29th ANNUAL REPORT URBANA LANDFILL COMPLEX

GROUNDWATER MONITORING ACTIVITIES MONITORING YEAR 2020

Prepared for

CHAMPAIGN-URBANA SOLID WASTE DISPOSAL SYSTEM

Prepared by

Midwest Engineering and Testing, Inc. 501 Mercury Drive Champaign, IL 61822 217.359.2158

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 **29**th **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.
- 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 *nth* 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.

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

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

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 downgradient 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 exceedances 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;
- 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

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FIGURES

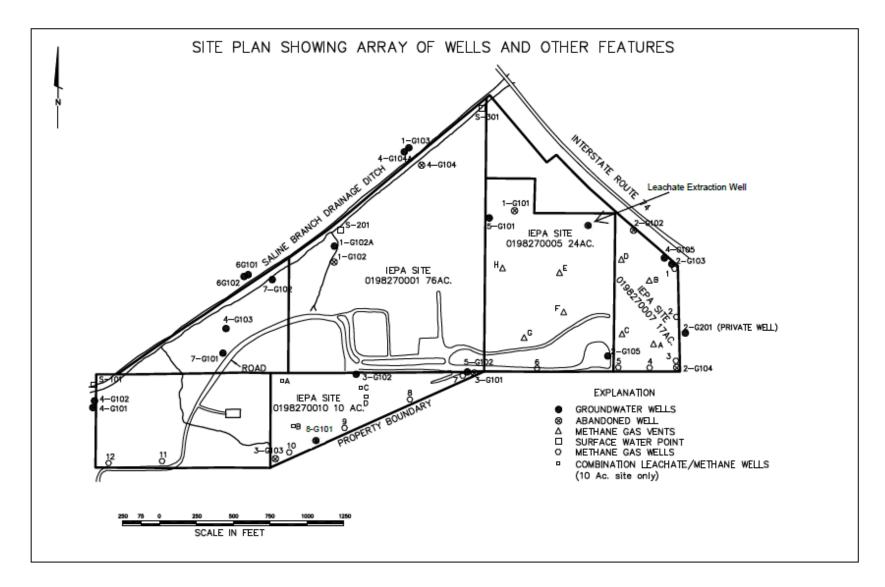


Figure 1 Urbana Landfill Complex showing location of features including monitoring wells and IEPA Sites.

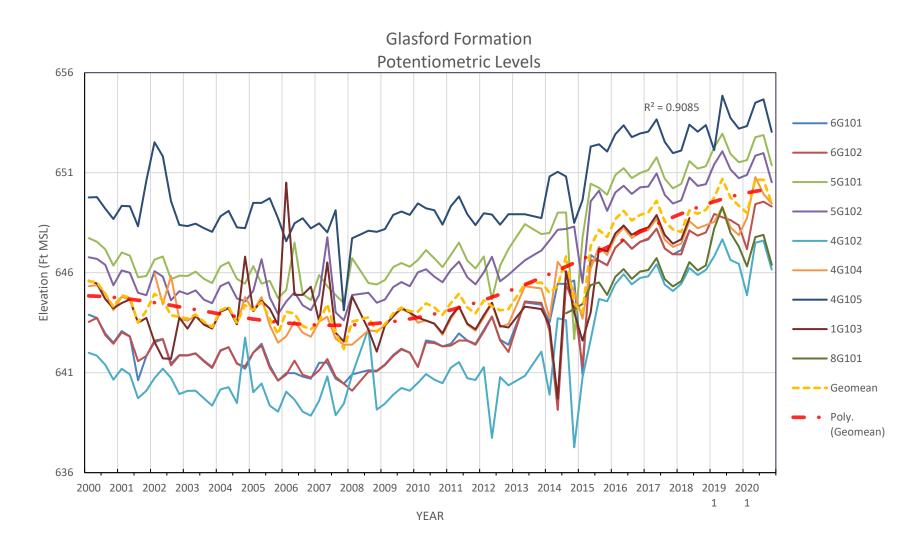


Figure 2. Upper Glasford Formation potentiometric data: 2000 through 2020. Geomean plotted and 4th order polynomial regression line added.

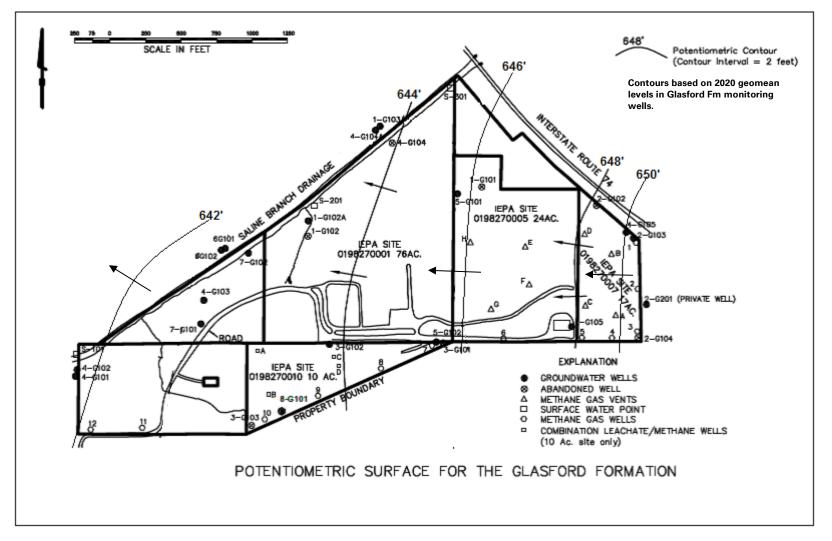


Figure 3. Potentiometric contour map of the Upper Glasford Formation. Arrows indicate general direction of groundwater flow in the upper Glasford Formation monitored and is essentially the same as in previous years.

APPENDIX A

Laboratory Reports



509 N. 3rd Avenue Des Plaines, Illinois 60016 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

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,

voly Jackesm

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



Des Plaines, Illinois 60016 509 N. 3rd Avenue **P** 847.967.6666 800.246.0663 **F** 847.967.6735 www.emt.com

Client Sample Results

Client: C	ity of Urbana					Client Sample ID:	4G102		
•	econd Quarte	r Groundwate	er			Report Date:	06/22/2020		
2	Q20					Collection Date:	05/26/2020 09:40)	
Work Order: 2	0E0546						Groundwater 20E0546-01		
			EMT				2020010 01		
			Reporting				Date/Time		
Analyses		Result	Limit	Qual	Units	MDL	Analyzed	Batch	Analyst
On Site Analysis									
N	lethod: Non-/	Analytical Da	ta						
Bottom of well elevation	on (Feet)	561.1200			No unit		05/26/20 09:40	B0F0736	CD
Depth to water (feet be	low land	50.5500			No unit		05/26/20 09:40	B0F0736	CD
surface) Depth to water (feet fro	om	52.5500			No unit		05/26/20 09:40	B0F0736	CD
measuring point)									
Elevation of groundwa (Feet)	ter surface	647.5000			No unit		05/26/20 09:40	B0F0736	CD
N	lethod: SM25	10B							
Specific Conductan	ce	725			uS/cm		05/26/20 09:40	B0F0736	CD
N	lethod: SM25	50-B							
Temperature		61.2			°F	0.00	05/26/20 09:40	B0F0736	CD
N	lethod: SM45	00-H		-					
рН		7.48	0.05		pH Units	0.04	05/26/20 09:40	B0F0736	CD
Metals by ICP-M	S								
-	lethod: SW60	20A / SW301	5						
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	s by ICP-MS								
N	lethod: SW60	20A / SW300	5						
Arsenic, Dissolved		< 22.2	22.2		ug/L	1.78	06/10/20 17:50	B0E0834	AG
Anions by Ion Cl	hromatogra	ohy							
N	lethod: SW90	56A							
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		Q, S2		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									
-	lethod: SM25	40C							
Total Dissolved Solids Filterable)		438	10.0		mg/L	1.00	05/28/20 09:44	B0E0843	MKP
	lethod: SM45	00-NH3-B-C							
Ammonia	-	< 0.980	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3
		0.000	0.000			0.0210	30/20/20 10.00	2020020	000



509 N. 3rd /	Avenue	Des Plaines, Illir	10is 600)16	P 847.967.6666	800.246.0663	F 847.967.6	6735	www.emt.con
				С	lient Sample Res	ults			
					(Continued)				
Client:	City of U	rbana				Client Sample ID:	4G102		
Project:	Second	Quarter Groundwater				Report Date:	06/22/2020		
	2Q20					Collection Date:	05/26/2020 09:4	0	
Work Order:	20E0546	i				Matrix:	Groundwater		
						Lab ID:	20E0546-01 (Co	ntinued)	
			EMT						
		I	Reporting				Date/Time		
Analyses		Result	Limit	Qual	Units	MDL	Analyzed	Batch	Analyst
Wet Chemis	try (Contin	ued)							
	Method:	SW9014 / SW9010B							
Cyanide		< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 11:57	B0E0844	SP1
	Method:	SW9060							
Organic Carbo		1.57	1.00		mg/L	0.400	05/29/20 15:26	B0E0913	TB2
Organic Carbo		1.57		Keyst	mg/L one Laboratory, Sub		05/29/20 15:26	B0E0913	TB2
-	n, Total			Keyst	Ū		05/29/20 15:26	B0E0913	TB2
Organic Carbo Subcontract	n, Total ed Analyse			Keyst	Ū		05/29/20 15:26	B0E0913	TB2



509 N. 3rd A	venue	Des Plaines, Illin	ois 600)16	P 847.967.6666	800.246.0663	F 847.967.0	6735	www.emt.co
				С	lient Sample Res	ults			
					(Continued)				
Client:	City of Ur	rhana				Client Sample ID:	4G104A		
Project:	-	Quarter Groundwater				Report Date:			
Project.	2Q20					-		_	
							05/26/2020 11:4	5	
Work Order:	20E0546						Groundwater		
						Lab ID:	20E0546-02		
			EMT						
		R	eporting				Date/Time		
Analyses		Result	Limit	Qual	Units	MDL	Analyzed	Batch	Analyst
On Site Analy	vsis								
	Method:	Non-Analytical Data							
Bottom of well ele	vation (Feet)	655.0900			No unit		05/26/20 11:45	B0F0736	CD
Depth to water (fe		44.9200			No unit		05/26/20 11:45	B0F0736	CD
surface)					N I a consta			DOFORTO	
Depth to water (fee measuring point)	et from	46.9200			No unit		05/26/20 11:45	B0F0736	CD
Elevation of groun (Feet)	ndwater surfac	e 670.3600			No unit		05/26/20 11:45	B0F0736	CD
	Method:	SM2510B							
Specific Conduc	ctance	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							
рН		7.33	0.05		pH Units	0.04	05/26/20 11:45	B0F0736	CD
					F				
Metals by ICF									
	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 Me	tale by IC	D_MS							
	-	SW6020A / SW3005							
Arsenic, Dissolve		< 22.2	22.2		ug/L	1.78	06/10/20 17:58	B0E0834	AG
Anions by lor	n Chromat	ography							
,		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		Q, S2	-	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 Chemistr	у								
	Method:	SM2540C							
Total Dissolved So Filterable)	olids (Residue,	481	10.0		mg/L	1.00	05/28/20 09:44	B0E0843	МКР
	Method:	SM4500-NH3-B-C							
Ammonia		5.04	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3
		V.V-T	0.000			0.02.0		0	



