

April 29, 2019

Mr. Todd Hall  
Voluntary Site Remediation Unit B  
Remedial Project Management Section  
Division of Remediation Management  
1021 North Grand Ave East  
P.O. Box 19276  
Springfield, IL 62794-9276

Subject: Groundwater Monitoring Summary  
Third Quarter 2018 Sampling Event  
Champaign Former MGP Site, Champaign, Illinois

Dear Mr. Hall:

On behalf of Ameren Illinois, Environmental Resources Management, Inc. (ERM) has completed the third quarter 2018 groundwater sampling event at the Champaign Former Manufactured Gas Plant (FMGP) Site, located at 308 N. 5<sup>th</sup> Street in Champaign, Illinois. This report summarizes the field data and analytical results for the quarterly groundwater monitoring event conducted in September 2018.

## INTRODUCTION

Groundwater sampling activities for the third quarter 2018 monitoring event were conducted from September 17 through 19. During the sampling event, groundwater samples were collected from 28 monitoring wells: which include seven on-site monitoring wells and 21 off-site monitoring wells.

The depth to groundwater was initially measured at each monitoring well location upon arrival. Groundwater was purged from the monitoring wells using the dedicated bladder pumps until water quality instrumentation indicated that measured parameters had stabilized. Upon stabilization, water samples were collected in containers provided by the laboratory and placed in ice-filled coolers pending delivery to the analytical laboratory.

Groundwater samples were analyzed for the following MGP-related compounds: the volatile organic compounds benzene, toluene, ethylbenzene, and total xylenes (BTEX); polynuclear aromatic hydrocarbons (PAHs); total cyanide; and total RCRA metals. Laboratory analytical services were provided by Teklab, Inc. (Teklab) of Collinsville, Illinois.

Groundwater level measurement data for the third quarter 2018 sampling event is provided in Table 1. Information on the table includes measurements of depth to water below each well's measuring point (MP), and calculated groundwater elevation. Groundwater elevation contour maps for the shallow monitoring zone (100 series wells) and the intermediate depth unit (300 series wells) are provided on Figures 1 and 2, respectively.

The analytical results for groundwater samples collected during this event are summarized in Table 2. The concentrations detected in samples that exceed an applicable Illinois Environmental Protection Agency (IEPA) groundwater standard are highlighted. The monitoring well locations where sample results exceeded a standard are also shown on Figure 3. The laboratory analytical report prepared by Teklab is provided in Attachment 1. Quality assurance samples collected during the event included duplicates, matrix spike and matrix spike duplicates, an equipment blank, and a trip blank. Blind duplicates were collected from shallow monitoring well locations UMW-107R and UMW-126, and from intermediate monitoring well UMW-302. The three duplicate samples were identified on the chain of custody and laboratory analytical report as DUP 001 through DUP 003. Duplicate sample results are shown on Table 2 adjacent to the primary samples. A summary of the results of data validation is also included with the analytical report in Attachment 1.

## GROUNDWATER MONITORING RESULTS

### Groundwater Levels

The measured depth to groundwater and elevations at the Champaign FMGP Site for the September 2018 sampling event are shown on Table 1. The depth to groundwater in the shallow monitoring wells ranged from 2.22 to 12.95 feet below MP. The shallowest occurrence of groundwater occurred at the on-site monitoring well locations, with depths ranging from 2.22 to 4.24 feet below MP.

As shown on Figure 1, the shallow groundwater at the FMGP Site flows in a radial pattern from the Site. This groundwater flow pattern is consistent with historical groundwater level surveys conducted at the Site. The groundwater gradient for the shallow groundwater zone during September 2018 ranged from 0.0094 to 0.031 foot per foot (ft/ft).

The depths to groundwater in the nine intermediate monitoring wells, which monitor the intermediate groundwater unit, ranged from 26.32 to 29.09 feet below MP. As shown on Figure 2, the intermediate groundwater flow direction is generally linear towards the southeast, with a groundwater gradient of approximately 0.002 ft/ft.

### Analytical Results

Figure 3 summarizes the monitoring well locations where constituents detected in samples collected during the September 2018 sampling event exceeded at least one Class I or Class II groundwater remediation objective (RO) standard. The shallow groundwater unit is classified as Class II groundwater, and the lower intermediate unit is classified as Class I groundwater. Three of the 28 monitoring wells sampled in the third quarter 2018 had at least one MGP-related constituent exceeding a respective Class I or II standard. Benzene concentrations reported in two onsite shallow wells, UMW-124 and UMW-126, exceeded the Class II groundwater standard. The benzene, ethylbenzene and naphthalene concentrations reported in the sample collected from the offsite intermediate well UMW-302 exceeded the Class I groundwater ingestion RO. These constituent concentrations reported in UMW-302 also exceed the groundwater ROs for indoor inhalation at residential sites. Analytical results for the groundwater samples collected from the other 17 shallow and eight intermediate-depth monitoring wells located within or surrounding the FMGP Site were all below the applicable standards during the September 2018 event.

Total metals and cyanide concentrations detected in groundwater samples did not exceed their respective groundwater standards in any of the onsite or offsite monitoring wells. Cyanide was detected in monitoring well UMW-107R in previous sampling events at concentrations exceeding

the Class II groundwater standard of 0.6 mg/L. However, the 0.433 mg/L concentration of cyanide detected in the sample collected during the September 2018 event is below the standard. The concentrations detected in samples submitted for analysis of the 8 RCRA metals were all below their respective groundwater standard.

Monitoring well locations where concentrations of organic constituents (BTEX or PAHs) from the September 2018 sample event exceeded their respective standard included shallow monitoring wells UMW-124 and UMW-126, and intermediate well UMW-302. Benzene concentrations of 0.0907 and 0.108 mg/L were reported in shallow onsite monitoring wells UMW-124 and UMW-126, respectively, above the Class II groundwater standard of 0.025 mg/L. Concentrations of other organic constituents detected in other shallow monitoring wells located on-site or off-site were below their respective Class II standard.

The only other monitoring well with organic constituents exceeding groundwater standards is intermediate well UMW-302. Benzene, ethylbenzene and naphthalene were detected at concentrations of 0.409, 0.751 and 3.53 mg/L, respectively, exceeding the Class I groundwater ingestion ROs of 0.005, 0.700, and 0.14 mg/L. These constituent concentrations also exceed the groundwater (vapor) inhalation ROs for indoor air at residential sites. This intermediate well is screened from 35 to 45 feet below land surface and separated from the overlying shallow water source in the co-located shallow well UMW-121 by over 20 vertical feet of silty clay. Of the nine intermediate monitoring wells screened in the lower groundwater source, this is the only intermediate well location with a constituent concentration exceeding a Class I groundwater ingestion or inhalation standard.

## CONCLUSIONS

Based on the data collected during the September 2018 sampling event, the only shallow monitoring wells where concentrations in samples exceeded the Class II groundwater ingestion standards were on-site monitoring wells UMW-124 and UMW-126. Benzene was the only constituent detected in these samples that exceeded a groundwater RO standard. No other Class II groundwater standards for organic (BTEX and PAHs) or inorganic (cyanide or metals) constituents were exceeded in samples collected from the other monitoring wells screened in the shallow groundwater unit.

The deeper groundwater unit, as represented by the 300-series wells screened in the intermediate groundwater unit, had no confirmed exceedances of a groundwater standard except at well UMW-302, located south of the Site. Benzene, ethylbenzene, and naphthalene were detected at concentrations exceeding the Class I groundwater ingestion, and groundwater inhalation for indoor air ROs. As stated previously, the lower groundwater unit is separated from the shallow groundwater unit by the 20-foot thick silty clay unit present at an approximate depth between 20 and 40 feet below land surface. The isolation of the lower groundwater unit from the shallow groundwater unit is evident in the difference in groundwater elevations between the 100 and 300-series monitoring wells (refer to Table 1, and Figures 1 and 2). Furthermore, no detections of constituents or exceedances of similar standards were reported in the co-located shallow monitoring well (UMW-121) that is adjacent to UMW-302.

The analytical results from sampling events completed during the two-year period between September 2016 and September 2018 are shown in Table 3. Graphical representations of benzene and naphthalene concentrations in monitoring wells UMW-107(R), UMW-124, UMW-126 and UMW-302 are shown on Figures 4A through 4D for reference.

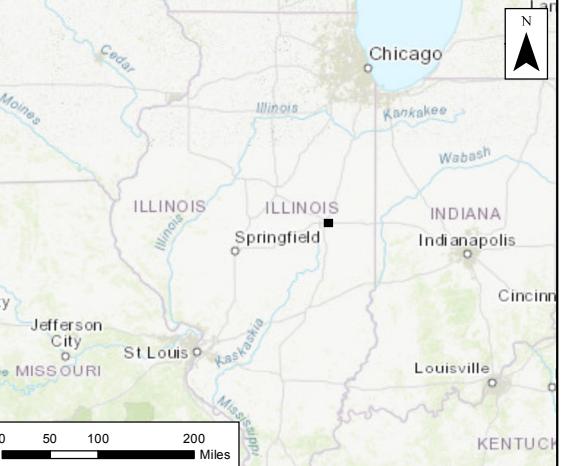
The next quarterly groundwater sampling event was completed in December 2018. Should you have any questions about the material presented in this summary letter, please contact us at your convenience.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dave Palmer".

Dave Palmer, PG, PMP, EVMP  
Manager, Remediation Projects  
Ameren Services

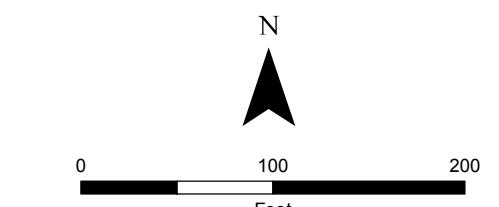
## *Figures*



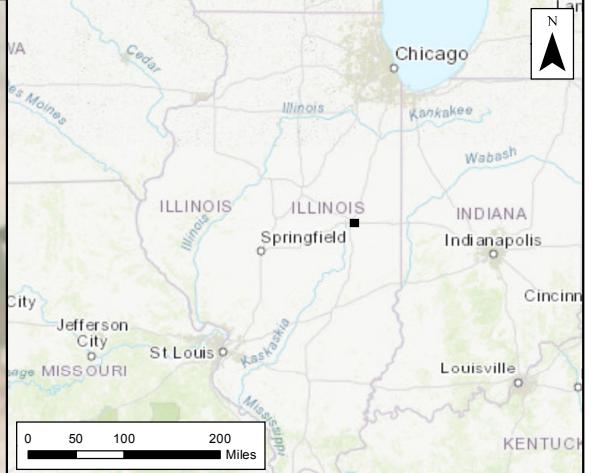
**Legend**

- Shallow Monitoring Well with September 2018 Groundwater Elevation
- September 2018 Potentiometric Surface Contour
- Site Boundary

**Notes:**  
All water levels in feet above mean sea level.



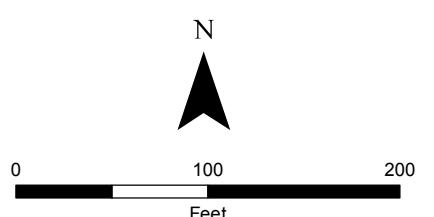
**Figure 1**  
**Shallow Groundwater Elevation Contours**  
September 2018  
Ameren Services  
Champaign, Illinois



#### Legend

- Intermediate Monitoring Well with September 2018 Groundwater Elevation
- September 2018 Potentiometric Surface Contour
- Site Boundary

**Notes:**  
All water levels in feet above mean sea level.



**Figure 2**  
**Intermediate Groundwater Elevation Contours**  
September 2018  
Ameren Services  
Champaign, Illinois



**Figure 3**  
**Class I and II Groundwater  
Standard Exceedances**  
September 2018  
Ameren Services  
Champaign, Illinois

FIGURE 4A  
Benzene and Naphthalene Concentration Trends in Wells Exceeding Groundwater Standards

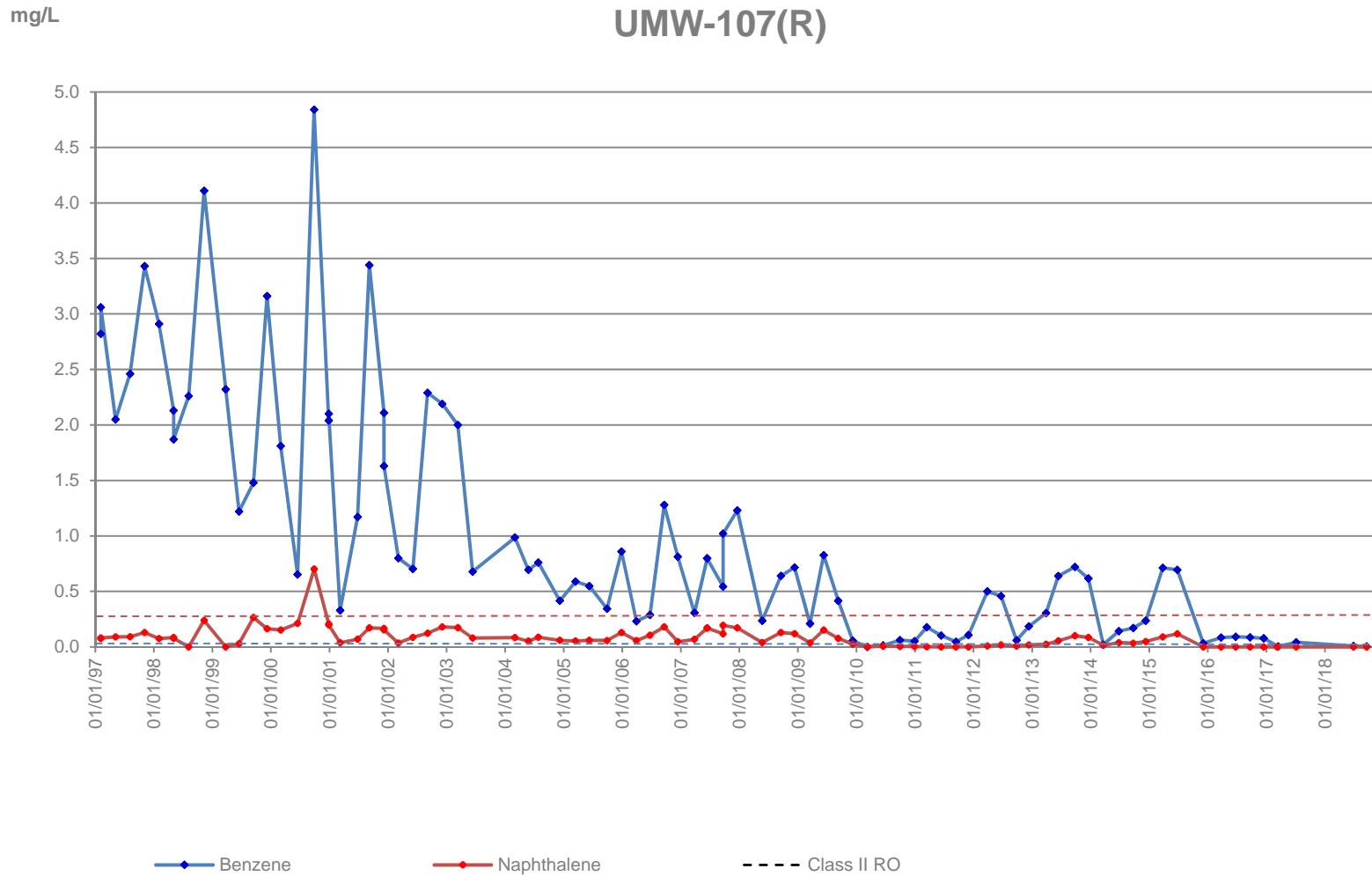


FIGURE 4B  
Benzene and Naphthalene Concentration Trends in Wells Exceeding Groundwater Standards

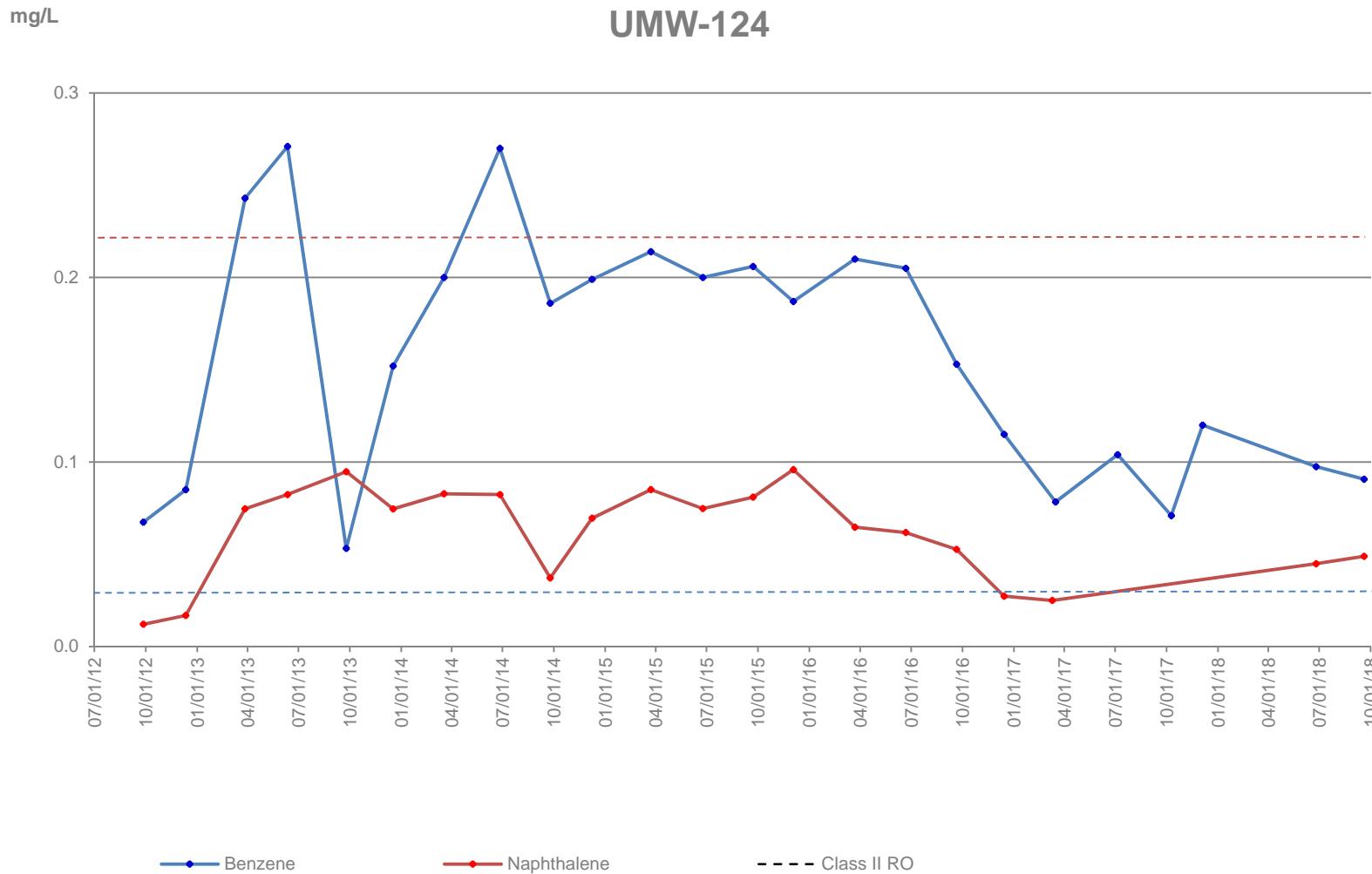


FIGURE 4C  
Benzene and Naphthalene Concentration Trends in Wells Exceeding Groundwater Standards

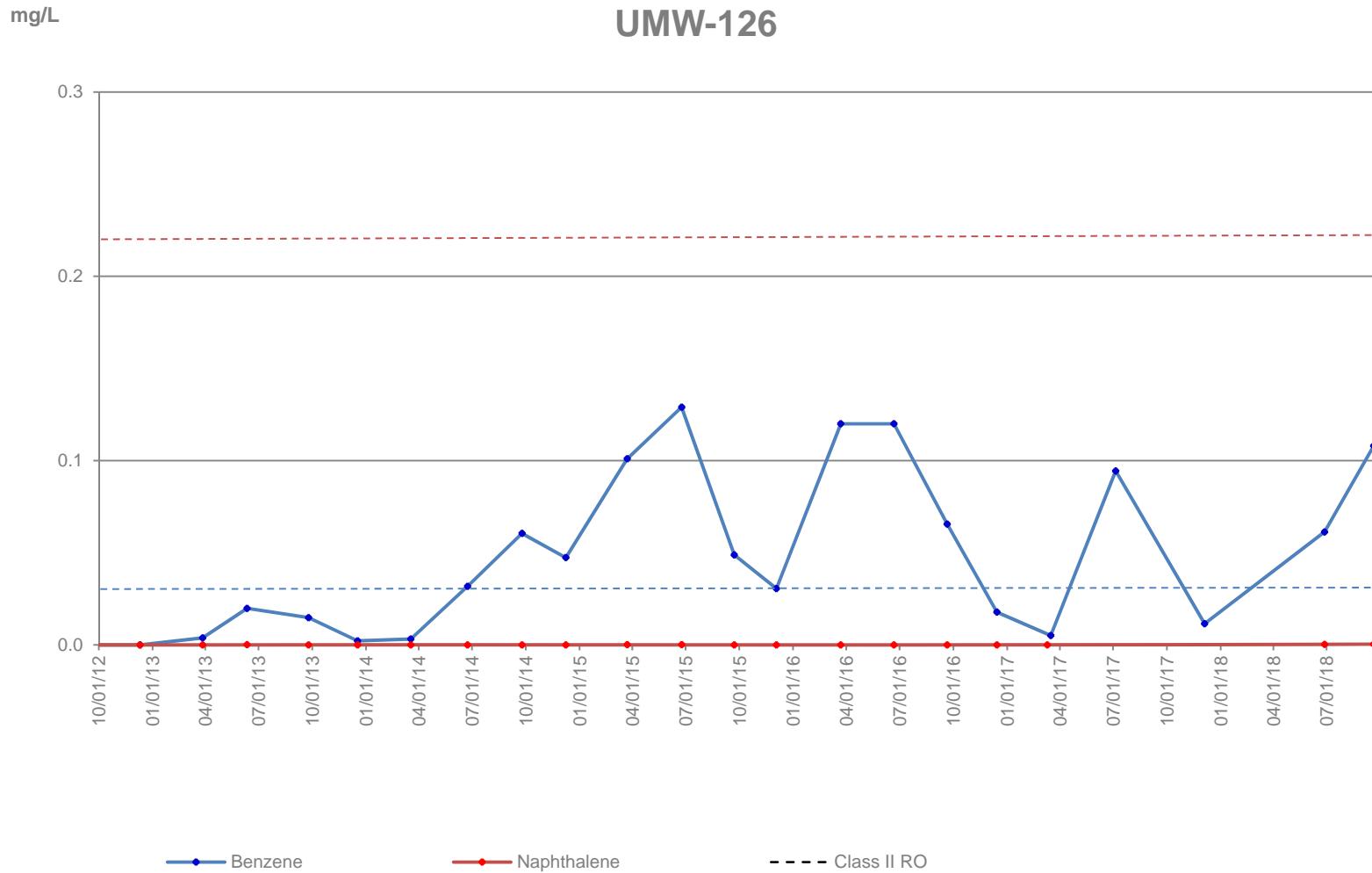
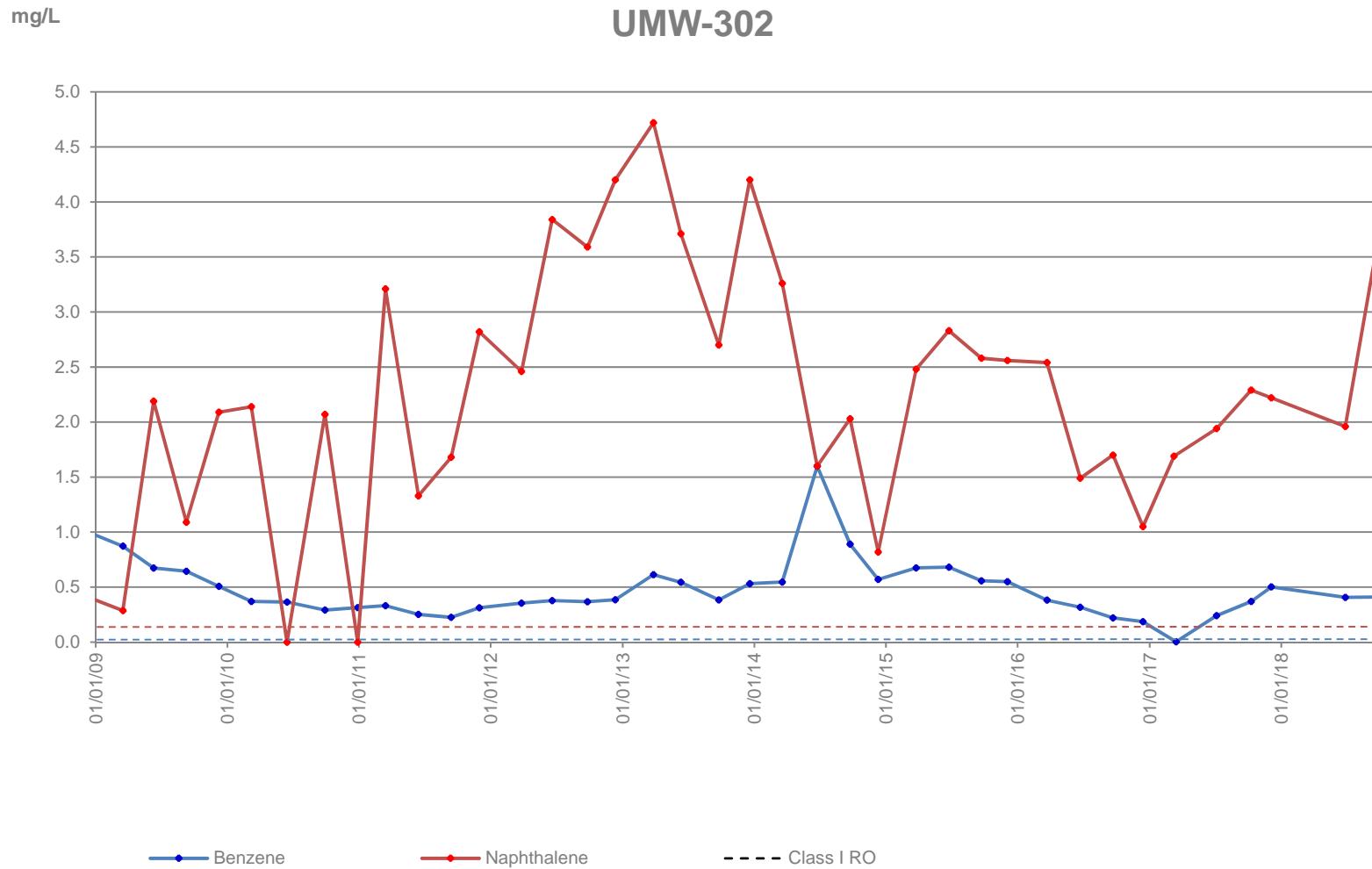


