ROD AND WIRE MILL INTERIM MEASURES PROGRESS REPORT – AUGUST 2018

TRADEPOINT ATLANTIC SPARROWS POINT, MARYLAND

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1.0 INTRODUCTION

This Progress Report for the Rod and Wire Mill Interim Measures at the Tradepoint Atlantic property has been prepared by ARM Group (ARM) on behalf of EnviroAnalytics Group (EAG). This report presents a brief history of the Rod and Wire Mill Area (RWM), a description of historical interim remedial measures that operated at the RWM, a description of additional remedial work that was completed in 2016 and 2017 to provide soil and groundwater treatment in the RWM area, the resulting changes observed in groundwater flow patterns and contaminant distribution, and an evaluation of the effectiveness of the remedial measures.

1.1. TRADEPOINT ATLANTIC SITE BACKGROUND

The Tradepoint Atlantic property is located in Baltimore County, Maryland at the southeastern corner of the Baltimore metropolitan area, approximately nine miles from the downtown area. The property encompasses approximately 3,100 acres located on a peninsula situated on the Patapsco River near its confluence with the Chesapeake Bay, physically positioned in the mouth of the heavily industrialized and urbanized Baltimore Harbor / Patapsco River region. A land connection to the northeast links the peninsula with the adjacent community of Edgemere.

From the late 1800s until 2012, the property was used for the production and manufacturing of steel. Iron and steel production operations and processes at the Site included raw material handling, coke production, sinter production, iron production, steel production, and semi-finished and finished product preparation. In 1970, Sparrows Point was the largest steel facility in the United States, producing hot and cold rolled sheets, coated materials, pipes, plates, and rod and wire. The steelmaking operations at the facility ceased in fall 2012, and current plans for the Site include demolition and redevelopment over the next several years. Some portions of the site have already undergone remediation and/or redevelopment.

The original topography of the peninsula was flat with elevations not exceeding 15 feet based on the North American Vertical Datum 1988 (NAVD88). The peninsula has been drastically altered since the inception of the steel manufacturing activities. Creeks have been filled in and new land has been added to various areas of the Site by building up near-shore areas of the river.

1.2. SITE OWNERSHIP HISTORY

Bethlehem Steel Corporation operated an integrated steelmaking facility at the site from approximately 1916 through 2003. As a result of multiple market factors, Bethlehem Steel declared bankruptcy in 2001 and the facility was subsequently operated by a succession of owners, the last of which (i.e., RG Steel Sparrows Point, LLC) filed for bankruptcy in 2012. The site was subsequently purchased by Sparrows Point, LLC (SPLLC) at a bankruptcy sale on August 7, 2012. Sparrows Point Terminal, LLC (SPT) purchased the real property on September 18, 2014 subject





to the provisions of a Purchase and Sale Agreement wherein SPLLC and SPT have allocated various environmental responsibilities, liabilities, and obligations among themselves. SPT has subsequently undergone a name change and is now doing business as Tradepoint Atlantic.

1.3. REGULATORY PROCESS

Environmental responses for the RWM and for the site in general are being implemented pursuant to the following:

- Multi-Media Consent Decree (Decree) between Bethlehem Steel Corporation, the United States Environmental Protection Agency, and the Maryland Department of the Environment (effective October 8, 1997); this Decree has been modified in accordance with a stipulated order entered into by Sparrows Point LLC and the respective agencies effective July 28, 2014;
- Administrative Consent Order (ACO) between Sparrows Point Terminal, LLC and the Maryland Department of the Environment (effective September 12, 2014); and,
- Settlement Agreement and Covenant Not to Sue (SA) between Sparrows Point Terminal, LLC and the United States Environmental Protection Agency (effective November 25, 2014).

The original Consent Decree for the Sparrows Point facility dealt with many issues associated with ongoing iron-making, steel-making, coking, byproduct, plating, and finishing operations. To the extent that these operations are no longer conducted, and the associated facilities no longer exist, many specific requirements of the Decree are no longer applicable and have been removed in accordance with the stipulated order implementing modifications to the Decree. The RWM is part of the acreage that remains subject to the requirements of the Decree as documented in correspondence received from EPA on September 12, 2014.





2.0 ROD AND WIRE MILL

2.1. SITE DESCRIPTION

2.1.1. Historical RWM Industrial Activities

The RWM (the Site) is located in the northwestern portion of the Site. This area has also been given the designation of Parcel A3, as the Tradepoint Atlantic property as a whole has been divided into several separate parcels. These parcels, including Parcel A3 (the RWM), are shown on **Figure 1.**

The RWM is the location of the former mills that produced rods and wire products from the 1940s to the early 1980s. All manufacturing activities at the RWM ceased operation in the early 1980s with subsequent demolition of all structures between 1994 and 2000, based on historical aerial photos.

Manufacturing activities at the RWM included leaching of zinc ore and a subsequent treatment process to remove cadmium impurities. The leaching process was implemented in large tanks located inside the north end of the former RWM building. In the 1950s through the early 1970s, the acidic leach residue was stored in the Northwest Pond until about 1959 when filters were installed to dewater the residues. Dewatered sludge generated from this process was temporarily stored on the ground outside the north end of the mill in the Former Sludge Bin Storage Area. Filtrate from the dewatering process was recycled to the wire plating process. Excess filtrate was discharged to the East Pond until 1971, after which it was sent to the Humphrey Creek Wastewater Treatment Plant (HCWWTP) for treatment. These operations ended in the early 1980s when the Rod and Wire Mill was shut down. The former locations of the Northwest Pond, the Sludge Bin Storage Area, and the East Pond are shown on **Figure 2**.

2.1.2. Site Geology/Hydrogeology

In general, the subsurface geology at the RWM includes slag fill materials overlying natural soils, which include fine-grained sediments (clays and silts) and coarse-grained sediments (sands). Groundwater occurrence at the Site has been segregated into three horizons identified as shallow, intermediate and deep hydrogeologic zones.

The shallow water table below the Site occurs within recent sedimentary deposits or slag fill material, and includes the unconfined water table at the Site. Monitoring wells and piezometers designated as shallow are screened within this shallow, unconfined unit. The "shallow" bottom-of-screen elevations generally range from +5 to -20 feet above mean sea level (amsl). In some areas of the Site, the slag fill is directly underlain by, and connected to, the coarser grained beds or lenses within the Talbot Formation that comprise the Upper Talbot Channel Unit. In these areas, the slag fill and Upper Talbot Channel Units form a single groundwater flow system. In much of





the investigation area, the slag fill material is underlain by finer-grained silts and clays that comprise the Talbot Clay Aquitard. In these areas, shallow groundwater flow may be separated from groundwater in any underlying coarse-grained beds or lenses.

The intermediate hydrogeologic zone is the focus of the interim pump and treat measure formerly used at the Site and is therefore also referred to as the intermediate pumping zone. The intermediate zone includes the unconfined to partially confined groundwater in the Pleistocene Upper Talbot unit. The "intermediate" bottom-of-screen elevations generally range from -20 to -50 feet amsl. The presence of clay and silt layers within the intermediate hydrogeologic zone likely retard the vertical recharge of groundwater from the upper fill material.

The lower hydrogeologic zone includes the confined groundwater in the Lower Talbot or Upper Patapsco Sand unit. The "lower" bottom-of-screen elevations generally range from -50 to -141 feet amsl. The lower hydrogeologic zone was not a primary focus in this groundwater investigation. Hydrogeologic zones at greater depth are known to exist based on a review of the regional geology; however, these deeper units are isolated from the upper three units and impacts have not been identified from former iron and steel operations.

2.2. HISTORICAL INTERIM MEASURES FOR GROUNDWATER CONDITIONS

The aforementioned historical operations in the RWM resulted in releases of cadmium and zinc to soil and groundwater. In 1986, a soil and groundwater remediation program was initiated to address groundwater exhibiting elevated levels of cadmium and zinc, and residual soil contamination in the Sludge Bin Storage Area. Remediation initially consisted of a soil flushing program and associated pumping and treatment of groundwater from shallow and intermediate wells. The groundwater pumping was discontinued and the treatment plant dismantled in 1999 to support a demolition project at the Rod and Wire Mill, allowing for reassessment of the interim measures. A Work Plan to re-establish interim measures was submitted to the reviewing agencies (MDE and EPA) in July 2000, and the Work Plan was approved in November 2000. Reestablishment of the interim measures included the following:

- Institutional controls for soils were established to provide a "Restricted Work Area" to control the exposure of onsite workers to soils in the Former Sludge Bin Storage Area.
- A groundwater monitoring network was installed consisting of 31 wells for monitoring the performance of the groundwater pump and treat system. This monitoring network was used to collect water level and groundwater quality data.
- A groundwater pump and treat system was operated and maintained consisting of two
 intermediate zone recovery wells (RW10-PZM020 and RW15-PZM020) that operated at a
 rate of between 5 and 12 gallons per minute (gpm). The expected normal operating rate for
 the treatment plant was set at a combined rate of 8 to 12 gpm, with a maximum design flow
 of 25 gpm.





• Recovered groundwater was transported via a pipeline to the HCWWTP for subsequent treatment and discharge in accordance with the NPDES permit requirements for the facility.

The pumping and treatment of groundwater resumed in September 2001. This IM was discontinued in 2017 so that additional remedial work could be performed at the RWM.

2.3. GROUNDWATER CONDITIONS PRIOR TO ADDITIONAL REMEDIAL WORK IN 2016

2.3.1. Shallow Groundwater Zone

The RWM Phase II Investigation Report (ARM, 2016) characterized the shallow groundwater zone at the Site based on samples collected in late 2015. Key findings from data collected during the Phase II Investigation are as follows:

- Groundwater in the shallow zone appears to flow radially in all directions from a mounded location in the vicinity of RW10-PZM004. The groundwater elevation contours for the shallow zone during pumping conditions are shown on **Figure 3.**
- Measurements of pH varied significantly, from a maximum of 11.25 at RW09-PZM004 in the central portion of the Site to less than 4 in RW11-PZM004 to the southeast. Generally, wells in the central and southwestern areas exhibited near-neutral or basic pH, while wells to the east and northeast exhibited neutral or acidic pH. The pH of the shallow zone in December 2015 is shown on Figure 4.
- Based on samples collected in October and November of 2015, the maximum cadmium concentration, 102 μg/L, was measured in the northern portion of the RWM at RW-002-PZ. The next two highest concentrations were 31.3 μg/L and 20.1 μg/L at RW18-MW(S) and RW-006-PZ, respectively, moving to the southeast away from RW-002-PZ. Sampling locations in the central, western and southern areas had very low or no detectable concentrations of cadmium. Shallow zone cadmium concentrations for the previous interim measures are shown on **Figure 5**.
- Zinc concentrations in the shallow zone vary significantly, with a maximum value of 245,000 μg/L far to the east in RW-006-PZ. Another (albeit lesser) zinc hotspot of 5,520 μg/L is located at RW-002-PZ in the north. Concentrations generally decrease towards the west and south away from the two hotspots. Shallow zone zinc concentrations for the previous interim measures are shown on **Figure 6.**

Groundwater data for samples collected from shallow zone wells and piezometers in late 2015 (prior to installation of the remediation trenches) are summarized in **Table 1**.





2.3.2. Intermediate Groundwater Zone

The Pre-Design Investigation (PDI) Report (ARM, 2016) characterized the intermediate groundwater zone at the Site based on samples collected in late 2015. Key findings from data collected during the PDI are as follows:

- In the intermediate zone, groundwater appeared to flow from the north and east toward the recovery system pumping wells. The western half of the Site is affected by the recovery system as well, as elevations below mean sea level were reported in several wells. The intermediate groundwater elevation contour map is included as **Figure 7**.
- Measurements of pH showed the relatively acidic nature of the groundwater. Out of measurements collected from 12 locations, the highest pH value was 7.48, with the majority of the values being less than 6. The pH of the intermediate zone in December 2015 is shown on **Figure 8**.
- The former sludge bin location appears to be the primary source of cadmium in the intermediate groundwater zone. This can be seen on **Figure 9** near sample location RW-057-PZ.
- The primary source of zinc in the intermediate groundwater zone is the western portion of the east pond (just west of the existing transformer pad). This can be seen on **Figure 10** at sample location RW-067-PZ. A secondary zinc source is located further west near the former sludge bin location. This can also be seen on Figure 10 at sample location RW-057-PZ.

Groundwater data for samples collected from intermediate zone wells and piezometers in late 2015 (prior to installation of the remediation trenches) are summarized in **Table 2**.





3.0 NEW INTERIM MEASURES AND GROUNDWATER CONDITIONS

3.1. INTERIM MEASURES REMEDIAL APPROACH

EAG contracted Advanced GeoServices (AGS) to design and install remediation trenches to serve as the new interim measures for remediating groundwater at the RWM. The full details of the remediation design are presented in the AGS Work Plan, *Interim Measure Work Plan In-Situ Groundwater Treatment* (AGS, 2016). The primary purpose of this new interim remedial measure is to reduce dissolved concentrations of metals focused primarily ongroundwater in the intermediate zone and eliminate the potential for future unacceptable groundwater discharges from this zone to surface water. Groundwater in the shallow zone was noted to have a higher pH due to placement of slag fill and as a result the metals contamination in this zone has not migrated. Therefore, the intermediate zone is the primary focus of this work.

Groundwater extraction from the pumping wells was stopped in September 2016 to support the construction of the remediation trenches. The approach for addressing the elevated dissolved cadmium and zinc in the intermediate groundwater zone was to precipitate the dissolved metals in-situ by raising the groundwater pH from approximately 4 to approximately 9.5 to 10. Alkaline reagents were added into the intermediate groundwater zone at select high concentration areas. Excavated soils were replaced with alkaline charges that react with acidic groundwater to create slightly alkaline conditions within the aquifer and remove the dissolved cadmium and zinc from solution. The alkaline charges utilized a combination of fast acting TerrabondMG (40% by weight) in conjunction with limestone aggregate (60% by weight). The reagents were placed in trenches in a staggered/offset alignment that is perpendicular to the anticipated groundwater flow. A typical cross-section of a remediation trench is provided as **Figure 11**, and the approximate locations of the trenches are shown on **Figures 12-17**.

Approximately 2,392 cubic yards of contaminated soil were also removed from the RWM during construction of the trenches and disposed offsite. Construction of the trenches was completed in January 2017.

The interim groundwater treatment goals were to increase the pH above 7 to affect a > 90% reduction in dissolved concentrations of cadmium and zinc within the source areas as compared to existing conditions.

After the completion of remediation trenches, several new groundwater wells were installed in the RWM to facilitate monitoring of the groundwater conditions in the shallow and intermediate zones.





3.2. GROUNDWATER CONDITIONS AFTER TRENCH INSTALLATION

Groundwater samples were collected from wells on a monthly basis starting in February 2017 up to January 2018. Following the January 2018 sampling event, groundwater samples were collected on a quarterly basis. The sections below discuss the results from the Spring 2018 monitoring period, which consisted of the April 2018 and August 2018 sampling events.