Total Organic Ha	alogens	< 0.01	0.01		mg/L	0.01	06/05/20 00:00	20E0546-0	2 EYSTONE
Subcontracte	-	es SW9020B							
				Keyst	one Laboratory, Sub	contract			
Organic Carbor	n, Total	3.45	1.00		mg/L	0.400	05/29/20 15:48	B0E0913	TB2
	Method:	SW9060							
Cyanide		< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 11:59	B0E0844	SP1
	Method:	SW9014 / SW9010B							
Wet Chemist	ry (Contin	ued)							
Analyses		F Result	Reporting Limit		Units	MDL	Date/Time Analyzed	Batch	Analyst
			EMT						
						Lab ID:	20E0546-02 (Co	ntinued)	
Work Order:	20E0546	3					Groundwater		
Project:	2Q20	Quarter Groundwater				Report Date: Collection Date:		15	
Client:	City of U					Client Sample ID:			
				С	(Continued)	ults			
509 N. 3rd A	venue	Des Plaines, Illir	nois 600	016	P 847.967.6666	800.246.0663	F 847.967.	6735	www.emt.co



				С	lient Sample Res (Continued)	ults			
Client:	City of Ur	rbana				Client Sample ID:	4G105		
Project:	-	Quarter Groundwater				Report Date:			
Fiojeci.	2Q20					-			
							05/26/2020 12:40		
Work Order:	20E0546						Groundwater		
						Lab ID:	20E0546-03		
		_	EMT						
Analyses		Result	eporting Limit	Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analy	vsis								
		Non-Analytical Data							
Bottom of well ele	evation (Feet)	610.1900			No unit		05/26/20 12:40	B0F0736	PB
Depth to water (fe		86.2200			No unit			B0F0736	PB
surface)					N <i>H</i>				
Depth to water (fe measuring point)	et from	88.2200			No unit		05/26/20 12:40	B0F0736	PB
Elevation of grout (Feet)	ndwater surfac	e 654.5000			No unit		05/26/20 12:40	B0F0736	PB
	Method:	SM2510B							
Specific Condu	ictance	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							
рН		7.17	0.05		pH Units	0.04	05/26/20 12:40	B0F0736	PB
Metals by ICI	P-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 Me	etals by IC	P-MS							
	Method:	SW6020A / SW3005							
Arsenic, Dissolv	ved	< 22.2	22.2		ug/L	1.78	06/10/20 18:00	B0E0834	AG
Anions by lo		ography SW9056A							
Chloride		10.1	0.500		mg/L	0.200	05/27/20 21:21	B0E0814	MM7
Nitrogen, Nitrate	e	< 0.250	0.250		mg/L	0.100		B0E0814	MM7
Nitrogen, Nitrite		< 0.250		Q, S2	-	0.100		B0E0814	MM7
Sulfate		16.2	1.50	,	mg/L	0.500		B0E0814	MM7
Net Chemist	ry								
	Method:	SM2540C							
Total Dissolved S Filterable)	olids (Residue,	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



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				С	lient Sample Res (Continued)	ults			
Client:	City of Urba	ana				Client Sample ID:	4G105		
Project:	Second Qua	arter Groundwater				Report Date:			
	2Q20					Collection Date:	05/26/2020 12:4	0	
Work Order:	20E0546					Matrix:	Groundwater		
						Lab ID:	20E0546-03 (Co	ntinued)	
		F	EMT Reporting				Date/Time		
Analyses		Result	Limit	Qual	Units	MDL	Analyzed	Batch	Analyst
Wet Chemis	try (Continue	d)							
	Method: SN	W9014 / SW9010B							
Cyanide	Method: SV	W9014 / SW9010B < 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 12:00	B0E0844	SP1
Cyanide	Method: SV	< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 12:00	B0E0844	SP1
Cyanide Organic Carbo	Method: S	< 0.010	0.010	Q, S1	mg/L mg/L	0.003	05/28/20 12:00	B0E0844 B0E0913	SP1 TB2
	Method: S	< 0.010 W9060	1.00			0.400			-
Organic Carbo	Method: S	< 0.010 W9060 5.81	1.00		mg/L	0.400			-



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				С	lient Sample Res	ults			
					(Continued)				
Client:	City of Ur	hana				Client Sample ID:	5G101		
	-					•			
Project:		Quarter Groundwater				Report Date:	06/22/2020		
	2Q20					Collection Date:	05/26/2020 11:25	5	
Work Order:	20E0546					Matrix:	Groundwater		
						Lab ID:	20E0546-04		
			EMT						
			eporting				Date/Time		
Analyses		Result	Limit	Qual	Units	MDL	Analyzed	Batch	Analyst
On Site Analy	veie								
JII Sile Allary		Non Analytical Data							
		Non-Analytical Data							
Bottom of well ele		608.0300			No unit		05/26/20 11:25	B0F0736	
Depth to water (fee	et below land	74.3600			No unit		05/26/20 11:25	B0F0736	PB
surface) Depth to water (fe	et from	76.8600			No unit		05/26/20 11:25	B0F0736	PB
measuring point)		70.0000					00/20/20 11.20	501 07 50	
Elevation of groun (Feet)	ndwater surface	652.7700			No unit		05/26/20 11:25	B0F0736	PB
	Method:	SM2510B							
Specific Conduc	ctance	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
remperature					1	0.00	00/20/20 11.20	501 07 50	
	Method:	SM4500-H							
pН		7.71	0.05		pH Units	0.04	05/26/20 11:25	B0F0736	PB
Metals by ICF									
	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	
Magnesium		43.3	1.25		mg/L	0.200	06/11/20 18:18	B0E0836	
Manganese		< 0.0250	0.0250		mg/L	0.00250	06/11/20 17:26	B0E0836	
Sodium		11.2		Q, S3		0.500	06/11/20 18:18	B0E0836	
				u, 00		0.000			
Dissolved Me	tals by ICI	P-MS							
	Method:	SW6020A / SW3005							
Arsenic, Dissolve	ed	< 22.2	22.2		ug/L	1.78	06/10/20 18:02	B0E0834	AG
Anions by lor	Chromet	ography							
		SW9056A							
Chloride		4.22	0.500		mg/L	0.200	05/27/20 21:50	B0E0814	MM7
Nitrogen, Nitrate	e	0.940	0.250		mg/L	0.100	05/27/20 21:50	B0E0814	
Nitrogen, Nitrite		< 0.250		Q, S2	-	0.100	05/27/20 21:50	B0E0814	
Sulfate		41.7	1.50	<u>, 02</u>	mg/L	0.500	05/27/20 21:50	B0E0814	
					J. –				
Wet Chemistr	-	SM2540C							
Total Dissolved So		426	10.0		ma/l	1.00	05/28/20 09:44	B0E0843	MKP
Filterable)	inesiuue,	420	10.0		mg/L	1.00	03/20/20 09.44	DUEU043	IVITAE
	Method:	SM4500-NH3-B-C							
Ammonia		< 0.980	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3
		- 0.000	0.000		····g/ L	0.0210	30/20/20 10.00	2020029	000



				0	liant Cample Dec	ulto			
				U	lient Sample Res (Continued)	uits			
Client:	City of Urb	bana				Client Sample ID:	5G101		
Project:	Second Q	uarter Groundwater				Report Date:	06/22/2020		
	2Q20					Collection Date:	05/26/2020 11:2	25	
Work Order:	20E0546						Groundwater 20E0546-04 (Co	ntinued)	
			EMT Reporting				Date/Time		
Analyses		Result	Limit	Qual	Units	MDL	Analyzed	Batch	Analyst
Wet Chemist	try (Continu	ed)							
	Method:	SW9014 / SW9010B	;						
Cyanide		< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 12:02	B0E0844	SP1
	Method:	SW9060							
Organic Carbor	n, Total	< 1.00	1.00		mg/L	0.400	05/29/20 16:29	B0E0913	TB2
				Keyst	one Laboratory, Sub	contract			
	ed Analyses	5							
Subcontract	<i>cu / many co</i>								
Subcontract	Method:	SW9020B							



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				С	lient Sample Res	ults			
					(Continued)				
Client:	City of Urba	na				Client Sample ID:	5G102		
Project:	-	arter Groundwater				Report Date:			
	2Q20					-	05/26/2020 10:2	5	
Work Order:	20E0546						Groundwater	.5	
work Order:	20E0546						20E0546-05		
						Lab ID.	20E0340-03		
		_	EMT						
Analyses		Result	eporting Limit		Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analy	sis								
,		on-Analytical Data							
Bottom of well ele	vation (Feet)	608.6000			No unit		05/26/20 10:25	B0F0736	PB
Depth to water (fe		84.4200			No unit		05/26/20 10:25	B0F0736	PB
surface)					N.a				DD
Depth to water (fe measuring point)	et from	86.9200			No unit		05/26/20 10:25	B0F0736	PB
Elevation of grour (Feet)	ndwater surface	651.8500			No unit		05/26/20 10:25	B0F0736	PB
	Method: SM	M2510B							
Specific Condu	ctance	653			uS/cm		05/26/20 10:25	B0F0736	PB
	Method: SM	И2550-В							
Temperature		56.2			°F	0.00	05/26/20 10:25	B0F0736	PB
	Method: SM	M4500-H							
pН		7.66	0.05		pH Units	0.04	05/26/20 10:25	B0F0736	PB
Metals by ICF	P-MS								
	Method: SV	N6020A / 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 Me	tals by ICP-I	ИS							
	-	N6020A / SW3005							
Arsenic, Dissol	ved	28.1	22.2		ug/L	1.78	06/10/20 18:03	B0E0834	AG
Anions by loi	n Chromatog	raphy							
	Method: SV	V9056A							
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 Chemisti	-		_	_					
Total Direct	Method: SN					4.00			MKD
Total Dissolved Se Filterable)	onas (Residue,	386	10.0		mg/L	1.00	05/28/20 09:44	B0E0843	MKP
	Method: SM	M4500-NH3-B-C							
Ammonia		1.78	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3



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				С	lient Sample Res (Continued)	ults			
Client:	City of Urb	ana				Client Sample ID:	5G102		
Project:	Second Q	uarter Groundwater				Report Date:	06/22/2020		
	2Q20					Collection Date:	05/26/2020 10:2	5	
Work Order:	20E0546					Matrix:	Groundwater		
						Lab ID:	20E0546-05 (Co	ntinued)	
		1	EMT Reporting				Date/Time		
Analyses		Result	Limit	Qual	Units	MDL	Analyzed	Batch	Analyst
Wet Chemist	try (Continue	ed)							
	Method: S	W9014 / SW9010B							
Cyanide		< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 12:04	B0E0844	SP1
	Method: S	W9060							
Organic Carbo		W9060 1.58	1.00		mg/L	0.400	05/29/20 16:47	B0E0913	TB2
Organic Carbo				Keyst	^{mg/L} one Laboratory, Sub		05/29/20 16:47	B0E0913	TB2
Organic Carbo Subcontract	n, Total	1.58		Keyst	-		05/29/20 16:47	B0E0913	TB2



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				С	lient Sample Res	ults			
					(Continued)				
Client:	City of Li	thana				Client Sample ID:	60102		
	City of Ur					-			
Project:	2Q20	Quarter Groundwater				Report Date:		_	
							05/26/2020 10:55	5	
Work Order:	20E0546						Groundwater		
						Lab ID:	20E0546-06		
			EMT						
			eporting				Date/Time		
Analyses		Result	Limit	Qual	Units	MDL	Analyzed	Batch	Analyst
On Site Analy	/sis								
		Non-Analytical Data							
Bottom of well ele		610.6700			No unit		05/26/20 10:55	B0F0736	CD
Depth to water (fe		59.6700			No unit		05/26/20 10:55	B0F0736	CD
surface)									
Depth to water (fe measuring point)	et from	61.1700			No unit		05/26/20 10:55	B0F0736	CD
Elevation of grour (Feet)	ndwater surfac	e 649.4300			No unit		05/26/20 10:55	B0F0736	CD
	Method:	SM2510B							
Specific Condu	ctance	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
Tomporataro	Madh a di				•	0.00	00,20,20 10,00	20.0100	02
	Method:	SM4500-H							
рН		7.27	0.05		pH Units	0.04	05/26/20 10:55	B0F0736	CD
Metals by ICF	P-MS								
		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
-		0.156	0.0250			0.00250	06/11/20 17:30	B0E0836	AG
Manganese				0.00	mg/L				
Sodium		18.7	1.25	Q, S3	mg/L	0.500	06/11/20 18:22	B0E0836	AG
Dissolved Me	etals by ICI	P-MS							
	Method:	SW6020A / SW3005							
Arsenic, Dissolv	ed	< 22.2	22.2		ug/L	1.78	06/10/20 18:05	B0E0834	AG
Anions by lor	n Chromat	ography							
Anions by ior		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		Q, S2		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
Net Chemistr	ry								
	Method:	SM2540C							
Total Dissolved So Filterable)	olids (Residue,	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
					5				



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				С	lient Sample Res (Continued)	ults			
					(Continued)				
Client:	City of U	rbana				Client Sample ID:	6G102		
Project:	Second	Quarter Groundwater				Report Date:	06/22/2020		
	2Q20					Collection Date:	05/26/2020 10:5	55	
Work Order:	20E0546	3				Matrix:	Groundwater		
						Lab ID:	20E0546-06 (Co	ntinued)	
		F	EMT Reporting				Date/Time		
Analyses		Result	Limit		Units	MDL	Analyzed	Batch	Analyst
Wet Chemist		-							
	Method:	SW9014 / SW9010B							
Cyanide		< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 12:06	B0E0844	SP1
	Method:	SW9060							
Organic Carbo	n, Total	3.91	1.00		mg/L	0.400	05/29/20 17:06	B0E0913	TB2
				Keyst	one Laboratory, Sub	contract			
Subcontracte	-	es SW9020B							
Total Organic H	alogens	< 0.01	0.01		mg/L	0.01	06/05/20 00:00	20E0546-0	6 EYSTONE

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Monitoring and Technologies, Inc.	