FIGURE 4D  
Benzene and Naphthalene Concentration Trends in Wells Exceeding Groundwater Standards



## ***Tables***

**TABLE 1**  
**Groundwater Measurement Data**  
**September 2018**  
**Ameren - Champaign FMGP Site**  
**Champaign, Illinois**

Monitoring Well Number	Total Depth (feet)	Monitored Interval feet BLS)	Elevation (feet NGVD)		September 2018		
			Measuring Point (MP)	Land Surface (LS)	WL Below MP (feet)	Elevation (feet NGVD)	Purge Vol (Liters)
UMW-102	22.00	6.70 - 22.0	737.32	737.70	5.92	731.40	17.0
UMW-105	19.70	9.50 - 19.70	737.33	737.70	7.66	729.67	7.6
UMW-106R	17.00	7.00 - 17.00	737.18	737.43	6.62	730.56	12.3
UMW-107R	19.70	9.50 - 19.70	736.88	737.30	5.49	731.39	7.6
UMW-108	15.00	4.80 - 15.00	736.86	737.10	4.58	732.28	7.6
UMW-109	20.00	10.00 - 20.00	735.11	735.50	5.92	729.19	6.8
UMW-111A	22.80	9.00 - 22.80	736.71	737.00	7.58	729.13	8.5
UMW-116	20.00	10.00 - 20.00	736.23	736.50	5.65	730.58	4.7
UMW-117	15.00	5.00 - 15.00	737.53	737.81	6.50	731.03	7.2
UMW-118	15.00	5.00 - 15.00	736.20	736.43	6.91	729.29	6.8
UMW-119	15.00	5.00 - 15.00	736.80	737.09	4.94	731.86	8.7
UMW-120	15.00	5.00 - 15.00	737.02	737.53	5.44	731.58	26.5
UMW-121	15.00	5.00 - 15.00	738.46	738.80	7.32	731.14	8.7
UMW-122	19.75	5.00 - 15.00	739.15	739.44	12.95	726.20	2.6
UMW-123	15.89	5.89 - 15.89	737.24	737.53	7.14	730.10	3.8
UMW-124 *	15.27	4.97 - 15.02	737.10	737.28	3.35	733.75	9.5
UMW-125 *	15.33	5.06 - 15.11	737.92	738.05	4.24	733.68	11.4
UMW-126 *	15.40	5.13 - 15.18	736.38	736.55	2.72	733.66	8.5
UMW-127 *	15.38	5.11 - 15.16	735.93	736.14	2.22	733.71	9.5
UMW-300	45.00	35.00 - 45.00	736.57	736.79	26.32	710.25	13.2
UMW-301R *	46.65	36.50 - 46.05	736.11	736.20	26.52	709.59	12.1
UMW-302	45.00	35.00 - 45.00	738.58	738.88	29.09	709.49	11.4
UMW-303	45.00	35.00 - 45.00	737.05	737.38	26.60	710.45	10.4
UMW-304R *	46.16	36.01 - 45.56	736.48	736.72	26.86	709.62	15.1
UMW-305	45.00	35.00 - 45.00	737.51	737.74	28.00	709.51	11.4
UMW-306	47.00	37.00 - 47.00	736.90	737.18	27.50	709.40	7.6
UMW-307	47.00	37.00 - 47.00	736.92	737.19	27.57	709.35	11.4
UMW-308 *	45.29	35.14 - 44.69	737.21	737.39	27.75	709.46	12.5

Notes:

- \* Onsite monitoring well location
- R Replacement monitoring well.
- BLS Below land surface.
- NGVD National Geodetic Vertical Datum

**TABLE 2**  
**Summary of Analytical Results**  
**September 2018**  
**Ameren - Champaign FMGP Site**  
**Champaign, Illinois**

Location Group				01 - Shallow Wells (Class 2 Groundwater Ingestion)												
				Location ID	UMW-102	UMW-105	UMW-106R	UMW-107R	UMW-107R	UMW-108	UMW-109	UMW-11A	UMW-116	UMW-117	UMW-118	UMW-119
				Sample Date	09/17/2018	09/19/2018	09/18/2018	09/18/2018	09/18/2018	09/18/2018	09/17/2018	09/17/2018	09/18/2018	09/18/2018	09/18/2018	09/17/2018
				Sample Type	N	N	N	N	FD	N	N	N	N	N	N	N
Analyte	CLASS I GROUNDWATER INGESTION	CLASS II GROUNDWATER INGESTION	GW INHALATION DIFFUSION & ADVECTION RES													
<b>01 - BTEX, mg/L</b>																
Benzene	0.005	0.025	0.11	< 0.0005	< 0.0005	< 0.0005	0.0047	0.0045	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
Ethylbenzene	0.7	1	0.37	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	
Toluene	1	2.5	530	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	
Xylene, Total	10	10	30	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	
<b>02 - PAH, mg/L</b>																
Acenaphthene	0.42	2.1	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Acenaphthylene	0.21	1.05	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Anthracene	2.1	10.5	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Benzo(a)anthracene	0.00013	0.00065	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Benzo(a)pyrene	0.0002	0.002	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Benzo(b)fluoranthene	0.00018	0.0009	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Benzo(g,h,i)perylene	0.21	1.05	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Benzo(k)fluoranthene	0.00017	0.00085	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Chrysene	0.0015	0.0075	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Dibenz(a,h)anthracene	0.0003	0.0015	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Fluoranthene	0.28	1.4	NS	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	
Fluorene	0.28	1.4	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Indeno(1,2,3-cd)pyrene	0.00043	0.00215	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Naphthalene	0.14	0.22	0.075	< 0.000200 BU	< 0.000200 BU	< 0.000200 BU	< 0.000200 BU	< 0.000200 BU	< 0.000200 BU	< 0.000200 BU	< 0.000200 BU	< 0.000200 BU	< 0.000200 BU	< 0.000200 BU		
Phenanthrene	0.21	1.05	NS	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	
Pyrene	0.21	1.05	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
<b>03 - General Chemistry, mg/L</b>																
Cyanide CN-	0.2	0.6	NS	< 0.005	0.049	0.022	0.381	0.433	0.032	0.036	< 0.005	< 0.005	< 0.005	0.034	0.033	
<b>04 - Metals, mg/L</b>																
Arsenic	0.05	0.2	NS	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	
Barium	2	2	NS	0.0801	0.0533	0.0860	0.154	0.154	0.174	0.0854	0.0490	0.0816	0.119	0.108	0.102	
Cadmium	0.005	0.05	NS	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	
Chromium	0.1	1	NS	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0187	< 0.0050	0.151	< 0.0050	< 0.0050	
Lead	0.0075	0.1	NS	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	
Mercury	0.002	0.01	0.053	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	
Selenium	0.05	0.05	NS	< 0.												

**TABLE 2**  
**Summary of Analytical Results**  
**September 2018**  
**Ameren - Champaign FMGP Site**  
**Champaign, Illinois**

Location Group				01 - Shallow Wells (Class 2 Groundwater Ingestion)									
				Location ID	UMW-120	UMW-121	UMW-122	UMW-123	UMW-124	UMW-124	UMW-125	UMW-126	UMW-127
				Sample Date	09/17/2018	09/19/2018	09/18/2018	09/18/2018	09/19/2018	09/19/2018	09/19/2018	09/19/2018	09/19/2018
Analyte	CLASS I GROUNDWATER INGESTION	CLASS II GROUNDWATER INGESTION	GW INHALATION DIFFUSION & ADVECTION RES	Sample Type	N	N	N	N	N	FD	N	N	N
<b>01 - BTEX, mg/L</b>													
Benzene	0.005	0.025	0.11	< 0.0005	< 0.0005	< 0.0005	< 0.0005	<b>0.0907</b>	<b>0.0869</b>	0.0078	<b>0.108</b>	0.0029	
Ethylbenzene	0.7	1	0.37	< 0.0020	< 0.0020	< 0.0020	< 0.0020	0.0090	0.0083	< 0.0020	< 0.0020	< 0.0020	
Toluene	1	2.5	530	< 0.0020	< 0.0020	< 0.0020	< 0.0020	0.0415	0.0394	< 0.0020	0.0034	< 0.0020	
Xylene, Total	10	10	30	< 0.0020	< 0.0020	< 0.0020	< 0.0020	0.0236	0.0216	< 0.0020	< 0.0020	< 0.0020	
<b>02 - PAH, mg/L</b>													
Acenaphthene	0.42	2.1	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	0.000469	0.000522	< 0.000100	< 0.000100	0.000238	
Acenaphthylene	0.21	1.05	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	0.000248	0.000284	< 0.000100	< 0.000100	< 0.000100	
Anthracene	2.1	10.5	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Benzo(a)anthracene	0.00013	0.00065	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Benzo(a)pyrene	0.0002	0.002	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Benzo(b)fluoranthene	0.00018	0.0009	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Benzo(g,h,i)perylene	0.21	1.05	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Benzo(k)fluoranthene	0.00017	0.00085	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Chrysene	0.0015	0.0075	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Dibeno(a,h)anthracene	0.0003	0.0015	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Fluoranthene	0.28	1.4	NS	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	
Fluorene	0.28	1.4	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	0.000142	0.000171	< 0.000100	< 0.000100	0.000170	
Indeno(1,2,3-cd)pyrene	0.00043	0.00215	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
Naphthalene	0.14	0.22	<b>0.075</b>	< 0.000200 BU	< 0.000200 BU	< 0.000200 BU	< 0.000200 BU	0.0489	0.0503	< 0.00102	< 0.000385	< 0.00220	
Phenanthrene	0.21	1.05	NS	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.000400	0.000451	
Pyrene	0.21	1.05	NS	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100	
<b>03 - General Chemistry, mg/L</b>													
Cyanide CN-	0.2	0.6	NS	< 0.005	0.138	0.027	< 0.005	0.010	0.010	0.048	< 0.005	< 0.005	
<b>04 - Metals, mg/L</b>													
Arsenic	0.05	0.2	NS	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	
Barium	2	2	NS	0.0439	0.147	0.0285	0.0256	0.0290	0.0313	0.0239	0.0220	0.177	
Cadmium	0.005	0.05	NS	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	0.0022	< 0.0020	< 0.0020	
Chromium	0.1	1	NS	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Lead	0.0075	0.1	NS	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	< 0.0075	
Mercury	0.002	0.01	0.053	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	
Selenium	0.05	0.05	NS	< 0.0400	< 0.0400	< 0.0400	< 0.0400	< 0.0400	< 0.0400	< 0.0400	< 0.0400	< 0.0400	
Silver	0.05	NS	NS	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	

Notes:

< = Compound not detected at concentrations above the laboratory reporting detection limit.

The laboratory reporting detection limit is shown.

Empty cells = not analyzed

NS = Normal Environmental Sample

FD = Field Duplicate Sample

EB = Equipment Blank Sample

TB = Trip Blank Sample

NS = No Standard

mg/L = milligrams per liter

Qualifiers - Inorganic:

B = Reported value is < CRDL, but >= IDL.

BU = Compound was found in the blank and sample; Indicates the analyte was analyzed for but not detected.

All analyses performed by TekLab.

CLASS I GROUNDWATER INGESTION = IEPA TACO Tier 1 CLASS I GROUNDWATER INGESTION

CLASS II GROUNDWATER INGESTION = IEPA TACO Tier 1 CLASS II GROUNDWATER INGESTION

GW INHALATION DIFFUSION & ADVECTION RESIDENTIAL = IEPA TACO Tier 1 GW INHALATION DIFFUSION & ADVECTION RESIDENTIAL

Non-TACO Class I and Class II Groundwater Objectives applied for Acenaphthylene,

Benzo(g,h,i)perylene, and Phenanthrene. (Revision Date 3/31/2016)



**TABLE 3**  
*Analytical Results by Parameter*  
 9/20/2016 to 9/19/2018  
**Ameren - Champaign FMGP Site**  
**Champaign, Illinois**

**TABLE 3**  
**Analytical Results by Parameter**  
**9/20/2016 to 9/19/2018**  
**Ameren - Champaign FMGP Site**  
**Champaign, Illinois**

Well ID	Date Sampled	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene, total (µg/L)	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Anthracene (µg/L)	Benzo(a) anthracene (µg/L)	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(g,h,i) perylene (µg/L)	Benzo(k) fluoranthene (µg/L)	Chrysene (µg/L)	Dibenzo(a,h) anthracene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Indeno(1,2,3- cd) pyrene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)	Cyanide, total (mg/L)
UMW-118	9/21/2016	<2	<5	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.042
	12/15/2016	<2	<5	<5	<5	<0.1	0.16	<0.1	0.21	0.35	0.35	0.2	0.11	0.12	<0.1	0.18	<0.1	0.15	<0.1	<0.1	0.76	0.044
	3/8/2017	<2	<5	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.049	
	7/6/2017	<2	<5	<5	<5	0.17	0.37	0.1	0.77	0.93	0.94	0.37	0.36	0.48	0.1	1.04	0.11	0.33	<0.1	0.14	5	0.056
	10/10/2017	<2	<5	<5	<5	<0.1	0.1	<0.1	0.21	0.27	0.27	0.12	0.09	0.09	<0.1	0.19	<0.1	0.1	<0.1	<0.1	0.93	0.056
	12/5/2017	<2	<5	<5	<5	<0.1	0.12	<0.1	0.25	0.34	0.4	<0.1	0.16	0.13	<0.1	0.26	<0.1	<0.1	<0.1	<0.1	1.15	0.059
	6/26/2018	<0.5	<2	<2	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.4	0.031
	9/18/2018	<0.5	<2	<2	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.4	0.034
	9/21/2016	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.046
UMW-119	12/15/2016	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.041
	3/7/2017	<2	<5	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.048
	7/5/2017	<2	<5	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.041
	10/11/2017	<2	<5	<5	0.29	0.41	0.11	0.14	0.12	0.11	<0.1	<0.1	0.15	<0.1	0.31	<0.1	<0.1	<0.1	<0.1	0.16	0.44	0.033
	12/5/2017	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.039
	6/26/2018	<0.5	<2	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.4	0.036
	9/17/2018	<0.5	<2	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.4	0.033
UMW-120	9/21/2016	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.005
	12/15/2016	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.005
	3/8/2017	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.005
	7/6/2017	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.005
	10/9/2017	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.007
	12/4/2017	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.005
	6/26/2018	<0.5	<2	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.4	<0.005
	9/17/2018	<0.5	<2	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.4	<0.005
	9/21/2016	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.186
UMW-121	12/13/2016	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.164
	3/9/2017	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.168
	7/6/2017	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.148
	10/12/2017	<2	<5	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.166
	12/7/20																					

**TABLE 3**  
**Analytical Results by Parameter**  
**9/20/2016 to 9/19/2018**  
**Ameren - Champaign FMGP Site**  
**Champaign, Illinois**

***Attachment 1***

***Laboratory Analytical Report***

**Memo**

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**To** Lacy Smith

**From** Elsie King

**Date** 27 November 2018

**Reference** 0466251

**Subject** Data Review of Ameren Champaign Groundwater Samples September 2018:  
Teklab, Inc. Data Package 18091324

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The data quality was assessed and any necessary qualifiers were applied following the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review*, January 2017 and *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review*, January 2017.

ERM reviewed data from for compliance with the following quality assurance/quality control (QA/QC) and method-prescribed criteria for Stage 2B review:

- **Holding Time and Sample Preservation:** The period of time between collection of the sample and preparation/analysis of the sample is evaluated. Analyses performed for this project have method-prescribed holding times as well as temperature and chemical preservation requirements.
- **Blank Samples:** The preparation and analysis of reagent (contaminant-free) water is evaluated. Blank samples for this investigation included method, trip, field blanks, and equipment rinsates. Detections in a blank sample may indicate laboratory, transportation, or field contamination. All samples are evaluated for common laboratory contaminants during the blank evaluation.
- **Spike Samples:** The preparation and analysis of an environmental sample or a sample of reagent water spiked with a subset of target compounds at known concentrations is evaluated. The results of the spike analysis measure laboratory accuracy in the reagent sample, and results from the environmental sample spike measure potential interferences from the matrix.
- **Surrogate Spikes:** The addition of compounds similar to target compounds of interest that are added to sample aliquots for organic analysis is evaluated. Surrogate spikes measure possible interferences from the sample matrix for the analysis of target compounds.
- **Duplicate Samples:** The preparation and analysis of an additional aliquot of the sample is evaluated. The results from duplicate analysis measure potential heterogeneity of contaminants in the sample.

Stage 4 data review for 20 percent of the samples (6 samples: UMW-107R-WG-20180918, UMW-124-WG-20180919, UMW-125-WG-20180919, UMW-126-WG-20180919, UMW-127-WG-20180919, and UMW-302-WG-20180919). The Stage 4 review included all of the QA/QC project and/or method-prescribed criteria for level II review plus:

- **Calibration:** The analysis of target analytes at a range of concentrations to develop a graphical plot of instrument response against the different analyte concentrations. An initial calibration curve establishes the graphical plot, and the continuing calibration verification monitors daily instrument linearity against the initial calibration.
- **Internal standards:** The addition of compounds similar to target compounds of interest that are added to sample aliquots for organic analysis. The internal standards are used to quantitatively and qualitatively evaluate retention time and response for each sample.
- **Recalculation:** Ten percent of the initial calibration, continuing calibration, internal response, surrogate percent recoveries (%R), laboratory control sample (LCS) %R, matrix spike/matrix spike duplicate (MS/MSD) %R, and all of the detected sample concentrations were recalculated.

#### **CHAIN-OF-CUSTODY DISCREPANCIES**

The lab noted that a collection date and time were not listed for the trip blank. The lab reported the collection date and time for TB-01-WQ-201809 as of 9/20/2018 at 15:22 to match the sample receipt date and time. The project samples results have been correctly reported; no qualifications were necessary.

#### **HOLDING TIME AND PRESERVATION EVALUATION**

The samples were prepared and analyzed within the method-prescribed time period from the date of collection. The sample shipments were received at the laboratory within the method-prescribed temperature preservation requirements of less than 6°C.

The pH was less than 12 for cyanide analysis in 22 samples and the laboratory adjusted the pH with additional sodium hydroxide upon receipt. No qualifications were added to the cyanide results since the samples were preserved properly upon receipt. The samples with incorrect preservation are presented in Table 1.

#### **CALIBRATION EVALUATION**

Two types of calibration data were reviewed. These were initial calibration (ICAL) and continuing calibration verification (CCV/ICV). The laboratory calculated the relative standard deviation for each of the target analytes included in the ICAL. The laboratory also calculated the relative response factors (RRFs) for the analytes in the ICAL. The reported percent relative standard deviations and RRFs were compared to the method-prescribed acceptance criteria and validation criteria during the data validation. The laboratory calculated the percent difference (%D) between CCV/ICV and the ICAL. The laboratory calculated the CCV ICV RRFs. The %Ds and RRFs were then compared to the method-prescribed acceptance criteria and validation criteria during the data validation. The ICAL and CCV/ICV results were within acceptable limits for the Level IV samples, with several exceptions. The %D for CCVs exceeded acceptance criteria for one analyte, indeno(1,2,3-cd)pyrene. The associated non-detect results were qualified as estimated (UJ). The affected samples are presented in Table 2.

#### **BLANK EVALUATION**

The method, equipment rinsate, and trip blank sample results were nondetected for each of the target analytes with limited exceptions. A method blank had a naphthalene detection, however, the associated sample results were non-detect. No data were qualified based upon method blank

detections. Anthracene, naphthalene and pyrene were detected in the equipment blank. Associated sample results reported below this concentration were qualified as non-detect (U). The blank detections and associated qualifiers are listed in Table 3.

#### **BLANK SPIKE EVALUATION**

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) recoveries and RPDs were within the laboratory's limits of acceptance. The LCS recoveries and RPDs indicate acceptable laboratory accuracy and precision.

#### **MATRIX SPIKE EVALUATION**

The matrix spike (MS)/matrix spike duplicate (MSD) recoveries were within the laboratory's limits of acceptance for project samples, with limited exceptions. Recoveries were below the control limits for the MS/MSD the following compounds in sample UMW-305-WG-20180918: benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene. The associated non-detect results were qualified as estimated (UJ). The affected sample results are presented in Table 4.

#### **SURROGATE SPIKE EVALUATION**

The surrogate recoveries were within acceptable limits with limited exceptions. No data are qualified if the dilution factor is greater than 10. No data were qualified. The outliers are presented in Table 5.

#### **INTERNAL STANDARD EVALUATION**

The internal standard areas and recoveries were within acceptable limits.

#### **FIELD DUPLICATE EVALUATION**

Three samples were submitted in duplicate. ERM calculated the RPD between detected results. The USEPA has not established control criteria for field duplicate samples; therefore, sample data are not qualified on the basis of field duplicate imprecision. The RPDs for detected results are presented in Table 6.

#### **OVERALL ASSESSMENT**

All data, including qualified data, can be used for decision-making purposes; however, the limitations indicated by the applied qualifiers should be considered when using the data. The quality of the data generated during this investigation is acceptable for the preparation of technically defensible documents.