3.2.1. Construction and Flush-Mount Conversions

Due to construction of a new warehouse in close proximity to the RWM wells, several of the wells needed to be converted from having above-ground stick-up protective steel casings to flush-mount surface protections. The primary reason for this was so a large part of the northern area of the former RWM could be paved and made into a parking lot. The flush-mount conversions were completed in March 2018. As a result of these conversions, the established surveyed top-of-casing (TOC) elevation data became invalid for the affected wells. Although depth to water measurements were collected during the April 2018 and August 2018 sampling event, they could not be used to calculate groundwater elevations without valid TOC elevation data. Wells that were converted to flush mounts will be resurveyed in the upcoming months so that groundwater elevation data can be accurately calculated and groundwater contour maps for the shallow and intermediate zones can be generated.

3.2.2. Shallow Groundwater Zone

Measurements of pH collected in August 2018 show that most pH values in the shallow zone are close to or above 6.5. The lowest pH was measured in well RW14-MW(S) in the central portion of the site at a value of 6.32. The highest pH was measured at RW18-MW(S) in the eastern portion of the site at 11.4. The average pH for the shallow zone had generally been trending downward from the August 2017 sampling event to the April 2018 sampling event, but then exhibited a notable increase during the August 2018 sampling event. This sampling event had the highest average pH value over the past year. Several measurements during the August 2018 sampling event were unusually high for a given well, and therefore may not actually be representative of shallow groundwater conditions. A figure depicting the pH of the shallow zone groundwater based on measurements collected during the August 2018 sampling event is included as **Figure 12.**

Cadmium results for shallow zone wells collected in April 2018 and August 2018 show that cadmium has increased in some wells, decreased in some wells, and stayed relatively the same in some wells, with no predominant trend in the shallow zone as a whole. The cadmium concentrations measured in shallow wells during the August 2018 sampling event were below 8.8 μ g/L in all wells along the western border of the site adjacent to the shoreline, except for RW03-MW(S). RW03-MW(S) had a cadmium concentration of 10.8 μ g/L. The highest cadmium concentration in the shallow zone during this sampling event was in the central portion of the site at well RW14-MW(S) (3,630 μ g/L). This well continues to have the highest levels of





cadmium in the shallow zone and the concentration was three orders of magnitude greater than the concentration in the majority of shallow zone wells. The second highest concentration (albeit significantly lower) was nearby at RW11-MW(S) ($66.3 \mu g/L$).

Typically, a cadmium concentration greater than 200 μ g/L is measured in RW18-MW(S), but it decreased significantly to 7.1 μ g/L during the August 2018 sampling event. Cadmium concentrations for samples collected in August 2018 from the shallow zone are shown on **Figure 13.**

Like those for cadmium, zinc results for shallow zone wells from the April 2018 and August 2018 sampling events show that concentrations have increased in some wells, decreased in some wells, and stayed relatively the same in some wells, with no predominant trend in the shallow zone as a whole. The lowest zinc concentration was measured in well RW04-MW(S) at 7.9 J μ g/L. The highest zinc concentration in the shallow zone is typically detected in well RW14-MW(S); however, during the August 2018 sampling event, the highest concentration of zinc in the shallow zone was at well RW11-MW(S) with a concentration of 109,000 μ g/L. Whether RW14-MW(S) or RW11-MW(S) has a higher concentration on a given date, the central portion of the Site appears to contain the highest zinc concentrations in shallow zone wells. Zinc concentrations for samples collected in August 2018 from shallow zone wells are shown on **Figure 14.**

Groundwater data for samples collected from shallow zone wells following installation of the remediation trenches (over the past year) are summarized in **Table 3.**

For ease in visualizing trends in pH, cadmium, and zinc, time-series graphs for each of these three parameters at each shallow zone monitoring well are presented in **Appendix A**.

3.2.3. Intermediate Groundwater Zone

Measurements of pH collected from intermediate zone wells in August 2018 show that groundwater wells RW01-MW(I), RW02-MW(I), RW05-MW(I), RW06-MW(I), and RW16-MW(I) had pH measurements greater than 7. During the April 2018 and August 2018 sampling events, the pH increased in some wells, decreased in some wells, and stayed relatively stable in some wells. Wells in the area closest to the remediation trenches have generally exhibited overall increases in pH since the beginning of post-trench monitoring in 2017 through the August 2018 sampling event. The wells in this area consist of RW11-MW(I), RW12-MW(I), RW13-MW(I), RW15-MW(I), RW16-MW(I) and RW18-MW(I). A figure depicting the pH of the intermediate zone groundwater based on measurements collected in August 2018 is included as **Figure 15.**

Cadmium results for intermediate zone wells collected in April 2018 and August 2018 show that cadmium concentrations vary significantly, with some wells displaying increases, other displaying decreases, and still others remaining relatively stable. In the area closest to the





remediation trenches, wells RW11-MW(I), RW12-MW(I), RW16-MW(I), and RW18-MW(I) all exhibited notable decreases in cadmium concentration from the beginning of post-trench monitoring in 2017 through the August 2018 sampling event. A few wells along the northern boundary of the site had no detectable level of cadmium. Cadmium concentrations for samples collected in August 2018 from the intermediate zone are shown on **Figure 16.**

Like the cadmium results, zinc results for intermediate zone wells collected during the April 2018 and August 2018 sampling events show that zinc concentrations vary significantly, with some wells displaying increases, other displaying decreases, and still others remaining relatively stable. In the area closest to the remediation trenches, wells RW11-MW(I), RW12-MW(I), RW16-MW(I), and RW18-MW(I) all exhibited notable decreases in zinc concentration from the beginning of post-trench monitoring in 2017 through the August 2018 sampling event. Zinc concentrations for all samples collected in August 2018 from intermediate zone wells are shown on **Figure 17.** Groundwater data for samples collected from intermediate zone wells are summarized in **Table 4.**

For ease in visualizing trends in pH, cadmium, and zinc, time-series graphs for each of these three parameters at each shallow zone monitoring well are presented in **Appendix B**.





4.0 SUMMARY AND CONCLUSIONS

The current approach for addressing the elevated dissolved cadmium and zinc in the intermediate groundwater zone is to precipitate the dissolved metals in-situ by raising the groundwater pH from approximately 4 to approximately 9.5 to 10. This approach relies on groundwater movement to distribute the reagent to increase pH and to intercept the migration of metals contaminants in the intermediate zone. Therefore, the effectiveness of the new interim measures is expected to be observed first in the intermediate zone wells closest to the trenches and, due to the relatively slow groundwater velocity, may not be apparent in downgradient wells for some time.

Results in shallow zone wells measured during the April 2018 and August 2018 sampling events over the past year indicate that pH, cadmium and zinc concentrations have increased in some wells, decreased in some wells, and stayed relatively the same in some wells, with no predominant trend in the shallow zone as a whole. Spatially, zinc concentrations continue to vary significantly across the Site.

Figure 18 compares pre-trench (**Figure 8**) and post-trench (**Figure 15**) iso-concentration maps for pH and shows an overall increase in pH in the intermediate zone following the installation of the trenches. While the pH has fluctuated between sampling events, the pH is above 6.0 in all but the two eastern-most wells in the most recent sampling event. In well RW-16-MW(I), the pH has increased to the target range of above 10.0.

Figure 19 compares pre-trench (**Figure 9**) and post-trench (**Figure 16**) iso-concentration maps for cadmium. These iso-concentration maps show a significant decrease in cadmium concentrations in the intermediate zone in the near-trench area, and an overall decrease over much of the site. With the exception of the new well upgradient of the trenches (RW19-MW(I)), the map shows significant decreases in the near-trench wells. The current maximum concentration (21,000 ug/L in RW13-MW(I)) is less than half the maximum concentration observed in the November 2015 data (44,500 ug/L in RW-057-PZ) within the same area of the site, near the former sludge bins.

Figure 20 compares pre-trench (**Figure 10**) and post-trench (**Figure 17**) iso-concentration maps for zinc. This figure shows the effect the trenches on zinc concentrations to be similar to the effect seen for cadmium. The current maximum concentration (330,000 ug/L in RW18-MW(I)) is also less than half the pre-trench maximum concentration (784,000 ug/L in RW-067-PZ) in the same area, near the western portion of the former East Pond. The decrease in concentration in this first well downgradient of the first trench (RW18-MW(I)) indicates the effectiveness of the trenches at mitigating the migration of metals in the intermediate groundwater, particularly given the presence of high zinc levels in RW19-MW(I) upgradient of the first trench. The current zinc concentration in RW13-MW(I) (274,000 ug/L) also shows decreases of greater than 50%





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from the pre-trench concentration of greater than 500,000 ug/L within this area near the former sludge bins.

Analytical results from the April 2018 and August 2018 sampling show noticeable progress evident in the wells closest to the remediation trenches, when compared to the pre-trench data from November 2015.

It is recommended that monitoring should continue at the Site to assess the overall performance and effectiveness of the remediation trenches.





5.0 REFERENCES

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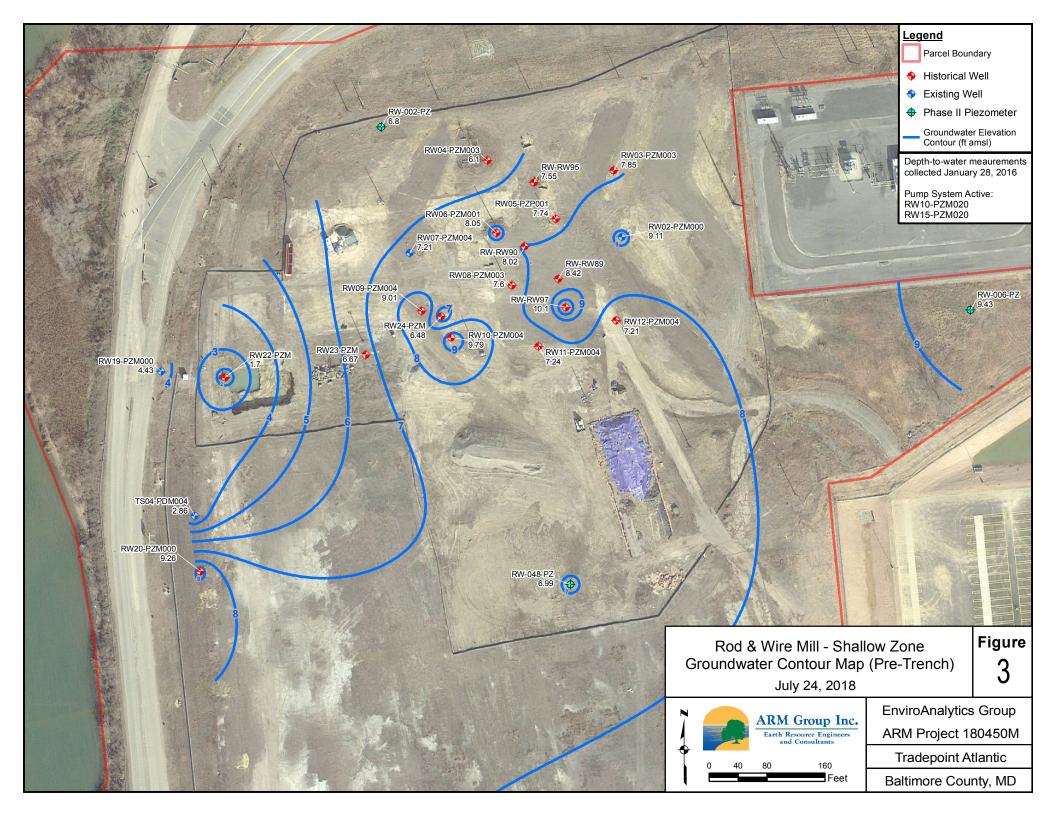