Des Plaines, Illinois 60016

Client Sample Results (Continued) Client: City of Urbana Client Sample ID: 8G101 Second Quarter Groundwater Report Date: 06/22/2020 Project: 2Q20 Collection Date: 05/26/2020 09:35 Work Order: 20E0546 Matrix: Groundwater Lab ID: 20E0546-07 EMT Date/Time Reporting MDL Limit Qual Units Analyst Analyses Result Analyzed Batch 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 No unit 05/26/20 09:35 B0F0736 PΒ 69.7200 surface) Depth to water (feet from 05/26/20 09:35 B0F0736 PB 71.2200 No unit measuring point) Elevation of groundwater surface 0.0000 No unit 05/26/20 09:35 B0F0736 PΒ (Feet) Method: SM2510B 639 uS/cm 05/26/20 09:35 B0F0736 PΒ **Specific Conductance** Method: SM2550-B B0F0736 PΒ °F 0.00 05/26/20 09:35 Temperature 58.1 Method: SM4500-H pН 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 2.00 06/11/20 17:32 B0E0836 AG ug/L Boron 0.542 0.0125 0.00500 06/11/20 17:32 B0E0836 AG mg/L Chromium < 25.0 25.0 06/11/20 17:32 B0E0836 AG ug/L 2.50 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, mg/L 0.500 06/11/20 18:23 B0E0836 AG S3 **Dissolved Metals by ICP-MS** Method: SW6020A / SW3005 Arsenic, Dissolved < 22.2 22.2 B0E0834 AG 1.78 06/10/20 18:07 ug/L 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 0.100 05/27/20 23:16 B0E0814 MM7 mg/L Sulfate 2.09 1.50 mg/L 0.500 05/27/20 23:16 B0E0814 MM7 Wet Chemistry Method: SM2540C Total Dissolved Solids (Residue, 05/28/20 09.44 B0E0843 MKP 381 10.0 1.00 mg/L Filterable)

P 847.967.6666

800.246.0663

F 847.967.6735

Method: SM4500-NH3-B-C



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			С	lient Sample Res (Continued)	ults			
City of L	Jrbana				Client Sample ID:	8G101		
Second	Quarter Groundwate	r			Report Date:	06/22/2020		
2Q20					Collection Date:	05/26/2020 09:	35	
20E054	6						ontinued)	
						Date/Time	_ / .	
	Result	Limit	Qual	Units	MDL	Analyzed	Batch	Analyst
y (Contir	nued)							
Method	: SM4500-NH3-B-C (Continued	I)					
	2.97	0.980		mg/L	0.0210	05/28/20 10:38	B0E0829	CS3
Method	: SW9014 / SW9010E	3						
	< 0.010	0.010	Q, S1	mg/L	0.003	05/28/20 12:08	B0E0844	SP1
Method	: SW9060							
, Total	1.77	1.00		mg/L	0.400	05/29/20 17:26	B0E0913	TB2
			Keyst	one Laboratory, Sub	contract			
-								
	City of L Second 2Q20 20E054 <i>Ty (Contin</i> Method Method Method	City of Urbana Second Quarter Groundwate 2Q20 20E0546 Result Ty (Continued) Method: SM4500-NH3-B-C (2.97 Method: SW9014 / SW90108 < 0.010 Method: SW9060	City of Urbana Second Quarter Groundwater 2Q20 20E0546 EMT Reporting Limit ry (Continued) Method: SM4500-NH3-B-C (Continued 2.97 0.980 Method: SW9014 / SW9010B <0.010 0.010 Method: SW9060 a, Total 1.77 1.00	C City of Urbana Second Quarter Groundwater 2Q20 20E0546 EMT Reporting Result Qual Y (Continued) Method: Qual Y (Continued) Method: 0.980 2.97 0.980 Method: SW9014 / SW9010B <	City of Urbana Second Quarter Groundwater 2Q20 20E0546 EMT Reporting Limit Qual Units ry (Continued) Method: SM4500-NH3-B-C (Continued) 2.97 Qual Units ry (Continued) Method: SM4500-NH3-B-C (Continued) 2.97 mg/L ry (Continued) Method: SM9014 / SW9010B < 0.010	City of Urbana Second Quarter Groundwater 2Q20 20E0546	Client Sample Results (Continued) Client Sample ID: 8G101 Report Date: 06/22/2020 2Q20 Collection Date: 05/26/2020 09: 06/22/2020 20E0546 Matrix: Groundwater EMT Reporting Reporting Matrix: Groundwater Lab ID: 20E0546-07 (Collection Date: 05/26/2020 09: 20E0546-07 (Collection Date: 05/26/2010: 20E0546-07 (Collection Date: 05/26/2	City of Urbana Second Quarter Groundwater 2Q20 Cilent Sample Results (Continued) 8G101 2Q20 Report Date: 06/22/2020 2Q20 Collection Date: 05/26/2020 09:35 2QE0546 Matrix: Groundwater 2QE0546 EMT Groundwater Reporting Limit Qual Units Method: SM4500-NH3-B-C Continued) Date/Time 2.97 0.980 mg/L 0.0210 05/28/20 10:38 B0E0829 Method: SW9010H .0.010 0.51 mg/L 0.003 05/28/20 12:08 B0E0844 Method: SW9060 mg/L 0.400 05/29/20 17:28 B0E0913 Keysterte Laboratory, Subcontract



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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,

voly Jackesm

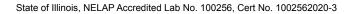
Jacoby Jackson Project Manager 847.967.6666 jjackson@emt.com Approved for release: 12/16/2020 4:58:25PM

Approved by,

Bognowly

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.







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Client Sample Results

Client:	City of U	rbana			Client Sample ID:	4G102		
Project:	Fourth Q	uarter Groundwater			Report Date:	12/17/2020		
	4Q20				Collection Date:	11/24/2020 09:55		
Work Order:	20K0552				Matrix:	Groundwater		
						20K0552-01		
			EMT					
			Reporting			Date/Time		
Analyses		Result	Limit Qu	ial Units	MDL	Analyzed	Batch	Analyst
On Site Analys	is							
	Method:	Non-Analytical Dat	a					
Bottom of well eleva	ation (Feet)	561.1200		No unit		11/24/20 09:55	B0L0470	CD
Depth to water (feet	below land	51.8900		No unit		11/24/20 09:55	B0L0470	CD
surface) Depth to water (feet	from	53.8900		No unit		11/24/20 09:55	B0L0470	CD
measuring point)								
Elevation of ground	water surfac	e 646.1600		No unit		11/24/20 09:55	B0L0470	CD
	Method:	SM2510B						
Specific Conduct	ance	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						
рН		7.55	0.05	pH Units	0.04	11/24/20 09:55	B0L0470	CD
Metals by ICP-I	MS							
2		SW6020A / SW301	5					
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 Meta	als by IC	P-MS						
	-	SW6020A / SW300	5					
Arsenic, Dissolved	i	< 22.2	22.2	ug/L	1.78	12/03/20 12:28	B0L0101	AG
Anions by lon	Chromet	tography						
		SW9056A						
Chloride		5.15	0.500	mg/L	0.200	11/25/20 12:45	B0K0683	MM7
Nitrogen, Nitrate		< 0.250	0.300	mg/L	0.200	11/25/20 12:45	B0K0683	MM7
-		< 0.250	0.250		0.100	11/25/20 12:45	B0K0683	MM7
Nitrogen, Nitrite Sulfate		< 0.250 31.3	1.50	mg/L mg/L	0.100	11/25/20 12:45	B0K0683	MM7
		01.0	1.00		0.000		_ 00000	
Wet Chemistry	Method:	E250 1						
Nitrogen, Ammonia		E350.1 < 0.0400	0.0400	ma/l	0.00600	12/08/20 12:46	B0L0255	MM7
maugen, Ammonia			0.0400	mg/L	0.00000	12/00/20 12.40	D0L0200	1011017
	Mothad							
Total Dissolved Soli	Method:		10.0	mg/L	1.00	11/28/20 10:16	B0K0706	MKP



509 N. 3rd A	venue	Des Plaines, Illi	inois 600	16 P 847.967.6	666 800.246.0663	F 847.967.6	6735	www.emt.com
				Client Sample (Continue				
Client:	City of L	Irbana			Client Sample ID:	4G102		
Project:	-	Quarter Groundwater			Report Date:	12/17/2020		
	4Q20				Collection Date:	11/24/2020 09:5	5	
Work Order:	20K055	2			Matrix:	Groundwater		
					Lab ID:	20K0552-01 (Cor	ntinued)	
			EMT Reporting			Date/Time		
Analyses		Result	Limit	Qual Units	MDL	Analyzed	Batch	Analyst
Wet Chemisti	ry (Contin	ued)						
-	Method:	SW9014 / SW9010	3					
Cyanide		< 0.010	0.010	mg/L	0.003	12/02/20 14:12	B0L0055	JE1
	Method:	SW9060						
Organic Carbon	n, Total	1.50	1.00	mg/L	0.400	12/09/20 23:05	B0L0309	TB2
			K	eystone Laboratorie	s, Inc Newton			
Determinatio	n of Conv	entional Chemisti	ry Parame	ters				
	Method:	EPA 9020 / TOX/TX	/EOX					