**Table 2**  
**Calibration Verification Standards Outside of Acceptable Limits**  
**September 2018 Groundwater Monitoring**  
**Ameren**  
**Champaign, Illinois**

Lab Package	Calibration Standard	Associated Sample ID	Compound	Calibration Outlier	Limit	Reported Concentration	Units	ERM Qualifier
18091324	9/21/18 CCV BNA180911B	UMW-102-WG-20180917	Indeno(1,2,3-cd)pyrene	41.6 %D	<40 %D	--	--	--
		UMW-106R-WG-20180918				ND	mg/L	UJ
		UMW-107R-WG-20180918				ND	mg/L	UJ
		UMW-108-WG-20180918				ND	mg/L	UJ
		UMW-109-WG-20180917				ND	mg/L	UJ
		UMW-111A-WG-20180917				ND	mg/L	UJ
		UMW-305-WG-20180918				ND	mg/L	UJ
		UMW-116-WG-20180918				--	--	--
		UMW-117-WG-20180918				ND	mg/L	UJ
		UMW-118-WG-20180918				ND	mg/L	UJ
		UMW-119-WG-20180917	Indeno(1,2,3-cd)pyrene	53.89 %D	<40% D	ND	mg/L	UJ
		UMW-120-WG-20180917				ND	mg/L	UJ
		UMW-122-WG-20180918				ND	mg/L	UJ
		UMW-123-WG-20180918				ND	mg/L	UJ
		UMW-300-WG-20180917				ND	mg/L	UJ
		UMW-303-WG-20180918				ND	mg/L	UJ
		UMW-306-WG-20180918				ND	mg/L	UJ
		UMW-307-WG-20180918				ND	mg/L	UJ
		DUP 001-WG-20180918				ND	mg/L	UJ

**Table 2**  
**Calibration Verification Standards Outside of Acceptable Limits**  
**September 2018 Groundwater Monitoring**  
**Ameren**  
**Champaign, Illinois**

Lab Package	Calibration Standard	Associated Sample ID	Compound	Calibration Outlier	Limit	Reported Concentration	Units	ERM Qualifier
18091324	9/25/18 CCV BNA180911B	UMW-105-WG-20180919	Indeno(1,2,3-cd)pyrene	46.9 %D	<40 %D	--	--	--
		UMW-121-WG-20180919				ND	mg/L	UJ
		UMW-124-WG-20180919				ND	mg/L	UJ
		UMW-125-WG-20180919				ND	mg/L	UJ
		UMW-126-WG-20180919				ND	mg/L	UJ
		UMW-127-WG-20180919				ND	mg/L	UJ
		UMW-304R-WG-20180919				ND	mg/L	UJ
		UMW-301R-WG-20180919				ND	mg/L	UJ
		UMW-302-WG-20180919				ND	mg/L	UJ
		UMW-308-WG-20180919				ND	mg/L	UJ
		DUP 002-WG-20180919				ND	mg/L	UJ
		DUP 003-WG-20180919				ND	mg/L	UJ
		EB-01-WQ-20180919				ND	mg/L	UJ

Lab report reviewed: 18091324

**Key:**

CCV = continuing calibration verification

%D = percent deviation

UJ = Nondetected, estimated report limit

mg/L = Milligrams per liter



Level 4 Data Package

Work Order 18091324

ERM-ST. LOUIS

Project ID: Champaign GW

# Data Package Review Form

Workorder#: 18091324 Client: ERM-ST. LOUIS  
Project: Champaign GW

<b>Analysis Reviewed</b>	<b>Method</b>
Total Cyanide	SW-846 9012A
Metals by ICP	SW-846 6010B
Mercury	SW-846 7470A
SVOCs by GC/MS	SW-846 8270C
VOCs by GC/MS	SW-846 8260B

All QC exceptions are noted in the sample narrative in the analytical report. Any additional exceptions are noted below.

No additional exceptions found

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**I have reviewed this data package and have found it to be complete, except as stated in the comments section above.**

**Quality Officer: Stacy Mathis**  
**Date: 10/17/18**

September 26, 2018

Greg Moore  
ERM  
2 CityPlace Drive, Suite 70  
St. Louis, MO 63141  
TEL: (314) 238-6162  
FAX:



**RE:** Champaign GW

**WorkOrder:** 18091324

Dear Greg Moore:

TEKLAB, INC received 33 samples on 9/20/2018 3:22:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Michael L. Austin  
Project Manager  
(618)344-1004 ex 16  
[MAustin@teklabinc.com](mailto:MAustin@teklabinc.com)

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

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**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

### Abbr Definition

\* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surrogate Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU )

### Qualifiers

# - Unknown hydrocarbon

B - Analyte detected in associated Method Blank

C - RL shown is a Client Requested Quantitation Limit

E - Value above quantitation range

H - Holding times exceeded

I - Associated internal standard was outside method criteria

M - Manual Integration used to determine area response

ND - Not Detected at the Reporting Limit

R - RPD outside accepted recovery limits

S - Spike Recovery outside recovery limits

T - TIC(Tentatively identified compound)

X - Value exceeds Maximum Contaminant Level



## Case Narrative

<http://www.teklabinc.com/>

**Client:** ERM

**Client Project:** Champaign GW

**Work Order:** 18091324

**Report Date:** 26-Sep-18

**Cooler Receipt Temp:** 1.42 °C

### Locations

<b>Collinsville</b>	
<b>Address</b>	5445 Horseshoe Lake Road Collinsville, IL 62234-7425
<b>Phone</b>	(618) 344-1004
<b>Fax</b>	(618) 344-1005
<b>Email</b>	jhriley@teklabinc.com

<b>Collinsville Air</b>	
<b>Address</b>	5445 Horseshoe Lake Road Collinsville, IL 62234-7425
<b>Phone</b>	(618) 344-1004
<b>Fax</b>	(618) 344-1005
<b>Email</b>	EHurley@teklabinc.com

<b>Springfield</b>	
<b>Address</b>	3920 Pintail Dr Springfield, IL 62711-9415
<b>Phone</b>	(217) 698-1004
<b>Fax</b>	(217) 698-1005
<b>Email</b>	KKlostermann@teklabinc.com

<b>Chicago</b>	
<b>Address</b>	1319 Butterfield Rd. Downers Grove, IL 60515
<b>Phone</b>	(630) 324-6855
<b>Fax</b>	
<b>Email</b>	arenner@teklabinc.com

<b>Kansas City</b>	
<b>Address</b>	8421 Nieman Road Lenexa, KS 66214
<b>Phone</b>	(913) 541-1998
<b>Fax</b>	(913) 541-1998
<b>Email</b>	jhriley@teklabinc.com

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

<b>State</b>	<b>Dept</b>	<b>Cert #</b>	<b>NELAP</b>	<b>Exp Date</b>	<b>Lab</b>
Illinois	IIEPA	100226	NELAP	1/31/2019	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2019	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2019	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2019	Collinsville
Arkansas	ADEQ	88-0966		3/14/2019	Collinsville
Illinois	IDPH	17584		5/31/2019	Collinsville
Indiana	ISDH	C-IL-06		1/31/2019	Collinsville
Kentucky	KDEP	98006		12/31/2018	Collinsville
Kentucky	UST	0073		1/31/2019	Collinsville
Louisiana	LDPH	LA170027		12/31/2018	Collinsville
Missouri	MDNR	930		1/31/2019	Collinsville
Missouri	MDNR	00930		5/31/2019	Collinsville
Oklahoma	ODEQ	9978		8/31/2019	Collinsville
Tennessee	TDEC	04905		1/31/2019	Collinsville

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-001

Client Sample ID: UMW-102-WG-20180917

Matrix: GROUNDWATER

Collection Date: 09/17/2018 17:10

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/25/2018 12:13	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 15:00	145952
Barium	NELAP	0.0025		0.0801	mg/L	1	09/21/2018 15:00	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 15:00	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 15:00	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 15:00	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 15:00	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 15:00	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:13	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/21/2018 17:09	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/21/2018 17:09	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/21/2018 17:09	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:09	145965
Surr: 2-Fluorobiphenyl	*	10-164		66.0	%REC	1	09/21/2018 17:09	145965
Surr: Nitrobenzene-d5	*	10.3-142		71.0	%REC	1	09/21/2018 17:09	145965
Surr: p-Terphenyl-d14	*	47.1-148		85.6	%REC	1	09/21/2018 17:09	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 10:19	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 10:19	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 10:19	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 10:19	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		99.9	%REC	1	09/21/2018 10:19	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		103.9	%REC	1	09/21/2018 10:19	146010
Surr: Dibromofluoromethane	*	84.9-113		98.8	%REC	1	09/21/2018 10:19	146010
Surr: Toluene-d8	*	86.7-112		97.4	%REC	1	09/21/2018 10:19	146010

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-002

Client Sample ID: UMW-105-WG-20180919

Matrix: GROUNDWATER

Collection Date: 09/19/2018 14:15

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.049	mg/L	1	09/25/2018 12:18	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 15:03	145952
Barium	NELAP	0.0025		0.0533	mg/L	1	09/21/2018 15:03	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 15:03	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 15:03	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 15:03	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 15:03	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 15:03	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:15	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/24/2018 16:30	146012
Fluorene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Naphthalene	NELAP	0.000200		ND	mg/L	1	09/24/2018 16:30	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/24/2018 16:30	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 16:30	146012
Surr: 2-Fluorobiphenyl	*	10-164		74.8	%REC	1	09/24/2018 16:30	146012
Surr: Nitrobenzene-d5	*	10.3-142		75.3	%REC	1	09/24/2018 16:30	146012
Surr: p-Terphenyl-d14	*	47.1-148		101.8	%REC	1	09/24/2018 16:30	146012
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 10:46	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 10:46	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 10:46	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 10:46	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		99.8	%REC	1	09/21/2018 10:46	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		101.4	%REC	1	09/21/2018 10:46	146010
Surr: Dibromofluoromethane	*	84.9-113		99.2	%REC	1	09/21/2018 10:46	146010
Surr: Toluene-d8	*	86.7-112		97.3	%REC	1	09/21/2018 10:46	146010

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-003

Client Sample ID: UMW-106R-WG-20180918

Matrix: GROUNDWATER

Collection Date: 09/18/2018 11:50

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.022	mg/L	1	09/25/2018 12:27	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 15:07	145952
Barium	NELAP	0.0025		0.0860	mg/L	1	09/21/2018 15:07	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 15:07	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 15:07	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 15:07	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 15:07	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 15:07	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:17	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/21/2018 17:45	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/21/2018 17:45	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/21/2018 17:45	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 17:45	145965
Surr: 2-Fluorobiphenyl	*	10-164		61.4	%REC	1	09/21/2018 17:45	145965
Surr: Nitrobenzene-d5	*	10.3-142		70.3	%REC	1	09/21/2018 17:45	145965
Surr: p-Terphenyl-d14	*	47.1-148		90.6	%REC	1	09/21/2018 17:45	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 11:12	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 11:12	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 11:12	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 11:12	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		98.2	%REC	1	09/21/2018 11:12	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		103.1	%REC	1	09/21/2018 11:12	146010
Surr: Dibromofluoromethane	*	84.9-113		98.7	%REC	1	09/21/2018 11:12	146010
Surr: Toluene-d8	*	86.7-112		97.7	%REC	1	09/21/2018 11:12	146010

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-004

Client Sample ID: UMW-107R-WG-20180918

Matrix: GROUNDWATER

Collection Date: 09/18/2018 16:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.050		0.381	mg/L	10	09/25/2018 16:03	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 15:18	145952
Barium	NELAP	0.0025		0.154	mg/L	1	09/21/2018 15:18	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 15:18	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 15:18	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 15:18	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 15:18	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 15:18	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:19	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/21/2018 18:22	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/21/2018 18:22	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/21/2018 18:22	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:22	145965
Surr: 2-Fluorobiphenyl	*	10-164		64.3	%REC	1	09/21/2018 18:22	145965
Surr: Nitrobenzene-d5	*	10.3-142		73.8	%REC	1	09/21/2018 18:22	145965
Surr: p-Terphenyl-d14	*	47.1-148		94.9	%REC	1	09/21/2018 18:22	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		4.7	µg/L	1	09/21/2018 11:39	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 11:39	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 11:39	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 11:39	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		100.8	%REC	1	09/21/2018 11:39	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		101.6	%REC	1	09/21/2018 11:39	146010
Surr: Dibromofluoromethane	*	84.9-113		99.4	%REC	1	09/21/2018 11:39	146010
Surr: Toluene-d8	*	86.7-112		97.5	%REC	1	09/21/2018 11:39	146010

## Laboratory Results

<http://www.teklabinc.com/>
**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**Lab ID:** 18091324-005

**Client Sample ID:** UMW-108-WG-20180918

**Matrix:** GROUNDWATER

**Collection Date:** 09/18/2018 9:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.032	mg/L	1	09/25/2018 14:49	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 15:33	145952
Barium	NELAP	0.0025		0.174	mg/L	1	09/21/2018 15:33	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 15:33	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 15:33	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 15:33	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 15:33	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 15:33	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:22	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/21/2018 18:58	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/21/2018 18:58	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/21/2018 18:58	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 18:58	145965
Surr: 2-Fluorobiphenyl	*	10-164		58.3	%REC	1	09/21/2018 18:58	145965
Surr: Nitrobenzene-d5	*	10.3-142		71.0	%REC	1	09/21/2018 18:58	145965
Surr: p-Terphenyl-d14	*	47.1-148		95.5	%REC	1	09/21/2018 18:58	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 12:06	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 12:06	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 12:06	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 12:06	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		102.0	%REC	1	09/21/2018 12:06	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		101.2	%REC	1	09/21/2018 12:06	146010
Surr: Dibromofluoromethane	*	84.9-113		100.0	%REC	1	09/21/2018 12:06	146010
Surr: Toluene-d8	*	86.7-112		97.1	%REC	1	09/21/2018 12:06	146010

## Laboratory Results

<http://www.teklabinc.com/>
**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**Lab ID:** 18091324-006

**Client Sample ID:** UMW-109-WG-20180917

**Matrix:** GROUNDWATER

**Collection Date:** 09/17/2018 17:15

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.036	mg/L	1	09/25/2018 14:53	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 15:37	145952
Barium	NELAP	0.0025		0.0854	mg/L	1	09/21/2018 15:37	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 15:37	145952
Chromium	NELAP	0.0050		0.0187	mg/L	1	09/21/2018 15:37	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 15:37	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 15:37	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 15:37	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:24	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/21/2018 19:35	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/21/2018 19:35	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/21/2018 19:35	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 19:35	145965
Surr: 2-Fluorobiphenyl	*	10-164		60.9	%REC	1	09/21/2018 19:35	145965
Surr: Nitrobenzene-d5	*	10.3-142		69.7	%REC	1	09/21/2018 19:35	145965
Surr: p-Terphenyl-d14	*	47.1-148		91.6	%REC	1	09/21/2018 19:35	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 12:32	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 12:32	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 12:32	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 12:32	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		101.6	%REC	1	09/21/2018 12:32	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		101.6	%REC	1	09/21/2018 12:32	146010
Surr: Dibromofluoromethane	*	84.9-113		99.8	%REC	1	09/21/2018 12:32	146010
Surr: Toluene-d8	*	86.7-112		97.3	%REC	1	09/21/2018 12:32	146010

## Laboratory Results

<http://www.teklabinc.com/>
**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**Lab ID:** 18091324-007

**Client Sample ID:** UMW-111A-WG-20180917

**Matrix:** GROUNDWATER

**Collection Date:** 09/17/2018 14:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/25/2018 15:20	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 15:40	145952
Barium	NELAP	0.0025		0.0490	mg/L	1	09/21/2018 15:40	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 15:40	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 15:40	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 15:40	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 15:40	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 15:40	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:26	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/21/2018 20:11	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/21/2018 20:11	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/21/2018 20:11	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:11	145965
Surr: 2-Fluorobiphenyl	*	10-164		65.3	%REC	1	09/21/2018 20:11	145965
Surr: Nitrobenzene-d5	*	10.3-142		72.8	%REC	1	09/21/2018 20:11	145965
Surr: p-Terphenyl-d14	*	47.1-148		94.0	%REC	1	09/21/2018 20:11	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 13:00	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 13:00	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 13:00	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 13:00	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		101.5	%REC	1	09/21/2018 13:00	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		101.0	%REC	1	09/21/2018 13:00	146010
Surr: Dibromofluoromethane	*	84.9-113		99.3	%REC	1	09/21/2018 13:00	146010
Surr: Toluene-d8	*	86.7-112		96.6	%REC	1	09/21/2018 13:00	146010

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-008

Client Sample ID: UMW-116-WG-20180918

Matrix: GROUNDWATER

Collection Date: 09/18/2018 10:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/25/2018 15:24	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 15:44	145952
Barium	NELAP	0.0025		0.0816	mg/L	1	09/21/2018 15:44	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 15:44	145952
Chromium	NELAP	0.0050		0.151	mg/L	1	09/21/2018 15:44	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 15:44	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 15:44	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 15:44	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:28	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 10:22	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 10:22	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 10:22	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:22	145965
Surr: 2-Fluorobiphenyl	*	10-164		69.0	%REC	1	09/22/2018 10:22	145965
Surr: Nitrobenzene-d5	*	10.3-142		71.9	%REC	1	09/22/2018 10:22	145965
Surr: p-Terphenyl-d14	*	47.1-148		96.0	%REC	1	09/22/2018 10:22	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 13:26	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 13:26	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 13:26	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 13:26	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		101.5	%REC	1	09/21/2018 13:26	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		100.7	%REC	1	09/21/2018 13:26	146010
Surr: Dibromofluoromethane	*	84.9-113		99.6	%REC	1	09/21/2018 13:26	146010
Surr: Toluene-d8	*	86.7-112		97.1	%REC	1	09/21/2018 13:26	146010

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-009

Client Sample ID: UMW-117-WG-20180918

Matrix: GROUNDWATER

Collection Date: 09/18/2018 11:40

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/25/2018 15:28	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 15:48	145952
Barium	NELAP	0.0025		0.119	mg/L	1	09/21/2018 15:48	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 15:48	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 15:48	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 15:48	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 15:48	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 15:48	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:31	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 10:58	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 10:58	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 10:58	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 10:58	145965
Surr: 2-Fluorobiphenyl	*	10-164		61.4	%REC	1	09/22/2018 10:58	145965
Surr: Nitrobenzene-d5	*	10.3-142		64.1	%REC	1	09/22/2018 10:58	145965
Surr: p-Terphenyl-d14	*	47.1-148		91.7	%REC	1	09/22/2018 10:58	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 13:53	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 13:53	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 13:53	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 13:53	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		101.2	%REC	1	09/21/2018 13:53	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		100.7	%REC	1	09/21/2018 13:53	146010
Surr: Dibromofluoromethane	*	84.9-113		99.9	%REC	1	09/21/2018 13:53	146010
Surr: Toluene-d8	*	86.7-112		97.7	%REC	1	09/21/2018 13:53	146010

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-010

Client Sample ID: UMW-118-WG-20180918

Matrix: GROUNDWATER

Collection Date: 09/18/2018 8:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.034	mg/L	1	09/25/2018 15:33	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 15:51	145952
Barium	NELAP	0.0025		0.108	mg/L	1	09/21/2018 15:51	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 15:51	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 15:51	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 15:51	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 15:51	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 15:51	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:37	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 11:35	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 11:35	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 11:35	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 11:35	145965
Surr: 2-Fluorobiphenyl	*	10-164		71.2	%REC	1	09/22/2018 11:35	145965
Surr: Nitrobenzene-d5	*	10.3-142		73.3	%REC	1	09/22/2018 11:35	145965
Surr: p-Terphenyl-d14	*	47.1-148		93.4	%REC	1	09/22/2018 11:35	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 14:20	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 14:20	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 14:20	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 14:20	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		101.8	%REC	1	09/21/2018 14:20	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		100.8	%REC	1	09/21/2018 14:20	146010
Surr: Dibromofluoromethane	*	84.9-113		99.6	%REC	1	09/21/2018 14:20	146010
Surr: Toluene-d8	*	86.7-112		97.2	%REC	1	09/21/2018 14:20	146010

## Laboratory Results

<http://www.teklabinc.com/>
**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**Lab ID:** 18091324-011

**Client Sample ID:** UMW-119-WG-20180917

**Matrix:** GROUNDWATER

**Collection Date:** 09/17/2018 15:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.033	mg/L	1	09/25/2018 16:12	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 16:02	145952
Barium	NELAP	0.0025		0.102	mg/L	1	09/21/2018 16:02	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 16:02	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 16:02	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 16:02	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 16:02	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 16:02	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:40	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 12:11	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 12:11	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 12:11	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:11	145965
Surr: 2-Fluorobiphenyl	*	10-164		64.4	%REC	1	09/22/2018 12:11	145965
Surr: Nitrobenzene-d5	*	10.3-142		63.6	%REC	1	09/22/2018 12:11	145965
Surr: p-Terphenyl-d14	*	47.1-148		80.5	%REC	1	09/22/2018 12:11	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 14:46	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 14:46	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 14:46	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 14:46	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		100.8	%REC	1	09/21/2018 14:46	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		100.9	%REC	1	09/21/2018 14:46	146010
Surr: Dibromofluoromethane	*	84.9-113		100.5	%REC	1	09/21/2018 14:46	146010
Surr: Toluene-d8	*	86.7-112		97.6	%REC	1	09/21/2018 14:46	146010

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-012

Client Sample ID: UMW-120-WG-20180917

Matrix: GROUNDWATER

Collection Date: 09/17/2018 16:10

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/25/2018 16:47	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 16:06	145952
Barium	NELAP	0.0025		0.0439	mg/L	1	09/21/2018 16:06	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 16:06	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 16:06	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 16:06	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 16:06	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 16:06	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:42	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 12:47	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 12:47	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 12:47	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 12:47	145965
Surr: 2-Fluorobiphenyl	*	10-164		57.3	%REC	1	09/22/2018 12:47	145965
Surr: Nitrobenzene-d5	*	10.3-142		65.9	%REC	1	09/22/2018 12:47	145965
Surr: p-Terphenyl-d14	*	47.1-148		81.8	%REC	1	09/22/2018 12:47	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 15:13	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 15:13	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 15:13	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 15:13	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		101.9	%REC	1	09/21/2018 15:13	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		101.3	%REC	1	09/21/2018 15:13	146010
Surr: Dibromofluoromethane	*	84.9-113		100.0	%REC	1	09/21/2018 15:13	146010
Surr: Toluene-d8	*	86.7-112		97.7	%REC	1	09/21/2018 15:13	146010

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-013

Client Sample ID: UMW-121-WG-20180919

Matrix: GROUNDWATER

Collection Date: 09/19/2018 13:35

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.025		0.138	mg/L	5	09/25/2018 16:56	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 16:21	145952
Barium	NELAP	0.0025		0.147	mg/L	1	09/21/2018 16:21	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 16:21	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 16:21	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 16:21	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 16:21	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 16:21	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/21/2018 8:44	145939
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/24/2018 17:06	146012
Fluorene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Naphthalene	NELAP	0.000200		ND	mg/L	1	09/24/2018 17:06	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/24/2018 17:06	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:06	146012
Surr: 2-Fluorobiphenyl	*	10-164		66.7	%REC	1	09/24/2018 17:06	146012
Surr: Nitrobenzene-d5	*	10.3-142		72.8	%REC	1	09/24/2018 17:06	146012
Surr: p-Terphenyl-d14	*	47.1-148		105.7	%REC	1	09/24/2018 17:06	146012
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 15:40	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 15:40	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 15:40	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 15:40	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		101.2	%REC	1	09/21/2018 15:40	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		101.9	%REC	1	09/21/2018 15:40	146010
Surr: Dibromofluoromethane	*	84.9-113		100.2	%REC	1	09/21/2018 15:40	146010
Surr: Toluene-d8	*	86.7-112		96.2	%REC	1	09/21/2018 15:40	146010

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-014

Client Sample ID: UMW-122-WG-20180918

Matrix: GROUNDWATER

Collection Date: 09/18/2018 14:05

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.027	mg/L	1	09/25/2018 16:34	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 16:24	145952
Barium	NELAP	0.0025		0.0285	mg/L	1	09/21/2018 16:24	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 16:24	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 16:24	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 16:24	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 16:24	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 16:24	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:24	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 13:24	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 13:24	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 13:24	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 13:24	145965
Surr: 2-Fluorobiphenyl	*	10-164		70.1	%REC	1	09/22/2018 13:24	145965
Surr: Nitrobenzene-d5	*	10.3-142		71.8	%REC	1	09/22/2018 13:24	145965
Surr: p-Terphenyl-d14	*	47.1-148		91.6	%REC	1	09/22/2018 13:24	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 16:06	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 16:06	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 16:06	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 16:06	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		101.7	%REC	1	09/21/2018 16:06	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		101.2	%REC	1	09/21/2018 16:06	146010
Surr: Dibromofluoromethane	*	84.9-113		99.6	%REC	1	09/21/2018 16:06	146010
Surr: Toluene-d8	*	86.7-112		96.2	%REC	1	09/21/2018 16:06	146010