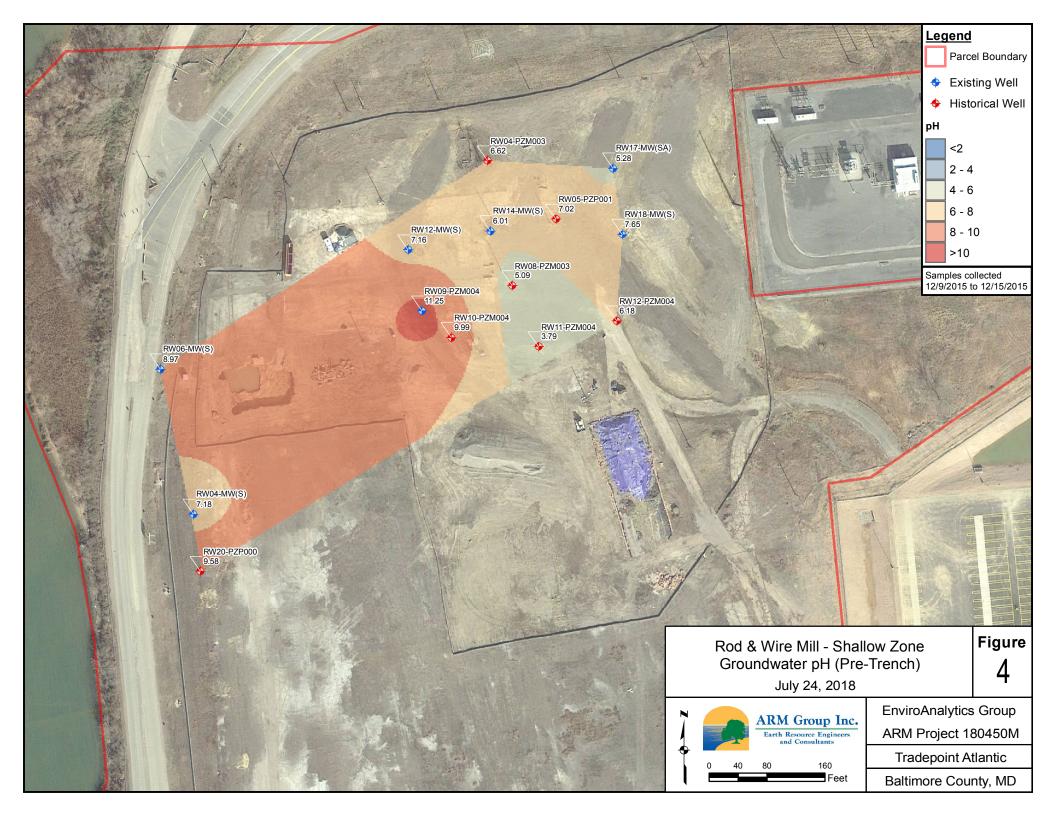


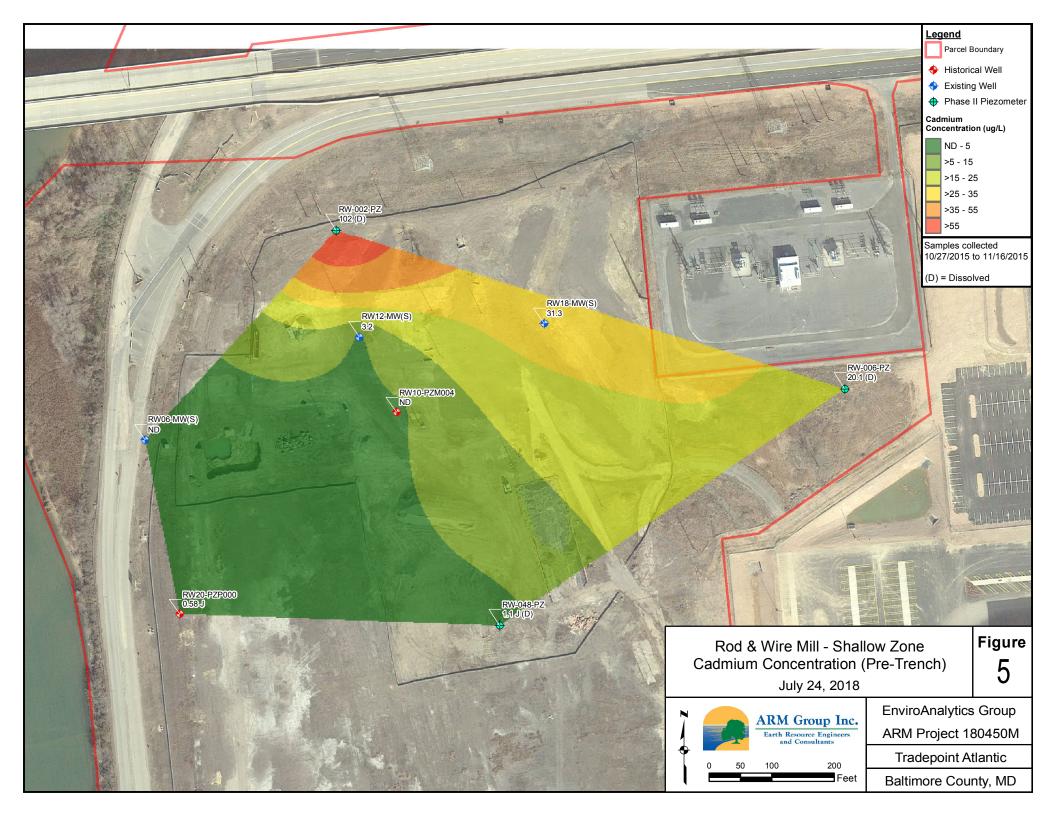
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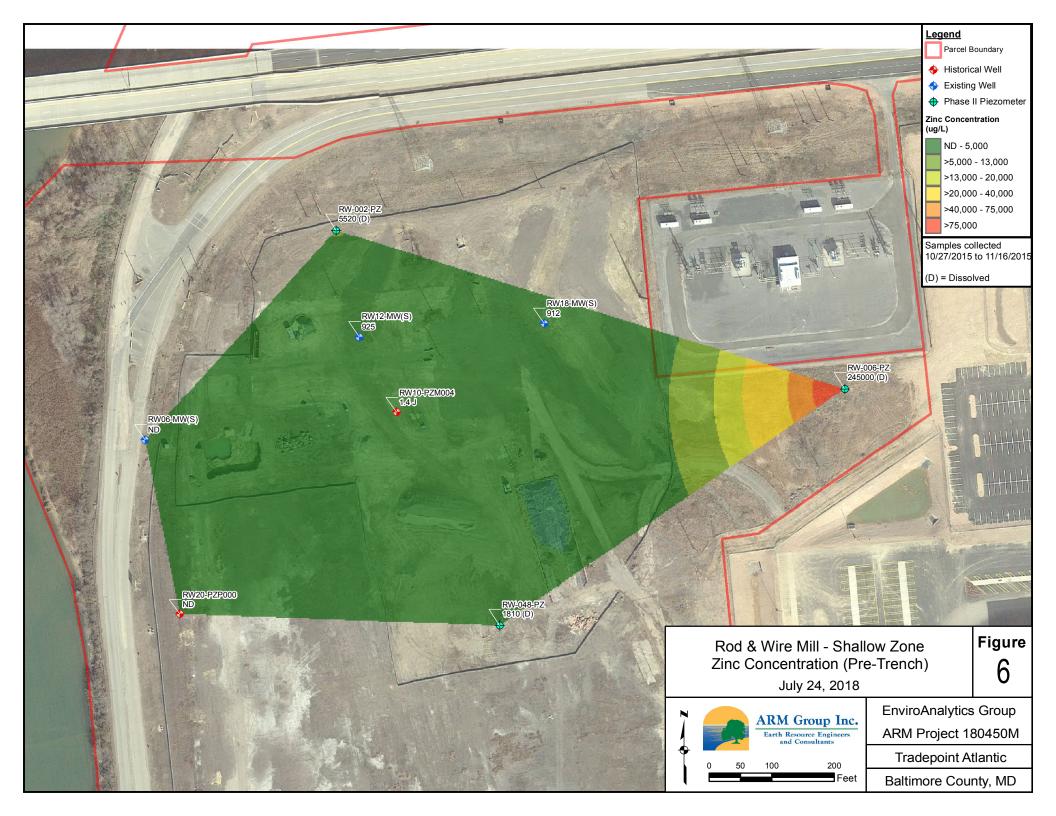