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						E 047.007	6705	
509 N. 3rd A	venue De	es Plaines, Illir	1015 6001	6 P 847.967.66	66 800.246.0663	F 847.967.	6735	www.emt.co
				Client Sample F (Continued)				
Client:	City of Urban	na			Client Sample ID:	4G104A		
Project:	-	er Groundwater			Report Date:	12/17/2020		
	4Q20				-	11/24/2020 10:2	5	
							.5	
Work Order:	20K0552					Groundwater 20K0552-02		
					Lau ID.	20100002-02		
		-	EMT			Dete (These		
Analyses		۲ Result	Reporting Limit (Qual Units	MDL	Date/Time Analyzed	Batch	Analyst
-	oio							•
On Site Analy		n Analytical Data						
		n-Analytical Data						
Bottom of well elev		655.0900		No unit		11/24/20 10:25	B0L0470	CL1
Depth to water (fee surface)	t below land	45.2400		No unit		11/24/20 10:25	B0L0470	CL1
Depth to water (fee	t from	47.2400		No unit		11/24/20 10:25	B0L0470	CL1
measuring point) Elevation of groun	dwater surface	670.0400		No unit		11/24/20 10:25	B0L0470	CL1
(Feet)								
	Method: SM							
Specific Conduc	tance	783		uS/cm		11/24/20 10:25	B0L0470	CL1
	Method: SM	2550-B						
Temperature		55.3		°F	0.00	11/24/20 10:25	B0L0470	CL1
	Method: SM	I4500-H						
рН		7.44	0.05	pH Units	0.04	11/24/20 10:25	B0L0470	CL1
Motale by ICD	MS							
Metals by ICP		/6020A / SW3015						
	wethou: SW			<i>"</i>			D.0.10	
Barium		91.5	25.0	ug/L	2.00	12/01/20 11:47	B0K0679	
Boron		0.215	0.0125	mg/L	0.00500	12/01/20 11:47	B0K0679	
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 Me	tals by ICP-M	IS						
	-	/6020A / SW3005						
Arsenic, Dissolve	ed	< 22.2	22.2	ug/L	1.78	12/03/20 12:30	B0L0101	AG
Anions by lon	Chromatoar	raphy						
	Method: SW							
Chloride			0.500	ma/l	0 200	11/25/20 13:13	B0K0683	MM7
Nitrogen, Nitrate		14.3 < 0.250	0.500	mg/L mg/l	0.200 0.100	11/25/20 13:13	B0K0683	
Nitrogen, Nitrate		< 0.250		mg/L mg/l			B0K0683	
Sulfate		< 0.250 < 1.50	0.250 1.50	mg/L mg/L	0.100 0.500	11/25/20 13:13 11/25/20 13:13	B0K0683 B0K0683	
		- 1.00	1.00		0.000	11/20/20 10:10	2010000	
Wet Chemistr	-	F0 4						
	Method: E3		0.000		0.0000	10/00/00 40-40		N 4N 4 7
Nitrogen, Ammo		3.27	0.200	mg/L	0.0300	12/08/20 12:46	B0L0255	MM7
	Method: SM	12540C						



509 N. 3rd A	venue	Des Plaines, Illi	nois 600	16 P 847.96	87.6666 800.246.0663	F 847.967.6	735	www.emt.com
					ple Results			
Client:	City of L	Irbana			Client Sample ID:	4G104A		
Project:	Fourth C	Quarter Groundwater			Report Date:	12/17/2020		
	4Q20				Collection Date:	11/24/2020 10:25		
Work Order:	20K055	2			Matrix:	Groundwater		
					Lab ID:	20K0552-02 (Con	tinued)	
			EMT Reporting			Date/Time		
Analyses		Result	Limit	Qual Units	MDL	Analyzed	Batch	Analyst
Wet Chemist	ry (Contin	ued)						
	Method:	SW9014 / SW9010E	3					
Cyanide		< 0.010	0.010	mg/L	0.003	12/02/20 14:14	B0L0055	JE1
	Method:	SW9060						
Organic Carbor	n, Total	2.84	1.00	mg/L	0.400	12/10/20 01:25	B0L0309	TB2
			K	eystone Laborate	ories, Inc Newton			
Determinatio		entional Chemistr EPA 9020 / TOX/TX	-	eters				
Total Organic H	lalogens (TC	OX) 0.013	0.010	mg/L	0.006	12/04/20 10:06	1DL0075	AJM



509 N. 3rd Ave	enue	Des Plaines, Illi	nois 60016	P 847.967.6666	800.246.0663	F 847.967.67	735	www.emt.com
			C	Client Sample Res (Continued)	ults			
Client:	City of U	hana			Client Sample ID:	4G105		
	-	uarter Groundwater			Report Date:			
•					-			
	4Q20					11/24/2020 09:10		
Work Order:	20K0552					Groundwater 20K0552-03		
			EMT					
Analyses		Result	Reporting Limit Qual	Units	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analysi	s							
	Method:	Non-Analytical Dat	a					
Bottom of well elevat	ion (Feet)	610.1900		No unit		11/24/20 09:10 I	B0L0470	ST1
Depth to water (feet b		87.6800		No unit			B0L0470	ST1
surface) Depth to water (feet f	rom	89.6800		No unit			B0L0470	
measuring point) Elevation of groundw (Feet)	ater surfac	e 653.0400		No unit		11/24/20 09:10 I	B0L0470	ST1
	Method:	SM2510B						
Specific Conducta	nce	876		uS/cm		11/24/20 09:10	B0L0470	ST1
	Method:	SM2550-B						
Temperature		54.3		°F	0.00	11/24/20 09:10 I	B0L0470	ST1
	Method:	SM4500-H						
рН		7.08	0.05	pH Units	0.04	11/24/20 09:10 I	B0L0470	ST1
Netals by ICP-N	IS							
	Method:	SW6020A / SW301	5					
Barium		127	25.0	ug/L	2.00	12/01/20 11:49	30K0679	KJ1
Boron		1.69	0.0125	mg/L	0.00500	12/01/20 11:49 I	30K0679	KJ1
Chromium		< 25.0	25.0	ug/L	2.50	12/01/20 11:49	30K0679	KJ1
Iron		< 0.125	0.125	mg/L	0.0500	12/01/20 11:49 I	30K0679	KJ1
Magnesium		39.5	1.25	mg/L	0.200	12/01/20 13:01	30K0679	KJ1
Manganese		0.166	0.0250	mg/L	0.00250	12/01/20 11:49 I	30K0679	KJ1
Sodium		65.5	1.25	mg/L	0.500	12/01/20 13:01 I	30K0679	KJ1
Dissolved Meta	-							
	Method:	SW6020A / SW300						
Arsenic, Dissolved		< 22.2	22.2	ug/L	1.78	12/03/20 12:32 I	B0L0101	AG
Anions by lon C		ography SW9056A						
Chloride			0.500	ma/l	0.200	11/25/20 12:41	30K0683	MM7
		8.34 < 0.250	0.500	mg/L	0.200		30K0683	
Nitrogen, Nitrate Nitrogen, Nitrite		< 0.250 < 0.250	0.250 0.250	mg/L	0.100 0.100		30K0683 30K0683	
Sulfate		< 0.250 12.7	1.50	mg/L mg/L	0.500		30K0683	
Net Chemistry								
	Method:							
Nitrogen, Ammoni		4.46	0.200	mg/L	0.0300	12/08/20 12:46 I	B0L0255	MM7
		SM2540C						
Total Dissolved Solid	e (Rosiduo	450	10.0	mg/L	1.00	11/28/20 10:16 I	30K0706	MKP



509 N. 3rd A	Avenue	Des Plaines, Illi	inois 600	016 P 847.9	67.6666 800.246.0663	F 847.967.6	735	www.emt.com
					nple Results			
Client:	City of U	rbana			Client Sample ID:	4G105		
Project:	-	uarter Groundwater			Report Date:	12/17/2020		
	4Q20				Collection Date:	11/24/2020 09:10		
Work Order:	20K0552	2			Matrix:	Groundwater		
					Lab ID:	20K0552-03 (Con	tinued)	
			EMT Reporting			Date/Time		
Analyses		Result	Limit	Qual Units	MDL	Analyzed	Batch	Analyst
Wet Chemist	ry (Contin	ued)						
	Method:	SW9014 / SW9010	В					
Cyanide		< 0.010	0.010	mg/L	0.003	12/02/20 14:16	B0L0055	JE1
	Method:	SW9060						
Organic Carbor	n, Total	7.40	5.00	mg/L	2.00	12/10/20 01:42	B0L0309	TB2
			K	eystone Labora	tories, Inc Newton			
Determinatio	n of Conv	entional Chemisti	ry Parame	eters				
	Method:	EPA 9020 / TOX/TX	/EOX					
Total Organic H	alogens (TO)	<) < 0.006	0.010	mg/L	0.006	12/04/20 10:06	1DL0075	AJM

Analyst

PB

PΒ

PΒ

PΒ

PΒ

PΒ

PΒ

KJ1

KJ1

KJ1

KJ1

KJ1

KJ1

KJ1

AG

MM7

MM7

MM7

MM7

MM7

MKP

B0K0706

11/28/20 10:16



Total Dissolved Solids (Residue,

Filterable)

474

10.0

509 N. 3rd A	venue [Des Plaines, III	inois 600 ⁻	16 P 847	7.967.6666 800	0.246.0663	F 847.967.	.6735
					Continued)			
Client	City of Link			(· ,	nt Comple ID:	50404	
Client: Project:	City of Urb	ana arter Groundwater			Chi	ent Sample ID: Report Date:		
Project.	4Q20	arter Groundwater			C	-		45
Work Order:							11/24/2020 10:4 Groundwater	40
work Order.	20K0552						20K0552-04	
			ЕМТ					
			Reporting				Date/Time	
Analyses		Result	Limit	Qual Units	r	MDL	Analyzed	Batch
On Site Analy	/sis							
-		Non-Analytical Dat	ta					
Bottom of well ele	evation (Feet)	608.0300		No unit			11/24/20 10:45	B0L0470
Depth to water (fe	et below land	75.7600		No unit			11/24/20 10:45	B0L0470
surface) Depth to water (fe	et from	78.2600		No unit			11/24/20 10:45	B0L0470
measuring point)								
Elevation of grour (Feet)	ndwater surface	651.3700		No unit			11/24/20 10:45	B0L0470
	Method: S	SM2510B						
Specific Condu	ctance	661		uS/cm			11/24/20 10:45	B0L0470
	Method: S	SM2550-B						
Temperature		54.3		°F		0.00	11/24/20 10:45	B0L0470
	Method: S	SM4500-H						
рН		7.63	0.05	pH Units	3	0.04	11/24/20 10:45	B0L0470
Metals by ICF	P-MS							
		SW6020A / SW301	5					
Barium		55.1	25.0	ug/L		2.00	12/01/20 11:51	B0K0679
Boron		0.0889	0.0125	mg/L	0.	00500	12/01/20 11:51	B0K0679
Chromium		< 25.0	25.0	ug/L		2.50	12/01/20 11:51	B0K0679
Iron		< 0.125	0.125	mg/L	(0.0500	12/01/20 11:51	B0K0679
Magnesium		47.2	1.25	mg/L		0.200	12/01/20 13:03	B0K0679
Manganese		< 0.0250	0.0250	mg/L	0.	00250	12/01/20 11:51	B0K0679
Sodium		20.1	0.125	mg/L	(0.0500	12/01/20 11:51	B0K0679
Dissolved Me	etals by ICP	-MS						
	Method: S	SW6020A / SW300	5					
Arsenic, Dissolv	ed	< 22.2	22.2	ug/L		1.78	12/03/20 12:34	B0L0101
Anions by lor	n Chromato	graphy						
	Method: S	SW9056A						
Chloride		3.77	0.500	mg/L		0.200	11/25/20 14:09	B0K0683
Nitrogen, Nitrat	e	1.02	0.250	mg/L		0.100	11/25/20 14:09	B0K0683
Nitrogen, Nitrite		< 0.250	0.250	mg/L		0.100	11/25/20 14:09	B0K0683
Sulfate		39.2	1.50	mg/L		0.500	11/25/20 14:09	B0K0683
Wet Chemistr	ry							
	Method: E	E350.1						
Nitrogen, Ammo	onia (As N)	0.364	0.0400	mg/L	0.	00600	12/08/20 12:46	B0L0255
	Method: S	SM2540C						