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-015

Client Sample ID: UMW-123-WG-20180918

Matrix: GROUNDWATER

Collection Date: 09/18/2018 13:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/25/2018 16:43	146037
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 16:28	145952
Barium	NELAP	0.0025		0.0256	mg/L	1	09/21/2018 16:28	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 16:28	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 16:28	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 16:28	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 16:28	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 16:28	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:26	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 14:00	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 14:00	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 14:00	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:00	145965
Surr: 2-Fluorobiphenyl	*	10-164		74.3	%REC	1	09/22/2018 14:00	145965
Surr: Nitrobenzene-d5	*	10.3-142		79.4	%REC	1	09/22/2018 14:00	145965
Surr: p-Terphenyl-d14	*	47.1-148		87.7	%REC	1	09/22/2018 14:00	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 16:33	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 16:33	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 16:33	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 16:33	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		100.9	%REC	1	09/21/2018 16:33	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		101.9	%REC	1	09/21/2018 16:33	146010
Surr: Dibromofluoromethane	*	84.9-113		99.0	%REC	1	09/21/2018 16:33	146010
Surr: Toluene-d8	*	86.7-112		97.2	%REC	1	09/21/2018 16:33	146010

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-016

Client Sample ID: UMW-124-WG-20180919

Matrix: GROUNDWATER

Collection Date: 09/19/2018 8:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.010	mg/L	1	09/26/2018 11:54	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 16:32	145952
Barium	NELAP	0.0025		0.0290	mg/L	1	09/21/2018 16:32	145952
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/21/2018 16:32	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 16:32	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 16:32	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 16:32	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 16:32	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:29	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		0.000469	mg/L	1	09/24/2018 17:43	146012
Acenaphthylene	NELAP	0.000100		0.000248	mg/L	1	09/24/2018 17:43	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:43	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:43	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:43	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:43	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:43	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:43	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:43	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:43	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/24/2018 17:43	146012
Fluorene	NELAP	0.000100		0.000142	mg/L	1	09/24/2018 17:43	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:43	146012
Naphthalene	NELAP	0.00500		0.0489	mg/L	25	09/25/2018 11:47	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/24/2018 17:43	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 17:43	146012
Surr: 2-Fluorobiphenyl	*	10-164		58.9	%REC	1	09/24/2018 17:43	146012
Surr: Nitrobenzene-d5	*	10.3-142		68.8	%REC	1	09/24/2018 17:43	146012
Surr: p-Terphenyl-d14	*	47.1-148		107.2	%REC	1	09/24/2018 17:43	146012
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		90.7	µg/L	1	09/21/2018 17:00	146010
Ethylbenzene	NELAP	2.0		9.0	µg/L	1	09/21/2018 17:00	146010
Toluene	NELAP	2.0		41.5	µg/L	1	09/21/2018 17:00	146010
Xylenes, Total	NELAP	2.0		23.6	µg/L	1	09/21/2018 17:00	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		102.7	%REC	1	09/21/2018 17:00	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		100.8	%REC	1	09/21/2018 17:00	146010
Surr: Dibromofluoromethane	*	84.9-113		100.3	%REC	1	09/21/2018 17:00	146010
Surr: Toluene-d8	*	86.7-112		96.2	%REC	1	09/21/2018 17:00	146010

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**Lab ID:** 18091324-017

**Client Sample ID:** UMW-125-WG-20180919

**Matrix:** GROUNDWATER

**Collection Date:** 09/19/2018 8:20

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.048	mg/L	1	09/26/2018 11:58	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/21/2018 16:35	145952
Barium	NELAP	0.0025		0.0239	mg/L	1	09/21/2018 16:35	145952
Cadmium	NELAP	0.0020		0.0022	mg/L	1	09/21/2018 16:35	145952
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/21/2018 16:35	145952
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/21/2018 16:35	145952
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/21/2018 16:35	145952
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/21/2018 16:35	145952
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:31	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/24/2018 18:20	146012
Fluorene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Naphthalene	NELAP	0.000200		0.00102	mg/L	1	09/24/2018 18:20	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/24/2018 18:20	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:20	146012
Surr: 2-Fluorobiphenyl	*	10-164		64.1	%REC	1	09/24/2018 18:20	146012
Surr: Nitrobenzene-d5	*	10.3-142		71.3	%REC	1	09/24/2018 18:20	146012
Surr: p-Terphenyl-d14	*	47.1-148		108.5	%REC	1	09/24/2018 18:20	146012
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		7.8	µg/L	1	09/21/2018 17:26	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 17:26	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 17:26	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 17:26	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		99.9	%REC	1	09/21/2018 17:26	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		101.3	%REC	1	09/21/2018 17:26	146010
Surr: Dibromofluoromethane	*	84.9-113		98.9	%REC	1	09/21/2018 17:26	146010
Surr: Toluene-d8	*	86.7-112		97.0	%REC	1	09/21/2018 17:26	146010

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-018

Client Sample ID: UMW-126-WG-20180919

Matrix: GROUNDWATER

Collection Date: 09/19/2018 10:50

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/26/2018 12:02	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 12:20	145967
Barium	NELAP	0.0025		0.0220	mg/L	1	09/24/2018 12:20	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 12:20	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 12:20	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 12:20	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 12:20	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 12:20	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:38	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/24/2018 18:57	146012
Fluorene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Naphthalene	NELAP	0.000200		0.000385	mg/L	1	09/24/2018 18:57	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/24/2018 18:57	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 18:57	146012
Surr: 2-Fluorobiphenyl	*	10-164		65.1	%REC	1	09/24/2018 18:57	146012
Surr: Nitrobenzene-d5	*	10.3-142		78.7	%REC	1	09/24/2018 18:57	146012
Surr: p-Terphenyl-d14	*	47.1-148		116.6	%REC	1	09/24/2018 18:57	146012
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		108	µg/L	1	09/21/2018 17:52	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 17:52	146010
Toluene	NELAP	2.0		3.4	µg/L	1	09/21/2018 17:52	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 17:52	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		102.9	%REC	1	09/21/2018 17:52	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		100.3	%REC	1	09/21/2018 17:52	146010
Surr: Dibromofluoromethane	*	84.9-113		99.3	%REC	1	09/21/2018 17:52	146010
Surr: Toluene-d8	*	86.7-112		96.4	%REC	1	09/21/2018 17:52	146010

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-019

Client Sample ID: UMW-127-WG-20180919

Matrix: GROUNDWATER

Collection Date: 09/19/2018 10:40

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/26/2018 12:07	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 12:23	145967
Barium	NELAP	0.0025		0.177	mg/L	1	09/24/2018 12:23	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 12:23	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 12:23	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 12:23	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 12:23	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 12:23	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:40	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		0.000238	mg/L	1	09/24/2018 19:34	146012
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 19:34	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 19:34	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 19:34	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 19:34	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 19:34	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 19:34	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 19:34	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/24/2018 19:34	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 19:34	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/24/2018 19:34	146012
Fluorene	NELAP	0.000100		0.000170	mg/L	1	09/24/2018 19:34	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 19:34	146012
Naphthalene	NELAP	0.000200		0.00220	mg/L	1	09/24/2018 19:34	146012
Phenanthrene	NELAP	0.000400		0.000451	mg/L	1	09/24/2018 19:34	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 19:34	146012
Surr: 2-Fluorobiphenyl	*	10-164		64.9	%REC	1	09/24/2018 19:34	146012
Surr: Nitrobenzene-d5	*	10.3-142		71.4	%REC	1	09/24/2018 19:34	146012
Surr: p-Terphenyl-d14	*	47.1-148		94.1	%REC	1	09/24/2018 19:34	146012
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		2.9	µg/L	1	09/21/2018 10:29	146015
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 10:29	146015
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 10:29	146015
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 10:29	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		92.2	%REC	1	09/21/2018 10:29	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		95.3	%REC	1	09/21/2018 10:29	146015
Surr: Dibromofluoromethane	*	84.9-113		100.2	%REC	1	09/21/2018 10:29	146015
Surr: Toluene-d8	*	86.7-112		96.7	%REC	1	09/21/2018 10:29	146015

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-020

Client Sample ID: UMW-300-WG-20180917

Matrix: GROUNDWATER

Collection Date: 09/17/2018 14:15

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/26/2018 12:16	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 12:27	145967
Barium	NELAP	0.0025		0.102	mg/L	1	09/24/2018 12:27	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 12:27	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 12:27	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 12:27	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 12:27	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 12:27	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:42	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 14:37	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 14:37	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 14:37	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 14:37	145965
Surr: 2-Fluorobiphenyl	*	10-164		61.6	%REC	1	09/22/2018 14:37	145965
Surr: Nitrobenzene-d5	*	10.3-142		74.6	%REC	1	09/22/2018 14:37	145965
Surr: p-Terphenyl-d14	*	47.1-148		91.9	%REC	1	09/22/2018 14:37	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 10:56	146015
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 10:56	146015
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 10:56	146015
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 10:56	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		92.8	%REC	1	09/21/2018 10:56	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		96.4	%REC	1	09/21/2018 10:56	146015
Surr: Dibromofluoromethane	*	84.9-113		101.3	%REC	1	09/21/2018 10:56	146015
Surr: Toluene-d8	*	86.7-112		95.7	%REC	1	09/21/2018 10:56	146015

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-021

Client Sample ID: UMW-301R-WG-20180919

Matrix: GROUNDWATER

Collection Date: 09/19/2018 16:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/26/2018 12:20	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 12:42	145967
Barium	NELAP	0.0025		0.0805	mg/L	1	09/24/2018 12:42	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 12:42	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 12:42	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 12:42	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 12:42	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 12:42	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:44	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		0.00274	mg/L	1	09/24/2018 22:00	146012
Acenaphthylene	NELAP	0.000100		0.00337	mg/L	1	09/24/2018 22:00	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:00	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:00	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:00	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:00	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:00	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:00	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:00	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:00	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/24/2018 22:00	146012
Fluorene	NELAP	0.000100		0.000142	mg/L	1	09/24/2018 22:00	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:00	146012
Naphthalene	NELAP	0.000200		0.000238	mg/L	1	09/24/2018 22:00	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/24/2018 22:00	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:00	146012
Surr: 2-Fluorobiphenyl	*	10-164		58.9	%REC	1	09/24/2018 22:00	146012
Surr: Nitrobenzene-d5	*	10.3-142		70.3	%REC	1	09/24/2018 22:00	146012
Surr: p-Terphenyl-d14	*	47.1-148		105.7	%REC	1	09/24/2018 22:00	146012
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 11:23	146015
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 11:23	146015
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 11:23	146015
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 11:23	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		93.9	%REC	1	09/21/2018 11:23	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		97.3	%REC	1	09/21/2018 11:23	146015
Surr: Dibromofluoromethane	*	84.9-113		100.5	%REC	1	09/21/2018 11:23	146015
Surr: Toluene-d8	*	86.7-112		96.8	%REC	1	09/21/2018 11:23	146015

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**Lab ID:** 18091324-022

**Client Sample ID:** UMW-302-WG-20180919

**Matrix:** GROUNDWATER

**Collection Date:** 09/19/2018 13:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.025		0.113	mg/L	5	09/26/2018 14:22	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 12:45	145967
Barium	NELAP	0.0025		0.0583	mg/L	1	09/24/2018 12:45	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 12:45	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 12:45	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 12:45	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 12:45	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 12:45	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:47	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		0.000456	mg/L	1	09/24/2018 22:37	146012
Acenaphthylene	NELAP	0.000100		0.000652	mg/L	1	09/24/2018 22:37	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:37	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:37	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:37	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:37	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:37	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:37	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:37	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:37	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/24/2018 22:37	146012
Fluorene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:37	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:37	146012
Naphthalene	NELAP	0.200		3.53	mg/L	1000	09/25/2018 14:18	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/24/2018 22:37	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 22:37	146012
Surr: 2-Fluorobiphenyl	*	10-164	S	0	%REC	1000	09/25/2018 14:18	146012
Surr: Nitrobenzene-d5	*	10.3-142	S	0	%REC	1000	09/25/2018 14:18	146012
Surr: p-Terphenyl-d14	*	47.1-148		113.5	%REC	1	09/24/2018 22:37	146012
Surrogate recovery is outside control limits due to sample dilution.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	5.0		409	µg/L	10	09/25/2018 16:53	146081
Ethylbenzene	NELAP	20.0		751	µg/L	10	09/25/2018 16:53	146081
Toluene	NELAP	20.0		ND	µg/L	10	09/25/2018 16:53	146081
Xylenes, Total	NELAP	20.0		198	µg/L	10	09/25/2018 16:53	146081
Surr: 1,2-Dichloroethane-d4	*	79.6-118		101.4	%REC	10	09/25/2018 16:53	146081
Surr: 4-Bromofluorobenzene	*	83.9-115		100.9	%REC	10	09/25/2018 16:53	146081
Surr: Dibromofluoromethane	*	84.9-113		100.5	%REC	10	09/25/2018 16:53	146081
Surr: Toluene-d8	*	86.7-112		96.1	%REC	10	09/25/2018 16:53	146081

*Elevated reporting limit due to high levels of target and/or non-target analytes.*

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-023

Client Sample ID: UMW-303-WG-20180918

Matrix: GROUNDWATER

Collection Date: 09/18/2018 10:35

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/26/2018 12:29	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 12:49	145967
Barium	NELAP	0.0025		0.0417	mg/L	1	09/24/2018 12:49	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 12:49	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 12:49	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 12:49	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 12:49	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 12:49	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:49	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 15:13	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 15:13	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 15:13	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:13	145965
Surr: 2-Fluorobiphenyl	*	10-164		61.7	%REC	1	09/22/2018 15:13	145965
Surr: Nitrobenzene-d5	*	10.3-142		64.8	%REC	1	09/22/2018 15:13	145965
Surr: p-Terphenyl-d14	*	47.1-148		83.0	%REC	1	09/22/2018 15:13	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 12:15	146015
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 12:15	146015
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 12:15	146015
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 12:15	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		92.4	%REC	1	09/21/2018 12:15	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		94.9	%REC	1	09/21/2018 12:15	146015
Surr: Dibromofluoromethane	*	84.9-113		101.5	%REC	1	09/21/2018 12:15	146015
Surr: Toluene-d8	*	86.7-112		94.9	%REC	1	09/21/2018 12:15	146015

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-024

Client Sample ID: UMW-304R-WG-20180919

Matrix: GROUNDWATER

Collection Date: 09/19/2018 9:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/26/2018 12:55	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 12:53	145967
Barium	NELAP	0.0025		0.0787	mg/L	1	09/24/2018 12:53	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 12:53	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 12:53	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 12:53	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 12:53	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 12:53	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:51	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		0.000539	mg/L	1	09/24/2018 20:10	146012
Acenaphthylene	NELAP	0.000100		0.00127	mg/L	1	09/24/2018 20:10	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 20:10	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 20:10	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 20:10	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 20:10	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 20:10	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 20:10	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/24/2018 20:10	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 20:10	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/24/2018 20:10	146012
Fluorene	NELAP	0.000100		ND	mg/L	1	09/24/2018 20:10	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 20:10	146012
Naphthalene	NELAP	0.000200		ND	mg/L	1	09/24/2018 20:10	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/24/2018 20:10	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 20:10	146012
Surr: 2-Fluorobiphenyl	*	10-164		69.7	%REC	1	09/24/2018 20:10	146012
Surr: Nitrobenzene-d5	*	10.3-142		73.2	%REC	1	09/24/2018 20:10	146012
Surr: p-Terphenyl-d14	*	47.1-148		111.6	%REC	1	09/24/2018 20:10	146012
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 12:42	146015
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 12:42	146015
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 12:42	146015
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 12:42	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		94.8	%REC	1	09/21/2018 12:42	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		95.5	%REC	1	09/21/2018 12:42	146015
Surr: Dibromofluoromethane	*	84.9-113		102.1	%REC	1	09/21/2018 12:42	146015
Surr: Toluene-d8	*	86.7-112		95.3	%REC	1	09/21/2018 12:42	146015

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-025

Client Sample ID: UMW-305-WG-20180918

Matrix: GROUNDWATER

Collection Date: 09/18/2018 16:10

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.012	mg/L	1	09/26/2018 13:12	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 16:54	145967
Barium	NELAP	0.0025		0.103	mg/L	1	09/24/2018 16:54	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 16:54	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 16:54	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 16:54	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 16:54	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 16:54	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 10:58	145976
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:48	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:48	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:48	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:48	145965
Benzo(a)pyrene	NELAP	0.000100	S	ND	mg/L	1	09/21/2018 20:48	145965
Benzo(b)fluoranthene	NELAP	0.000100	S	ND	mg/L	1	09/21/2018 20:48	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:48	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:48	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:48	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:48	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/21/2018 20:48	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:48	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100	S	ND	mg/L	1	09/21/2018 20:48	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/21/2018 20:48	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/21/2018 20:48	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/21/2018 20:48	145965
Surr: 2-Fluorobiphenyl	*	10-164		60.1	%REC	1	09/21/2018 20:48	145965
Surr: Nitrobenzene-d5	*	10.3-142		67.7	%REC	1	09/21/2018 20:48	145965
Surr: p-Terphenyl-d14	*	47.1-148		94.4	%REC	1	09/21/2018 20:48	145965
Matrix spike did not recover within control limits due to matrix interference.								
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 18:18	146010
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 18:18	146010
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 18:18	146010
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 18:18	146010
Surr: 1,2-Dichloroethane-d4	*	79.6-118		102.1	%REC	1	09/21/2018 18:18	146010
Surr: 4-Bromofluorobenzene	*	83.9-115		102.9	%REC	1	09/21/2018 18:18	146010
Surr: Dibromofluoromethane	*	84.9-113		100.4	%REC	1	09/21/2018 18:18	146010
Surr: Toluene-d8	*	86.7-112		97.5	%REC	1	09/21/2018 18:18	146010

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-026

Client Sample ID: UMW-306-WG-20180918

Matrix: GROUNDWATER

Collection Date: 09/18/2018 15:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.019	mg/L	1	09/26/2018 13:30	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 17:05	145967
Barium	NELAP	0.0025		0.122	mg/L	1	09/24/2018 17:05	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 17:05	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 17:05	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 17:05	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 17:05	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 17:05	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 11:14	145978
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 15:50	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 15:50	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 15:50	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 15:50	145965
Surr: 2-Fluorobiphenyl	*	10-164		64.0	%REC	1	09/22/2018 15:50	145965
Surr: Nitrobenzene-d5	*	10.3-142		69.6	%REC	1	09/22/2018 15:50	145965
Surr: p-Terphenyl-d14	*	47.1-148		92.2	%REC	1	09/22/2018 15:50	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 13:08	146015
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 13:08	146015
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 13:08	146015
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 13:08	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		95.5	%REC	1	09/21/2018 13:08	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		95.5	%REC	1	09/21/2018 13:08	146015
Surr: Dibromofluoromethane	*	84.9-113		102.8	%REC	1	09/21/2018 13:08	146015
Surr: Toluene-d8	*	86.7-112		95.0	%REC	1	09/21/2018 13:08	146015

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**Lab ID:** 18091324-027

**Client Sample ID:** UMW-307-WG-20180918

**Matrix:** GROUNDWATER

**Collection Date:** 09/18/2018 15:05

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.010		0.053	mg/L	2	09/26/2018 14:27	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 17:09	145967
Barium	NELAP	0.0025		0.132	mg/L	1	09/24/2018 17:09	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 17:09	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 17:09	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 17:09	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 17:09	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 17:09	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 11:21	145978
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 16:26	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 16:26	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 16:26	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 16:26	145965
Surr: 2-Fluorobiphenyl	*	10-164		60.3	%REC	1	09/22/2018 16:26	145965
Surr: Nitrobenzene-d5	*	10.3-142		70.2	%REC	1	09/22/2018 16:26	145965
Surr: p-Terphenyl-d14	*	47.1-148		96.2	%REC	1	09/22/2018 16:26	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 13:34	146015
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 13:34	146015
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 13:34	146015
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 13:34	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		95.2	%REC	1	09/21/2018 13:34	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		95.8	%REC	1	09/21/2018 13:34	146015
Surr: Dibromofluoromethane	*	84.9-113		102.8	%REC	1	09/21/2018 13:34	146015
Surr: Toluene-d8	*	86.7-112		95.6	%REC	1	09/21/2018 13:34	146015

## Laboratory Results

<http://www.teklabinc.com/>
**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**Lab ID:** 18091324-028

**Client Sample ID:** UMW-308-WG-20180919

**Matrix:** GROUNDWATER

**Collection Date:** 09/19/2018 9:50

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.018	mg/L	1	09/26/2018 13:39	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 17:13	145967
Barium	NELAP	0.0025		0.113	mg/L	1	09/24/2018 17:13	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 17:13	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 17:13	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 17:13	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 17:13	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 17:13	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 11:23	145978
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/24/2018 23:14	146012
Fluorene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Naphthalene	NELAP	0.00200		0.00285	mg/L	10	09/25/2018 13:40	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/24/2018 23:14	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:14	146012
Surr: 2-Fluorobiphenyl	*	10-164		61.7	%REC	1	09/24/2018 23:14	146012
Surr: Nitrobenzene-d5	*	10.3-142		77.0	%REC	1	09/24/2018 23:14	146012
Surr: p-Terphenyl-d14	*	47.1-148		101.7	%REC	1	09/24/2018 23:14	146012
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 14:00	146015
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 14:00	146015
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 14:00	146015
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 14:00	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		93.1	%REC	1	09/21/2018 14:00	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		96.2	%REC	1	09/21/2018 14:00	146015
Surr: Dibromofluoromethane	*	84.9-113		101.0	%REC	1	09/21/2018 14:00	146015
Surr: Toluene-d8	*	86.7-112		97.7	%REC	1	09/21/2018 14:00	146015

## Laboratory Results

<http://www.teklabinc.com/>

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-029

Client Sample ID: DUP 001-WG-20180918

Matrix: GROUNDWATER

Collection Date: 09/18/2018 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.250		0.433	mg/L	50	09/26/2018 14:31	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 17:27	145967
Barium	NELAP	0.0025		0.154	mg/L	1	09/24/2018 17:27	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 17:27	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 17:27	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 17:27	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 17:27	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 17:27	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 11:26	145978
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Chrysene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/22/2018 17:03	145965
Fluorene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Naphthalene	NELAP	0.000200	B	ND	mg/L	1	09/22/2018 17:03	145965
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/22/2018 17:03	145965
Pyrene	NELAP	0.000100		ND	mg/L	1	09/22/2018 17:03	145965
Surr: 2-Fluorobiphenyl	*	10-164		62.3	%REC	1	09/22/2018 17:03	145965
Surr: Nitrobenzene-d5	*	10.3-142		69.2	%REC	1	09/22/2018 17:03	145965
Surr: p-Terphenyl-d14	*	47.1-148		94.8	%REC	1	09/22/2018 17:03	145965
Contamination present in the MBLK for Naphthalene. Sample results below the reporting limit are reportable per the TNI Standard.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		4.5	µg/L	1	09/21/2018 14:26	146015
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 14:26	146015
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 14:26	146015
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 14:26	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		93.3	%REC	1	09/21/2018 14:26	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		96.5	%REC	1	09/21/2018 14:26	146015
Surr: Dibromofluoromethane	*	84.9-113		100.3	%REC	1	09/21/2018 14:26	146015
Surr: Toluene-d8	*	86.7-112		95.0	%REC	1	09/21/2018 14:26	146015