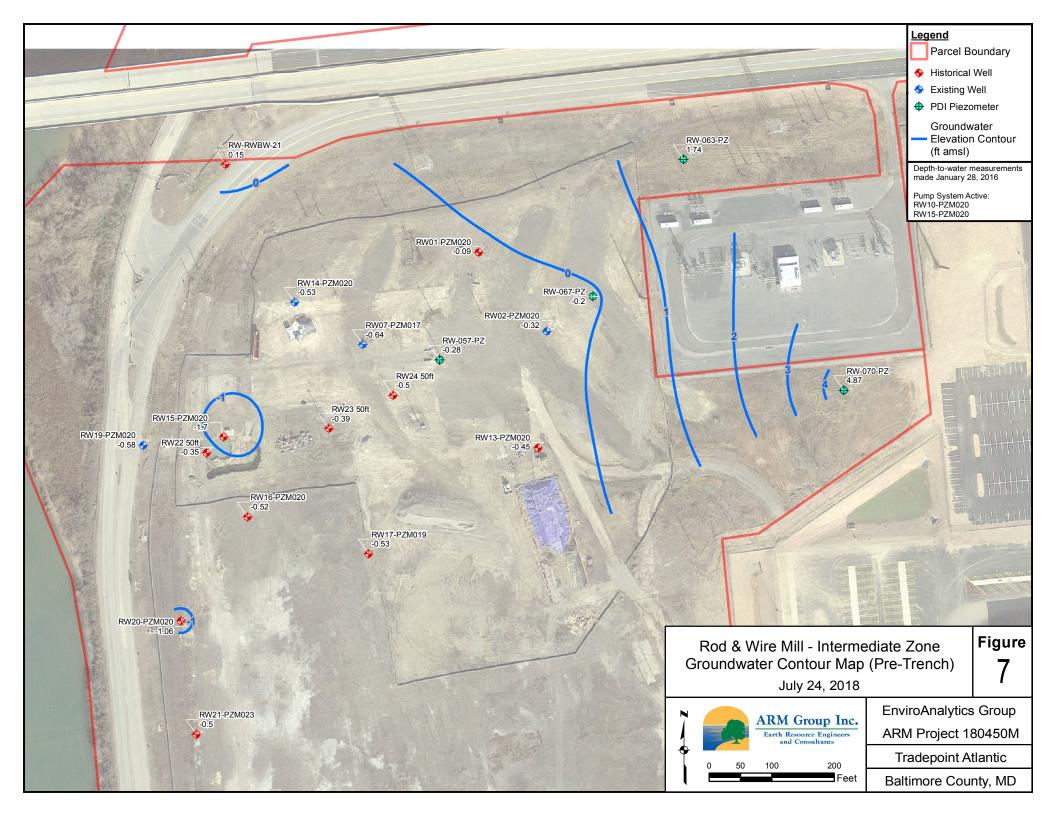


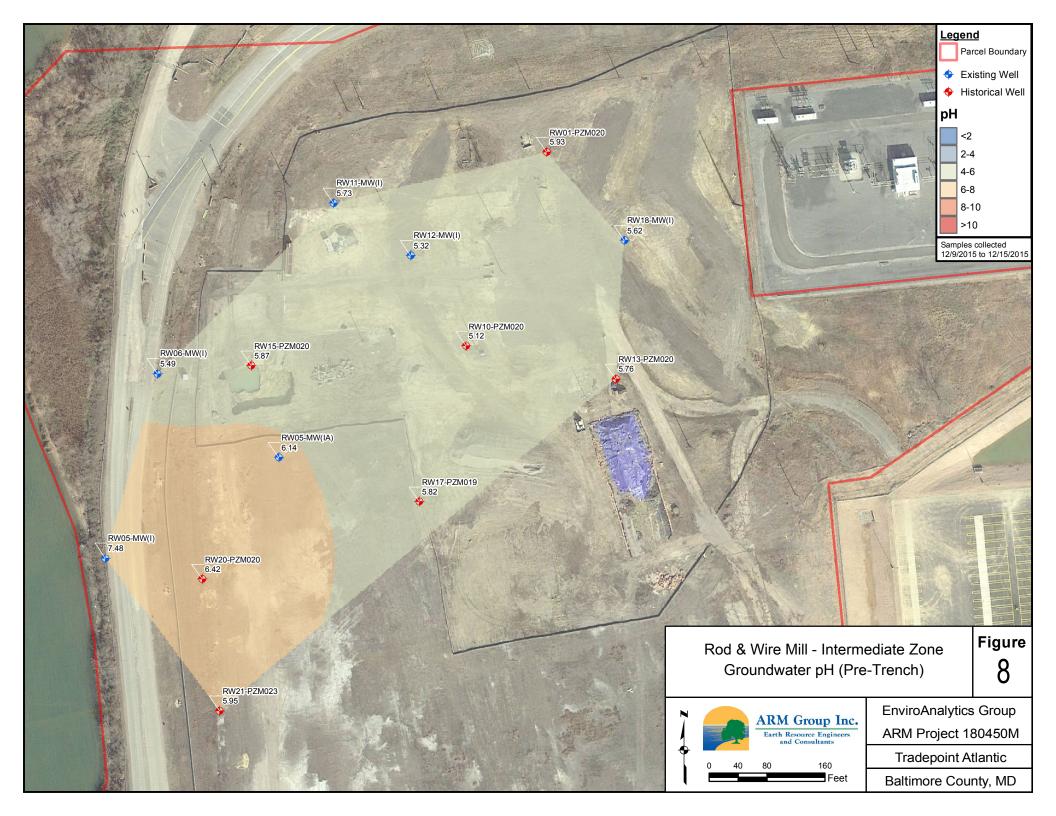


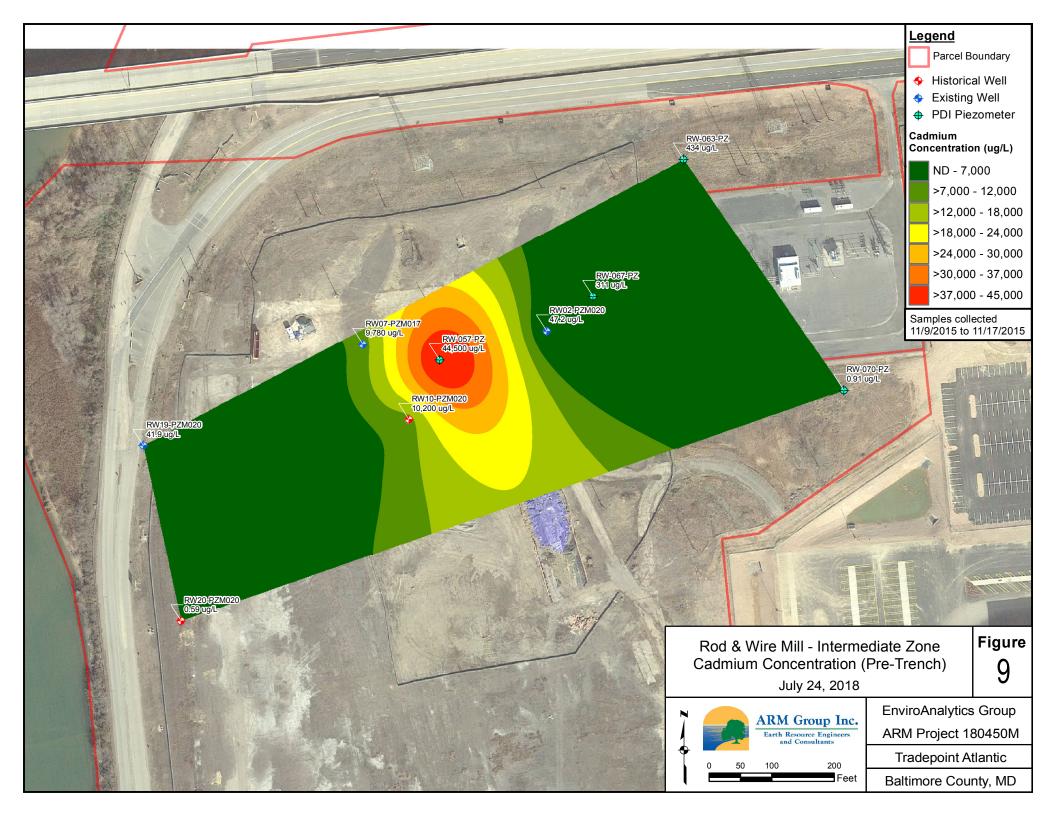


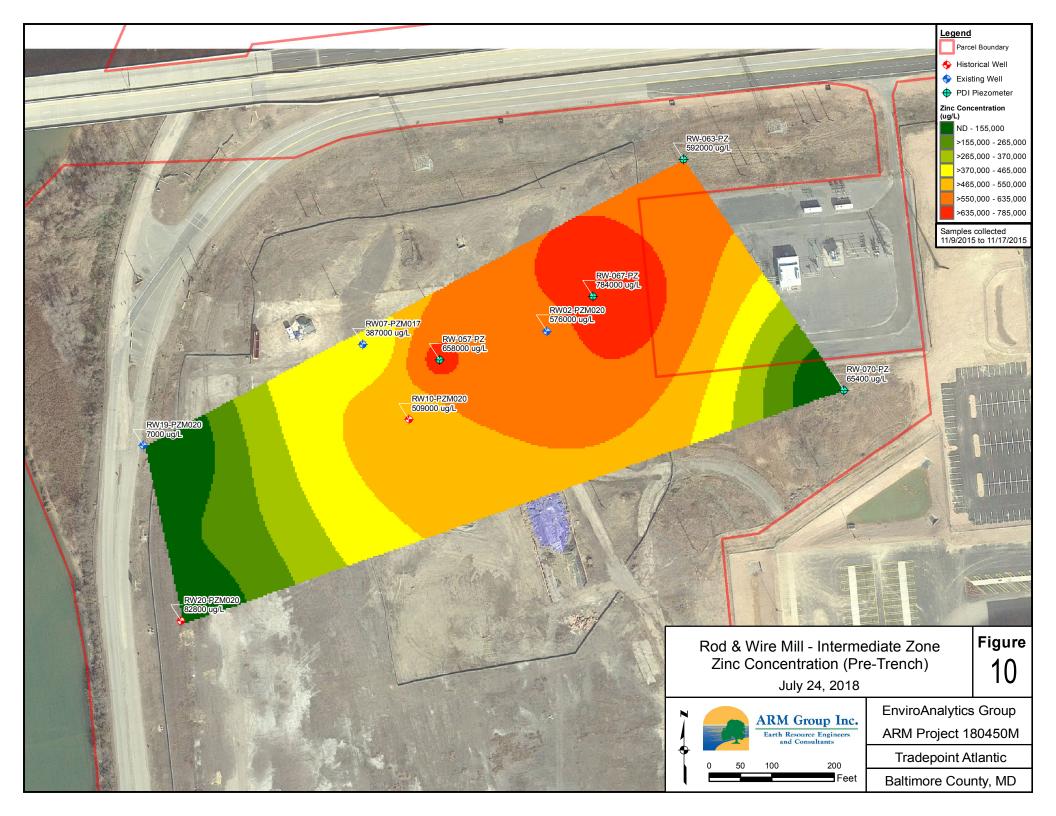


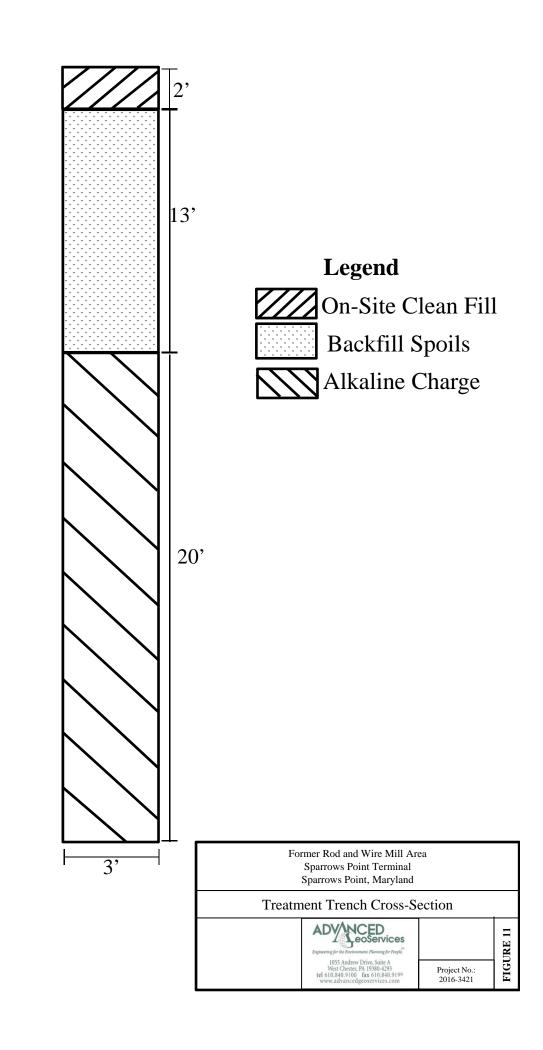


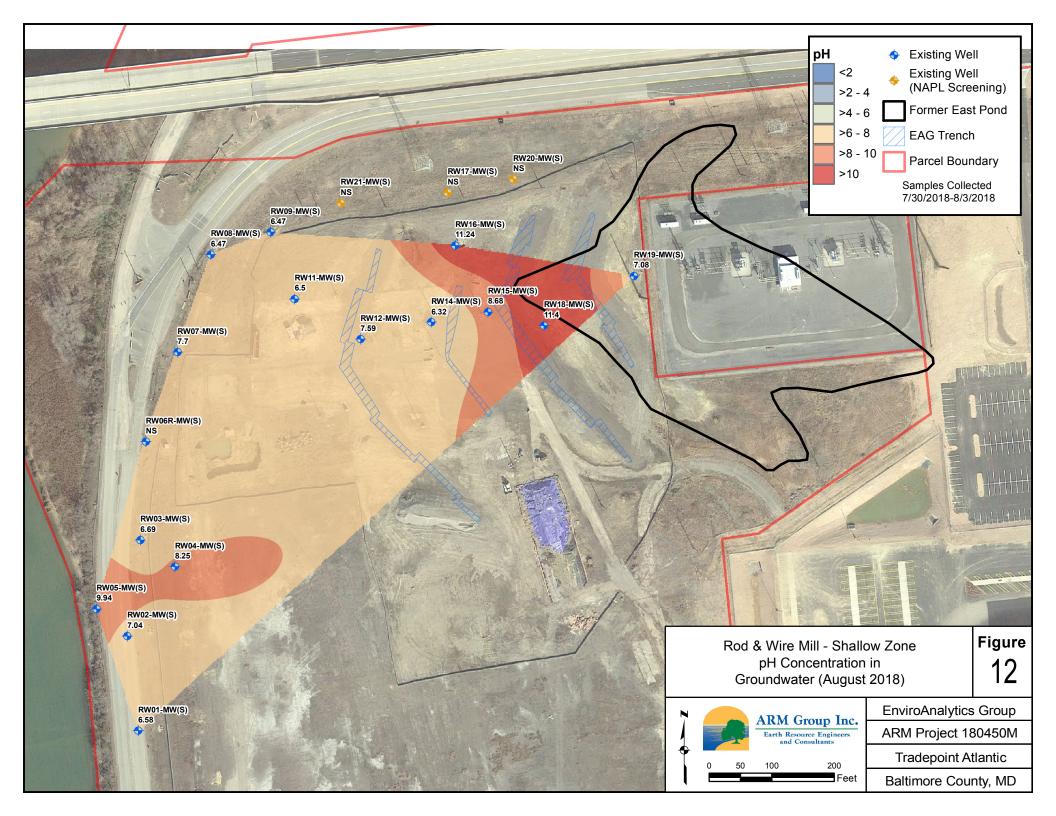


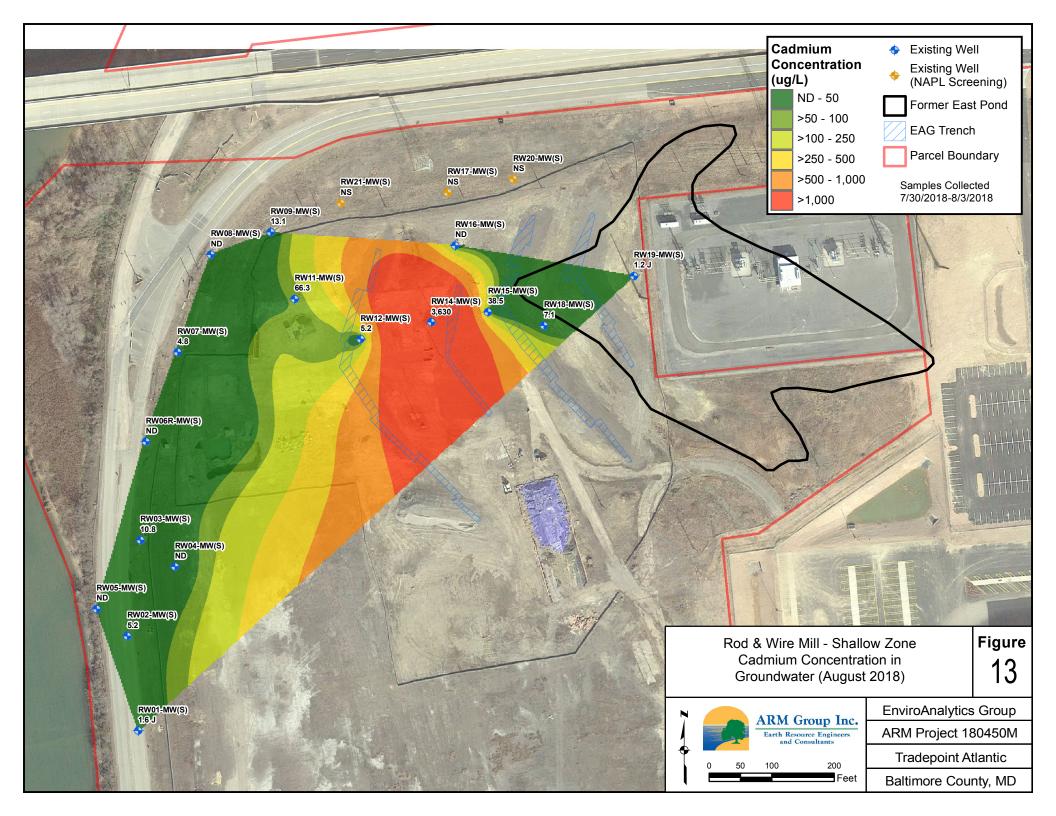


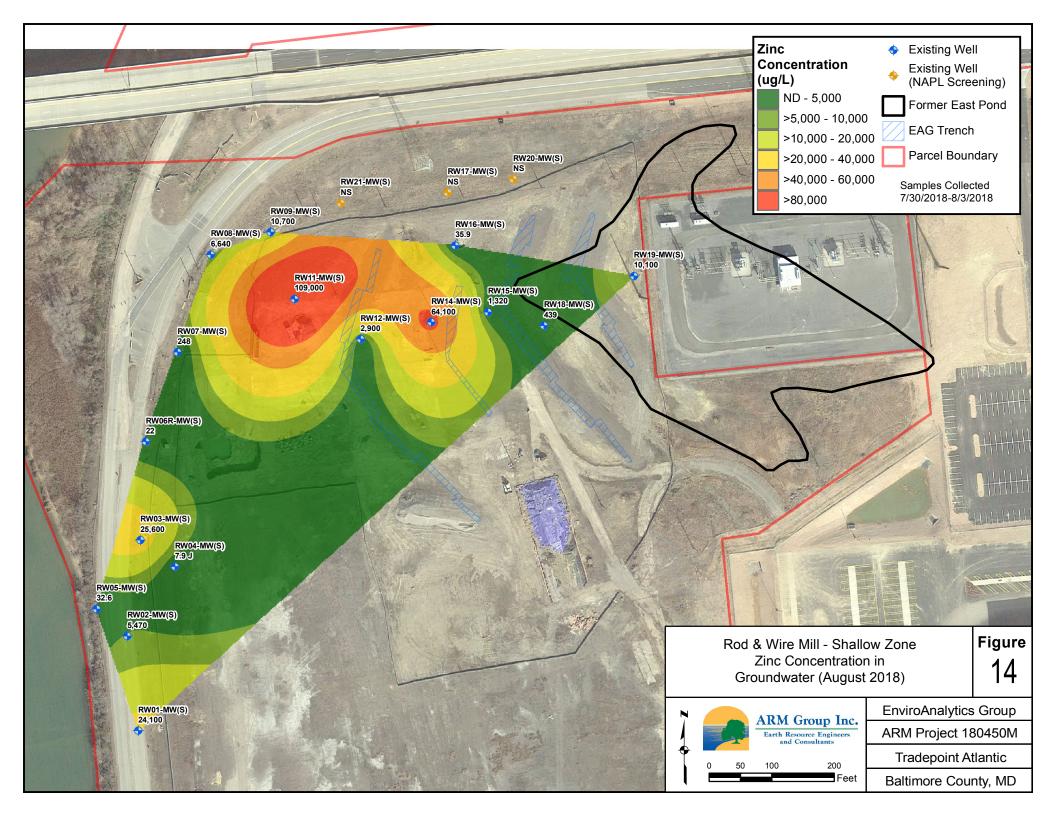


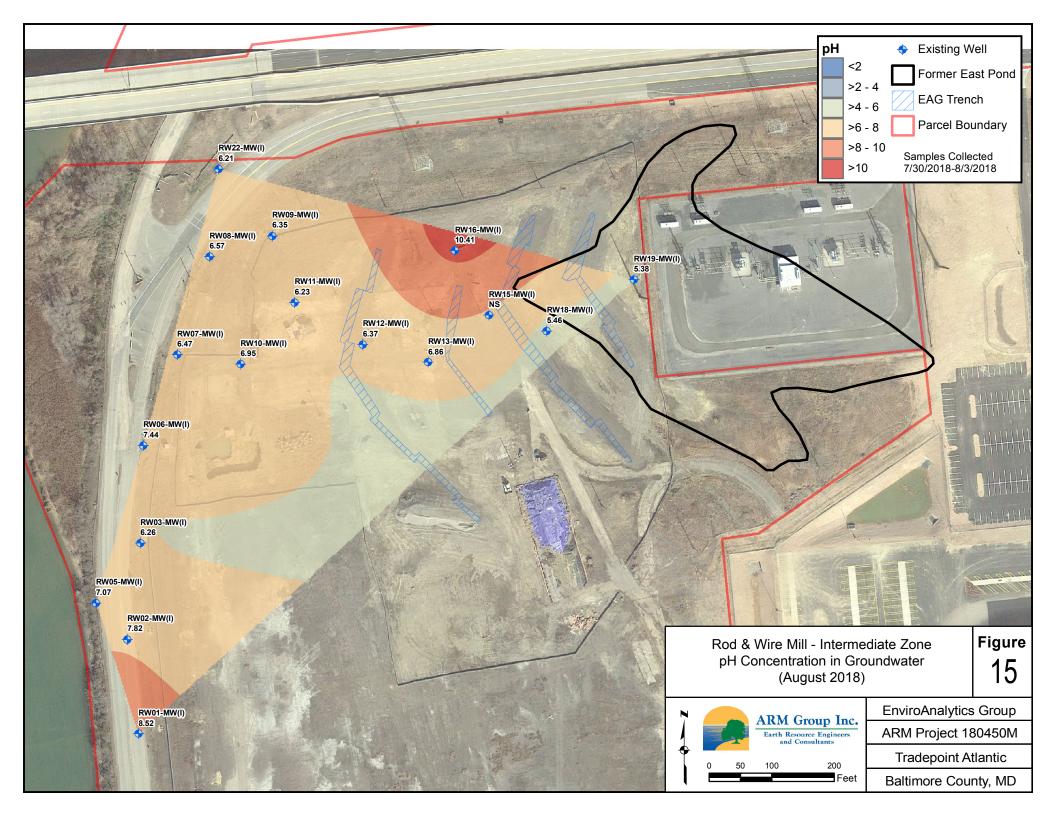