1.00

mg/L



509 N. 3rd A	venue	Des Plaines, Illi	nois 600	016 P 847	.967.6666 800.24	6.0663 F	847.967.6	735	www.emt.com
					ample Results				
Client:	City of U	Irbana			Client S	ample ID: 5G	101		
Project:	Fourth C	Quarter Groundwater			Rep	oort Date: 12/	17/2020		
	4Q20				Collect	tion Date: 11/2	24/2020 10:45		
Work Order:	20K0552	2				Matrix: Gro	oundwater		
						Lab ID: 20k	K0552-04 (Cont	tinued)	
			EMT Reporting			I	Date/Time		
Analyses		Result	Limit	Qual Units	MDL		Analyzed	Batch	Analyst
Wet Chemist	ry (Contin	ued)							
	Method:	SW9014 / SW9010	3						
Cyanide		< 0.010	0.010	mg/L	0.003	3 12	2/02/20 14:17	B0L0055	JE1
	Method:	SW9060							
Organic Carbon	, Total	< 1.00	1.00	mg/L	0.400) 12	2/10/20 03:03	B0L0309	TB2
			К	eystone Labo	ratories, Inc Newton				
Determinatio		entional Chemisti EPA 9020 / TOX/TX		eters					
Total Organic Ha	alogens (TO)	X) < 0.006	0.010	mg/L	0.006	6 12	2/04/20 10:06	1DL0075	AJM



Monito Techno	oring and ologies, Inc.	
509 N. 3rd Avenue	Des Plaines, Illinois 60016	P 847.967.6666
		Client Sample Res

lient Sample Results

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F 847.967.6735

(Continued)

					(Continued)				
Client: (City of Urba	na				Client Sample ID:	5G102		
Project: F	ourth Qua	rter Groundwater				Report Date:	12/17/2020		
•	1Q20						11/24/2020 09:55	5	
Work Order: 2	20K0552						Groundwater	-	
							20K0552-05		
			ЕМТ						
			Reporting				Date/Time		
Analyses		Result	Limit	Qual	Units	MDL	Analyzed	Batch	Analyst
Analyses		Result	2	Quui		MDE	Analyzeu	Buton	Analyst
On Site Analysis	5								
N	Method: No	on-Analytical Data	I						
Bottom of well elevation	on (Feet)	608.6000			No unit		11/24/20 09:55	B0L0470	PB
Depth to water (feet be	elow land	85.7500			No unit		11/24/20 09:55	B0L0470	PB
surface)	~ m	00.0500			No unit		11/01/00 00-55		DD
Depth to water (feet fr measuring point)	on	88.2500			No unit		11/24/20 09:55	B0L0470	PB
Elevation of groundwa	ater surface	650.5200			No unit		11/24/20 09:55	B0L0470	PB
(Feet)									
N	Method: SI	M2510B							
Specific Conductar	nce	656			uS/cm		11/24/20 09:55	B0L0470	PB
ľ	Method: SI	M2550-B							
Temperature		54.1			°F	0.00	11/24/20 09:55	B0L0470	PB
•					1	0.00	11/27/20 03.00	5020470	טו
Ν	Method: SI	M4500-H							
pН		7.69	0.05		pH Units	0.04	11/24/20 09:55	B0L0470	PB
Metals by ICP-M									
r	wethod: 51	N6020A / 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 Metal	e by ICP	MS							
	-	WS N6020A / SW3005							
	weinou: 51								
Arsenic, Dissolved		< 22.2	22.2		ug/L	1.78	12/03/20 12:36	B0L0101	AG
Anions by lon C	hromatoo	iraphy							
-	Method: S								
	istiidu. Si		0 500			0.000		DOLAGOOG	
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: E3	850 1							
			0.0400			0.00000	10/00/00 40-40		N 4N 47
Nitrogen, Ammonia	I (AS N)	1.00	0.0400		mg/L	0.00600	12/08/20 12:46	B0L0255	MM7
Ν	Method: SI	M2540C							
Total Dissolved Solids	s (Residue,	367	10.0		mg/L	1.00	11/28/20 10:16	B0K0706	MKP



509 N. 3rd A	venue	Des Plaines, Illi	nois 600	16	P 847.967.666	800.246.0663	F 847.967.6	6735	www.emt.com
				С	lient Sample R (Continued)				
Client:	City of U	Irbana				Client Sample ID:	5G102		
Project:	-	uarter Groundwater				Report Date:	12/17/2020		
	4Q20					Collection Date:	11/24/2020 09:55	5	
Work Order:	20K0552	2				Matrix:	Groundwater		
						Lab ID:	20K0552-05 (Cor	ntinued)	
			EMT Reporting				Date/Time		
Analyses		Result	Limit	Qual	Units	MDL	Analyzed	Batch	Analyst
Wet Chemisti	ry (Contin	ued)							
	Method:	SW9014 / SW9010E	3						
Cyanide		< 0.010	0.010	J2	mg/L	0.003	12/02/20 14:19	B0L0055	JE1
	Method:	SW9060							
Organic Carbor	, Total	1.50	1.00		mg/L	0.400	12/10/20 03:26	B0L0309	TB2
			К	eysto	ne Laboratories,	nc Newton			
Determinatio	n of Conv	entional Chemistr	y Parame	eters					
	Method:	EPA 9020 / TOX/TX	/EOX						
Total Organic Ha	alogens (TO)	() < 0.006	0.010		mg/L	0.006	12/04/20 10:10	1DL0222	AJM



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	echno	ologies, Inc.		
509 N. 3rd A	venue	Des Plaines, Illinois 60016	P 847.967.6666	800
			Client Sample Resu (Continued)	ults
Client:	City of	Jrbana		Clie
Project:		Quarter Groundwater		
	4Q20			C
Work Order:	20K055	2		
		EMT		

		EMT Reporting			Date/Time		
Analyses	Result		Qual Units	MDL	Analyzed	Batch	Analyst
On Site Analysis							
Method: Non-Ana	alytical Da	ta					
Bottom of well elevation (Feet)	610.6700		No ur	t	11/24/20 09:45	B0L0470	CL1
Depth to water (feet below land	59.7900		No ur	t	11/24/20 09:45	B0L0470	CL1
surface)							
Depth to water (feet from measuring point)	61.2900		No ur	t	11/24/20 09:45	B0L0470	CL1
Elevation of groundwater surface	649.3100		No ur	t	11/24/20 09:45	B0L0470	CL1
(Feet)							
Method: SM2510	В						
Specific Conductance	745		uS/cn		11/24/20 09:45	B0L0470	CL1
Method: SM2550-	-В						
Temperature	54.2		°F	0.00	11/24/20 09:45	B0L0470	CL1
Method: SM4500-	-Н						
рН	7.38	0.05	pH U	its 0.04	11/24/20 09:45	B0L0470	CL1
Metals by ICP-MS							
Method: SW6020	A / SW301	5					
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
-	0.145	0.0250	mg/L	0.200	12/01/20 11:54	B0K0679	KJ1
Manganese Sodium	27.0	1.25	-	0.500	12/01/20 13:07	B0K0679	KJ1
Sodium	27.0	1.20	mg/L	0.500	12/01/20 15:07	BUK0079	KJ I
Dissolved Metals by ICP-MS							
Method: SW6020	A / SW300	5					
Arsenic, Dissolved	< 22.2	22.2	ug/L	1.78	12/03/20 12:44	B0L0101	AG
Anions by Ion Chromatography	v						
Method: SW9056							
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
	1.00	1.00		0.000		20.0000	
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: SM2540	с						

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Client Sample ID: 6G102

 Report Date:
 12/17/2020

 Collection Date:
 11/24/2020 09:45

 Matrix:
 Groundwater

Lab ID: 20K0552-06

F 847.967.6735



509 N. 3rd A	Avenue	Des Plaines, Il	linois 600	016 P 84	7.967.6666 800.24	6.0663	F 847.967.6	735	www.emt.com
					Sample Results (Continued)				
Client:	City of U	Irbana			Client S	ample ID: 6	G102		
Project:	-	uarter Groundwate	r		Rep	port Date: 1	2/17/2020		
	4Q20				Collect	tion Date: 1	1/24/2020 09:45		
Work Order:	20K0552	2				Matrix: G	Froundwater		
						Lab ID: 2	0K0552-06 (Con	tinued)	
			EMT Reporting				Date/Time		
Analyses		Result	Limit	Qual Units	MDL		Analyzed	Batch	Analyst
Wet Chemist	ry (Contin	ued)							
	Method:	SW9014 / SW9010	В						
Cyanide		< 0.010	0.010	mg/L	0.003	3	12/02/20 14:21	B0L0055	JE1
	Method:	SW9060							
Organic Carbo	n, Total	3.11	1.00	mg/L	0.400	0	12/10/20 03:54	B0L0309	TB2
			К	eystone Lab	oratories, Inc Newton				
Determinatio		entional Chemist	•	eters					
		EPA 9020 / TOX/T	K/EOX						
Total Organic H	alogens (TO)	K) < 0.006	0.010	mg/L	0.006	6	12/04/20 10:10	1DL0222	AJM



509 N. 3rd Av	renue D	es Plaines, Illin	ois 600 ⁻	16	9 847.967.6666	800.246.0663	F 847.967.6	735	www.emt.cor
				Cli	ent Sample Res (Continued)	ults			
Client: Project:	City of Urba Fourth Qua 4Q20	ana rter Groundwater			· · · ·	Client Sample ID: Report Date: Collection Date:		5	
Work Order:	20K0552						Groundwater 20K0552-07		
			ЕМТ						
Analyses		Result	eporting Limit	Qual I	Jnits	MDL	Date/Time Analyzed	Batch	Analyst
On Site Analys	is								
	Method: N	on-Analytical Data							
Bottom of well eleva	tion (Feet)	0.0000		1	No unit		11/24/20 09:05	B0L0470	PB
Depth to water (feet		71.1100			No unit		11/24/20 09:05	B0L0470	PB
surface) Depth to water (feet measuring point)	from	72.6100		ı	No unit		11/24/20 09:05	B0L0470	PB
Elevation of groundv (Feet)	vater surface	0.0000		I	No unit		11/24/20 09:05	B0L0470	PB
	Method: S	M2510B							
Specific Conduct	ance	641		ι	JS/cm		11/24/20 09:05	B0L0470	PB
	Method: S	M2550-B							
Temperature		55.7		c	F	0.00	11/24/20 09:05	B0L0470	PB
	Method: S	M4500-H							
рН		7.54	0.05	f	oH Units	0.04	11/24/20 09:05	B0L0470	PB
Metals by ICP-	MS								
	Method: S	W6020A / SW3015							
Barium		116	25.0	ι	ıg/L	2.00	12/01/20 11:56	B0K0679	KJ1
Boron		0.505	0.0125		ng/L	0.00500	12/01/20 11:56	B0K0679	KJ1
Chromium		< 25.0	25.0		J/L	2.50	12/01/20 11:56	B0K0679	KJ1
Iron		0.446	0.125		ng/L	0.0500	12/01/20 11:56	B0K0679	KJ1
Magnesium		40.8	1.25		ng/L	0.200	12/01/20 13:08	B0K0679	KJ1
Manganese		0.127	0.0250		ng/L	0.00250	12/01/20 11:56	B0K0679	KJ1
Sodium		37.3	1.25		ng/L	0.500	12/01/20 13:08	B0K0679	KJ1
Dissolved Meta	als by ICP-	MS							
	Method: S	W6020A / SW3005							
Arsenic, Dissolved	t	< 22.2	22.2	ι	ıg/L	1.78	12/03/20 12:46	B0L0101	AG
Anions by lon	Chromatog Method: S								
Chloride	· · · · · ·	5.22	0.500	r	ng/L	0.200	11/25/20 15:32	B0K0683	MM7
Nitrogen, Nitrate		0.280	0.250		ng/L	0.100	11/25/20 15:32	B0K0683	MM7
Nitrogen, Nitrite		< 0.250	0.250		ng/L	0.100	11/25/20 15:32	B0K0683	MM7
Sulfate		1.96	1.50		ng/L	0.500	11/25/20 15:32	B0K0683	MM7
Net Chemistry	,								
	Method: E	350.1							
Nitrogen, Ammor	nia (As N)	1.24	0.200	r	ng/L	0.0300	12/08/20 12:46	B0L0255	MM7
	Method: S	M2540C							
Total Dissolved Soli	da (Basidua	394	10.0		ng/L	1.00	11/28/20 10:16	B0K0706	MKP



509 N. 3rd A	Venue	Des Plaines, II	linois 60(016 P	847.967.6666	800.246.0663	F 847.967.6	735	www.emt.com
				Clie	nt Sample Res (Continued)	sults			
Client:	City of U	rbana				Client Sample ID:	8G101		
Project:	•	uarter Groundwate	r			Report Date:	12/17/2020		
	4Q20					Collection Date:	11/24/2020 09:05	5	
Work Order:	20K0552					Matrix:	Groundwater		
						Lab ID:	20K0552-07 (Cor	itinued)	
			EMT Reporting	I			Date/Time		
Analyses		Result	Limit	Qual Ur	nits	MDL	Analyzed	Batch	Analyst
Wet Chemist	ry (Contin	ued)							
	Method:	SW9014 / SW9010	в						
Cyanide		< 0.010	0.010	mį	g/L	0.003	12/02/20 14:23	B0L0055	JE1
	Method:	SW9060							
Organic Carbor	n, Total	2.24	1.00	mę	g/L	0.400	12/10/20 04:18	B0L0309	TB2
			к	eystone	Laboratories, Inc	Newton			
Determinatio		entional Chemist	-	eters					
	Method:	EPA 9020 / TOX/T	K/EOX						
Total Organic H	alogens (TO)	<) < 0.006	0.010	mg	g/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,

voly Jackesm

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.