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-030

Client Sample ID: DUP 002-WG-20180919

Matrix: GROUNDWATER

Collection Date: 09/19/2018 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		0.010	mg/L	1	09/26/2018 14:09	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 17:31	145967
Barium	NELAP	0.0025		0.0313	mg/L	1	09/24/2018 17:31	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 17:31	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 17:31	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 17:31	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 17:31	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 17:31	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 11:32	145978
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		0.000522	mg/L	1	09/24/2018 23:50	146012
Acenaphthylene	NELAP	0.000100		0.000284	mg/L	1	09/24/2018 23:50	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:50	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:50	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:50	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:50	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:50	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:50	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:50	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:50	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/24/2018 23:50	146012
Fluorene	NELAP	0.000100		0.000171	mg/L	1	09/24/2018 23:50	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:50	146012
Naphthalene	NELAP	0.00500		0.0503	mg/L	25	09/25/2018 12:24	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/24/2018 23:50	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/24/2018 23:50	146012
Surr: 2-Fluorobiphenyl	*	10-164		66.1	%REC	1	09/24/2018 23:50	146012
Surr: Nitrobenzene-d5	*	10.3-142		71.5	%REC	1	09/24/2018 23:50	146012
Surr: p-Terphenyl-d14	*	47.1-148		116.6	%REC	1	09/24/2018 23:50	146012
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		86.9	µg/L	1	09/21/2018 14:52	146015
Ethylbenzene	NELAP	2.0		8.3	µg/L	1	09/21/2018 14:52	146015
Toluene	NELAP	2.0		39.4	µg/L	1	09/21/2018 14:52	146015
Xylenes, Total	NELAP	2.0		21.6	µg/L	1	09/21/2018 14:52	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		95.2	%REC	1	09/21/2018 14:52	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		95.7	%REC	1	09/21/2018 14:52	146015
Surr: Dibromofluoromethane	*	84.9-113		99.8	%REC	1	09/21/2018 14:52	146015
Surr: Toluene-d8	*	86.7-112		95.2	%REC	1	09/21/2018 14:52	146015

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-031

Client Sample ID: DUP 003-WG-20180919

Matrix: GROUNDWATER

Collection Date: 09/19/2018 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.026		0.113	mg/L	5	09/26/2018 14:57	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 17:35	145967
Barium	NELAP	0.0025		0.0603	mg/L	1	09/24/2018 17:35	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 17:35	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 17:35	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 17:35	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 17:35	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 17:35	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 11:35	145978
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		0.000417	mg/L	1	09/25/2018 0:27	146012
Acenaphthylene	NELAP	0.000100		0.000569	mg/L	1	09/25/2018 0:27	146012
Anthracene	NELAP	0.000100		ND	mg/L	1	09/25/2018 0:27	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/25/2018 0:27	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/25/2018 0:27	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/25/2018 0:27	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/25/2018 0:27	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/25/2018 0:27	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/25/2018 0:27	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/25/2018 0:27	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/25/2018 0:27	146012
Fluorene	NELAP	0.000100		ND	mg/L	1	09/25/2018 0:27	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/25/2018 0:27	146012
Naphthalene	NELAP	0.200		2.61	mg/L	1000	09/25/2018 14:56	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/25/2018 0:27	146012
Pyrene	NELAP	0.000100		ND	mg/L	1	09/25/2018 0:27	146012
Surr: 2-Fluorobiphenyl	*	10-164	S	0	%REC	1000	09/25/2018 14:56	146012
Surr: Nitrobenzene-d5	*	10.3-142	S	0	%REC	1000	09/25/2018 14:56	146012
Surr: p-Terphenyl-d14	*	47.1-148		102.2	%REC	1	09/25/2018 0:27	146012
Surrogate recovery is outside control limits due to sample dilution.								
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	5.0		420	µg/L	10	09/25/2018 17:20	146081
Ethylbenzene	NELAP	20.0		775	µg/L	10	09/25/2018 17:20	146081
Toluene	NELAP	20.0		ND	µg/L	10	09/25/2018 17:20	146081
Xylenes, Total	NELAP	20.0		203	µg/L	10	09/25/2018 17:20	146081
Surr: 1,2-Dichloroethane-d4	*	79.6-118		100.4	%REC	10	09/25/2018 17:20	146081
Surr: 4-Bromofluorobenzene	*	83.9-115		99.5	%REC	10	09/25/2018 17:20	146081
Surr: Dibromofluoromethane	*	84.9-113		100.3	%REC	10	09/25/2018 17:20	146081
Surr: Toluene-d8	*	86.7-112		95.9	%REC	10	09/25/2018 17:20	146081

Elevated reporting limit due to high levels of target and/or non-target analytes.

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

Lab ID: 18091324-032

Client Sample ID: EB-01-WQ-20180919

Matrix: GROUNDWATER

Collection Date: 09/19/2018 8:20

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 9012A (TOTAL)</b>								
Cyanide	NELAP	0.005		< 0.005	mg/L	1	09/26/2018 14:18	146079
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	09/24/2018 17:38	145967
Barium	NELAP	0.0025		0.0035	mg/L	1	09/24/2018 17:38	145967
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	09/24/2018 17:38	145967
Chromium	NELAP	0.0050		< 0.0050	mg/L	1	09/24/2018 17:38	145967
Lead	NELAP	0.0075		< 0.0075	mg/L	1	09/24/2018 17:38	145967
Selenium	NELAP	0.0400		< 0.0400	mg/L	1	09/24/2018 17:38	145967
Silver	NELAP	0.0070		< 0.0070	mg/L	1	09/24/2018 17:38	145967
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	09/24/2018 11:37	145978
<b>SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS</b>								
Acenaphthene	NELAP	0.000100		ND	mg/L	1	09/25/2018 1:04	146012
Acenaphthylene	NELAP	0.000100		ND	mg/L	1	09/25/2018 1:04	146012
Anthracene	NELAP	0.000100		0.000134	mg/L	1	09/25/2018 1:04	146012
Benzo(a)anthracene	NELAP	0.000100		ND	mg/L	1	09/25/2018 1:04	146012
Benzo(a)pyrene	NELAP	0.000100		ND	mg/L	1	09/25/2018 1:04	146012
Benzo(b)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/25/2018 1:04	146012
Benzo(g,h,i)perylene	NELAP	0.000100		ND	mg/L	1	09/25/2018 1:04	146012
Benzo(k)fluoranthene	NELAP	0.000100		ND	mg/L	1	09/25/2018 1:04	146012
Chrysene	NELAP	0.000100		ND	mg/L	1	09/25/2018 1:04	146012
Dibenzo(a,h)anthracene	NELAP	0.000100		ND	mg/L	1	09/25/2018 1:04	146012
Fluoranthene	NELAP	0.000200		ND	mg/L	1	09/25/2018 1:04	146012
Fluorene	NELAP	0.000100		ND	mg/L	1	09/25/2018 1:04	146012
Indeno(1,2,3-cd)pyrene	NELAP	0.000100		ND	mg/L	1	09/25/2018 1:04	146012
Naphthalene	NELAP	0.00500		0.00500	mg/L	25	09/25/2018 13:02	146012
Phenanthrene	NELAP	0.000400		ND	mg/L	1	09/25/2018 1:04	146012
Pyrene	NELAP	0.000100		0.000107	mg/L	1	09/25/2018 1:04	146012
Surr: 2-Fluorobiphenyl	*	10-164		65.2	%REC	1	09/25/2018 1:04	146012
Surr: Nitrobenzene-d5	*	10.3-142		73.3	%REC	1	09/25/2018 1:04	146012
Surr: p-Terphenyl-d14	*	47.1-148		104.6	%REC	1	09/25/2018 1:04	146012
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 15:45	146015
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 15:45	146015
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 15:45	146015
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 15:45	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		93.3	%REC	1	09/21/2018 15:45	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		95.4	%REC	1	09/21/2018 15:45	146015
Surr: Dibromofluoromethane	*	84.9-113		101.8	%REC	1	09/21/2018 15:45	146015
Surr: Toluene-d8	*	86.7-112		94.7	%REC	1	09/21/2018 15:45	146015

## Laboratory Results

<http://www.teklabinc.com/>

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**Lab ID:** 18091324-033

**Client Sample ID:** TB-01-WQ-201809

**Matrix:** TRIP BLANK

**Collection Date:** 09/20/2018 15:22

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Benzene	NELAP	0.5		ND	µg/L	1	09/21/2018 16:11	146015
Ethylbenzene	NELAP	2.0		ND	µg/L	1	09/21/2018 16:11	146015
Toluene	NELAP	2.0		ND	µg/L	1	09/21/2018 16:11	146015
Xylenes, Total	NELAP	2.0		ND	µg/L	1	09/21/2018 16:11	146015
Surr: 1,2-Dichloroethane-d4	*	79.6-118		94.7	%REC	1	09/21/2018 16:11	146015
Surr: 4-Bromofluorobenzene	*	83.9-115		95.3	%REC	1	09/21/2018 16:11	146015
Surr: Dibromofluoromethane	*	84.9-113		103.1	%REC	1	09/21/2018 16:11	146015
Surr: Toluene-d8	*	86.7-112		96.9	%REC	1	09/21/2018 16:11	146015

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
18091324-001	UMW-102-WG-20180917	Groundwater	4	09/17/2018 17:10
18091324-002	UMW-105-WG-20180919	Groundwater	4	09/19/2018 14:15
18091324-003	UMW-106R-WG-20180918	Groundwater	4	09/18/2018 11:50
18091324-004	UMW-107R-WG-20180918	Groundwater	4	09/18/2018 16:45
18091324-005	UMW-108-WG-20180918	Groundwater	4	09/18/2018 9:00
18091324-006	UMW-109-WG-20180917	Groundwater	4	09/17/2018 17:15
18091324-007	UMW-111A-WG-20180917	Groundwater	4	09/17/2018 14:25
18091324-008	UMW-116-WG-20180918	Groundwater	4	09/18/2018 10:25
18091324-009	UMW-117-WG-20180918	Groundwater	4	09/18/2018 11:40
18091324-010	UMW-118-WG-20180918	Groundwater	4	09/18/2018 8:45
18091324-011	UMW-119-WG-20180917	Groundwater	4	09/17/2018 15:45
18091324-012	UMW-120-WG-20180917	Groundwater	4	09/17/2018 16:10
18091324-013	UMW-121-WG-20180919	Groundwater	4	09/19/2018 13:35
18091324-014	UMW-122-WG-20180918	Groundwater	4	09/18/2018 14:05
18091324-015	UMW-123-WG-20180918	Groundwater	4	09/18/2018 13:45
18091324-016	UMW-124-WG-20180919	Groundwater	4	09/19/2018 8:45
18091324-017	UMW-125-WG-20180919	Groundwater	4	09/19/2018 8:20
18091324-018	UMW-126-WG-20180919	Groundwater	4	09/19/2018 10:50
18091324-019	UMW-127-WG-20180919	Groundwater	4	09/19/2018 10:40
18091324-020	UMW-300-WG-20180917	Groundwater	4	09/17/2018 14:15
18091324-021	UMW-301R-WG-20180919	Groundwater	4	09/19/2018 16:30
18091324-022	UMW-302-WG-20180919	Groundwater	4	09/19/2018 13:25
18091324-023	UMW-303-WG-20180918	Groundwater	4	09/18/2018 10:35
18091324-024	UMW-304R-WG-20180919	Groundwater	4	09/19/2018 9:25
18091324-025	UMW-305-WG-20180918	Groundwater	4	09/18/2018 16:10
18091324-026	UMW-306-WG-20180918	Groundwater	4	09/18/2018 15:30
18091324-027	UMW-307-WG-20180918	Groundwater	4	09/18/2018 15:05
18091324-028	UMW-308-WG-20180919	Groundwater	4	09/19/2018 9:50
18091324-029	DUP 001-WG-20180918	Groundwater	4	09/18/2018 0:00
18091324-030	DUP 002-WG-20180919	Groundwater	4	09/19/2018 0:00
18091324-031	DUP 003-WG-20180919	Groundwater	4	09/19/2018 0:00
18091324-032	EB-01-WQ-20180919	Groundwater	4	09/19/2018 8:20
18091324-033	TB-01-WQ-201809	Trip Blank	1	09/20/2018 15:22

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Sample ID	Client Sample ID	Collection Date	Received Date		
		Test Name		Prep Date/Time	Analysis Date/Time
18091324-001A	UMW-102-WG-20180917	09/17/2018 17:10	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/21/2018 10:41	09/21/2018 17:09
18091324-001B	UMW-102-WG-20180917	09/17/2018 17:10	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 15:00
	SW-846 7470A (Total)			09/20/2018 17:39	09/21/2018 8:13
18091324-001C	UMW-102-WG-20180917	09/17/2018 17:10	09/20/2018 15:22		
	SW-846 9012A (Total)			09/24/2018 16:15	09/25/2018 12:13
18091324-001D	UMW-102-WG-20180917	09/17/2018 17:10	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 10:19
18091324-002A	UMW-105-WG-20180919	09/19/2018 14:15	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 9:52	09/24/2018 16:30
18091324-002B	UMW-105-WG-20180919	09/19/2018 14:15	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 15:03
	SW-846 7470A (Total)			09/20/2018 17:39	09/21/2018 8:15
18091324-002C	UMW-105-WG-20180919	09/19/2018 14:15	09/20/2018 15:22		
	SW-846 9012A (Total)			09/24/2018 16:15	09/25/2018 12:18
18091324-002D	UMW-105-WG-20180919	09/19/2018 14:15	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 10:46
18091324-003A	UMW-106R-WG-20180918	09/18/2018 11:50	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/21/2018 10:41	09/21/2018 17:45
18091324-003B	UMW-106R-WG-20180918	09/18/2018 11:50	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 15:07
	SW-846 7470A (Total)			09/20/2018 17:39	09/21/2018 8:17
18091324-003C	UMW-106R-WG-20180918	09/18/2018 11:50	09/20/2018 15:22		
	SW-846 9012A (Total)			09/24/2018 16:15	09/25/2018 12:27
18091324-003D	UMW-106R-WG-20180918	09/18/2018 11:50	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 11:12
18091324-004A	UMW-107R-WG-20180918	09/18/2018 16:45	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/21/2018 10:41	09/21/2018 18:22
18091324-004B	UMW-107R-WG-20180918	09/18/2018 16:45	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 15:18
	SW-846 7470A (Total)			09/20/2018 17:39	09/21/2018 8:19
18091324-004C	UMW-107R-WG-20180918	09/18/2018 16:45	09/20/2018 15:22		
	SW-846 9012A (Total)			09/24/2018 16:15	09/25/2018 16:03
18091324-004D	UMW-107R-WG-20180918	09/18/2018 16:45	09/20/2018 15:22		

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Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
		Test Name			
		SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS			09/21/2018 11:39
18091324-005A	UMW-108-WG-20180918	09/18/2018 9:00	09/20/2018 15:22		
		SW-846 3510C,8270C, Semi-Volatile Organic Compounds		09/21/2018 10:41	09/21/2018 18:58
18091324-005B	UMW-108-WG-20180918	09/18/2018 9:00	09/20/2018 15:22		
		SW-846 3005A, 6010B, Metals by ICP (Total)		09/20/2018 18:12	09/21/2018 15:33
		SW-846 7470A (Total)		09/20/2018 17:39	09/21/2018 8:22
18091324-005C	UMW-108-WG-20180918	09/18/2018 9:00	09/20/2018 15:22		
		SW-846 9012A (Total)		09/24/2018 16:15	09/25/2018 14:49
18091324-005D	UMW-108-WG-20180918	09/18/2018 9:00	09/20/2018 15:22		
		SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS			09/21/2018 12:06
18091324-006A	UMW-109-WG-20180917	09/17/2018 17:15	09/20/2018 15:22		
		SW-846 3510C,8270C, Semi-Volatile Organic Compounds		09/21/2018 10:41	09/21/2018 19:35
18091324-006B	UMW-109-WG-20180917	09/17/2018 17:15	09/20/2018 15:22		
		SW-846 3005A, 6010B, Metals by ICP (Total)		09/20/2018 18:12	09/21/2018 15:37
		SW-846 7470A (Total)		09/20/2018 17:39	09/21/2018 8:24
18091324-006C	UMW-109-WG-20180917	09/17/2018 17:15	09/20/2018 15:22		
		SW-846 9012A (Total)		09/24/2018 16:15	09/25/2018 14:53
18091324-006D	UMW-109-WG-20180917	09/17/2018 17:15	09/20/2018 15:22		
		SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS			09/21/2018 12:32
18091324-007A	UMW-111A-WG-20180917	09/17/2018 14:25	09/20/2018 15:22		
		SW-846 3510C,8270C, Semi-Volatile Organic Compounds		09/21/2018 10:41	09/21/2018 20:11
18091324-007B	UMW-111A-WG-20180917	09/17/2018 14:25	09/20/2018 15:22		
		SW-846 3005A, 6010B, Metals by ICP (Total)		09/20/2018 18:12	09/21/2018 15:40
		SW-846 7470A (Total)		09/20/2018 17:39	09/21/2018 8:26
18091324-007C	UMW-111A-WG-20180917	09/17/2018 14:25	09/20/2018 15:22		
		SW-846 9012A (Total)		09/24/2018 16:15	09/25/2018 15:20
18091324-007D	UMW-111A-WG-20180917	09/17/2018 14:25	09/20/2018 15:22		
		SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS			09/21/2018 13:00
18091324-008A	UMW-116-WG-20180918	09/18/2018 10:25	09/20/2018 15:22		
		SW-846 3510C,8270C, Semi-Volatile Organic Compounds		09/21/2018 14:57	09/22/2018 10:22
18091324-008B	UMW-116-WG-20180918	09/18/2018 10:25	09/20/2018 15:22		
		SW-846 3005A, 6010B, Metals by ICP (Total)		09/20/2018 18:12	09/21/2018 15:44
		SW-846 7470A (Total)		09/20/2018 17:39	09/21/2018 8:28
18091324-008C	UMW-116-WG-20180918	09/18/2018 10:25	09/20/2018 15:22		
		SW-846 9012A (Total)		09/24/2018 16:15	09/25/2018 15:24

## Dates Report

<http://www.teklabinc.com/>
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		Test Name		Prep Date/Time	Analysis Date/Time
18091324-008D	UMW-116-WG-20180918	09/18/2018 10:25	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS			09/21/2018 13:26	
18091324-009A	UMW-117-WG-20180918	09/18/2018 11:40	09/20/2018 15:22		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds			09/21/2018 14:57	09/22/2018 10:58
18091324-009B	UMW-117-WG-20180918	09/18/2018 11:40	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 15:48
	SW-846 7470A (Total)			09/20/2018 17:39	09/21/2018 8:31
18091324-009C	UMW-117-WG-20180918	09/18/2018 11:40	09/20/2018 15:22		
	SW-846 9012A (Total)			09/24/2018 16:15	09/25/2018 15:28
18091324-009D	UMW-117-WG-20180918	09/18/2018 11:40	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS			09/21/2018 13:53	
18091324-010A	UMW-118-WG-20180918	09/18/2018 8:45	09/20/2018 15:22		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds			09/21/2018 14:57	09/22/2018 11:35
18091324-010B	UMW-118-WG-20180918	09/18/2018 8:45	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 15:51
	SW-846 7470A (Total)			09/20/2018 17:39	09/21/2018 8:37
18091324-010C	UMW-118-WG-20180918	09/18/2018 8:45	09/20/2018 15:22		
	SW-846 9012A (Total)			09/24/2018 16:15	09/25/2018 15:33
18091324-010D	UMW-118-WG-20180918	09/18/2018 8:45	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS			09/21/2018 14:20	
18091324-011A	UMW-119-WG-20180917	09/17/2018 15:45	09/20/2018 15:22		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds			09/21/2018 14:57	09/22/2018 12:11
18091324-011B	UMW-119-WG-20180917	09/17/2018 15:45	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 16:02
	SW-846 7470A (Total)			09/20/2018 17:39	09/21/2018 8:40
18091324-011C	UMW-119-WG-20180917	09/17/2018 15:45	09/20/2018 15:22		
	SW-846 9012A (Total)			09/24/2018 16:15	09/25/2018 16:12
18091324-011D	UMW-119-WG-20180917	09/17/2018 15:45	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS			09/21/2018 14:46	
18091324-012A	UMW-120-WG-20180917	09/17/2018 16:10	09/20/2018 15:22		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds			09/21/2018 14:57	09/22/2018 12:47
18091324-012B	UMW-120-WG-20180917	09/17/2018 16:10	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 16:06
	SW-846 7470A (Total)			09/20/2018 17:39	09/21/2018 8:42
18091324-012C	UMW-120-WG-20180917	09/17/2018 16:10	09/20/2018 15:22		

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		Test Name			
	SW-846 9012A (Total)			09/24/2018 16:15	09/25/2018 16:47
18091324-012D	UMW-120-WG-20180917	09/17/2018 16:10	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 15:13
18091324-013A	UMW-121-WG-20180919	09/19/2018 13:35	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 9:52	09/24/2018 17:06
18091324-013B	UMW-121-WG-20180919	09/19/2018 13:35	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 16:21
	SW-846 7470A (Total)			09/20/2018 17:39	09/21/2018 8:44
18091324-013C	UMW-121-WG-20180919	09/19/2018 13:35	09/20/2018 15:22		
	SW-846 9012A (Total)			09/24/2018 16:15	09/25/2018 16:56
18091324-013D	UMW-121-WG-20180919	09/19/2018 13:35	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 15:40
18091324-014A	UMW-122-WG-20180918	09/18/2018 14:05	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/21/2018 14:57	09/22/2018 13:24
18091324-014B	UMW-122-WG-20180918	09/18/2018 14:05	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 16:24
	SW-846 7470A (Total)			09/21/2018 13:03	09/24/2018 10:24
18091324-014C	UMW-122-WG-20180918	09/18/2018 14:05	09/20/2018 15:22		
	SW-846 9012A (Total)			09/24/2018 16:15	09/25/2018 16:34
18091324-014D	UMW-122-WG-20180918	09/18/2018 14:05	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 16:06
18091324-015A	UMW-123-WG-20180918	09/18/2018 13:45	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/21/2018 14:57	09/22/2018 14:00
18091324-015B	UMW-123-WG-20180918	09/18/2018 13:45	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 16:28
	SW-846 7470A (Total)			09/21/2018 13:03	09/24/2018 10:26
18091324-015C	UMW-123-WG-20180918	09/18/2018 13:45	09/20/2018 15:22		
	SW-846 9012A (Total)			09/24/2018 16:15	09/25/2018 16:43
18091324-015D	UMW-123-WG-20180918	09/18/2018 13:45	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 16:33
18091324-016A	UMW-124-WG-20180919	09/19/2018 8:45	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 9:52	09/24/2018 17:43
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 9:52	09/25/2018 11:47
18091324-016B	UMW-124-WG-20180919	09/19/2018 8:45	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/20/2018 18:12	09/21/2018 16:32

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Sample ID	Client Sample ID	Collection Date	Received Date	
			Prep Date/Time	Analysis Date/Time
		Test Name		
		SW-846 7470A (Total)	09/21/2018 13:03	09/24/2018 10:29
18091324-016C	UMW-124-WG-20180919	09/19/2018 8:45	09/20/2018 15:22	
		SW-846 9012A (Total)	09/25/2018 15:35	09/26/2018 11:54
18091324-016D	UMW-124-WG-20180919	09/19/2018 8:45	09/20/2018 15:22	
		SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS		09/21/2018 17:00
18091324-017A	UMW-125-WG-20180919	09/19/2018 8:20	09/20/2018 15:22	
		SW-846 3510C,8270C, Semi-Volatile Organic Compounds	09/24/2018 9:52	09/24/2018 18:20
18091324-017B	UMW-125-WG-20180919	09/19/2018 8:20	09/20/2018 15:22	
		SW-846 3005A, 6010B, Metals by ICP (Total)	09/20/2018 18:12	09/21/2018 16:35
		SW-846 7470A (Total)	09/21/2018 13:03	09/24/2018 10:31
18091324-017C	UMW-125-WG-20180919	09/19/2018 8:20	09/20/2018 15:22	
		SW-846 9012A (Total)	09/25/2018 15:35	09/26/2018 11:58
18091324-017D	UMW-125-WG-20180919	09/19/2018 8:20	09/20/2018 15:22	
		SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS		09/21/2018 17:26
18091324-018A	UMW-126-WG-20180919	09/19/2018 10:50	09/20/2018 15:22	
		SW-846 3510C,8270C, Semi-Volatile Organic Compounds	09/24/2018 9:52	09/24/2018 18:57
18091324-018B	UMW-126-WG-20180919	09/19/2018 10:50	09/20/2018 15:22	
		SW-846 3005A, 6010B, Metals by ICP (Total)	09/21/2018 11:08	09/24/2018 12:20
		SW-846 7470A (Total)	09/21/2018 13:03	09/24/2018 10:38
18091324-018C	UMW-126-WG-20180919	09/19/2018 10:50	09/20/2018 15:22	
		SW-846 9012A (Total)	09/25/2018 15:35	09/26/2018 12:02
18091324-018D	UMW-126-WG-20180919	09/19/2018 10:50	09/20/2018 15:22	
		SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS		09/21/2018 17:52
18091324-019A	UMW-127-WG-20180919	09/19/2018 10:40	09/20/2018 15:22	
		SW-846 3510C,8270C, Semi-Volatile Organic Compounds	09/24/2018 9:52	09/24/2018 19:34
18091324-019B	UMW-127-WG-20180919	09/19/2018 10:40	09/20/2018 15:22	
		SW-846 3005A, 6010B, Metals by ICP (Total)	09/21/2018 11:08	09/24/2018 12:23
		SW-846 7470A (Total)	09/21/2018 13:03	09/24/2018 10:40
18091324-019C	UMW-127-WG-20180919	09/19/2018 10:40	09/20/2018 15:22	
		SW-846 9012A (Total)	09/25/2018 15:35	09/26/2018 12:07
18091324-019D	UMW-127-WG-20180919	09/19/2018 10:40	09/20/2018 15:22	
		SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS		09/21/2018 10:29
18091324-020A	UMW-300-WG-20180917	09/17/2018 14:15	09/20/2018 15:22	
		SW-846 3510C,8270C, Semi-Volatile Organic Compounds	09/21/2018 14:57	09/22/2018 14:37
18091324-020B	UMW-300-WG-20180917	09/17/2018 14:15	09/20/2018 15:22	