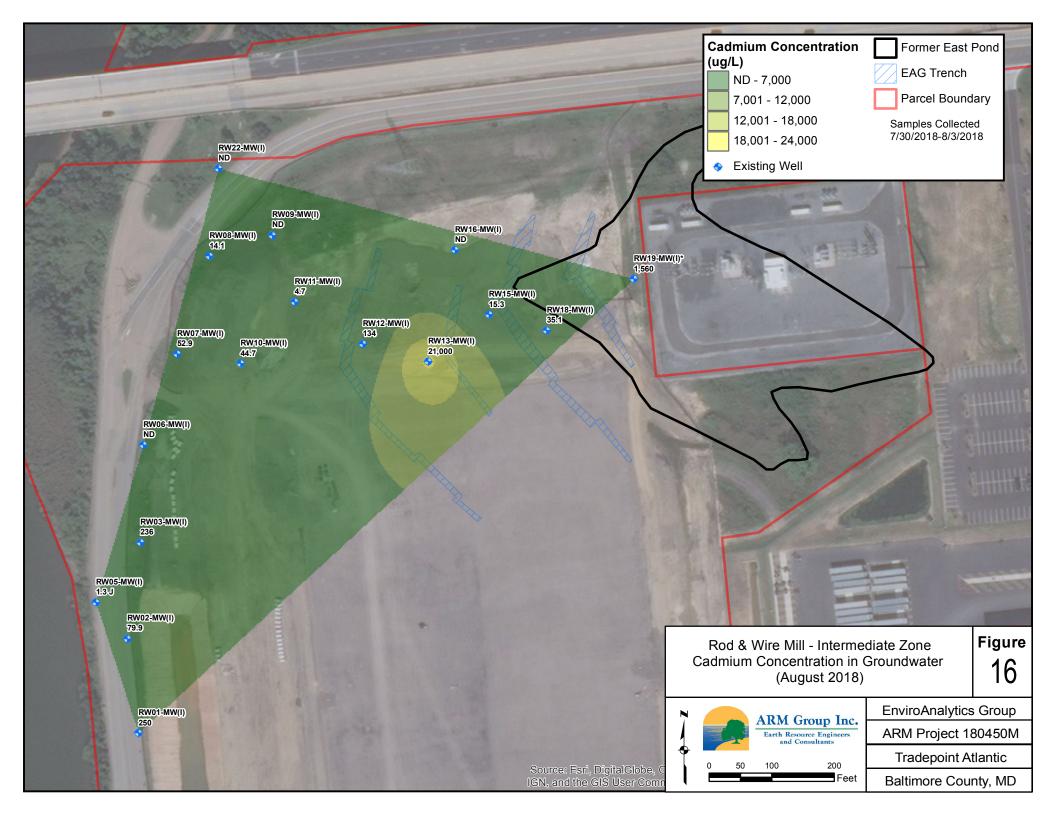


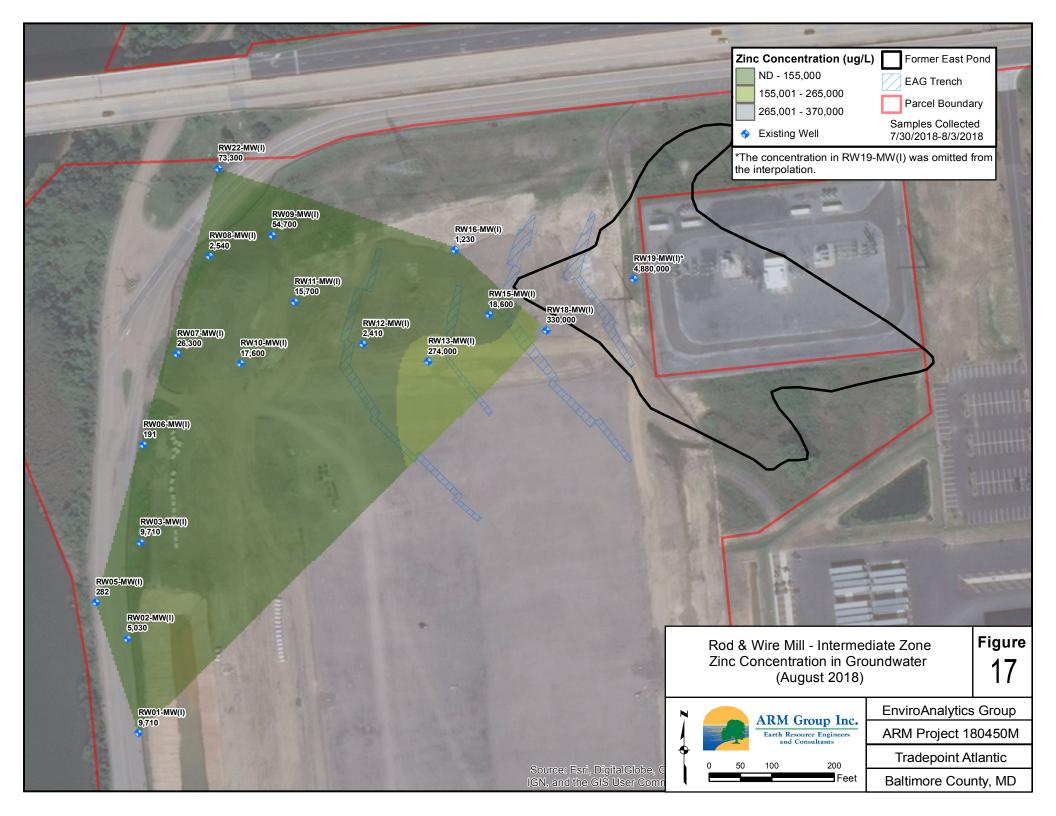


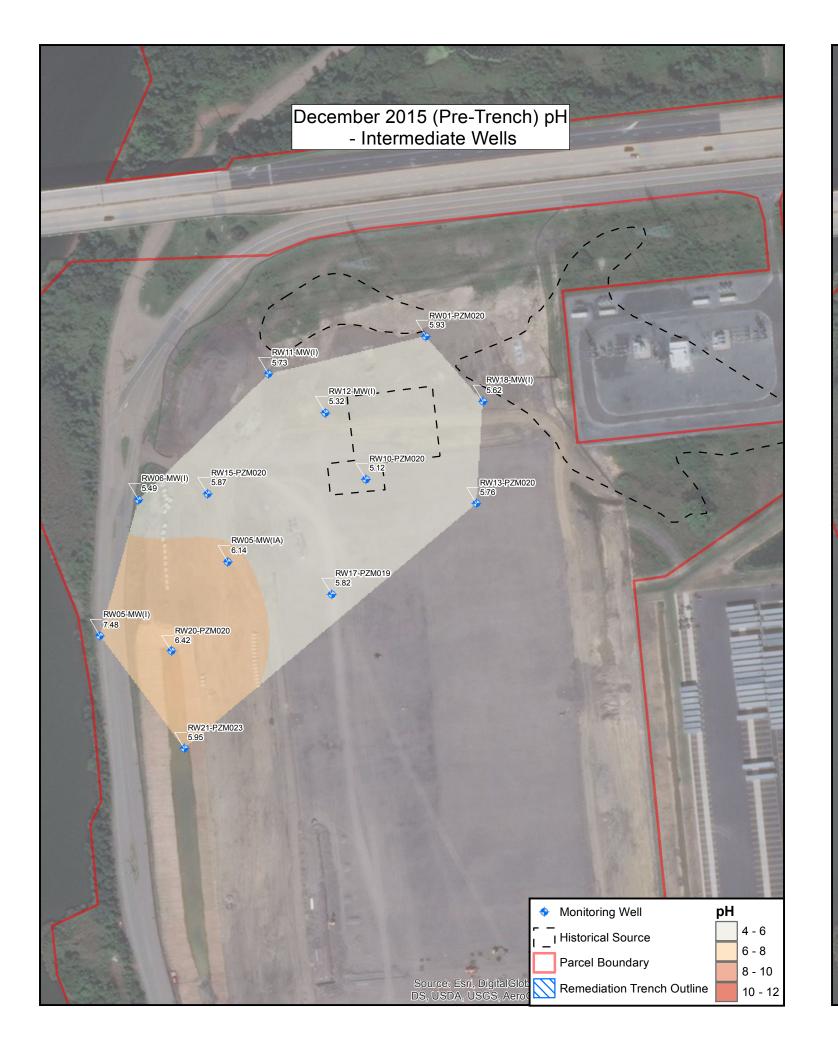


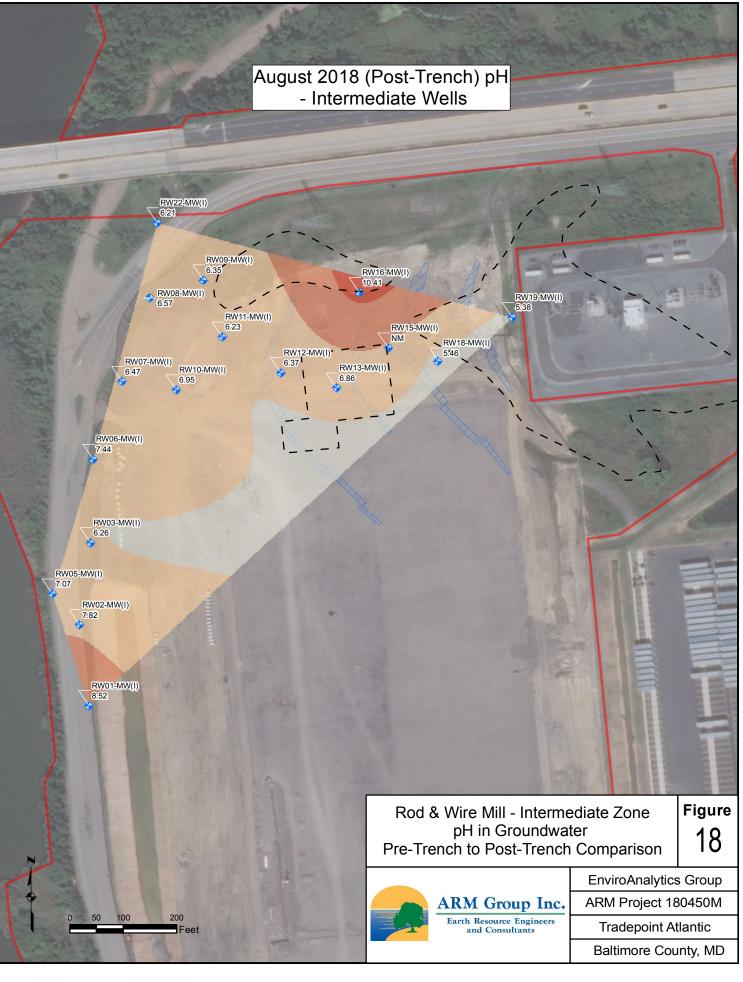


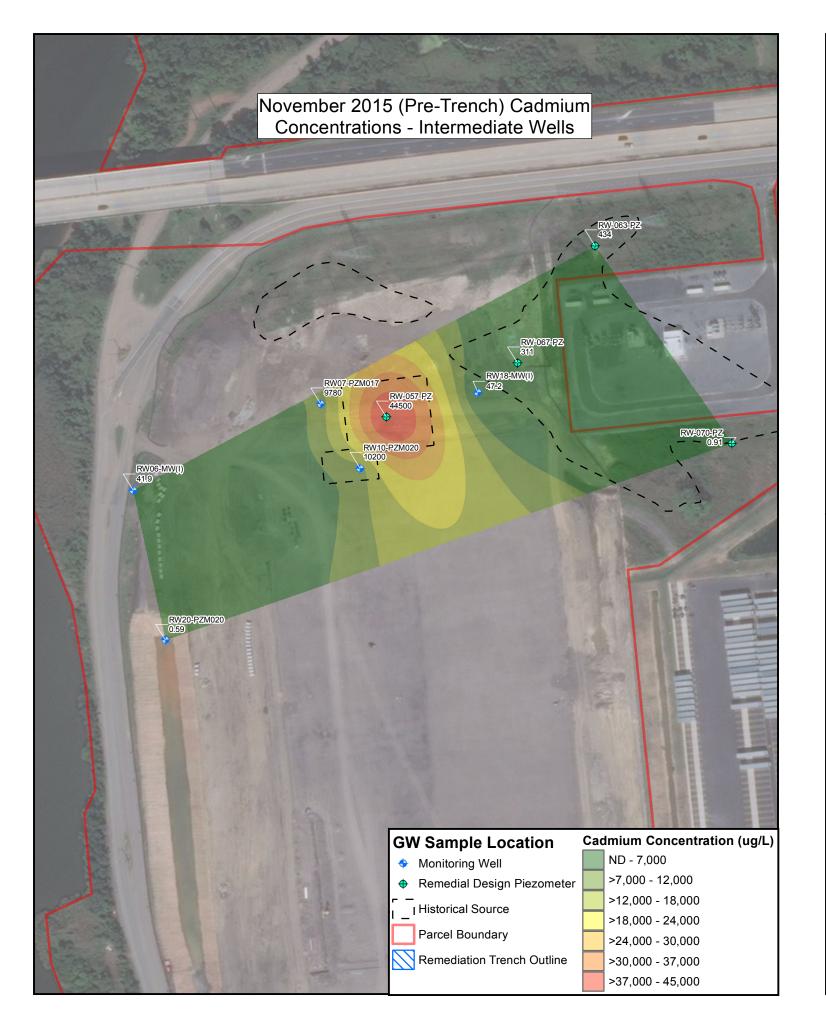




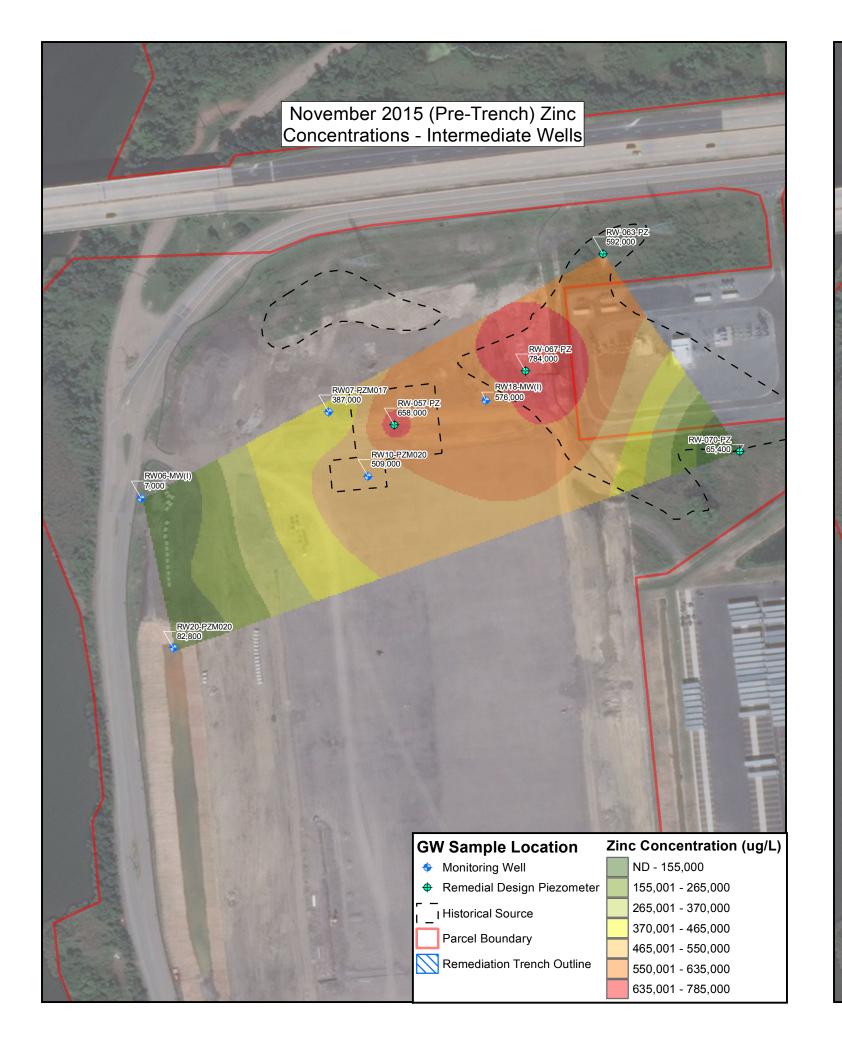














TABLES

TABLE 1
Shallow Groundwater Data - Pre-Trench
Rod Wire Mill Interim Measurement Progress Report