509 N. 3rd Avenue	Des Plaines, Illinois 60016	P 847.967.6666	800.246.0663	F 847.967.6735	www.emt.com
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Client Sample Results

Client:	City of U						Client Sample ID:		Ditch		
Project:		al Surface Water					Report Date:				
	3Q20						Collection Date:	07/01/2020 10:3	30		
Work Order:	20F0815	5					Matrix:				
							Lab ID:	20F0815-01			
			EMT								
			Reporting			Reg		Date/Time			
Analyses		Result	Limit	Qual	Units	Limit	MDL	Analyzed	Batch	Analyst	DF
On Site Analy	sis										
	Method:	SM2510B									
Specific Conduc	ctance	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									
рН		8.14	0.05		pH Units		0.04	07/01/20 10:30	B0G0399	ST1	1
Metals by ICP	-AES										
-	Method:	Calculated result									
Trivalent Chromi	um	< 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 Me	tals by IC	P-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 C	VAA										
	Method:	E245.1									
Mercury		< 0.00050	0.00050		mg/L		0.00020	07/16/20 13:37	B0G0469	MB1	1
Anions by lon	Chroma	tography									
-	Method:	• • •									
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



509 N. 3rd Av	venue De	es Plaines, Illi	nois 6001	6	P 847.967.6	666	800.246.0663	F 847.967.	6735	www.em	t.con
				С	lient Sample (Continue		llts				
Client: Project: Work Order:	City of Urbar 3Q Annual S 3Q20 20F0815	na Jurface Water					Client Sample ID: Report Date: Collection Date: Matrix:	07/24/2020 07/01/2020 10:3			
	201 0010							20F0815-01 (Co	ntinued)		
			ЕМТ					X	,		
			Reporting			Reg		Date/Time			
Analyses		Result	Limit	Qual	Units	Limit	MDL	Analyzed	Batch	Analyst	DF
Net Chemistry	(Continued	0									
yet onemiou y	-	9 20.1 Rev.1978 b	v Discrete/M		Continued)						
Phenolics, Total R		< 0.0500	0.0500		mg/L		0.00500	07/06/20 15:20	B0G0149	SP1	1
	Method: SM		0.0000		iiig/L		0.00000	01700/20 10:20	Beconno	01 1	
			10.0				1.00	07/07/00 00 40	D000407		
Total Dissolved Soli Filterable)	ias (Residue,	515	10.0		mg/L		1.00	07/07/20 09:48	B0G0137	MKP	1
	Method: SM	13500-Cr B by Di	screte								
Chromium, Hexav	valent	< 0.0100	0.0100		mg/L		0.00400	07/07/20 09:12	B0G0177	SP1	4
	Method: SM	14500-CN			•						
Quanida	Method. OM		0.0100				0.00200	07/12/20 14:20	DOCO3EO	001	1
Cyanide		< 0.0100	0.0100		mg/L		0.00300	07/13/20 14:38	B0G0359	SP1	1
	Method: SM	14500-P E									
Phosphorus, Tota	al (As P)	0.640	0.500	J2	mg/L		0.0900	07/15/20 18:35	B0G0458	ER1	5
Alcohols & Gly	cols by GC	/FID									
	Method: 801										
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
Polychlorinate		(PCBs) by G(C/ECD								
	Method: E6	08 / 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: Decac	hlorobiphenyl				Recovery: 67%		Limits: 40-135	07/06/20 14:30	B0G0124	CS2	1
Surrogate: 2,4,5,6	6-Tetrachloro-m-	-xylene			Recovery: 38%	<i>b</i>	Limits: 13-133	07/06/20 14:30	B0G0124	CS2	1
Volatile Organ	ic Compoun	ds by GC/MS									
-	Method: E6	-									
1,1,1-Trichloroeth	ane	< 4.00	4.00		ug/L		0.719	07/10/20 14:35	B0G0357	WZZ	1
1,1,2,2-Tetrachlor	oethane	< 4.00	4.00		ug/L		0.713	07/10/20 14:35	B0G0357	WZZ	1
1,1,2-Trichloroeth	ane	< 2.00	2.00		ug/L		0.198	07/10/20 14:35	B0G0357	WZZ	1
1,1-Dichloroethan	е	< 4.00	4.00		ug/L		0.691	07/10/20 14:35	B0G0357	WZZ	1
1,1-Dichloroethen	е	< 8.00	8.00		ug/L		1.10	07/10/20 14:35	B0G0357	WZZ	1
1,2-Dichloroethan		< 4.00	4.00		ug/L		0.731	07/10/20 14:35	B0G0357	WZZ	1
1,2-Dichloropropa		< 4.00	4.00		ug/L		0.557	07/10/20 14:35	B0G0357	WZZ	1
2-Chloroethyl viny		< 4.00	4.00 2	-CVE,	-		0.740	07/10/20 14:35	B0G0357	WZZ	1
				J1							



509 N. 3rd Avenue

Des Plaines, Illinois 60016

			.						
			Clier	(Continued)	ults				
Client: (City of Urbana			х <i>у</i>	Client Sample ID:	Upstream Saline	Ditch		
Project: 3	Q Annual Surface Water				Report Date:	07/24/2020			
3	3Q20				Collection Date:	07/01/2020 10:3	30		
Work Order: 2	20F0815				Matrix:	Water			
					Lab ID:	20F0815-01 (Co	ntinued)		
		EMT		Der		Dete (Time			
Analyses	Result	Reporting Limit Q	ual Un	Reg ts Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic	Compounds by GC/MS	(Continued)							
N	Method: E624 / SW5030 (C	ontinued)							
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
Bromodichlorometha	ane < 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		1
Carbon tetrachloride		4.00	ug/l		0.710	07/10/20 14:35	B0G0357		1
Chlorobenzene	< 2.00	2.00	ug/l		0.170	07/10/20 14:35	B0G0357		1
Chloroethane	< 4.00	4.00	ug/l		0.621	07/10/20 14:35	B0G0357		1
Chloroform	< 8.00	8.00	ug/l		1.06	07/10/20 14:35	B0G0357		1
Chloromethane	< 8.00	8.00	ug/l		1.30	07/10/20 14:35	B0G0357		1
cis-1,3-Dichloroprop		4.00	ug/l		0.408	07/10/20 14:35	B0G0357		1
Dibromochlorometha		4.00	-		0.632	07/10/20 14:35	B0G0357		1
	< 2.00		ug/l			07/10/20 14:35	B0G0357 B0G0357		1
Ethylbenzene		2.00	ug/l		0.268				
m,p-Xylene	< 8.00	8.00	ug/l		1.58	07/10/20 14:35	B0G0357		1
Methylene chloride	< 8.00	8.00	ug/l		1.02	07/10/20 14:35	B0G0357		1
o-Xylene	< 2.00	2.00	ug/l		0.324	07/10/20 14:35	B0G0357		1
Tetrachloroethene	< 4.00	4.00	ug/l		0.646	07/10/20 14:35	B0G0357		1
Toluene	< 4.00	4.00	ug/l		0.510	07/10/20 14:35	B0G0357		1
trans-1,2-Dichloroet		4.00	ug/l		0.566	07/10/20 14:35	B0G0357		1
trans-1,3-Dichloropr		8.00	ug/l	-	1.17	07/10/20 14:35	B0G0357		1
Trichloroethene	< 4.00	4.00	ug/l	-	0.939	07/10/20 14:35	B0G0357	WZZ	1
Trichlorofluorometha	ane < 4.00	4.00	ug/l	-	0.503	07/10/20 14:35	B0G0357		1
Vinyl chloride	< 4.00	4.00	ug/l	-	0.582	07/10/20 14:35	B0G0357		1
Xylenes, Total	< 12.0	12.0	ug/l	-	1.62	07/10/20 14:35	B0G0357	WZZ	1
Surrogate: Dibromo	fluoromethane			Recovery: 103%	Limits: 83-135	07/10/20 14:35	B0G0357	WZZ	1
Surrogate: 1,2-Dich				Recovery: 99%	Limits: 77-140	07/10/20 14:35	B0G0357		1
Surrogate: Fluorobe				Recovery: 101%	Limits: 90-105	07/10/20 14:35	B0G0357		1
Surrogate: Toluene-				Recovery: 102%	Limits: 75-112	07/10/20 14:35	B0G0357		1
Surrogate: 4-Bromo				Recovery: 101%	Limits: 89-128	07/10/20 14:35	B0G0357		1
Surrogate: 1,2-Dich				Recovery: 98%	Limits: 91-127	07/10/20 14:35	B0G0357		1
Semivolatile Ord	ganic Compounds by G	C/MS							
-	Method: E625 / SW3510								
1,2,4-Trichlorobenze	ene < 2.05	2.05	ug/l	-	0.287	07/08/20 17:10	B0G0214	CP1	1
1,2-Dichlorobenzene	e < 2.05	2.05	ug/l	-	0.307	07/08/20 17:10	B0G0214	CP1	1
1,3-Dichlorobenzene	e < 2.05	2.05	ug/l		0.318	07/08/20 17:10	B0G0214	CP1	1
1,4-Dichlorobenzene	e < 2.05	2.05	ug/l	_	0.287	07/08/20 17:10	B0G0214	CP1	1
2,4,6-Trichlorophene	ol < 1.02	1.02	ug/l		0.250	07/08/20 17:10	B0G0214		1
2,4-Dichlorophenol	< 1.02	1.02	ug/l		0.0807	07/08/20 17:10	B0G0214		1
									1
2,4-Dimethylphenol	< 2.05	2.05	ua/i	_	0.120	07/08/20 17:10	B0G0214	CP1	
2,4-Dimethylphenol 2,4-Dinitrophenol	< 2.05	2.05 30.7	ug/l ug/l		0.120 3.39	07/08/20 17:10 07/08/20 17:10	B0G0214 B0G0214		1