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Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
		Test Name			
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 12:27
	SW-846 7470A (Total)			09/21/2018 13:03	09/24/2018 10:42
18091324-020C	UMW-300-WG-20180917	09/17/2018 14:15	09/20/2018 15:22		
	SW-846 9012A (Total)			09/25/2018 15:35	09/26/2018 12:16
18091324-020D	UMW-300-WG-20180917	09/17/2018 14:15	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 10:56
18091324-021A	UMW-301R-WG-20180919	09/19/2018 16:30	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 12:02	09/24/2018 22:00
18091324-021B	UMW-301R-WG-20180919	09/19/2018 16:30	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 12:42
	SW-846 7470A (Total)			09/21/2018 13:03	09/24/2018 10:44
18091324-021C	UMW-301R-WG-20180919	09/19/2018 16:30	09/20/2018 15:22		
	SW-846 9012A (Total)			09/25/2018 15:35	09/26/2018 12:20
18091324-021D	UMW-301R-WG-20180919	09/19/2018 16:30	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 11:23
18091324-022A	UMW-302-WG-20180919	09/19/2018 13:25	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 12:02	09/24/2018 22:37
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 12:02	09/25/2018 14:18
18091324-022B	UMW-302-WG-20180919	09/19/2018 13:25	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 12:45
	SW-846 7470A (Total)			09/21/2018 13:03	09/24/2018 10:47
18091324-022C	UMW-302-WG-20180919	09/19/2018 13:25	09/20/2018 15:22		
	SW-846 9012A (Total)			09/25/2018 15:35	09/26/2018 14:22
18091324-022D	UMW-302-WG-20180919	09/19/2018 13:25	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/25/2018 16:53
18091324-023A	UMW-303-WG-20180918	09/18/2018 10:35	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/21/2018 14:57	09/22/2018 15:13
18091324-023B	UMW-303-WG-20180918	09/18/2018 10:35	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 12:49
	SW-846 7470A (Total)			09/21/2018 13:03	09/24/2018 10:49
18091324-023C	UMW-303-WG-20180918	09/18/2018 10:35	09/20/2018 15:22		
	SW-846 9012A (Total)			09/25/2018 15:35	09/26/2018 12:29
18091324-023D	UMW-303-WG-20180918	09/18/2018 10:35	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 12:15
18091324-024A	UMW-304R-WG-20180919	09/19/2018 9:25	09/20/2018 15:22		

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 9:52	09/24/2018 20:10
18091324-024B	UMW-304R-WG-20180919	09/19/2018 9:25	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 12:53
	SW-846 7470A (Total)			09/21/2018 13:03	09/24/2018 10:51
18091324-024C	UMW-304R-WG-20180919	09/19/2018 9:25	09/20/2018 15:22		
	SW-846 9012A (Total)			09/25/2018 15:35	09/26/2018 12:55
18091324-024D	UMW-304R-WG-20180919	09/19/2018 9:25	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 12:42
18091324-025A	UMW-305-WG-20180918	09/18/2018 16:10	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/21/2018 10:41	09/21/2018 20:48
18091324-025B	UMW-305-WG-20180918	09/18/2018 16:10	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 16:54
	SW-846 7470A (Total)			09/21/2018 13:03	09/24/2018 10:58
18091324-025C	UMW-305-WG-20180918	09/18/2018 16:10	09/20/2018 15:22		
	SW-846 9012A (Total)			09/25/2018 15:35	09/26/2018 13:12
18091324-025D	UMW-305-WG-20180918	09/18/2018 16:10	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 18:18
18091324-026A	UMW-306-WG-20180918	09/18/2018 15:30	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/21/2018 14:57	09/22/2018 15:50
18091324-026B	UMW-306-WG-20180918	09/18/2018 15:30	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 17:05
	SW-846 7470A (Total)			09/21/2018 13:58	09/24/2018 11:14
18091324-026C	UMW-306-WG-20180918	09/18/2018 15:30	09/20/2018 15:22		
	SW-846 9012A (Total)			09/25/2018 15:35	09/26/2018 13:30
18091324-026D	UMW-306-WG-20180918	09/18/2018 15:30	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 13:08
18091324-027A	UMW-307-WG-20180918	09/18/2018 15:05	09/20/2018 15:22		
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/21/2018 14:57	09/22/2018 16:26
18091324-027B	UMW-307-WG-20180918	09/18/2018 15:05	09/20/2018 15:22		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 17:09
	SW-846 7470A (Total)			09/21/2018 13:58	09/24/2018 11:21
18091324-027C	UMW-307-WG-20180918	09/18/2018 15:05	09/20/2018 15:22		
	SW-846 9012A (Total)			09/25/2018 15:35	09/26/2018 14:27
18091324-027D	UMW-307-WG-20180918	09/18/2018 15:05	09/20/2018 15:22		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 13:34

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

Sample ID	Client Sample ID	Collection Date	Received Date		Prep Date/Time	Analysis Date/Time
18091324-028A	UMW-308-WG-20180919	09/19/2018 9:50	09/20/2018 15:22			
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 12:02	09/24/2018 23:14	
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 12:02	09/25/2018 13:40	
18091324-028B	UMW-308-WG-20180919	09/19/2018 9:50	09/20/2018 15:22			
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 17:13	
	SW-846 7470A (Total)			09/21/2018 13:58	09/24/2018 11:23	
18091324-028C	UMW-308-WG-20180919	09/19/2018 9:50	09/20/2018 15:22			
	SW-846 9012A (Total)			09/25/2018 15:35	09/26/2018 13:39	
18091324-028D	UMW-308-WG-20180919	09/19/2018 9:50	09/20/2018 15:22			
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 14:00	
18091324-029A	DUP 001-WG-20180918	09/18/2018 0:00	09/20/2018 15:22			
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/21/2018 14:57	09/22/2018 17:03	
18091324-029B	DUP 001-WG-20180918	09/18/2018 0:00	09/20/2018 15:22			
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 17:27	
	SW-846 7470A (Total)			09/21/2018 13:58	09/24/2018 11:26	
18091324-029C	DUP 001-WG-20180918	09/18/2018 0:00	09/20/2018 15:22			
	SW-846 9012A (Total)			09/25/2018 15:35	09/26/2018 14:31	
18091324-029D	DUP 001-WG-20180918	09/18/2018 0:00	09/20/2018 15:22			
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 14:26	
18091324-030A	DUP 002-WG-20180919	09/19/2018 0:00	09/20/2018 15:22			
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 12:02	09/24/2018 23:50	
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 12:02	09/25/2018 12:24	
18091324-030B	DUP 002-WG-20180919	09/19/2018 0:00	09/20/2018 15:22			
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 17:31	
	SW-846 7470A (Total)			09/21/2018 13:58	09/24/2018 11:32	
18091324-030C	DUP 002-WG-20180919	09/19/2018 0:00	09/20/2018 15:22			
	SW-846 9012A (Total)			09/25/2018 15:35	09/26/2018 14:09	
18091324-030D	DUP 002-WG-20180919	09/19/2018 0:00	09/20/2018 15:22			
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/21/2018 14:52	
18091324-031A	DUP 003-WG-20180919	09/19/2018 0:00	09/20/2018 15:22			
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 12:02	09/25/2018 0:27	
	SW-846 3510C,8270C, Semi-Volatile Organic Compounds			09/24/2018 12:02	09/25/2018 14:56	
18091324-031B	DUP 003-WG-20180919	09/19/2018 0:00	09/20/2018 15:22			
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/21/2018 11:08	09/24/2018 17:35	
	SW-846 7470A (Total)			09/21/2018 13:58	09/24/2018 11:35	

**Client:** ERM

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**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

Sample ID	Client Sample ID	Collection Date	Received Date		Prep Date/Time	Analysis Date/Time
			Test Name			
18091324-031C	DUP 003-WG-20180919	09/19/2018 0:00	SW-846 9012A (Total)	09/20/2018 15:22	09/25/2018 15:35	09/26/2018 14:57
18091324-031D	DUP 003-WG-20180919	09/19/2018 0:00	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS	09/20/2018 15:22		09/25/2018 17:20
18091324-032A	EB-01-WQ-20180919	09/19/2018 8:20	SW-846 3510C,8270C, Semi-Volatile Organic Compounds	09/20/2018 15:22	09/24/2018 12:02	09/25/2018 1:04
			SW-846 3510C,8270C, Semi-Volatile Organic Compounds		09/24/2018 12:02	09/25/2018 13:02
18091324-032B	EB-01-WQ-20180919	09/19/2018 8:20	SW-846 3005A, 6010B, Metals by ICP (Total)	09/20/2018 15:22	09/21/2018 11:08	09/24/2018 17:38
			SW-846 7470A (Total)		09/21/2018 13:58	09/24/2018 11:37
18091324-032C	EB-01-WQ-20180919	09/19/2018 8:20	SW-846 9012A (Total)	09/20/2018 15:22	09/25/2018 15:35	09/26/2018 14:18
18091324-032D	EB-01-WQ-20180919	09/19/2018 8:20	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS	09/20/2018 15:22		09/21/2018 15:45
18091324-033A	TB-01-WQ-201809	09/20/2018 15:22	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS	09/20/2018 15:22		09/21/2018 16:11

## Quality Control Results

<http://www.teklabinc.com/>

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

### **SW-846 9012A (TOTAL)**

<b>Batch 146037 SampType: MBLK</b>		Units mg/L								
SamplID: MBLK 180924 TCN1								Date Analyzed		
Analyses	RL	Qual		Result	Spike	SPK	Ref Val	%REC		
Cyanide	0.005			< 0.005	0.00300C	0	0	-100	100	09/25/2018

### **Batch 146037 SampType: LCS**

<b>Batch 146037 SampType: LCS</b>		Units mg/L								
SamplID: LCS 180924 TCN1								Date Analyzed		
Analyses	RL	Qual		Result	Spike	SPK	Ref Val	%REC		
Cyanide	0.005			0.024	0.02500	0	95.4	90	110	09/25/2018

### **Batch 146037 SampType: MS**

<b>Batch 146037 SampType: MS</b>		Units mg/L								
SamplID: 18091324-003CMS								Date Analyzed		
Analyses	RL	Qual		Result	Spike	SPK	Ref Val	%REC		
Cyanide	0.005			0.045	0.02500	0.02206	93.6	75	125	09/25/2018

### **Batch 146037 SampType: MSD**

<b>Batch 146037 SampType: MSD</b>		Units mg/L		RPD Limit 15						
SamplID: 18091324-003CMSD								Date Analyzed		
Analyses	RL	Qual		Result	Spike	SPK	Ref Val	%REC		
Cyanide	0.005			0.045	0.02500	0.02206	93.2	0.04547	0.23	09/25/2018

### **Batch 146037 SampType: MS**

<b>Batch 146037 SampType: MS</b>		Units mg/L								
SamplID: 18091324-011CMS								Date Analyzed		
Analyses	RL	Qual		Result	Spike	SPK	Ref Val	%REC		
Cyanide	0.005	E		0.054	0.02500	0.03262	86.2	75	125	09/25/2018

### **Batch 146037 SampType: MSD**

<b>Batch 146037 SampType: MSD</b>		Units mg/L		RPD Limit 15						
SamplID: 18091324-011CMSD								Date Analyzed		
Analyses	RL	Qual		Result	Spike	SPK	Ref Val	%REC		
Cyanide	0.005	E		0.055	0.02500	0.03262	90.0	0.05416	1.72	09/25/2018

### **Batch 146079 SampType: MBLK**

<b>Batch 146079 SampType: MBLK</b>		Units mg/L								
SamplID: MBLK 180925 TCN1								Date Analyzed		
Analyses	RL	Qual		Result	Spike	SPK	Ref Val	%REC		
Cyanide	0.005			< 0.005	0.00300C	0	0	-100	100	09/26/2018

### **Batch 146079 SampType: LCS**

<b>Batch 146079 SampType: LCS</b>		Units mg/L								
SamplID: LCS 180925 TCN1								Date Analyzed		
Analyses	RL	Qual		Result	Spike	SPK	Ref Val	%REC		
Cyanide	0.005			0.025	0.02500	0	100.1	90	110	09/26/2018

### **Batch 146079 SampType: MS**

<b>Batch 146079 SampType: MS</b>		Units mg/L								
SamplID: 18091324-024CMS								Date Analyzed		
Analyses	RL	Qual		Result	Spike	SPK	Ref Val	%REC		
Cyanide	0.005			0.027	0.02500	0	109.5	75	125	09/26/2018

## Quality Control Results

<http://www.teklabinc.com/>

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

### **SW-846 9012A (TOTAL)**

<b>Batch 146079 SampType: MSD</b>		Units mg/L		RPD Limit 15					
SampID: 18091324-024CMSD									
Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	RPD Ref Val	%RPD
Cyanide	0.005		<b>0.028</b>	0.02500	0	110.7		0.02737	1.11

### **Batch 146079 SampType: MS**

		Units mg/L		Date Analyzed					
SampID: 18091324-025CMS									
Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit
Cyanide	0.005		<b>0.038</b>	0.02500	0.01222	102.1		75	125

### **Batch 146079 SampType: MSD**

		Units mg/L		Date Analyzed					
SampID: 18091324-025CMSD									
Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	RPD Ref Val	%RPD
Cyanide	0.005		<b>0.038</b>	0.02500	0.01222	104.5		0.03774	1.58

### **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)**

#### **Batch 145952 SampType: MBLK**

		Units mg/L		Date Analyzed					
SampID: MBLK-145952									
Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit
Arsenic	0.0250		<b>&lt; 0.0250</b>	0.00870C	0	0	-100	100	09/21/2018
Barium	0.0025		<b>&lt; 0.0025</b>	0.000700C	0	0	-100	100	09/21/2018
Cadmium	0.0020		<b>&lt; 0.0020</b>	0.000500C	0	0	-100	100	09/21/2018
Chromium	0.0050		<b>&lt; 0.0050</b>	0.00280C	0	0	-100	100	09/21/2018
Lead	0.0150		<b>&lt; 0.0150</b>	0.00140C	0	0	-100	100	09/21/2018
Selenium	0.0400		<b>&lt; 0.0400</b>	0.01700C	0	0	-100	100	09/21/2018
Silver	0.0070		<b>&lt; 0.0070</b>	0.00270C	0	0	-100	100	09/21/2018

#### **Batch 145952 SampType: LCS**

		Units mg/L		Date Analyzed					
SampID: LCS-145952									
Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit
Arsenic	0.0250		<b>0.515</b>	0.5000	0	103.0		85	115
Barium	0.0025		<b>1.95</b>	2.000	0	97.7		85	115
Cadmium	0.0020		<b>0.0491</b>	0.05000	0	98.2		85	115
Chromium	0.0050		<b>0.206</b>	0.2000	0	102.8		85	115
Lead	0.0150		<b>0.513</b>	0.5000	0	102.7		85	115
Selenium	0.0400		<b>0.506</b>	0.5000	0	101.2		85	115
Silver	0.0070		<b>0.0497</b>	0.05000	0	99.4		85	115

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

### SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

**Batch 145952 SampType: MS**      Units mg/L

SampID: 18091324-003BMS

Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic	0.0250		<b>0.522</b>	0.5000	0	104.4	75	125		09/21/2018
Barium	0.0025		<b>2.06</b>	2.000	0.08600	98.5	75	125		09/21/2018
Cadmium	0.0020		<b>0.0490</b>	0.05000	0	98.0	75	125		09/21/2018
Chromium	0.0050		<b>0.206</b>	0.2000	0	102.8	75	125		09/21/2018
Lead	0.0150		<b>0.514</b>	0.5000	0	102.8	75	125		09/21/2018
Selenium	0.0400		<b>0.511</b>	0.5000	0	102.2	75	125		09/21/2018
Silver	0.0070		<b>0.0504</b>	0.05000	0	100.8	75	125		09/21/2018

**Batch 145952 SampType: MSD**      Units mg/L

SampID: 18091324-003BMSD

Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	RPD	Ref Val	%RPD	Date Analyzed
Arsenic	0.0250		<b>0.518</b>	0.5000	0	103.5	0.5220	0.5220	0.85	09/21/2018	
Barium	0.0025		<b>2.05</b>	2.000	0.08600	98.3	2.056	2.056	0.19	09/21/2018	
Cadmium	0.0020		<b>0.0490</b>	0.05000	0	98.0	0.04900	0.04900	0.00	09/21/2018	
Chromium	0.0050		<b>0.207</b>	0.2000	0	103.4	0.2055	0.2055	0.68	09/21/2018	
Lead	0.0150		<b>0.512</b>	0.5000	0	102.4	0.5138	0.5138	0.35	09/21/2018	
Selenium	0.0400		<b>0.503</b>	0.5000	0	100.6	0.5111	0.5111	1.58	09/21/2018	
Silver	0.0070		<b>0.0503</b>	0.05000	0	100.6	0.05040	0.05040	0.20	09/21/2018	

**Batch 145952 SampType: MS**      Units mg/L

SampID: 18091324-010BMS

Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic	0.0250		<b>0.514</b>	0.5000	0	102.7	75	125		09/21/2018
Barium	0.0025		<b>2.11</b>	2.000	0.1077	100.3	75	125		09/21/2018
Cadmium	0.0020		<b>0.0491</b>	0.05000	0	98.2	75	125		09/21/2018
Chromium	0.0050		<b>0.210</b>	0.2000	0	105.0	75	125		09/21/2018
Lead	0.0150		<b>0.517</b>	0.5000	0	103.4	75	125		09/21/2018
Selenium	0.0400		<b>0.504</b>	0.5000	0	100.7	75	125		09/21/2018
Silver	0.0070		<b>0.0508</b>	0.05000	0	101.6	75	125		09/21/2018

**Batch 145952 SampType: MSD**      Units mg/L

SampID: 18091324-010BMSD

Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	RPD	Ref Val	%RPD	Date Analyzed
Arsenic	0.0250		<b>0.524</b>	0.5000	0	104.8	0.5135	0.5135	2.06	09/21/2018	
Barium	0.0025		<b>2.10</b>	2.000	0.1077	99.9	2.113	2.113	0.38	09/21/2018	
Cadmium	0.0020		<b>0.0495</b>	0.05000	0	99.0	0.04910	0.04910	0.81	09/21/2018	
Chromium	0.0050		<b>0.210</b>	0.2000	0	105.2	0.2100	0.2100	0.19	09/21/2018	
Lead	0.0150		<b>0.518</b>	0.5000	0	103.7	0.5170	0.5170	0.29	09/21/2018	
Selenium	0.0400		<b>0.509</b>	0.5000	0	101.8	0.5037	0.5037	1.01	09/21/2018	
Silver	0.0070		<b>0.0509</b>	0.05000	0	101.8	0.05080	0.05080	0.20	09/21/2018	

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**SW-846 3005A, 6010B, METALS BY ICP (TOTAL)**

**Batch 145967 SampType: MBLK**      Units mg/L

SampID: MBLK-145967

Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic	0.0250		< 0.0250	0.00870C	0	0	-100	100	09/24/2018	
Barium	0.0025		< 0.0025	0.000700I	0	0	-100	100	09/24/2018	
Cadmium	0.0020		< 0.0020	0.000500I	0	0	-100	100	09/24/2018	
Chromium	0.0050		< 0.0050	0.00280C	0	0	-100	100	09/24/2018	
Lead	0.0150		< 0.0150	0.00140C	0	0	-100	100	09/24/2018	
Selenium	0.0400		< 0.0400	0.01700	0	0	-100	100	09/24/2018	
Silver	0.0070		< 0.0070	0.00270C	0	0	-100	100	09/24/2018	

**Batch 145967 SampType: LCS**      Units mg/L

SampID: LCS-145967

Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic	0.0250		0.510	0.5000	0	102.0	85	115	09/24/2018	
Barium	0.0025		2.01	2.000	0	100.5	85	115	09/24/2018	
Cadmium	0.0020		0.0500	0.05000	0	100.0	85	115	09/24/2018	
Chromium	0.0050		0.209	0.2000	0	104.5	85	115	09/24/2018	
Lead	0.0150		0.522	0.5000	0	104.5	85	115	09/24/2018	
Selenium	0.0400		0.495	0.5000	0	99.1	85	115	09/24/2018	
Silver	0.0070		0.0499	0.05000	0	99.8	85	115	09/24/2018	

**Batch 145967 SampType: MS**      Units mg/L

SampID: 18091324-024BMS

Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic	0.0250		0.522	0.5000	0	104.3	75	125	09/24/2018	
Barium	0.0025		2.09	2.000	0.07870	100.5	75	125	09/24/2018	
Cadmium	0.0020		0.0494	0.05000	0	98.8	75	125	09/24/2018	
Chromium	0.0050		0.208	0.2000	0	104.0	75	125	09/24/2018	
Lead	0.0150		0.520	0.5000	0	103.9	75	125	09/24/2018	
Selenium	0.0400		0.498	0.5000	0	99.6	75	125	09/24/2018	
Silver	0.0070		0.0500	0.05000	0	100.0	75	125	09/24/2018	

**Batch 145967 SampType: MSD**      Units mg/L

SampID: 18091324-024BMSD

Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Arsenic	0.0250		0.507	0.5000	0	101.3	0.5217	2.94	09/24/2018	
Barium	0.0025		2.02	2.000	0.07870	97.2	2.088	3.21	09/24/2018	
Cadmium	0.0020		0.0477	0.05000	0	95.4	0.04940	3.50	09/24/2018	
Chromium	0.0050		0.200	0.2000	0	100.2	0.2079	3.72	09/24/2018	
Lead	0.0150		0.502	0.5000	0	100.4	0.5197	3.44	09/24/2018	
Selenium	0.0400		0.491	0.5000	0	98.2	0.4982	1.48	09/24/2018	
Silver	0.0070		0.0487	0.05000	0	97.4	0.05000	2.63	09/24/2018	

## Quality Control Results

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**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

### SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

**Batch 145967 SampType: MS**      Units mg/L

SampID: 18091324-025BMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic	0.0250		<b>0.539</b>	0.5000	0	107.9	75	125	09/24/2018
Barium	0.0025		<b>2.24</b>	2.000	0.1034	106.8	75	125	09/24/2018
Cadmium	0.0020		<b>0.0512</b>	0.05000	0	102.4	75	125	09/24/2018
Chromium	0.0050		<b>0.218</b>	0.2000	0	108.8	75	125	09/24/2018
Lead	0.0150		<b>0.543</b>	0.5000	0	108.6	75	125	09/24/2018
Selenium	0.0400		<b>0.511</b>	0.5000	0	102.3	75	125	09/24/2018
Silver	0.0070		<b>0.0522</b>	0.05000	0	104.4	75	125	09/24/2018