Client Sample ID	Date Collected	Result	Flag						
Cadmium (µg/L)									
RW-002-PZ	10/27/2015	102							
RW-006-PZ	10/27/2015	20.1							
RW-048-PZ	10/27/2015	1.1	J						
RW06-MW(S)	11/12/2015	3	U						
RW10-PZM004	11/12/2015	3	U						
RW12-MW(S)	11/13/2015	3.2							
RW18-MW(S)	11/13/2015	31.3							
RW20-PZP000	11/16/2015	0.58	J						
Zinc (µg/L)									
RW-002-PZ	10/27/2015	5520							
RW-006-PZ	10/27/2015	245000							
RW-048-PZ	10/27/2015	1810							
RW06-MW(S)	11/12/2015	10	U						
RW10-PZM004	11/12/2015	1.4	J						
RW12-MW(S)	11/13/2015	925							
RW18-MW(S)	11/13/2015	912							
RW20-PZP000	11/16/2015	10	U						
pН									
RW04-MW(S)	12/9/2015	7.18							
RW20-PZM000	12/9/2015	9.58							
RW06-MW(S)	12/10/2015	8.97							
RW09-PZM004	12/10/2015	11.25							
RW10-PZM004	12/10/2015	9.99							
RW12-MW(S)	12/11/2015	7.16							
RW04-PZM003	12/14/2015	6.62							
RW12-PZM004	12/14/2015	6.18							
RW17-MW(SA)	12/14/2015	5.28							
RW18-MW(S)	12/14/2015	7.65							
RW05-PZP001	12/15/2015	7.02							
RW08-PZM003	12/15/2015	5.09							
RW11-PZM004	12/15/2015	3.79							
RW14-MW(S)	12/15/2015	6.01							

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

J: The positive result reported for this analyte is a quantitative estimate.

TABLE 2
Intermediate Groundwater Data - Pre-Trench
Rod Wire Mill Interim Measurement Progress Report

Client Sample ID	Date Collected	Result	Flag
Cadmium (µg/L)			
RW-057-PZ	11/9/2015	44,500	
RW-063-PZ	11/9/2015	434	
RW-067-PZ	11/9/2015	311	
RW-070-PZ	11/9/2015	0.91	J
RW10-PZM020	11/12/2015	10,200	
RW19-PZM020	11/12/2015	41.9	
RW02-PZM020	11/13/2015	47.2	
RW07-PZM017	11/13/2015	9,780	
RW20-PZM020	11/17/2015	0.59	J
Zinc (µg/L)			
RW-057-PZ	11/9/2015	658,000	J
RW-063-PZ	11/9/2015	592,000	J
RW-067-PZ	11/9/2015	784,000	J
RW-070-PZ	11/9/2015	65,400	J
RW10-PZM020	11/12/2015	509,000	
RW19-PZM020	11/12/2015	7,000	
RW02-PZM020	11/13/2015	576,000	
RW07-PZM017	11/13/2015	387,000	
RW20-PZM020	11/17/2015	82,800	
pH			
RW05-MW(IA)	12/9/2015	6.14	
RW20-PZM020	12/9/2015	6.42	
RW20-PZM050	12/9/2015	11.23	
RW21-PZM023	12/9/2015	5.95	
RW06-MW(I)	12/10/2015	5.49	
RW10-PZM020	12/10/2015	5.12	
RW10-PZM065	12/10/2015	7.34	
RW15-PZM020	12/10/2015	5.87	
RW17-PZM019	12/10/2015	5.82	
RW11-MW(I)	12/11/2015	5.73	
RW12-MW(I)	12/11/2015	5.32	
RW01-PZM020	12/14/2015	5.93	
RW18-MW(I)	12/14/2015	5.62	
RW05-MW(I)	12/15/2015	7.48	
RW13-PZM020	12/15/2015	5.76	
RW18-PZM047	12/15/2015	6.42	

J: The positive result reported for this analyte is a quantitative estimate

TABLE 3 Shallow Groundwater Data - August 2018 Rod Wire Mill Interim Measurement Progress Report

Event Date	Units	RW01-MW(S)	RW02-MW(S)	RW03-MW(S)	RW04-MW(S)	RW05-MW(S)	RW06R-MW(S)	RW07-MW(S)	RW08-MW(S)
Cadmium	u								
2/1/2017	μg/L	NS	NS	7.9	NS	NS	NS	1.8 J	3.8
3/1/2017	μg/L	NS	NS	4.7	NS	NS	NS	1.7 J	11
4/1/2017	μg/L	NS	NS	3.2	NS	NS	NS	1.4 J	7.8
5/1/2017	μg/L	NS	NS	3.9	NS	NS	NS	1.9 J	3.2
6/1/2017	μg/L	NS	NS	4	0.7 J	NS	NS	2.3 J	1.7 J
7/1/2017	μg/L	NS	NS	4.6	1.2 J	NS	NS	2.8 J	0.74 J
8/1/2017	μg/L	1.6 J	12	5.1	3 U	4.9	NS	3.1	2.7 J
9/1/2017	μg/L	1.2 J	11.8	8.4	0.71 J	0.37 J	NS	3.6	2.5 J
10/1/2017	μg/L	1.7 J	9.1	11	3 U	1.2 J	NS	3.2	0.96 J
11/1/2017	μg/L	21.7	7.7	8.5	1.1 J	3 U	NS	5.8	3 U
12/1/2017	μg/L	98	3 U	11.4	1.1 J	8.4	NS	6	3 U
1/1/2018	μg/L	23.9	13.1	9.9	3 U	3 U	NS	4.8	3 U
4/1/2018	μg/L	7.6	16.7	11.8	3 U	3 U	NS	4.6	2.2 J
8/1/2018	μg/L	1.6 J	5.2	10.8	3 U	3 U	3 U	4.8	3 U
Zinc									
2/1/2017	μg/L	NS	NS	6,200	NS	NS	NS	81.6	1,080
3/1/2017	μg/L	NS	NS	6,510	NS	NS	NS	74.8	8,710
4/1/2017	μg/L	NS	NS	4,860	NS	NS	NS	86.4	9,520 MH
5/1/2017	μg/L	NS	NS	5,380	NS	NS	NS	102	2,680
6/1/2017	μg/L	NS	NS	5,500	58.2	NS	NS	107	1,870
7/1/2017	μg/L	NS	NS	8,460	179	NS	NS	114	968
8/1/2017	μg/L	12,200 MH	6,290	7,730	74.7	550	NS	127	3,190
9/1/2017	μg/L	5,730	3,220	16,300	163	184	NS	165	4,460
10/1/2017	μg/L	7,730	5,490	32,100	137	1,410	NS	144	1,950
11/1/2017	μg/L	25,200	1,460	14,100	123	503	NS	227	1,600
12/1/2017	μg/L	7,300	79.3	46,400	279	5,440	NS	216	1,770
1/1/2018	μg/L	35,200	2,210	31,500	384	35.7	NS	276	2,600
4/1/2018	μg/L	52,000	5,320	44,000	300	75.3	NS	204	13,200
8/1/2018	μg/L	24,100	5,470	25,600	7.9 J	32.6	22	248	6,640
pН									
2/1/2017	SU	NS	NS	5.57	NS	NS	NS	7.05	8.21
3/1/2017	SU	NS	NS	3.85	NS	NS	NS	5.68	4.66
4/1/2017	SU	NS	NS	5.65	NS	NS	NS	6.77	6.46
5/1/2017	SU	NS	NS	5.88	NS	NS	NS	7.16	7.97
6/1/2017	SU	NS	NS	5.89	6.72	NS	NS	6.95	8.83
7/1/2017	SU	NS	NS	5.9	6.56	NS	NS	6.8	6.79
8/1/2017	SU	5.73	5.99	5.26	7.05	10.12	NS	7.01	7.1
9/1/2017	SU	5.3	6.1	5.7	7.19	10.1	NS	6.46	6.94
10/1/2017	SU	5.47	6.16	5.62	6.9	7.3	NS	7.03	6.53
11/1/2017	SU	4.57	5.93	5.42	6.91	9.96	NS	6.67	6.46
12/1/2017	SU	4.86	5.03	5.28	6.73	6.83	NS	6.89	6.76
1/1/2018	SU	5.16	5.79	5.55	7.2	7.04	NS	6.99	6.57
4/1/2018	SU	4.9	4.82	5.41	6.79	6.74	NS	6.78	6.28
8/1/2018	SU	6.58	7.04	6.69	8.25	9.94	NS	7.7	6.47

NS indicates not sampled NA indicates not applicable

TABLE 3 Shallow Groundwater Data - August 2018 Rod Wire Mill Interim Measurement Progress Report