P 847.967.6666

800.246.0663

F 847.967.6735



509 N. 3rd A	Venue	Des Plaines, Illi	nois 600		847.967.6666	800.246.0663	F 847.967.	6735	www.em	t.con
				Clie	(Continued)	ults				
Client: Project:	City of Ur 3Q Annua 3Q20	bana al Surface Water				Client Sample ID: Report Date: Collection Date:				
Work Order:	20F0815					Matrix: Lab ID:	Water 20F0815-01 (Co	ntinued)		
			ЕМТ			200121	201 00 10 01 (00			
Analyses		Result	Reporting Limit	Qual Un	Reg its Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
-	Organic Co	ompounds by GC		-						
oennvolatile (-	E625 / SW3510 (Co	-	imacay						
2,6-Dinitrotoluen	1e	< 1.02	1.02	ug/	1	0.235	07/08/20 17:10	B0G0214	CP1	1
2-Chloronaphtha		< 0.615	0.615	ug/ ug/		0.235	07/08/20 17:10	B0G0214 B0G0214		1
2-Chlorophenol		< 1.02	1.02	ug/ ug/		0.157	07/08/20 17:10	B0G0214 B0G0214		1
3.3'-Dichlorober	nzidine	< 20.5	20.5	ug/ ug/		3.24	07/08/20 17:10	B0G0214		1
4,6-Dinitro-2-me		< 15.4	15.4	ug/ ug/		2.51	07/08/20 17:10	B0G0214		1
4-Bromophenyl-		< 1.02	1.02	ug/ ug/		0.164	07/08/20 17:10	B0G0214		1
4-Chloro-3-meth		< 0.512	0.512	ug/ ug/		0.0730	07/08/20 17:10	B0G0214		1
4-Chlorophenyl-	• •	< 1.02	1.02	ug/ ug/		0.149	07/08/20 17:10	B0G0214		1
4-Oniorophenol	phenyletitei	< 15.4	1.02	-		1.47	07/08/20 17:10	B0G0214		1
Acenaphthene		< 0.615	0.615	ug/ ug/		0.107	07/08/20 17:10	B0G0214		1
Acenaphthylene		< 0.615	0.615	ug/ ug/		0.133	07/08/20 17:10	B0G0214		1
Anthracene		< 0.615	0.615	ug/ ug/		0.135	07/08/20 17:10	B0G0214		1
Azobenzene as		< 1.02	1.02	ug/ ug/		0.0786	07/08/20 17:10	B0G0214		1
1,2-Diphenylhydra:	zine	\$ 1.02	1.02	ug/	L	0.0700	07/00/20 17:10	0000214		
Benzidine		< 81.9	81.9	ug/	L	17.0	07/08/20 17:10	B0G0214	CP1	1
Benzo(a)anthrac	cene	< 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)fluorant	thene	< 2.05	2.05	ug/	L	0.381	07/08/20 17:10	B0G0214	CP1	1
Benzo(g,h,i)pery	lene	< 2.05	2.05	ug/	L	0.409	07/08/20 17:10	B0G0214	CP1	1
Benzo(k)fluorant	thene	< 2.05	2.05	ug/	L	0.255	07/08/20 17:10	B0G0214	CP1	1
Bis(2-chloroetho	oxy)methane	< 1.02	1.02	ug/	L	0.139	07/08/20 17:10	B0G0214	CP1	1
Bis(2-chloroethy	/l)ether	< 1.02	1.02	ug/	L	0.180	07/08/20 17:10	B0G0214	CP1	1
Bis(2-chloroisop	oropyl)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 phtl	halate	< 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)ant	hracene	< 2.05	2.05	ug/	L	0.453	07/08/20 17:10	B0G0214	CP1	1
Diethyl phthalate	е	< 6.15	6.15	ug/	L	1.19	07/08/20 17:10	B0G0214	CP1	1
Dimethyl phthala	ate	< 0.615	0.615	ug/	L	0.0904	07/08/20 17:10	B0G0214	CP1	1
Di-n-butyl phthal	late	< 10.2	10.2	ug/	L	2.95	07/08/20 17:10	B0G0214	CP1	1
Di-n-octyl phthal	late	< 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
Hexachlorobenz	zene	< 1.02	1.02	ug/	L	0.169	07/08/20 17:10	B0G0214	CP1	1
Hexachlorobutad	diene	< 1.02	1.02	ug/	L	0.256	07/08/20 17:10	B0G0214	CP1	1
Hexachlorocyclo	opentadiene	< 15.4	15.4	ug/		2.24	07/08/20 17:10	B0G0214	CP1	1
Hexachloroethar	ne	< 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/		0.113	07/08/20 17:10	B0G0214	CP1	1
Naphthalene		< 4.10	4.10	ug/		0.836	07/08/20 17:10	B0G0214	CP1	1
Nitrobenzene		< 0.615	0.615	ug/		0.143	07/08/20 17:10	B0G0214		1
N-Nitrosodimeth	ylamine	< 1.02	1.02	ug/		0.160	07/08/20 17:10	B0G0214	CP1	1
N-Nitrosodi-n-pr	-	< 2.05	2.05	ug/		0.327	07/08/20 17:10	B0G0214		1
N-Nitrosodiphen		< 0.615	0.615	ug/		0.107	07/08/20 17:10	B0G0214		1



509 N. 3rd Avenue	Des Plaines, Illinois 60016	P 847.967.6666	800.246.0663	F 847.967.6735	www.emt.com
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Client Sample Results

(Continued)

					(Continue	cu)					
Client:	City of Urbana						Client Sample ID:	Upstream Saline	e Ditch		
Project:	3Q Annual Surfa	ace Water					Report Date:	07/24/2020			
	3Q20						Collection Date:	07/01/2020 10:3	30		
Work Order:	20F0815						Matrix:	Water			
							Lab ID:	20F0815-01 (Co	ontinued)		
			ЕМТ								
			Reporting	g		Reg		Date/Time			
Analyses		Result	Limit	Qual	Units	Limit	MDL	Analyzed	Batch	Analyst	DF
		•	•								
	Method: E625 /	SW3510 (Co	ontinued)								
Pentachlorophe	nol	< 30.7	30.7		ug/L		2.58	07/08/20 17:10	B0G0214	CP1	1
Phenanthrene		< 1.02	1.02	2	ug/L		0.211	07/08/20 17:10	B0G0214	CP1	1
Phenol		< 1.02	1.02	2	ug/L		0.175	07/08/20 17:10	B0G0214	CP1	1
Pyrene		< 1.02	1.02	2	ug/L		0.213	07/08/20 17:10	B0G0214	CP1	1
Surrogate: 2-Flu	uorophenol				Recovery: 50	%	Limits: 16-87	07/08/20 17:10	B0G0214	CP1	1
Surrogate: Pher	nol-d5				Recovery: 41	%	Limits: 7-68	07/08/20 17:10	B0G0214	CP1	1
Surrogate: Nitro	benzene-d5				Recovery: 55	%	Limits: 26-117	07/08/20 17:10	B0G0214	CP1	1
Surrogate: 2-Flu	uorobiphenyl				Recovery: 60	%	Limits: 23-105	07/08/20 17:10	B0G0214	CP1	1
Surrogate: 2,4,6	6-Tribromophenol				Recovery: 81	%	Limits: 20-128	07/08/20 17:10	B0G0214	CP1	1
Surrogate: 4-Te	rphenyl-d14				Recovery: 77	%	Limits: 35-144	07/08/20 17:10	B0G0214	CP1	1



509 N. 3rd A	venue	Des Plaines, III	linois 600	016	P 847.96	67.6666	800.246.0663	F 847.967.	6735	www.em	t.con
				С	lient Sam (Con	iple Resi tinued)	ults				
Client: Project: Work Order:	City of U 3Q Annu 3Q20 20F0815	al Surface Water					Matrix:	07/24/2020 07/01/2020 13:8 Water			
Analyses		Result	EMT Reporting Limit		Units	Reg Limit	MDL	20F0815-02 Date/Time Analyzed	Batch	Analyst	DF
On Site Analy	/sis										
,		SM2510B									
Specific Condu	ctance	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									
pН		8.06	0.05		pH Units		0.04	07/01/20 13:50	B0G0399	ST1	1
Metals by ICF	P-AES										
		Calculated result									
Trivalent Chrom	ium	< 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 Me	etals by IC	P-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 C	VAA										
	Method:	E245.1									
Mercury		< 0.00050	0.00050		mg/L		0.00020	07/16/20 13:43	B0G0469	MB1	1
Anions by lo											
	Method:										
Chloride		58.3		Q, S2			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



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				Client	Sample Res (Continued)	sults				
Client: Project: Work Order:	City of Urban 3Q Annual Si 3Q20 20F0815					Matrix:	07/24/2020 07/01/2020 13:5	50		
			ЕМТ			Lab ID.	20F0815-02 (C0	minueu)		
Analyses		Result	Reporting Limit	Qual Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
Net Chemistry	(Continued)								
-		, 20.1 Rev.1978 b	y Discrete/	MIDI (Continu	ied)					
Phenolics, Total Re	ecoverable	< 0.0500	0.0500	mg/L		0.00500	07/07/20 11:26	B0G0183	SP1	1
	Method: SM			5			-			
Total Dissolved Solid Filterable)		487	10.0	mg/L		1.00	07/07/20 09:48	B0G0137	MKP	1
	Method: SM	3500-Cr B by D	iscrete							
Chromium, Hexava		< 0.0100	0.0100	mg/L		0.00400	07/07/20 09:15	B0G0177	SP1	4
			0.0100					2000111	0	· ·
Overside	Method: SM		0.0100			0.00200	07/42/20 44:40	DOCODEO	004	4
Cyanide		< 0.0100	0.0100	mg/L		0.00300	07/13/20 14:40	B0G0359	SP1	1
	Method: SM	4500-P E								
Phosphorus, Tota	ll (As P)	0.377	0.100	mg/L		0.0180	07/15/20 18:35	B0G0458	ER1	1
Alcohols & Gly	cols by GC/	/FID								
,	Method: 801									
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		1
Methanol		< 8.00	8.00	mg/L		1.99	07/02/20 17:28	B0G0136	CS2	1
Balvahlarinata	d Pinhanyla	(BCBa) by C								
Polychlorinate	и ырпепуіs Method: E60		C/ECD							
Ann 1040	Methou. Eou					0.000		D 000404	000	
Aroclor 1016		< 1.04 < 0.622	1.04	ug/L		0.220	07/06/20 14:47	B0G0124		1
Aroclor 1221 Aroclor 1232		< 0.622	0.622 0.622	ug/L ug/L		0.199 0.168	07/06/20 14:47 07/06/20 14:47	B0G0124 B0G0124		1 1
Aroclor 1242		< 2.07	2.07	ug/L		0.363	07/06/20 14:47	B0G0124		1
Aroclor 1248		< 0.622	0.622	ug/L		0.166	07/06/20 14:47	B0G0124		1
Aroclor 1254		< 0.622	0.622	ug/L		0.182	07/06/20 14:47	B0G0124		1
Aroclor 1260		< 0.415	0.415	ug/L		0.116	07/06/20 14:47	B0G0124		1
Surrogate: Decach	hlorobinhenvl				covery: 81%	Limits: 40-135	07/06/20 14:47	B0G0124	CS2	1
Surrogate: 2,4,5,6		-xylene			covery: 38%	Limits: 13-133	07/06/20 14:47	B0G0124		1
Volatile Organi	C Compoun Method: E62	-								
			4.00			0.740	07/40/00 45:00	DOCOCC	10/77	
1,1,1-Trichloroetha		< 4.00	4.00	ug/L		0.719	07/10/20 15:00	B0G0357		1
1,1,2,2-Tetrachloro		< 4.00	4.00	ug/L		0.713	07/10/20 15:00	B0G0357		1
1,1,2-Trichloroetha		< 2.00	2.00	ug/L		0.198	07/10/20 15:00	B0G0357		1
1,1-Dichloroethane		< 4.00 < 8.00	4.00 8.00	ug/L		0.691	07/10/20 15:00	B0G0357 B0G0357		1 1
		< 8.00 < 4.00		ug/L		1.10	07/10/20 15:00	B0G0357 B0G0357		1
1,2-Dichloroethane		< 4.00 < 4.00	4.00	ug/L		0.731	07/10/20 15:00			1
1,2-Dichloropropar			4.00	ug/L		0.557	07/10/20 15:00	B0G0357		1
2-Chloroethyl vinyl		< 4.00	4.00	2-CVE ug/L		0.740	07/10/20 15:00	B0G0357	VVZZ	I