**Batch 145967 SampType: MSD**      Units mg/L

SampID: 18091324-025BMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Arsenic	0.0250		<b>0.543</b>	0.5000	0	108.7	0.5393	0.74	09/24/2018
Barium	0.0025		<b>2.24</b>	2.000	0.1034	106.9	2.240	0.04	09/24/2018
Cadmium	0.0020		<b>0.0512</b>	0.05000	0	102.4	0.05120	0.00	09/24/2018
Chromium	0.0050		<b>0.218</b>	0.2000	0	109.1	0.2176	0.28	09/24/2018
Lead	0.0150		<b>0.539</b>	0.5000	0	107.8	0.5429	0.72	09/24/2018
Selenium	0.0400		<b>0.510</b>	0.5000	0	101.9	0.5114	0.33	09/24/2018
Silver	0.0070		<b>0.0518</b>	0.05000	0	103.6	0.05220	0.77	09/24/2018

### SW-846 7470A (TOTAL)

**Batch 145939 SampType: MBLK**      Units mg/L

SampID: MBLK-145939

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury	0.00020		< 0.00020	0.00055C	0	0	-100	100	09/21/2018

**Batch 145939 SampType: LCS**      Units mg/L

SampID: LCS-145939

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury	0.00020		<b>0.00535</b>	0.00500C	0	107.1	85	115	09/21/2018

**Batch 145939 SampType: MS**      Units mg/L

SampID: 18091324-013BMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury	0.00020		<b>0.00538</b>	0.00500C	0	107.5	75	125	09/21/2018

**Batch 145939 SampType: MSD**      Units mg/L

SampID: 18091324-013BMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury	0.00020		<b>0.00533</b>	0.00500C	0	106.6	0.005376	0.90	09/21/2018

## Quality Control Results

<http://www.teklabinc.com/>
**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**SW-846 7470A (TOTAL)**

<b>Batch 145976 SampType: MBLK</b>		Units mg/L								Date Analyzed
SampID: MBLK-145976	Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit
Mercury		0.00020		< 0.00020	0.000550C	0	0	-100	100	09/24/2018

**Batch 145976 SampType: LCS**

<b>Batch 145976 SampType: LCS</b>		Units mg/L								Date Analyzed
SampID: LCS-145976	Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit
Mercury		0.00020		0.00521	0.00500C	0	104.1	85	115	09/24/2018

**Batch 145976 SampType: MS**

<b>Batch 145976 SampType: MS</b>		Units mg/L								Date Analyzed
SampID: 18091324-024BMS	Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit
Mercury		0.00020		0.00525	0.00500C	0	104.9	75	125	09/24/2018

**Batch 145976 SampType: MSD**

<b>Batch 145976 SampType: MSD</b>		Units mg/L								RPD Limit 15	Date Analyzed
SampID: 18091324-024BMSD	Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	RPD Ref Val	%RPD	
Mercury		0.00020		0.00535	0.00500C	0	107.0	0.005245	1.99	09/24/2018	

**Batch 145976 SampType: MS**

<b>Batch 145976 SampType: MS</b>		Units mg/L								RPD Limit 15	Date Analyzed
SampID: 18091324-025BMS	Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit	
Mercury		0.00020		0.00533	0.00500C	0	106.6	75	125	09/24/2018	

**Batch 145976 SampType: MSD**

<b>Batch 145976 SampType: MSD</b>		Units mg/L								RPD Limit 15	Date Analyzed
SampID: 18091324-025BMSD	Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	RPD Ref Val	%RPD	
Mercury		0.00020		0.00534	0.00500C	0	106.8	0.005330	0.20	09/24/2018	

**Batch 145976 SampType: MBLK**

<b>Batch 145976 SampType: MBLK</b>		Units mg/L								RPD Limit 15	Date Analyzed
SampID: MBLK-145976	Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit	
Mercury		0.00020		< 0.00020	0.000550C	0	0	-100	100	09/24/2018	

**Batch 145978 SampType: LCS**

<b>Batch 145978 SampType: LCS</b>		Units mg/L								RPD Limit 15	Date Analyzed
SampID: LCS-145978	Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit	
Mercury		0.00020		0.00522	0.00500C	0	104.5	85	115	09/24/2018	

**Batch 145978 SampType: MS**

<b>Batch 145978 SampType: MS</b>		Units mg/L								RPD Limit 15	Date Analyzed
SampID: 18091324-026BMS	Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit	
Mercury		0.00020		0.00540	0.00500C	0	107.9	75	125	09/24/2018	

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

### **SW-846 7470A (TOTAL)**

Batch	145978	SampType	MSD	Units	mg/L	RPD Limit 15				
SampID: 18091324-026BMSD										Date Analyzed
Analyses		RL	Qual		Result	Spike	SPK	Ref Val	%REC	RPD Ref Val %RPD
Mercury		0.00020			0.00534	0.00500C	0	106.8		0.005397 1.04

### **SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS**

Batch	145965	SampType	MBLK	Units	mg/L						
SampID: MBLK-145965										Date Analyzed	
Analyses		RL	Qual		Result	Spike	SPK	Ref Val	%REC	Low Limit High Limit	
Acenaphthene		0.000100			ND					09/21/2018	
Acenaphthylene		0.000100			ND					09/21/2018	
Anthracene		0.000100			ND					09/21/2018	
Benzo(a)anthracene		0.000100			ND					09/21/2018	
Benzo(a)pyrene		0.000100			ND					09/21/2018	
Benzo(b)fluoranthene		0.000100			ND					09/21/2018	
Benzo(g,h,i)perylene		0.000100			ND					09/21/2018	
Benzo(k)fluoranthene		0.000100			ND					09/21/2018	
Chrysene		0.000100			ND					09/21/2018	
Dibenzo(a,h)anthracene		0.000100			ND					09/21/2018	
Fluoranthene		0.000200			ND					09/21/2018	
Fluorene		0.000100			ND					09/21/2018	
Indeno(1,2,3-cd)pyrene		0.000100			ND					09/21/2018	
Naphthalene		0.000200			ND					09/21/2018	
Phenanthrene		0.000400			ND					09/21/2018	
Pyrene		0.000200			ND					09/21/2018	
Surr: 2-Fluorobiphenyl					0.000699	0.00100C		69.9	34.1	131	09/21/2018
Surr: Nitrobenzene-d5					0.000702	0.00100C		70.2	35.1	136	09/21/2018
Surr: p-Terphenyl-d14					0.000894	0.00100C		89.4	38.3	195	09/21/2018

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

## SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS

Batch 145965	SampType: LCS	Units mg/L								Date Analyzed
SampID: LCS-145965										
Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit	
Acenaphthene	0.000100		<b>0.00174</b> 0.00200C	0	87.2			53.8	111	09/21/2018
Acenaphthylene	0.000100		<b>0.00145</b> 0.00200C	0	72.5			55.3	112	09/21/2018
Anthracene	0.000100		<b>0.00175</b> 0.00200C	0	87.7			56.5	111	09/21/2018
Benzo(a)anthracene	0.000100		<b>0.00159</b> 0.00200C	0	79.6			52.8	121	09/21/2018
Benzo(a)pyrene	0.000100		<b>0.00163</b> 0.00200C	0	81.5			56.9	127	09/21/2018
Benzo(b)fluoranthene	0.000100		<b>0.00146</b> 0.00200C	0	73.2			50.8	132	09/21/2018
Benzo(g,h,i)perylene	0.000100		<b>0.00158</b> 0.00200C	0	79.0			37.6	151	09/21/2018
Benzo(k)fluoranthene	0.000100		<b>0.00162</b> 0.00200C	0	81.0			56.6	125	09/21/2018
Chrysene	0.000100		<b>0.00184</b> 0.00200C	0	92.1			39.6	124	09/21/2018
Dibenzo(a,h)anthracene	0.000100		<b>0.00166</b> 0.00200C	0	83.2			42.6	144	09/21/2018
Fluoranthene	0.000200		<b>0.00190</b> 0.00200C	0	95.2			55.3	130	09/21/2018
Fluorene	0.000100		<b>0.00162</b> 0.00200C	0	81.2			53.2	118	09/21/2018
Indeno(1,2,3-cd)pyrene	0.000100		<b>0.00127</b> 0.00200C	0	63.6			48.4	151	09/21/2018
Naphthalene	0.000200	B	<b>0.00181</b> 0.00200C	0	90.7			50.6	108	09/21/2018
Phenanthrene	0.000400		<b>0.00193</b> 0.00200C	0	96.3			56.1	125	09/21/2018
Pyrene	0.000200		<b>0.00181</b> 0.00200C	0	90.6			52.7	129	09/21/2018
Surr: 2-Fluorobiphenyl			<b>0.000641</b> 0.00100C		64.1			34.1	131	09/21/2018
Surr: Nitrobenzene-d5			<b>0.000707</b> 0.00100C		70.7			35.1	136	09/21/2018
Surr: p-Terphenyl-d14			<b>0.000942</b> 0.00100C		94.2			38.3	195	09/21/2018

Batch 145965	SampType: LCSD	Units mg/L							RPD Limit 40		
SampID: LCSD-145965											
Analyses	RL	Qual	Result	Spike	SPK	Ref Val	%REC	RPD	Ref Val	%RPD	Date Analyzed
Acenaphthene	0.000100		<b>0.00170</b> 0.00200C	0	85.1			0.001743	2.35	09/21/2018	
Acenaphthylene	0.000100		<b>0.00124</b> 0.00200C	0	61.9			0.001449	15.76	09/21/2018	
Anthracene	0.000100		<b>0.00159</b> 0.00200C	0	79.7			0.001754	9.54	09/21/2018	
Benzo(a)anthracene	0.000100		<b>0.00158</b> 0.00200C	0	79.0			0.001592	0.78	09/21/2018	
Benzo(a)pyrene	0.000100		<b>0.00152</b> 0.00200C	0	75.9			0.001631	7.13	09/21/2018	
Benzo(b)fluoranthene	0.000100		<b>0.00144</b> 0.00200C	0	72.0			0.001464	1.60	09/21/2018	
Benzo(g,h,i)perylene	0.000100		<b>0.00161</b> 0.00200C	0	80.3			0.001580	1.64	09/21/2018	
Benzo(k)fluoranthene	0.000100		<b>0.00158</b> 0.00200C	0	79.0			0.001620	2.44	09/21/2018	
Chrysene	0.000100		<b>0.00182</b> 0.00200C	0	91.0			0.001842	1.23	09/21/2018	
Dibenzo(a,h)anthracene	0.000100		<b>0.00167</b> 0.00200C	0	83.7			0.001665	0.52	09/21/2018	
Fluoranthene	0.000200		<b>0.00173</b> 0.00200C	0	86.7			0.001904	9.36	09/21/2018	
Fluorene	0.000100		<b>0.00163</b> 0.00200C	0	81.5			0.001625	0.27	09/21/2018	
Indeno(1,2,3-cd)pyrene	0.000100		<b>0.00132</b> 0.00200C	0	66.2			0.001272	4.02	09/21/2018	
Naphthalene	0.000200	B	<b>0.00174</b> 0.00200C	0	87.1			0.001814	4.01	09/21/2018	
Phenanthrene	0.000400		<b>0.00174</b> 0.00200C	0	87.2			0.001926	9.90	09/21/2018	
Pyrene	0.000200		<b>0.00170</b> 0.00200C	0	85.0			0.001813	6.45	09/21/2018	
Surr: 2-Fluorobiphenyl			<b>0.000624</b> 0.00100C		62.4					09/21/2018	
Surr: Nitrobenzene-d5			<b>0.000738</b> 0.00100C		73.8					09/21/2018	
Surr: p-Terphenyl-d14			<b>0.000928</b> 0.00100C		92.8					09/21/2018	

## Quality Control Results

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**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

### SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS

Batch 145965	SampType: MS	Units mg/L							
SampID: 18091324-025AMS									Date Analyzed
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	
Acenaphthene	0.000100		<b>0.00167</b> 0.00200C	0	83.4	40.5	121		09/21/2018
Acenaphthylene	0.000100		<b>0.00165</b> 0.00200C	0	82.5	50.9	132		09/21/2018
Anthracene	0.000100		<b>0.00153</b> 0.00200C	0	76.5	62.1	120		09/21/2018
Benzo(a)anthracene	0.000100		<b>0.00146</b> 0.00200C	0	72.8	67.8	119		09/21/2018
Benzo(a)pyrene	0.000100	S	<b>0.00141</b> 0.00200C	0	70.3	73.8	124		09/21/2018
Benzo(b)fluoranthene	0.000100	S	<b>0.00136</b> 0.00200C	0	68.0	73.3	119		09/21/2018
Benzo(g,h,i)perylene	0.000100		<b>0.00151</b> 0.00200C	0	75.4	56.3	139		09/21/2018
Benzo(k)fluoranthene	0.000100		<b>0.00166</b> 0.00200C	0	83.0	69.5	115		09/21/2018
Chrysene	0.000100		<b>0.00172</b> 0.00200C	0	86.0	69	112		09/21/2018
Dibenzo(a,h)anthracene	0.000100		<b>0.00144</b> 0.00200C	0	72.1	66.1	135		09/21/2018
Fluoranthene	0.000200		<b>0.00173</b> 0.00200C	0	86.4	69.4	117		09/21/2018
Fluorene	0.000100		<b>0.00154</b> 0.00200C	0	76.8	54.3	116		09/21/2018
Indeno(1,2,3-cd)pyrene	0.000100	S	<b>0.00111</b> 0.00200C	0	55.7	62.5	136		09/21/2018
Naphthalene	0.000200	B	<b>0.00170</b> 0.00200C	0	84.9	34.6	129		09/21/2018
Phenanthrene	0.000400		<b>0.00163</b> 0.00200C	0	81.6	62.4	108		09/21/2018
Pyrene	0.000200		<b>0.00165</b> 0.00200C	0	82.6	64.2	118		09/21/2018
Surr: 2-Fluorobiphenyl			<b>0.000615</b> 0.00100C		61.5	10	164		09/21/2018
Surr: Nitrobenzene-d5			<b>0.000666</b> 0.00100C		66.6	10.3	142		09/21/2018
Surr: p-Terphenyl-d14			<b>0.000962</b> 0.00100C		96.2	47.1	148		09/21/2018

Batch 145965	SampType: MSD	Units mg/L	RPD Limit 40							
SampID: 18091324-025AMSD										Date Analyzed
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Acenaphthene	0.000100		<b>0.00168</b> 0.00200C	0	84.0	0.001669	0.73	09/21/2018		
Acenaphthylene	0.000100		<b>0.00173</b> 0.00200C	0	86.3	0.001649	4.60	09/21/2018		
Anthracene	0.000100		<b>0.00160</b> 0.00200C	0	80.1	0.001530	4.60	09/21/2018		
Benzo(a)anthracene	0.000100		<b>0.00156</b> 0.00200C	0	77.8	0.001455	6.63	09/21/2018		
Benzo(a)pyrene	0.000100	S	<b>0.00147</b> 0.00200C	0	73.3	0.001405	4.22	09/21/2018		
Benzo(b)fluoranthene	0.000100	S	<b>0.00137</b> 0.00200C	0	68.4	0.001361	0.48	09/21/2018		
Benzo(g,h,i)perylene	0.000100		<b>0.00145</b> 0.00200C	0	72.7	0.001508	3.72	09/21/2018		
Benzo(k)fluoranthene	0.000100		<b>0.00163</b> 0.00200C	0	81.3	0.001660	2.10	09/21/2018		
Chrysene	0.000100		<b>0.00176</b> 0.00200C	0	87.8	0.001719	2.08	09/21/2018		
Dibenzo(a,h)anthracene	0.000100		<b>0.00145</b> 0.00200C	0	72.3	0.001441	0.39	09/21/2018		
Fluoranthene	0.000200		<b>0.00170</b> 0.00200C	0	85.0	0.001729	1.64	09/21/2018		
Fluorene	0.000100		<b>0.00156</b> 0.00200C	0	78.2	0.001537	1.77	09/21/2018		
Indeno(1,2,3-cd)pyrene	0.000100	S	<b>0.00111</b> 0.00200C	0	55.5	0.001115	0.47	09/21/2018		
Naphthalene	0.000200	B	<b>0.00172</b> 0.00200C	0	85.8	0.001697	1.07	09/21/2018		
Phenanthrene	0.000400		<b>0.00167</b> 0.00200C	0	83.3	0.001631	2.06	09/21/2018		
Pyrene	0.000200		<b>0.00169</b> 0.00200C	0	84.3	0.001652	2.01	09/21/2018		
Surr: 2-Fluorobiphenyl			<b>0.000630</b> 0.00100C		63.0					09/21/2018
Surr: Nitrobenzene-d5			<b>0.000704</b> 0.00100C		70.4					09/21/2018
Surr: p-Terphenyl-d14			<b>0.000932</b> 0.00100C		93.2					09/21/2018

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

## SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS

Batch	146012	SampType	MBLK	Units	mg/L						Date Analyzed	
SampID:	MBLK-146012											
Analyses		RL	Qual			Result	Spike	SPK	Ref Val	%REC		
Acenaphthene		0.000100				ND					09/24/2018	
Acenaphthylene		0.000100				ND					09/24/2018	
Anthracene		0.000100				ND					09/24/2018	
Benzo(a)anthracene		0.000100				ND					09/24/2018	
Benzo(a)pyrene		0.000100				ND					09/24/2018	
Benzo(b)fluoranthene		0.000100				ND					09/24/2018	
Benzo(g,h,i)perylene		0.000100				ND					09/24/2018	
Benzo(k)fluoranthene		0.000100				ND					09/24/2018	
Chrysene		0.000100				ND					09/24/2018	
Dibenzo(a,h)anthracene		0.000100				ND					09/24/2018	
Fluoranthene		0.000200				ND					09/24/2018	
Fluorene		0.000100				ND					09/24/2018	
Indeno(1,2,3-cd)pyrene		0.000100				ND					09/24/2018	
Naphthalene		0.000200				ND					09/24/2018	
Phenanthrene		0.000400				ND					09/24/2018	
Pyrene		0.000200				ND					09/24/2018	
Surr: 2-Fluorobiphenyl					0.000693	0.00100C			69.3	34.1	131	09/24/2018
Surr: Nitrobenzene-d5					0.000748	0.00100C			74.8	35.1	136	09/24/2018
Surr: p-Terphenyl-d14					0.00109	0.00100C			109.3	38.3	195	09/24/2018

## Batch 146012 SampType: LCS Units mg/L

Batch	146012	SampType	LCS	Units	mg/L						Date Analyzed	
SampID:	LCS-146012											
Analyses		RL	Qual			Result	Spike	SPK	Ref Val	%REC		
Acenaphthene		0.000100				0.00173	0.00200C	0	86.6	53.8	111	09/24/2018
Acenaphthylene		0.000100				0.00186	0.00200C	0	92.8	55.3	112	09/24/2018
Anthracene		0.000100				0.00166	0.00200C	0	82.9	56.5	111	09/24/2018
Benzo(a)anthracene		0.000100				0.00176	0.00200C	0	88.1	52.8	121	09/24/2018
Benzo(a)pyrene		0.000100				0.00168	0.00200C	0	83.9	56.9	127	09/24/2018
Benzo(b)fluoranthene		0.000100				0.00155	0.00200C	0	77.4	50.8	132	09/24/2018
Benzo(g,h,i)perylene		0.000100				0.00169	0.00200C	0	84.5	37.6	151	09/24/2018
Benzo(k)fluoranthene		0.000100				0.00175	0.00200C	0	87.7	56.6	125	09/24/2018
Chrysene		0.000100				0.00198	0.00200C	0	99.0	39.6	124	09/24/2018
Dibenzo(a,h)anthracene		0.000100				0.00164	0.00200C	0	81.8	42.6	144	09/24/2018
Fluoranthene		0.000200				0.00172	0.00200C	0	85.8	55.3	130	09/24/2018
Fluorene		0.000100				0.00164	0.00200C	0	82.2	53.2	118	09/24/2018
Indeno(1,2,3-cd)pyrene		0.000100				0.00136	0.00200C	0	68.2	48.4	151	09/24/2018
Naphthalene		0.000200				0.00172	0.00200C	0	86.0	50.6	108	09/24/2018
Phenanthrene		0.000400				0.00174	0.00200C	0	87.1	56.1	125	09/24/2018
Pyrene		0.000200				0.00164	0.00200C	0	81.9	52.7	129	09/24/2018
Surr: 2-Fluorobiphenyl					0.000688	0.00100C			68.8	34.1	131	09/24/2018
Surr: Nitrobenzene-d5					0.000754	0.00100C			75.4	35.1	136	09/24/2018
Surr: p-Terphenyl-d14					0.000996	0.00100C			99.6	38.3	195	09/24/2018

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

## SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS

Batch	146012	SampType:	LCSD	Units	mg/L	RPD Limit 40				Date Analyzed
SampID: LCSD-146012										
Analyses		RL	Qual	Result	Spike	SPK	Ref Val	%REC	RPD Ref Val	%RPD
Acenaphthene		0.000100		<b>0.00166</b> 0.00200C	0		82.9		0.001733	4.44
Acenaphthylene		0.000100		<b>0.00168</b> 0.00200C	0		84.0		0.001856	9.90
Anthracene		0.000100		<b>0.00158</b> 0.00200C	0		79.0		0.001657	4.71
Benzo(a)anthracene		0.000100		<b>0.00154</b> 0.00200C	0		77.0		0.001761	13.37
Benzo(a)pyrene		0.000100		<b>0.00166</b> 0.00200C	0		83.0		0.001679	1.11
Benzo(b)fluoranthene		0.000100		<b>0.00143</b> 0.00200C	0		71.5		0.001547	7.91
Benzo(g,h,i)perylene		0.000100		<b>0.00156</b> 0.00200C	0		77.8		0.001690	8.28
Benzo(k)fluoranthene		0.000100		<b>0.00163</b> 0.00200C	0		81.7		0.001755	7.08
Chrysene		0.000100		<b>0.00170</b> 0.00200C	0		85.0		0.001980	15.27
Dibenzo(a,h)anthracene		0.000100		<b>0.00151</b> 0.00200C	0		75.4		0.001635	8.11
Fluoranthene		0.000200		<b>0.00168</b> 0.00200C	0		83.8		0.001716	2.33
Fluorene		0.000100		<b>0.00157</b> 0.00200C	0		78.6		0.001644	4.42
Indeno(1,2,3-cd)pyrene		0.000100		<b>0.00102</b> 0.00200C	0		51.2		0.001364	28.39
Naphthalene		0.000200		<b>0.00162</b> 0.00200C	0		81.1		0.001720	5.94
Phenanthrene		0.000400		<b>0.00169</b> 0.00200C	0		84.5		0.001742	3.04
Pyrene		0.000200		<b>0.00161</b> 0.00200C	0		80.7		0.001638	1.43
Surr: 2-Fluorobiphenyl				<b>0.000622</b> 0.00100C			62.2			09/24/2018
Surr: Nitrobenzene-d5				<b>0.000691</b> 0.00100C			69.1			09/24/2018
Surr: p-Terphenyl-d14				<b>0.000890</b> 0.00100C			89.0			09/24/2018

## Batch 146012 SampType: MS Units mg/L

Batch	146012	SampType:	MS	Units	mg/L	Low Limit				High Limit	Date Analyzed
SampID: 18091324-024AMS											
Analyses		RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Acenaphthene		0.000100		<b>0.00229</b> 0.00200C	0.0005393		87.6		40.5	121	09/24/2018
Acenaphthylene		0.000100		<b>0.00315</b> 0.00200C	0.001274		94.0		50.9	132	09/24/2018
Anthracene		0.000100		<b>0.00188</b> 0.00200C	0		94.0		62.1	120	09/24/2018
Benzo(a)anthracene		0.000100		<b>0.00168</b> 0.00200C	0		84.1		67.8	119	09/24/2018
Benzo(a)pyrene		0.000100		<b>0.00164</b> 0.00200C	0		81.8		73.8	124	09/24/2018
Benzo(b)fluoranthene		0.000100		<b>0.00153</b> 0.00200C	0		76.6		73.3	119	09/24/2018
Benzo(g,h,i)perylene		0.000100		<b>0.00170</b> 0.00200C	0		84.8		56.3	139	09/24/2018
Benzo(k)fluoranthene		0.000100		<b>0.00183</b> 0.00200C	0		91.3		69.5	115	09/24/2018
Chrysene		0.000100		<b>0.00183</b> 0.00200C	0		91.4		69	112	09/24/2018
Dibenzo(a,h)anthracene		0.000100		<b>0.00166</b> 0.00200C	0		83.1		66.1	135	09/24/2018
Fluoranthene		0.000200		<b>0.00198</b> 0.00200C	0		99.0		69.4	117	09/24/2018
Fluorene		0.000100		<b>0.00163</b> 0.00200C	0		81.5		54.3	116	09/24/2018
Indeno(1,2,3-cd)pyrene		0.000100		<b>0.00136</b> 0.00200C	0		67.8		62.5	136	09/24/2018
Naphthalene		0.000200		<b>0.00186</b> 0.00200C	0		92.8		34.6	129	09/24/2018
Phenanthrene		0.000400		<b>0.00179</b> 0.00200C	0		89.6		62.4	108	09/24/2018
Pyrene		0.000200		<b>0.00189</b> 0.00200C	0		94.4		64.2	118	09/24/2018
Surr: 2-Fluorobiphenyl				<b>0.000714</b> 0.00100C			71.4		10	164	09/24/2018
Surr: Nitrobenzene-d5				<b>0.000756</b> 0.00100C			75.6		10.3	142	09/24/2018
Surr: p-Terphenyl-d14				<b>0.00106</b> 0.00100C			106.4		47.1	148	09/24/2018