Units	RW09-MW(S)	RW11-MW(S)	RW12-MW(S)	RW14-MW(S)	RW15-MW(S)	RW16-MW(S)	RW18-MW(S)	RW19-MW(S)
μg/L	22.3	0.78 J	NS	NS	NS	NS	NS	14.8
μg/L	17.5	1.8 J	NS	NS	NS	NS	NS	6.9
μg/L								8.5
								3.6
								2.4 J
								9.7
				,				7.2
				,				2.6 J
				,				5.2
				,				4.4
				/				4.6
				,				4.8
				,				6.6
μg/L	13.1	66.3	5.2	3,630	38.5	3 U	7.1	1.2 J
			1		1	T	1	1
								10,100
								7,100
	, , , ,	-,						6,260
								4,860
	-,	- ,	,					3,720
			. ,					3,700
	. ,	- ,	- ,	,				3,360
								2,990
	- /		- /					18,700 ML
	. ,	- ,	,	-,	-,			2,730
	.,	,	,	.,	,		-,	3,380
	. ,							10,200
	-,	- ,	-,	. ,	.,		-,	7,060 10,100
μg/L	10,700	109,000	2,900	04,100	1,320	35.9	439	10,100
CII	5.07	(1)	MC	MC	NC	λic	5.00	(00
								6.98
								6.45 6.92
								7.04
								7.04
								7.35
								7.19
								NS NS
								7.18
								7.18
								7.43
								7.43
								7.04
								7.04
	μg/L	µg/L 22.3 µg/L 17.5 µg/L 16.6 µg/L 13.9 µg/L 13.4 µg/L 12.5 µg/L 10.6 µg/L 10.5 µg/L 9.2 µg/L 9.9 µg/L 9.8 µg/L 12,400 µg/L 12,400 µg/L 12,900 µg/L 11,500 µg/L 9,700 µg/L 9,700 µg/L 8,750 µg/L 8,550 µg/L 9,290 µg/L 9,310 µg/L 9,310 µg/L 9,310 µg/L 9,310 µg/L 10,700 SU 5.87 SU 5.51 SU 5.52 SU 5.72 SU 5.98 SU 6.62 SU 6.09 SU </td <td>µg/L 22.3 0.78 J µg/L 17.5 1.8 J µg/L 16.6 5.3 µg/L 14.9 1.8 J µg/L 13.9 0.94 J µg/L 13.4 0.84 J µg/L 12.5 1.3 J µg/L 12.3 0.81 J µg/L 10.6 3 U µg/L 10.5 2.1 J µg/L 9.2 2.9 J µg/L 9.9 2.2 J µg/L 9.8 4.1 µg/L 12,500 8,790 µg/L 12,400 10,500 µg/L 11,500 10,500 µg/L 11,500 10,900 µg/L 8,750 <td< td=""><td>µg/L 22.3 0.78 J NS µg/L 17.5 1.8 J NS µg/L 16.6 5.3 NS µg/L 14.9 1.8 J NS µg/L 13.9 0.94 J 29.7 µg/L 13.4 0.84 J 12.6 µg/L 12.5 1.3 J 7 µg/L 12.3 0.81 J 5.1 µg/L 10.6 3 U 11.3 µg/L 10.5 2.1 J 193 µg/L 10.5 2.1 J 193 µg/L 9.2 2.2 J 11.7 µg/L 9.9 8.790 NS µg/L 13.1 66.3 5.2 µg/L 14.500 8.790 NS</td><td>µg/L 22.3 0.78 J NS NS µg/L 17.5 1.8 J NS NS µg/L 16.6 5.3 NS NS µg/L 14.9 1.8 J NS NS µg/L 13.9 0.94 J 29.7 NS µg/L 13.4 0.84 J 12.6 NS µg/L 12.5 1.3 J 7 1,780 µg/L 12.3 0.81 J 5.1 1,700 µg/L 10.6 3 U 11.3 1,750 µg/L 10.5 2.1 J 193 2,390 µg/L 9.2 2.9 J 4.2 2,820 µg/L 9.9 2.2 J 11.7 2,800 µg/L 13.1 66.3 5.2 3,630 µg/L 14,500 8,790 NS NS µg/L 12,400 10,500 NS NS µg/L 11,900 12,500 NS NS</td><td>µg/L 22.3 0.78 J NS NS NS µg/L 17.5 1.8 J NS NS NS µg/L 16.6 5.3 NS NS NS µg/L 14.9 1.8 J NS NS NS µg/L 13.9 0.94 J 29.7 NS NS µg/L 13.4 0.84 J 12.6 NS NS µg/L 12.5 1.3 J 7 1,780 12.2 µg/L 10.6 3 U 11.3 1,750 25.3 µg/L 10.6 3 U 11.3 1,750 25.3 µg/L 10.5 2.1 J 193 2,390 63 µg/L 9.9 2.2 J 11.7 2,800 40.7 µg/L 9.9 2.2 J 11.7 2,800 40.7 µg/L 9.9 8.4 I 11 3,220 41.2 µg/L 9.8 4.1 11 3</td><td> μg/L 22.3 0.78 NS NS NS NS NS μg/L 17.5 1.8 1 NS NS NS NS NS NS μg/L 16.6 5.3 NS NS NS NS NS NS NS μg/L 13.9 0.94 1 29.7 NS NS NS NS NS μg/L 13.4 0.84 1 12.6 NS NS NS NS NS μg/L 13.3 0.94 1 22.7 NS NS NS NS NS μg/L 12.3 0.8 1 12.6 NS NS NS μg/L 12.3 0.8 1 5.1 1,700 29.9 3 U μg/L 10.6 3 U 11.3 1,750 25.3 3 U μg/L 10.5 2.1 1 193 2,390 63 3 U μg/L 9.2 2.9 1 4.2 2,820 55 3 U μg/L 9.9 2.2 1 11.7 2,800 40.7 3 U μg/L 9.9 2.2 1 11.7 2,800 40.7 3 U μg/L 13.1 66.3 5.2 3,630 38.5 3 U μg/L 13.1 66.3 5.2 3,630 38.5 3 U μg/L 12,400 10,500 NS NS NS NS μg/L 11,900 12,500 NS NS NS NS NS μg/L 11,900 12,500 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 3,980 43,500 1,980 25.6 μg/L 8,310 ML 9,270 3,790 28,900 900 26.2 μg/L 9,200 18,300 235,000 ML 28,100 8,800 48.6 μg/L 8,550 24,000 2,990 64,100 1,320 35.9 NS NS NS NS NS NS NS N</td><td> μg/L 17.5 1.8 J NS NS NS NS NS NS NS </td></td<></td>	µg/L 22.3 0.78 J µg/L 17.5 1.8 J µg/L 16.6 5.3 µg/L 14.9 1.8 J µg/L 13.9 0.94 J µg/L 13.4 0.84 J µg/L 12.5 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13.9 0.94 J 29.7 NS NS µg/L 13.4 0.84 J 12.6 NS NS µg/L 12.5 1.3 J 7 1,780 12.2 µg/L 10.6 3 U 11.3 1,750 25.3 µg/L 10.6 3 U 11.3 1,750 25.3 µg/L 10.5 2.1 J 193 2,390 63 µg/L 9.9 2.2 J 11.7 2,800 40.7 µg/L 9.9 2.2 J 11.7 2,800 40.7 µg/L 9.9 8.4 I 11 3,220 41.2 µg/L 9.8 4.1 11 3</td><td> μg/L 22.3 0.78 NS NS NS NS NS μg/L 17.5 1.8 1 NS NS NS NS NS NS μg/L 16.6 5.3 NS NS NS NS NS NS NS μg/L 13.9 0.94 1 29.7 NS NS NS NS NS μg/L 13.4 0.84 1 12.6 NS NS NS NS NS μg/L 13.3 0.94 1 22.7 NS NS NS NS NS μg/L 12.3 0.8 1 12.6 NS NS NS μg/L 12.3 0.8 1 5.1 1,700 29.9 3 U μg/L 10.6 3 U 11.3 1,750 25.3 3 U μg/L 10.5 2.1 1 193 2,390 63 3 U μg/L 9.2 2.9 1 4.2 2,820 55 3 U μg/L 9.9 2.2 1 11.7 2,800 40.7 3 U μg/L 9.9 2.2 1 11.7 2,800 40.7 3 U μg/L 13.1 66.3 5.2 3,630 38.5 3 U μg/L 13.1 66.3 5.2 3,630 38.5 3 U μg/L 12,400 10,500 NS NS NS NS μg/L 11,900 12,500 NS NS NS NS NS μg/L 11,900 12,500 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 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9.9 2.2 J 11.7 2,800 µg/L 13.1 66.3 5.2 3,630 µg/L 14,500 8,790 NS NS µg/L 12,400 10,500 NS NS µg/L 11,900 12,500 NS NS	µg/L 22.3 0.78 J NS NS NS µg/L 17.5 1.8 J NS NS NS µg/L 16.6 5.3 NS NS NS µg/L 14.9 1.8 J NS NS NS µg/L 13.9 0.94 J 29.7 NS NS µg/L 13.4 0.84 J 12.6 NS NS µg/L 12.5 1.3 J 7 1,780 12.2 µg/L 10.6 3 U 11.3 1,750 25.3 µg/L 10.6 3 U 11.3 1,750 25.3 µg/L 10.5 2.1 J 193 2,390 63 µg/L 9.9 2.2 J 11.7 2,800 40.7 µg/L 9.9 2.2 J 11.7 2,800 40.7 µg/L 9.9 8.4 I 11 3,220 41.2 µg/L 9.8 4.1 11 3	μg/L 22.3 0.78 NS NS NS NS NS μg/L 17.5 1.8 1 NS NS NS NS NS NS μg/L 16.6 5.3 NS NS NS NS NS NS NS μg/L 13.9 0.94 1 29.7 NS NS NS NS NS μg/L 13.4 0.84 1 12.6 NS NS NS NS NS μg/L 13.3 0.94 1 22.7 NS NS NS NS NS μg/L 12.3 0.8 1 12.6 NS NS NS μg/L 12.3 0.8 1 5.1 1,700 29.9 3 U μg/L 10.6 3 U 11.3 1,750 25.3 3 U μg/L 10.5 2.1 1 193 2,390 63 3 U μg/L 9.2 2.9 1 4.2 2,820 55 3 U μg/L 9.9 2.2 1 11.7 2,800 40.7 3 U μg/L 9.9 2.2 1 11.7 2,800 40.7 3 U μg/L 13.1 66.3 5.2 3,630 38.5 3 U μg/L 13.1 66.3 5.2 3,630 38.5 3 U μg/L 12,400 10,500 NS NS NS NS μg/L 11,900 12,500 NS NS NS NS NS μg/L 11,900 12,500 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 9,090 NS NS NS NS NS μg/L 11,500 10,900 3,980 43,500 1,980 25.6 μg/L 8,310 ML 9,270 3,790 28,900 900 26.2 μg/L 9,200 18,300 235,000 ML 28,100 8,800 48.6 μg/L 8,550 24,000 2,990 64,100 1,320 35.9 NS NS NS NS NS NS NS N	μg/L 17.5 1.8 J NS NS NS NS NS NS NS

NS indicates not sampled NA indicates not applicable

TABLE 4 Intermediate Groundwater Data - August 2018 Rod Wire Mill Interim Measurement Progress Report

Event Date	Units	RW01-MW(I)	RW02-MW(I)	RW03-MW(I)	RW05-MW(I)	RW06-MW(I)	RW07-MW(I)	RW08-MW(I)	RW09-MW(I)
Cadmium									
2/1/2017	μg/L	NS	NS	189	NS	12.5	1.2 J	0.49 J	3.1
3/1/2017	μg/L	NS	NS	196	NS	9.2	4.6	0.39 J	4
4/1/2017	μg/L	NS	NS	192	NS	14	3 U	3 U	5
5/1/2017	μg/L	NS	NS	84	NS	20.4	1.1 J	1.5 J	11.1
6/1/2017	μg/L	NS	NS	37.4	1.9 J	14.3	0.91 J	0.48 J	8.1
7/1/2017	μg/L	NS	NS	138	17.5	10.2	1.2 J	1.3 J	12.9
8/1/2017	μg/L	194	511	227	19.3	10.1	1 J	0.86 J	18.5
9/1/2017	μg/L	0.51 J	3 J	214	3.7	4.5	11	0.77 J	9.1
10/1/2017	μg/L	145	2.4 J	20.2	4.2	4.2	3 U	3 U	12
11/1/2017	μg/L	3 U	3 U	25.2	4.9	5.4	5.1	0.88 J	8.8
12/1/2017	μg/L	37.5	2.3 J	154	2.7 J	7.1	1.7 J	1.8 J	7.7
1/1/2018	μg/L	2.4 J	14.5	259	2.2 J	8.4	3 U	3 U	2.1 J
4/1/2018	μg/L	16.5	3	128	2.6 J	89.2	1.3 J	6.2	1.8 J
8/1/2018	μg/L	250	79.9	236	1.3 J	3 U	52.9	14.1	3 U
Zinc									
2/1/2017	μg/L	NS	NS	9,740	NS	1,900	944	178	51,000
3/1/2017	μg/L	NS	NS	9,240	NS	1,680	1,210	44.6	51,900
4/1/2017	μg/L	NS	NS	7,830	NS	1,420	364	85	57,500
5/1/2017	μg/L	NS	NS	2,960	NS	999	298	188	57,200
6/1/2017	μg/L	NS	NS	2,440	374	876	432	71.9	51,900
7/1/2017	μg/L	NS	NS	8,330	1,730	1,690	45.7	153	65,600
8/1/2017	μg/L	11,600	18,200	10,900	1,730	1,340	62.7	49.8	55,500
9/1/2017	μg/L	90	203	9,340	328	508	2,840	69.4	39,400
10/1/2017	μg/L	13,700	290	1,810	349	615	23.4	16.9	49,700
11/1/2017	μg/L	29	38.6	1,750	502	909	1,650	21.5	67,900
12/1/2017	μg/L	41,000	186	6,270	205	1,360	39.8	21.4	44,500
1/1/2018	μg/L	104	573	12,700	173	1,950	70.6	108	54,700
4/1/2018	μg/L	576	452	6,920	402	27,900	756	1,050	38,400
8/1/2018	μg/L	9,710	5,030 ML	9,710	282	191	26,300	2,540	54,700
pН									
2/1/2017	SU	NS	NS	6.41	NS	5.85	6.25	6.06	6.23
3/1/2017	SU	NS	NS	6.04	NS	5.71	6	5.57	5.96
4/1/2017	SU	NS	NS	6.28	NS	5.94	6.05	6.21	5.84
5/1/2017	SU	NS	NS	5.97	NS	6.06	6.61	3.14	6
6/1/2017	SU	NS	NS	5.96	8.05	5.81	6.09	NS	5.8
7/1/2017	SU	NS	NS	6.21	7.97	6.08	6.18	3.88	5.67
8/1/2017	SU	6.68	6.73	6.02	8.71	5.7	6.54	6.31	5.93
9/1/2017	SU	12.3	12.2	6.34	7.2	6.11	5.65	6.78	6.57
10/1/2017	SU	8.03	12.39	5.8	8.02	6.16	6.66	6.34	6.03
11/1/2017	SU	12.07	11.95	5.67	8.9	5.84	5.89	5.99	6.01
12/1/2017	SU	6.74	11.4	5.68	8.01	6	6.6	6.21	5.96
1/1/2018	SU	13.17	12.87	6.4	8.31	5.92	7.11	6.3	5.98
4/1/2018	SU	12.42	10.02	5.82	8.41	5.68	6.18	6.27	5.64
8/1/2018	SU	8.52	7.82	6.26	7.07	7.44	6.47	6.57	6.35

NS indicates not sampled

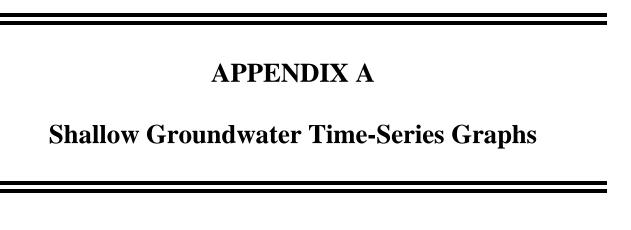
NA indicates not applicable

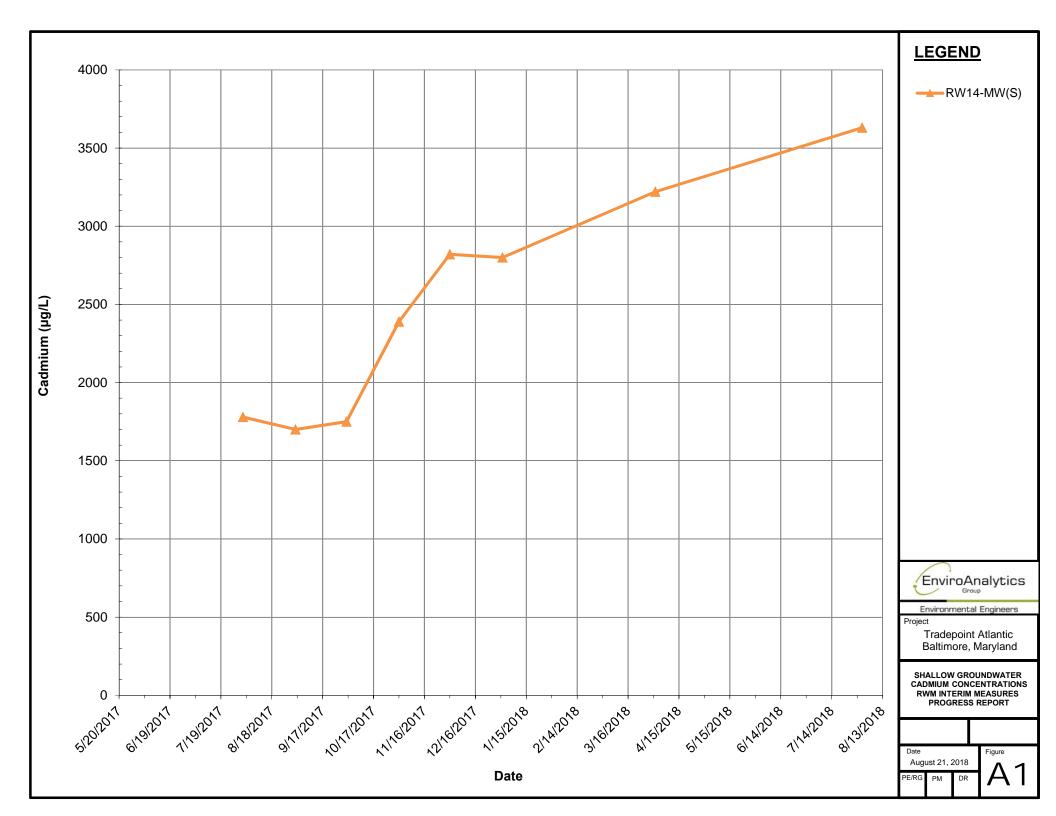
TABLE 4 Intermediate Groundwater Data - August 2018 Rod Wire Mill Interim Measurement Progress Report

