3Q20	Report Date:	07/24/2020
Work Order:	20F0815	Collection Date:	07/01/2020 13:50
		Matrix:	Water
		Lab ID:	20F0815-02 (Continued)

Analyses	EMT Reporting			Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
	Result	Limit	Qual Units						
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: E625 / SW3510 (Continued)									
Pentachlorophenol	< 34.6	34.6	ug/L		2.91	07/08/20 17:36	B0G0214	CP1	1
Phenanthrene	< 1.15	1.15	ug/L		0.238	07/08/20 17:36	B0G0214	CP1	1
Phenol	< 1.15	1.15	ug/L		0.197	07/08/20 17:36	B0G0214	CP1	1
Pyrene	< 1.15	1.15	ug/L		0.240	07/08/20 17:36	B0G0214	CP1	1
Surrogate: 2-Fluorophenol			Recovery: 43%	Limits: 16-87	07/08/20 17:36	B0G0214	CP1	1	
Surrogate: Phenol-d5			Recovery: 36%	Limits: 7-68	07/08/20 17:36	B0G0214	CP1	1	
Surrogate: Nitrobenzene-d5			Recovery: 48%	Limits: 26-117	07/08/20 17:36	B0G0214	CP1	1	
Surrogate: 2-Fluorobiphenyl			Recovery: 50%	Limits: 23-105	07/08/20 17:36	B0G0214	CP1	1	
Surrogate: 2,4,6-Tribromophenol			Recovery: 81%	Limits: 20-128	07/08/20 17:36	B0G0214	CP1	1	
Surrogate: 4-Terphenyl-d14			Recovery: 83%	Limits: 35-144	07/08/20 17:36	B0G0214	CP1	1	

Analytical Report

Scott Tess
City of Urbana
706 S Glover Ave
Urbana, IL 61802

August 24, 2020

Work Order: 20F0813

RE: City Landfill Leachate Pumping Facility
3Q20

Dear Scott Tess:

Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

Sincerely,



Jacoby Jackson
Project Manager
847.967.6666
jjackson@emt.com
Approved for release: 8/24/2020 2:19:22PM

Approved by,



Matthew Gregory
Technical Manager

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Illinois, NELAP Accredited Lab No. 100256, Cert No. 1002562020-1



Client Sample Results

Client: City of Urbana
Project: City Landfill Leachate Pumping Facility
 3Q20
Work Order: 20F0813

Client Sample ID: Solar Powered Leachate Pump
Report Date: 08/24/2020
Collection Date: 08/14/2020 07:25
Matrix: Leachate
Lab ID: 20F0813-01

Analyses	Result	EMT Reporting Limit	Qual	Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
On Site Analysis										
Method: SM4500-H										
pH	6.78	0.05		pH Units		0.04	08/14/20 07:25	B0H0716	CD	1
Metals by ICP-MS										
Method: E200.8 / SW3015										
Arsenic	< 0.0500	0.0500		mg/L		0.00200	08/19/20 11:20	B0H0521	AG	10
Cadmium	< 0.001	0.001		mg/L		0.0004	08/19/20 11:20	B0H0521	AG	10
Chromium	< 0.0500	0.0500		mg/L		0.00500	08/19/20 11:20	B0H0521	AG	10
Copper	0.149	0.00500		mg/L		0.00500	08/19/20 11:20	B0H0521	AG	10
Lead	< 0.050	0.050		mg/L		0.0008	08/19/20 11:20	B0H0521	AG	10
Nickel	< 0.0500	0.0500		mg/L		0.00700	08/19/20 11:20	B0H0521	AG	10
Selenium	< 0.0500	0.0500		mg/L		0.00600	08/19/20 11:20	B0H0521	AG	10
Silver	< 0.00500	0.00500		mg/L		0.000800	08/19/20 11:20	B0H0521	AG	10
Zinc	0.405	0.0500		mg/L		0.0200	08/19/20 11:20	B0H0521	AG	10
Mercury by CVAA										
Method: E245.1										
Mercury	< 0.00050	0.00050		mg/L		0.00020	08/17/20 10:04	B0H0474	MB1	1
Wet Chemistry										
Method: E1664B										
Oil and Grease (HEM)	312	5.00		mg/L		1.40	08/21/20 13:06	B0H0563	GB1	1
Oil and Grease, Non-Polar Material (SGT-HEM)	221	4.00	Q	mg/L		1.40	08/24/20 08:20	B0H0679	GB1	1
Method: SM2540D										
Suspended Solids (Residue, Non-filterable)	531	10.0		mg/L		1.40	08/18/20 07:18	B0H0488	MKP	1
Method: SM3500-Cr B by Discrete										
Chromium, Hexavalent	0.0220	0.0100		mg/L		0.0100	08/20/20 13:10	B0H0623	JE1	10
Method: SM4500-CN										
Cyanide	< 0.0100	0.0100		mg/L		0.00300	08/19/20 09:31	B0H0548	JE1	1
Method: SM4500-H										
pH	7.09	0.05		pH Units		0.04	08/18/20 10:05	B0H0517	CS3	1
Method: SM4500-NH3-B-C										
Ammonia	251	3.92		mg/L		0.0840	08/18/20 19:00	B0H0551	ER1	1.4
Method: SM5210 B										
Biochemical Oxygen Demand	< 104.4	15	BOD DO	mg/L		2	08/20/20 09:10	B0H0464	CS3	1