## Quality Control Results

<http://www.teklabinc.com/>

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

### SW-846 3510C,8270C, SEMI-VOLATILE ORGANIC COMPOUNDS

Batch	146012	SampType	MSD	Units	mg/L	RPD Limit 40						
										Date Analyzed		
Analyses		RL	Qual	Result	Spike	SPK	Ref Val	%REC	RPD	Ref Val	%RPD	
Acenaphthene		0.000100		<b>0.00239</b>	0.00200C	0.0005393	92.5		0.002292		4.14	09/24/2018
Acenaphthylene		0.000100		<b>0.00330</b>	0.00200C	0.001274	101.6		0.003153		4.70	09/24/2018
Anthracene		0.000100		<b>0.00181</b>	0.00200C	0	90.5		0.001880		3.83	09/24/2018
Benzo(a)anthracene		0.000100		<b>0.00168</b>	0.00200C	0	84.0		0.001682		0.03	09/24/2018
Benzo(a)pyrene		0.000100		<b>0.00165</b>	0.00200C	0	82.4		0.001637		0.74	09/24/2018
Benzo(b)fluoranthene		0.000100		<b>0.00151</b>	0.00200C	0	75.7		0.001532		1.09	09/24/2018
Benzo(g,h,i)perylene		0.000100		<b>0.00166</b>	0.00200C	0	82.9		0.001696		2.24	09/24/2018
Benzo(k)fluoranthene		0.000100		<b>0.00172</b>	0.00200C	0	86.0		0.001826		6.03	09/24/2018
Chrysene		0.000100		<b>0.00185</b>	0.00200C	0	92.4		0.001828		1.13	09/24/2018
Dibenzo(a,h)anthracene		0.000100		<b>0.00173</b>	0.00200C	0	86.3		0.001663		3.69	09/24/2018
Fluoranthene		0.000200		<b>0.00192</b>	0.00200C	0	96.2		0.001979		2.78	09/24/2018
Fluorene		0.000100		<b>0.00175</b>	0.00200C	0	87.4		0.001630		6.99	09/24/2018
Indeno(1,2,3-cd)pyrene		0.000100		<b>0.00143</b>	0.00200C	0	71.6		0.001357		5.35	09/24/2018
Naphthalene		0.000200		<b>0.00182</b>	0.00200C	0	91.0		0.001855		1.95	09/24/2018
Phenanthrene		0.000400		<b>0.00188</b>	0.00200C	0	94.1		0.001793		4.82	09/24/2018
Pyrene		0.000200		<b>0.00180</b>	0.00200C	0	90.2		0.001887		4.49	09/24/2018
Surr: 2-Fluorobiphenyl				<b>0.000723</b>	0.00100C		72.3					09/24/2018
Surr: Nitrobenzene-d5				<b>0.000775</b>	0.00100C		77.5					09/24/2018
Surr: p-Terphenyl-d14				<b>0.00105</b>	0.00100C		104.9					09/24/2018

### SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch	146010	SampType	MBLK	Units	µg/L	RPD Limit 40						
										Date Analyzed		
Analyses		RL	Qual	Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit		
Benzene		0.5		<b>ND</b>								09/21/2018
Ethylbenzene		2.0		<b>ND</b>								09/21/2018
Toluene		2.0		<b>ND</b>								09/21/2018
Xylenes, Total		2.0		<b>ND</b>								09/21/2018
Surr: 1,2-Dichloroethane-d4				<b>49.9</b>	50.00		99.9		79.6	118		09/21/2018
Surr: 4-Bromofluorobenzene				<b>50.8</b>	50.00		101.7		83.9	115		09/21/2018
Surr: Dibromofluoromethane				<b>49.2</b>	50.00		98.4		84.9	113		09/21/2018
Surr: Toluene-d8				<b>48.7</b>	50.00		97.4		86.7	112		09/21/2018

Batch	146010	SampType	LCSD	Units	µg/L	RPD Limit 40						
										Date Analyzed		
Analyses		RL	Qual	Result	Spike	SPK	Ref Val	%REC	RPD	Ref Val	%RPD	
Benzene		0.5		<b>51.3</b>	50.00	0	102.6		51.91		1.20	09/21/2018
Ethylbenzene		2.0		<b>49.5</b>	50.00	0	99.0		49.83		0.70	09/21/2018
Toluene		2.0		<b>49.4</b>	50.00	0	98.8		49.98		1.15	09/21/2018
Xylenes, Total		2.0		<b>148</b>	150.0	0	98.4		148.7		0.71	09/21/2018
Surr: 1,2-Dichloroethane-d4				<b>50.1</b>	50.00		100.2					09/21/2018
Surr: 4-Bromofluorobenzene				<b>50.0</b>	50.00		99.9					09/21/2018
Surr: Dibromofluoromethane				<b>50.3</b>	50.00		100.5					09/21/2018
Surr: Toluene-d8				<b>49.0</b>	50.00		98.0					09/21/2018

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS**

Batch	146010	SampType	LCS	Units	µg/L						Date Analyzed
SampID:	LCS-R180921A-1										
Analyses		RL	Qual			Result	Spike	SPK Ref Val	%REC		
Benzene		0.5				51.9	50.00	0	103.8	77.8	120
Ethylbenzene		2.0				49.8	50.00	0	99.7	81.8	117
Toluene		2.0				50.0	50.00	0	100.0	82.2	113
Xylenes, Total		2.0				149	150.0	0	99.1	82.7	118
Surr: 1,2-Dichloroethane-d4						49.2	50.00		98.4	79.6	118
Surr: 4-Bromofluorobenzene						49.5	50.00		98.9	83.9	115
Surr: Dibromofluoromethane						50.5	50.00		101.0	84.9	113
Surr: Toluene-d8						49.3	50.00		98.6	86.7	112

Batch	146015	SampType	MBLK	Units	µg/L						Date Analyzed
SampID:	MBLK-T180921A-1										
Analyses		RL	Qual			Result	Spike	SPK Ref Val	%REC		
Benzene		0.5				ND					09/21/2018
Ethylbenzene		2.0				ND					09/21/2018
Toluene		2.0				ND					09/21/2018
Xylenes, Total		2.0				ND					09/21/2018
Surr: 1,2-Dichloroethane-d4						47.0	50.00		93.9	79.6	118
Surr: 4-Bromofluorobenzene						48.5	50.00		97.0	83.9	115
Surr: Dibromofluoromethane						50.2	50.00		100.5	84.9	113
Surr: Toluene-d8						48.4	50.00		96.7	86.7	112

Batch	146015	SampType	LCSD	Units	µg/L						RPD Limit 40
SampID:	LCSD-T180921A-1										
Analyses		RL	Qual			Result	Spike	SPK Ref Val	%REC		
Benzene		0.5				56.8	50.00	0	113.6	50.83	11.06
Ethylbenzene		2.0				54.5	50.00	0	109.0	48.55	11.53
Toluene		2.0				52.5	50.00	0	105.1	48.01	9.01
Xylenes, Total		2.0				159	150.0	0	105.9	142.9	10.62
Surr: 1,2-Dichloroethane-d4						47.0	50.00		94.0		09/21/2018
Surr: 4-Bromofluorobenzene						46.1	50.00		92.2		09/21/2018
Surr: Dibromofluoromethane						51.4	50.00		102.9		09/21/2018
Surr: Toluene-d8						48.3	50.00		96.7		09/21/2018

Batch	146015	SampType	LCS	Units	µg/L						Date Analyzed
SampID:	LCS-T180921A-1										
Analyses		RL	Qual			Result	Spike	SPK Ref Val	%REC		
Benzene		0.5				50.8	50.00	0	101.7	77.8	120
Ethylbenzene		2.0				48.6	50.00	0	97.1	81.8	117
Toluene		2.0				48.0	50.00	0	96.0	82.2	113
Xylenes, Total		2.0				143	150.0	0	95.3	82.7	118
Surr: 1,2-Dichloroethane-d4						46.4	50.00		92.7	79.6	118
Surr: 4-Bromofluorobenzene						46.7	50.00		93.4	83.9	115
Surr: Dibromofluoromethane						51.1	50.00		102.3	84.9	113
Surr: Toluene-d8						48.4	50.00		96.9	86.7	112

Client: ERM

Work Order: 18091324

Client Project: Champaign GW

Report Date: 26-Sep-18

## SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 146015	SampType: MS	Units µg/L								
SampID: 18091324-024DMS										Date Analyzed
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Benzene	0.5		47.3	50.00	0	94.6	62.5	121		09/21/2018
Ethylbenzene	2.0		45.5	50.00	0.2100	90.6	74.4	130		09/21/2018
Toluene	2.0		42.7	50.00	0	85.5	69.5	118		09/21/2018
Xylenes, Total	2.0		87.9	100.0	0	87.9	71.1	125		09/21/2018
Surr: 1,2-Dichloroethane-d4			47.1	50.00		94.3	74.7	129		09/21/2018
Surr: 4-Bromofluorobenzene			47.3	50.00		94.6	86	119		09/21/2018
Surr: Dibromofluoromethane			50.0	50.00		100.0	81.7	123		09/21/2018
Surr: Toluene-d8			47.6	50.00		95.1	84.3	114		09/21/2018

Batch 146015	SampType: MSD	Units µg/L								RPD Limit 20	
SampID: 18091324-024DMSD										Date Analyzed	
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Benzene	0.5		48.8	50.00	0	97.6	47.30	3.14		09/21/2018	
Ethylbenzene	2.0		45.9	50.00	0.2100	91.5	45.52	0.92		09/21/2018	
Toluene	2.0		43.8	50.00	0	87.6	42.74	2.50		09/21/2018	
Xylenes, Total	2.0		89.1	100.0	0	89.1	87.93	1.31		09/21/2018	
Surr: 1,2-Dichloroethane-d4			46.6	50.00		93.2				09/21/2018	
Surr: 4-Bromofluorobenzene			47.6	50.00		95.1				09/21/2018	
Surr: Dibromofluoromethane			50.6	50.00		101.2				09/21/2018	
Surr: Toluene-d8			47.6	50.00		95.3				09/21/2018	

Batch 146081	SampType: MBLK	Units µg/L									Date Analyzed
SampID: MBLK-R180925A-1											
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit			
Benzene	0.5		ND								09/25/2018
Ethylbenzene	2.0		ND								09/25/2018
Toluene	2.0		ND								09/25/2018
Xylenes, Total	2.0		ND								09/25/2018
Surr: 1,2-Dichloroethane-d4			50.1	50.00		100.1	79.6	118			09/25/2018
Surr: 4-Bromofluorobenzene			51.0	50.00		101.9	83.9	115			09/25/2018
Surr: Dibromofluoromethane			50.5	50.00		101.0	84.9	113			09/25/2018
Surr: Toluene-d8			48.3	50.00		96.5	86.7	112			09/25/2018

Batch 146081	SampType: LCSD	Units µg/L								RPD Limit 40	
SampID: LCSD-R180925A-1										Date Analyzed	
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Benzene	0.5		50.6	50.00	0	101.2	49.94	1.31		09/25/2018	
Ethylbenzene	2.0		48.2	50.00	0	96.5	47.06	2.48		09/25/2018	
Toluene	2.0		47.9	50.00	0	95.9	47.17	1.60		09/25/2018	
Xylenes, Total	2.0		143	150.0	0	95.5	140.8	1.68		09/25/2018	
Surr: 1,2-Dichloroethane-d4			50.4	50.00		100.7				09/25/2018	
Surr: 4-Bromofluorobenzene			50.0	50.00		100.0				09/25/2018	
Surr: Dibromofluoromethane			51.1	50.00		102.2				09/25/2018	
Surr: Toluene-d8			48.4	50.00		96.7				09/25/2018	

## Quality Control Results

<http://www.teklabinc.com/>

**Client:** ERM

**Work Order:** 18091324

**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

### SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch	146081	SampType	LCS	Units	µg/L						Date Analyzed
SampID:			LCS-R180925A-1								
Analyses		RL	Qual		Result	Spike	SPK	Ref Val	%REC	Low Limit	High Limit
Benzene		0.5			<b>49.9</b>	50.00	0	99.9		77.8	120
Ethylbenzene		2.0			<b>47.1</b>	50.00	0	94.1		81.8	117
Toluene		2.0			<b>47.2</b>	50.00	0	94.3		82.2	113
Xylenes, Total		2.0			<b>141</b>	150.0	0	93.9		82.7	118
Surr: 1,2-Dichloroethane-d4					<b>50.9</b>	50.00		101.8		79.6	118
Surr: 4-Bromofluorobenzene					<b>49.5</b>	50.00		99.0		83.9	115
Surr: Dibromofluoromethane					<b>51.1</b>	50.00		102.3		84.9	113
Surr: Toluene-d8					<b>48.4</b>	50.00		96.8		86.7	112

## Receiving Check List

<http://www.teklabinc.com/>

**Client:** ERM

**Work Order:** 18091324

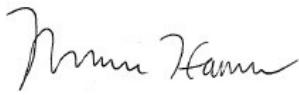
**Client Project:** Champaign GW

**Report Date:** 26-Sep-18

**Carrier:** Employee

**Received By:** NH

**Completed by:**



**On:**

20-Sep-18

Nathan Harer

**Reviewed by:**



**On:**

20-Sep-18

Elizabeth A. Hurley

**Pages to follow:** Chain of custody

**4**

Extra pages included

**0**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C <b>1.42</b>
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input type="checkbox"/>	Lab <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
<i>When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.</i>				
Water – at least one vial per sample has zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input type="checkbox"/>	
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>	
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	

**Any No responses must be detailed below or on the COC.**

Additional Sodium Hydroxide was in all samples for Cyanide analysis except 105, 106R, 109, 120, 123, 124, 125, 127, Dup 002, and EB-01-WQ upon arrival at the laboratory. - nharer - 9/20/2018 4:05:54 PM

Trip Blank collection date and time will be reported as the received date and time (end of trip). - ehurley - 9/20/2018 4:23:06 PM

# CHAIN OF CUSTODY

pg. 1 of 4 Work order # 18091324

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	ERM
Address:	2 CityPlace Drive, Suite 70
City / State / Zip	St. Louis, MO 63141
Contact:	Tom Stiegemeier Greg Moore
E-Mail:	tom.stiegemeier@erm.com
Phone:	(314) 682-3980
Fax:	

Samples on:  ICE  BLUE ICE  NO ICE 1.40 °C

Preserved in:  LAB  FIELD FOR LAB USE ONLY

Lab Notes: Additional NaOH added to all samples except: 105, 106R, 109, 120, 123, 124, 125, 127, Duy 002, and EB-01-wa 9/20/18

Client Comments: EPA Tier 1 CLASS 1 RO'S

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No

Are these samples known to be hazardous?  Yes  No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

DHS 9/18/18  
TE

Project Name/Number		Sample Collector's Name		# and Type of Containers	MATRIX	INDICATE ANALYSIS REQUESTED							
Champaign GW		Greg Moore				Total Cyanide 9012A	PAH 8270 SIM	BTEX 8260	Groundwater				
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> 1-2 Day (100% Surcharge)	Billing Instructions		1	1	1	2		X	X	X	X	
<input type="checkbox"/> Other	<input type="checkbox"/> 3 Day (50% Surcharge)	Billing Instructions Standard or 3 Day Rates		UNP	HNO3	NaOH	HCl		X	X	X	X	
Lab Use Only	Sample Identification	Date/Time Sampled							X	X	X	X	
18091324-001	UMW-102-WG-20180917	9/17/18	1710	1	1	1	2		X	X	X	X	
-002	UMW-105-WG-20180919	9/19/18	1415	1	1	1	2		X	X	X	X	
-003	UMW-106R-WG-20180918	9/18/18	1150	1	1	1	2		X	X	X	X	
-004	UMW-107R-WG-20180919	9/18/18	1645	1	1	1	2		X	X	X	X	
-005	UMW-108-WG-20180918	9/18/18	900	1	1	1	2		X	X	X	X	
-006	UMW-109-WG-20180917	9/17/18	1715	1	1	1	2		X	X	X	X	
-007	UMW-111A-WG-20180917	9/17/18	1425	1	1	1	2		X	X	X	X	
-008	UMW-116-WG-20180918	9/18/18	1025	1	1	1	2		X	X	X	X	
-009	UMW-117-WG-20180918	9/18/18	1140	1	1	1	2		X	X	X	X	
-010	UMW-118-WG-20180918	9/18/18	845	1	1	1	2		X	X	X	X	

Relinquished By	Date/Time	Received By	Date/Time
John Dyer	9/20/18 1522	MBJ	9/20/18 1522

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See [www.teklabinc.com](http://www.teklabinc.com) for terms and conditions.

BottleOrder: 46155



9/20/18 N/A

# CHAIN OF CUSTODY

pg. 2 of 4 Work order # 18091324

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	ERM
Address:	2 CityPlace Drive, Suite 70
City / State / Zip	St. Louis, MO 63141
Contact:	Tom Stiegemeier Greg Moore
E-Mail:	tom.stiegemeier@erm.com
Phone:	(314) 682-3980
Fax:	

Samples on:	<input checked="" type="checkbox"/> ICE	<input type="checkbox"/> BLUE ICE	<input type="checkbox"/> NO ICE	1.45 °C
Preserved in:	<input type="checkbox"/> LAB	<input type="checkbox"/> FIELD	FOR LAB USE ONLY	
Lab Notes:	UMW-300-WG-20180917 time of collection per sample bottle G/2018/11/17 * 9/17/18			
Client Comments:	EPA Tier 1 Class 1 RO's			

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No

Are these samples known to be hazardous?  Yes  No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

Project Name/Number		Sample Collector's Name				MATRIX	INDICATE ANALYSIS REQUESTED													
Champaign GW		Greg Moore																		
Results Requested		Billing Instructions		# and Type of Containers																
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> 1-2 Day (100% Surcharge)			UNP	HNO3	NaOH	HCl													
<input type="checkbox"/> Other	<input type="checkbox"/> 3 Day (50% Surcharge)																			
Lab Use Only		Sample Identification		Date/Time Sampled																
18091324-011		UMW-119-WG-20180917		9/17/18 1545				1	1	1	2	X			X	X	X	X		
-012		UMW-120-WG-20180917		9/17/18 1610				1	1	1	2	X			X	X	X	X		
-013		UMW-121-WG-20180917		9/17/18 1335				1	1	1	2	X			X	X	X	X		
-014		UMW-122-WG-20180918		9/18/18 1405				1	1	1	2	X			X	X	X	X		
-015		UMW-123-WG-20180918		9/18/18 1345				1	1	1	2	X			X	X	X	X		
-016		UMW-124-WG-20180919		9/19/18 845				1	1	1	2	X			X	X	X	X		
-017		UMW-125-WG-20180919		9/19/18 820				1	1	1	2	X			X	X	X	X		
-018		UMW-126-WG-20180919		9/19/18 1050				1	1	1	2	X			X	X	X	X		
-019		UMW-127-WG-20180919		9/19/18 1040				1	1	1	2	X			X	X	X	X		
-020		UMW-300-WG-20180917		9/17 146*				1	1	1	2	X			X	X	X	X		

Relinquished By		Date/Time		Received By		Date/Time	
Tom H Stgyn		9/20/18 1522		M J D		9/20/18 1522	

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BottleOrder: 46155



# CHAIN OF CUSTODY

pg. 3 of 4 Work order # 18091324

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	ERM
Address:	2 CityPlace Drive, Suite 70
City / State / Zip	St. Louis, MO 63141
Contact:	Tom Stiegemeier Greg Moore
E-Mail:	tom.stiegemeier@erm.com
Phone:	(314) 682-3980
Fax:	

Samples on:  ICE  BLUE ICE  NO ICE 1.40 °C  
 Preserved in:  LAB  FIELD **FOR LAB USE ONLY**

Lab Notes:

Client Comments *EPA TIER1 CLASS 6W RD's*

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No

Are these samples known to be hazardous?  Yes  No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

Project Name/Number		Sample Collector's Name				MATRIX	INDICATE ANALYSIS REQUESTED															
		<i>Greg Moore</i>						Total Cyanide	9012A	Total RCRA Metals												
Champaign GW						Groundwater																
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)						Billing Instructions	# and Type of Containers	UNP	HNO3	NaOH	HCl											
18091324-021		UMW-301R-WG-20180919	9/19/18	1630	1	1	1	2					X	X	X	X						
-022		UMW-302-WG-20180919	9/19/18	1325	1	1	1	2					X	X	X	X						
-023		UMW-303-WG-20180918	9/18/18	1035	1	1	1	2					X	X	X	X						
-024		UMW-304R-WG-20180919	9/19/18	929	1	1	1	2					X	X	X	X						
-025		UMW-305-WG-20180918	9/18/18	1610	1	1	1	2					X	X	X	X						
-026		UMW-306-WG-20180918	9/18/18	1530	1	1	1	2					X	X	X	X						
-027		UMW-307-WG-20180918	9/18/18	1505	1	1	1	2					X	X	X	X						
-028		UMW-308-WG-20180919	9/19/18	0950	1	1	1	2					X	X	X	X						
-029		DUP 001-WG-20180918	9/18/18	—	1	1	1	2					X	X	X	X						
-030		DUP 002-WG-20180919	9/19/18	—	1	1	1	2					X	X	X	X						

Relinquished By	Date/Time	Received By	Date/Time
<i>Tom Stiegemeier</i>	9/20/18 1522	<i>M</i>	9/20/18 1522

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See [www.teklabinc.com](http://www.teklabinc.com) for terms and conditions.

BottleOrder: 46155



# CHAIN OF CUSTODY

pg. 4 of 4 Work order # 1609324

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	ERM
Address:	2 CityPlace Drive, Suite 70
City / State / Zip	St. Louis, MO 63141
Contact:	Tom Stiegemeier <i>Frey More</i>
E-Mail:	tom.stiegemeier@erm.com
Phone:	(314) 682-3980
Fax:	

Samples on:  ICE  BLUE ICE  NO ICE *142 °C*

Preserved in:  LAB  FIELD **FOR LAB USE ONLY**

Lab Notes:

Client Comments *TEPA Tier 2 Class I GW/Ro's*

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No

Are these samples known to be hazardous?  Yes  No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

Project Name/Number		Sample Collector's Name						MATRIX	INDICATE ANALYSIS REQUESTED																	
Champaign GW		<i>Frey More</i>							Billing Instructions	# and Type of Containers	UNP	HNO3	NaOH	HCl	Groundwater	PAH 8270 SIM	BTEX 8260	Total Cyanide 9012A	Total 8 RCRA Metals							
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> 1-2 Day (100% Surcharge)														X	X	X	X								
<input type="checkbox"/> Other	<input type="checkbox"/> 3 Day (50% Surcharge)														X	X	X	X								
<b>Lab Use Only</b>	<b>Sample Identification</b>	<b>Date/Time Sampled</b>													X	X	X	X								
1609324-031 -032 -033	DUP 003-WG-20180919	9/19/19 —						1	1	1	2				X											
	EB-01-WQ-20180919	9/19/19 820						1	1	1	2				X											
	TB-01-WQ-201809										2				X											
	MS/MSD 1							2	1	1	4				X											
	MS/MSD 2							2	1	1	4				X											
	EXTRA SET 1							1	1	1	2				X											
	EXTRA SET 2							1	1	1	2				X											

Relinquished By	Date/Time	Received By	Date/Time
<i>Tom Stieg</i>	9/20/18 1522	<i>Tom Stieg</i>	9/20/18 1522

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BottleOrder: 46155