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				C	lient Sample (Continue		uits				
Project:	City of Urbana 3Q Annual Surfa 3Q20	ice Water						07/24/2020 07/01/2020 13:5			
Work Order:	20F0815						Matrix: Lab ID:	Water 20F0815-02 (Co	ntinued)		
			ЕМТ						,		
Analysos		Pocult	Reporting	Qual		Reg	MDL	Date/Time	Batch	Analyst	DE
Analyses		Result	Limit	Quai	Units	Limit	MDL	Analyzed	Batch	Analyst	DF
Volatile Organie	-	-	-	d)							
	Method: E624 /	SW5030 (Co	ontinued)								
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
Bromodichlorometh	nane	< 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 tetrachlorid	е	< 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-Dichloropro	pene	< 4.00	4.00		ug/L		0.408	07/10/20 15:00	B0G0357	WZZ	1
Dibromochlorometh	nane	< 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		1
Tetrachloroethene		< 4.00	4.00		ug/L		0.646	07/10/20 15:00	B0G0357		1
Toluene		< 4.00	4.00		ug/L		0.510	07/10/20 15:00	B0G0357	WZZ	1
trans-1,2-Dichloroe	thene	< 4.00	4.00		ug/L		0.566	07/10/20 15:00	B0G0357	WZZ	1
trans-1,3-Dichlorop		< 8.00	8.00		ug/L		1.17	07/10/20 15:00	B0G0357		1
Trichloroethene		< 4.00	4.00		ug/L		0.939	07/10/20 15:00	B0G0357	WZZ	1
Trichlorofluorometh	ane	< 4.00	4.00		ug/L		0.503	07/10/20 15:00	B0G0357		1
Vinyl chloride		< 4.00	4.00		ug/L		0.582	07/10/20 15:00	B0G0357		1
Xylenes, Total		< 12.0	12.0		ug/L		1.62	07/10/20 15:00	B0G0357		1
	fluoromothono										
Surrogate: Dibrom					Recovery: 102		Limits: 83-135	07/10/20 15:00	B0G0357 B0G0357		1
Surrogate: 1,2-Dicl					Recovery: 101		Limits: 77-140	07/10/20 15:00			1
Surrogate: Fluorob					Recovery: 100		Limits: 90-105	07/10/20 15:00	B0G0357		1
Surrogate: Toluene					Recovery: 99%		Limits: 75-112	07/10/20 15:00	B0G0357		1
Surrogate: 4-Brom					Recovery: 101		Limits: 89-128	07/10/20 15:00	B0G0357		1
Surrogate: 1,2-Dicl					Recovery: 102	/o	Limits: 91-127	07/10/20 15:00	B0G0357	' WZZ	1
Semivolatile Or	ganic Compoເ Method: E625 /	-	C/MS								
1,2,4-Trichlorobenz		< 2.31	2.31		ug/L		0.323	07/08/20 17:36	B0G0214	CP1	1
1,2-Dichlorobenzer		< 2.31	2.31		ug/L		0.346	07/08/20 17:36	B0G0214		1
1,3-Dichlorobenzer		< 2.31	2.31		ug/L		0.358	07/08/20 17:36	B0G0214		1
1,4-Dichlorobenzer		< 2.31	2.31		ug/L		0.323	07/08/20 17:36	B0G0214		1
2,4,6-Trichloropher		< 1.15	1.15		ug/L		0.281	07/08/20 17:36	B0G0214		1
2,4-Dichlorophenol		< 1.15	1.15		ug/L		0.0910	07/08/20 17:36	B0G0214		1
-		< 2.31	2.31		ug/L		0.136	07/08/20 17:36	B0G0214 B0G0214		1
2 4-1)imethvinheno		- 2.01	2.01		ug/L		0.100	01100/20 11.00	0000214	0.1	•
2,4-Dimethylpheno 2,4-Dinitrophenol		< 34.6	34.6		ug/L		3.82	07/08/20 17:36	B0G0214	CP1	1



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				Client	(Continued)	ults				
Client: Project: Work Order:	City of Url 3Q Annua 3Q20 20F0815	bana al Surface Water				Client Sample ID: Report Date: Collection Date: Matrix:	07/24/2020 07/01/2020 13:5			
Work Order.	201 0013						20F0815-02 (Co	ntinued)		
			ЕМТ							
			Reporting		Reg		Date/Time			
Analyses		Result	Limit	Qual Unit	s Limit	MDL	Analyzed	Batch	Analyst	DF
Semivolatile	Organic Co	ompounds by GC	/MS (Con	tinued)						
	Method:	E625 / SW3510 (Co	ntinued)							
2,6-Dinitrotoluer	ne	< 1.15	1.15	ug/L		0.265	07/08/20 17:36	B0G0214	CP1	1
2-Chloronaphtha		< 0.693	0.693	ug/L		0.122	07/08/20 17:36	B0G0214		1
2-Chlorophenol		< 1.15	1.15	ug/L		0.177	07/08/20 17:36	B0G0214		1
3,3'-Dichlorober	nzidine	< 23.1	23.1	ug/L		3.65	07/08/20 17:36	B0G0214	CP1	1
4,6-Dinitro-2-me		< 17.3	17.3	ug/L		2.83	07/08/20 17:36	B0G0214		1
4-Bromophenyl-		< 1.15	1.15	ug/L		0.185	07/08/20 17:36	B0G0214		1
4-Chloro-3-meth		< 0.577	0.577	ug/L		0.0823	07/08/20 17:36	B0G0214	CP1	1
4-Chlorophenyl-		< 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		1
Acenaphthene		< 0.693	0.693	ug/L		0.120	07/08/20 17:36	B0G0214		1
Acenaphthylene	2	< 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		1
Azobenzene as		< 1.15	1.15	ug/L		0.0885	07/08/20 17:36	B0G0214		1
1,2-Diphenylhydra	zine			0.9. L		0.0000	01100/20 11100			
Benzidine		< 92.3	92.3	ug/L		19.1	07/08/20 17:36	B0G0214		1
Benzo(a)anthrae	cene	< 0.693	0.693	ug/L		0.142	07/08/20 17:36	B0G0214		1
Benzo(a)pyrene	9	< 2.31	2.31	ug/L		0.434	07/08/20 17:36	B0G0214		1
Benzo(b)fluoran	thene	< 2.31	2.31	ug/L		0.430	07/08/20 17:36	B0G0214		1
Benzo(g,h,i)pery	ylene	< 2.31	2.31	ug/L		0.461	07/08/20 17:36	B0G0214	CP1	1
Benzo(k)fluoran	ithene	< 2.31	2.31	ug/L		0.287	07/08/20 17:36	B0G0214	CP1	1
Bis(2-chloroetho	oxy)methane	< 1.15	1.15	ug/L		0.156	07/08/20 17:36	B0G0214	CP1	1
Bis(2-chloroethy	yl)ether	< 1.15	1.15	ug/L		0.203	07/08/20 17:36	B0G0214	CP1	1
Bis(2-chloroisop	propyl)ether	< 1.15	1.15	ug/L		0.148	07/08/20 17:36	B0G0214	CP1	1
Bis(2-ethylhexyl	l)phthalate	< 23.1	23.1	ug/L		4.19	07/08/20 17:36	B0G0214	CP1	1
Butyl benzyl pht	thalate	< 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)ant	thracene	< 2.31	2.31	ug/L		0.510	07/08/20 17:36	B0G0214	CP1	1
Diethyl phthalate	е	< 6.93	6.93	ug/L		1.34	07/08/20 17:36	B0G0214	CP1	1
Dimethyl phthala	ate	< 0.693	0.693	ug/L		0.102	07/08/20 17:36	B0G0214	CP1	1
Di-n-butyl phtha	late	< 11.5	11.5	ug/L		3.32	07/08/20 17:36	B0G0214	CP1	1
Di-n-octyl phtha	late	< 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
Hexachlorobenz	zene	< 1.15	1.15	ug/L		0.190	07/08/20 17:36	B0G0214	CP1	1
Hexachlorobuta	diene	< 1.15	1.15	ug/L		0.289	07/08/20 17:36	B0G0214	CP1	1
Hexachlorocyclo	opentadiene	< 17.3	17.3	ug/L		2.52	07/08/20 17:36	B0G0214	CP1	1
Hexachloroetha	ne	< 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-Nitrosodimeth	nylamine	< 1.15	1.15	ug/L		0.180	07/08/20 17:36	B0G0214	CP1	1
N-Nitrosodi-n-pr	ropylamine	< 2.31	2.31	ug/L		0.368	07/08/20 17:36	B0G0214	CP1	1
-	nylamine	< 0.693	0.693	ug/L		0.120	07/08/20 17:36	B0G0214	CP1	1



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(Continued)

					(,					
Client:	City of Urbana						Client Sample ID:	Downstream Sa	line Ditch		
Project:	3Q Annual Surfa	ice Water					Report Date:	07/24/2020			
	3Q20						Collection Date:	07/01/2020 13:	50		
Work Order:	20F0815						Matrix:	Water			
							Lab ID:	20F0815-02 (Co	ontinued)		
			ЕМТ								
			Reporting	9		Reg		Date/Time			
Analyses		Result	Limit	Qual	Units	Limit	MDL	Analyzed	Batch	Analyst	DF
	Method: E625 /	•									
	Method: E625 /	SW3510 (Co	ontinued)								
Pentachlorophe	nol	< 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-Flu	uorophenol				Recovery: 439	%	Limits: 16-87	07/08/20 17:36	B0G0214	CP1	1
Surrogate: Pher	nol-d5				Recovery: 369	%	Limits: 7-68	07/08/20 17:36	B0G0214	CP1	1
Surrogate: Nitro	obenzene-d5				Recovery: 489	%	Limits: 26-117	07/08/20 17:36	B0G0214	CP1	1
Surrogate: 2-Flu	uorobiphenyl				Recovery: 509	%	Limits: 23-105	07/08/20 17:36	B0G0214	CP1	1
Surrogate: 2,4,6	6-Tribromophenol				Recovery: 819	%	Limits: 20-128	07/08/20 17:36	B0G0214	CP1	1
Surrogate: 4-Te	erphenyl-d14				Recovery: 839	%	Limits: 35-144	07/08/20 17:36	B0G0214	CP1	1



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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,

voly Jackesm

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

Approved by,

ht

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



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Client Sample Results

Client: Project:	City of U City Land 3Q20	rbana dfill Leachate Pump	ing Facility				Client Sample ID: Report Date: Collection Date:	ımp			
Work Order:	20F0813	5						Leachate 20F0813-01			
Analyses		Result	EMT Reporting Limit		Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DF
On Site Analy	/sis										
	Method:	SM4500-H									
рН		6.78	0.05		pH Units		0.04	08/14/20 07:25	B0H0716	CD	1
Metals by ICF	P-MS										
-		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 C	VAA Method:	E245.1									
Mercury		< 0.00050	0.00050		mg/L		0.00020	08/17/20 10:04	B0H0474	MB1	1
Wet Chemist	rv										
	Method:	E1664B									
Oil and Grease	(HEM)	312	5.00		mg/L		1.40	08/21/20 13:06	B0H0563	GB1	1
Oil and Grease, N Material (SGT-HE	on-Polar	221	4.00	Q	mg/L		1.40	08/24/20 08:20	B0H0679	GB1	1
	Method:	SM2540D									
Suspended Solids Non-filterable)	s (Residue,	531	10.0		mg/L		1.40	08/18/20 07:18	B0H0488	MKP	1
	Method:	SM3500-Cr B by D)iscrete								
Chromium, Hex	avalent	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								Not	tes: H
рН		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 Ox	ygen Demano	d < 104.4	15	BOD DO	mg/L		2	08/20/20 09:10	B0H0464	CS3	1