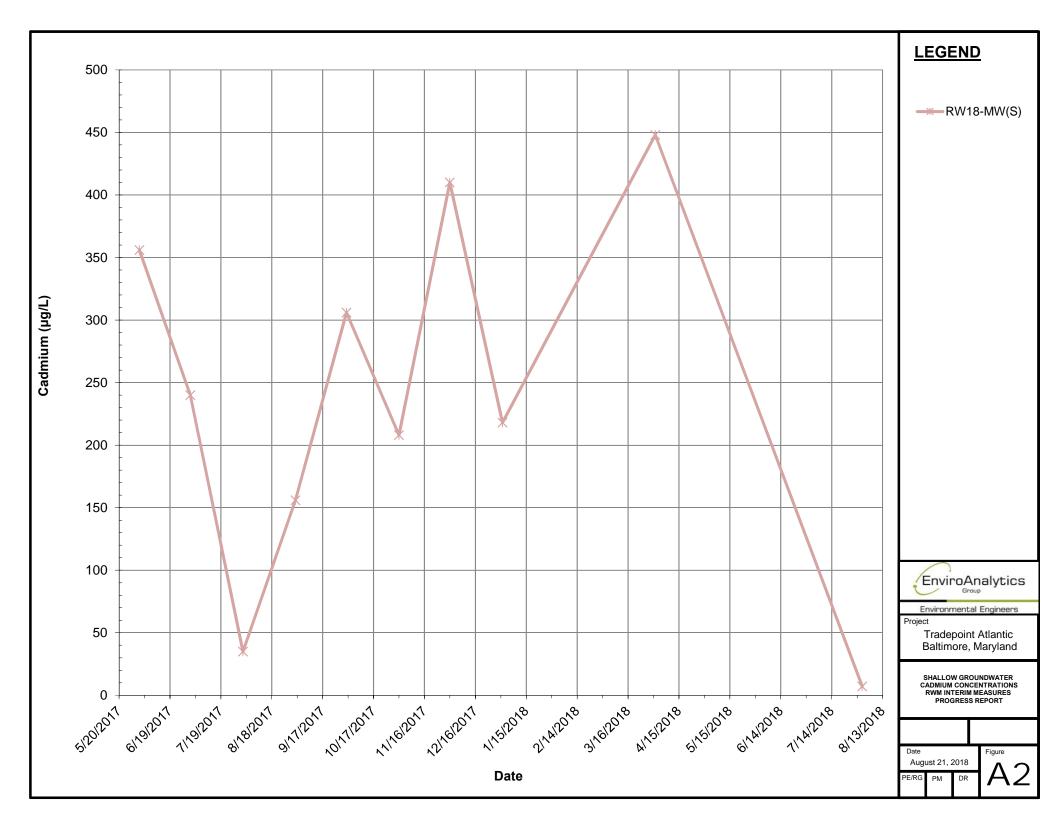
Event Date	Units	RW10-MW(I)	RW11-MW(I)	RW12-MW(I)	RW13-MW(I)	RW15-MW(I)	RW16-MW(I)	RW18-MW(I)	RW19-MW(I)	RW22-MW(I)
Cadmium										
2/1/2017	μg/L	455	1,690	4,740	NS	NS	NS	70.3	3,760	NS
3/1/2017	μg/L	3 U	1,490	3,530	NS	NS	NS	63.8	3,450	NS
4/1/2017	μg/L	198	1,800	2,730	NS	NS	NS	119	3,380 MH	NS
5/1/2017	μg/L	2.5 J	2,600	3,820	NS	NS	NS	92	2,770	NS
6/1/2017	μg/L	27.2	218	2,260	NS	NS	NS	65.1	2,280	0.35 J
7/1/2017	μg/L	16.3	518	2,730	NS	NS	NS	61.7	2,550	3 U
8/1/2017	μg/L	3 U	163	2,220	31,800	10.1	NS	74.4	1,670	NS
9/1/2017	μg/L	17.7	274	1,820	66	3 U	1.7 J	72.2	1,320	2.3 J
10/1/2017	μg/L	24.6	125	1,510	28,700	3 U	3 U	43.7	1,710	3 U
11/1/2017	μg/L	63.7	1,460	1,380	24,500	3 U	3 U	66.6	1,770	3.8
12/1/2017	μg/L	3 U	1,380	1,450	44.2	0.97 J	1.9 J	51.5	1,710	15.2
1/1/2018	μg/L	3 U	1,400	1,270	1,240	1.6 J	1.2 J	63.5	1,880	4.1
4/1/2018	μg/L	44.4	1,660	121	19,400	3 U	1.1 J	55.8	1,700	3 U
8/1/2018	μg/L	44.7	4.7	134	21,000	15.3	3 U	35.1	1,560	3 U
Zinc										
2/1/2017	μg/L	111,000	368,000 ML	249,000 MH	NS	NS	86,300	728,000	5,900,000	NS
3/1/2017	μg/L	20.4	301,000	216,000	NS	NS	90,300	592,000	4,650,000	NS
4/1/2017	μg/L	75,800	288,000	188,000	NS	NS	314,000	633,000	7,010,000 MH	NS
5/1/2017	μg/L	1,150	336,000	232,000	NS	NS	207,000	246,000	5,370,000 ML	NS
6/1/2017	μg/L	34,600	201,000	226,000	NS	NS	NS	694,000	6,720,000	303
7/1/2017	μg/L	25,900	192,000	219,000	NS	NS	NS	575,000	5,330,000	103
8/1/2017	μg/L	79.7	147,000	156,000	308,000	3,210	NS	290,000	3,360,000	NS
9/1/2017	μg/L	8,220	134,000	156,000	1,160	71.1	20,200	382,000 MHML	2,500,000	43,000
10/1/2017	μg/L	31,000	111,000	150,000 ML	204,000	295	2,000	393,000	3,670,000	16,100
11/1/2017	μg/L	39,000	207,000	140,000	172,000	825	441	323,000	3,400,000	3,700
12/1/2017	μg/L	158	197,000	157,000 ML	237	1,070	19,200	369,000	3,970,000	19,500
1/1/2018	μg/L	26.5	225,000 ML	117,000	8,600	5,540	16,200	370,000	3,840,000 ML	27,200
4/1/2018	μg/L	13,500	215,000	103,000	201,000	252	11,200	396,000	4,190,000	44,700 ML
8/1/2018	μg/L	17,600 MH	15,700	2,410	274,000	18,600	1,230	330,000	4,880,000	73,300
рH										
2/1/2017	SU	6.86	6.05	5.27	NS	NS	NS	5.64	5.5	NS
3/1/2017	SU	9.93	5.93	5.26	NS	NS	NS	5.33	5.35	NS
4/1/2017	SU	7.03	5.35	5.34	NS	NS	NS	5.39	5.28	NS
5/1/2017	SU	8.7	6.11	4.18	NS	NS	NS	3.43	5.41	NS
6/1/2017	SU	7.15	5.5	5.39	NS	NS	NS	5.38	5.32	12.97
7/1/2017	SU	6.58	5.66	4.2	NS	NS	NS	5.25	5.15	12.75
8/1/2017	SU	10.92	5.81	4.71	6.72	11.6	NS	5.45	5.58	NS
9/1/2017	SU	7.15	5.21	4.61	12.18	6.68	6.14	5.99	NS	5.4
10/1/2017	SU	6.28	5.92	5.25	6.86	10.17	9.36	5.49	5.37	6.05
11/1/2017	SU	6.67	6.2	5.32	7.32	11.59	9.43	5.84	5.52	5.81
	SU	11.21	6.16	6.06	7.67	11.69	6.47	5.62	5.52	5.68
12/1/2017						12.13	6.37	5.56	5.41	5.85
	SU	10.29	5,61	4.46	11.44	14.13	0.37			
12/1/2017 1/1/2018 4/1/2018	SU SU	10.29 6.39	5.61 5.98	4.46 4.68	11.44 6.46	11.99	6.36	5.27	4.93	5.48

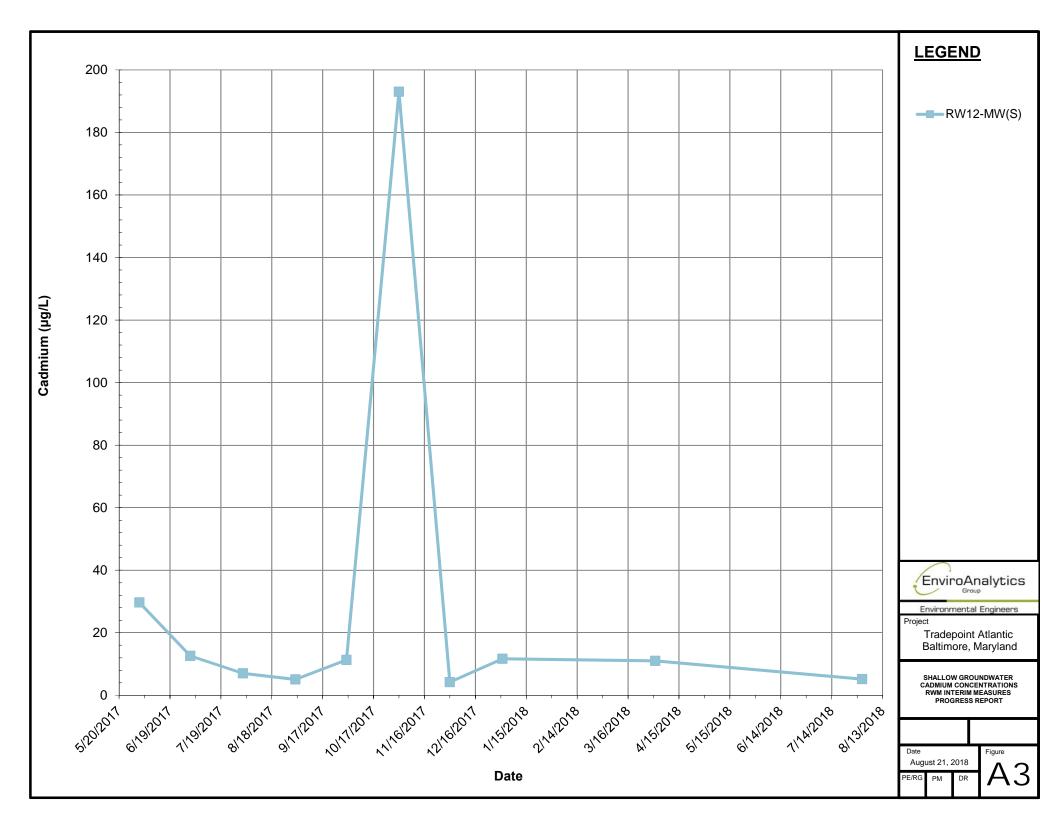
NS indicates not sampled

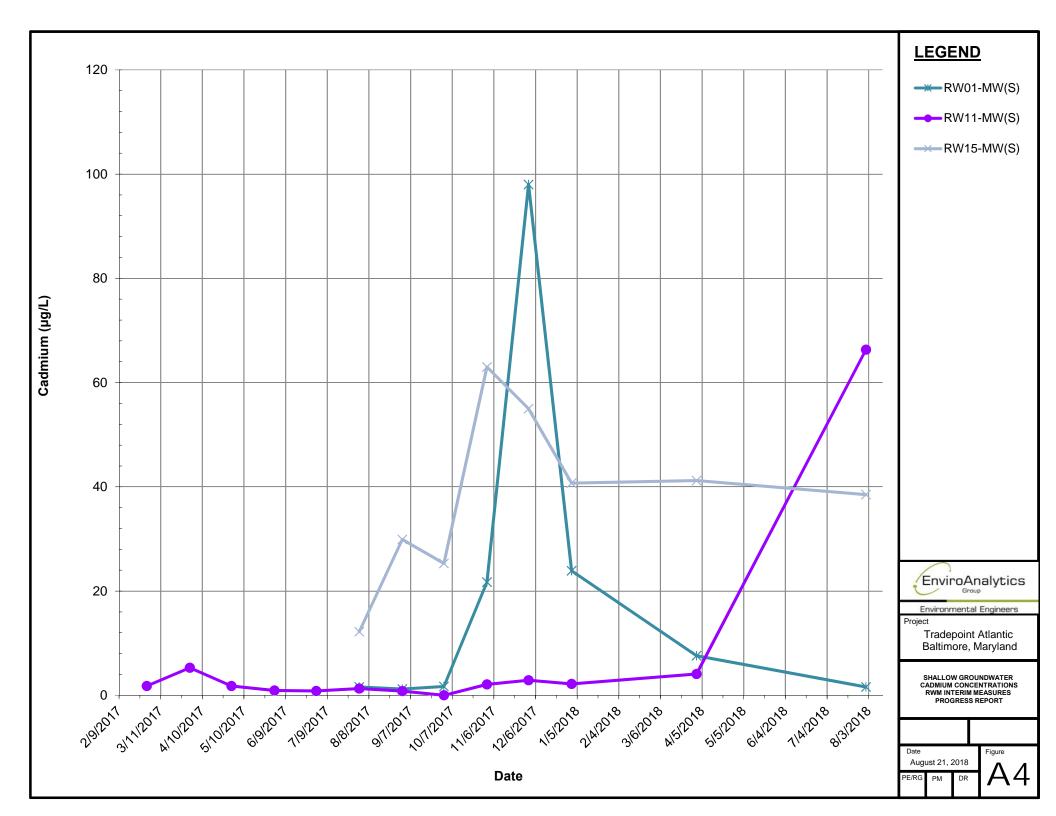
NA indicates not applicable

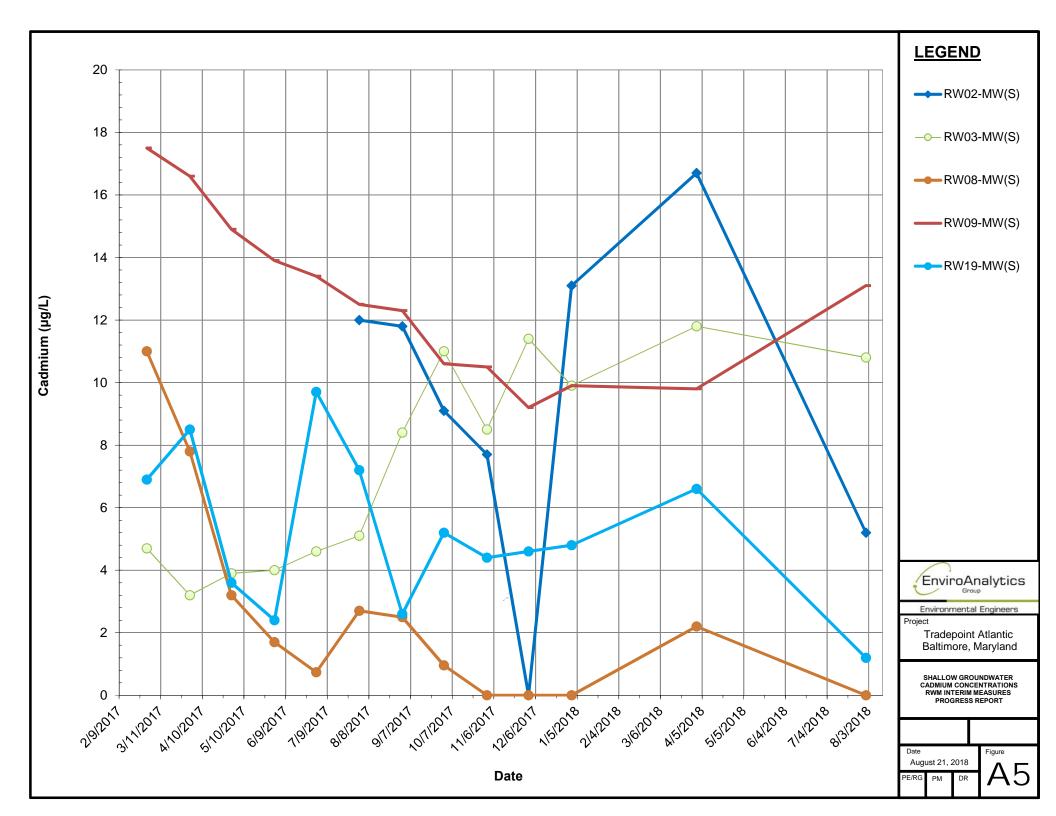


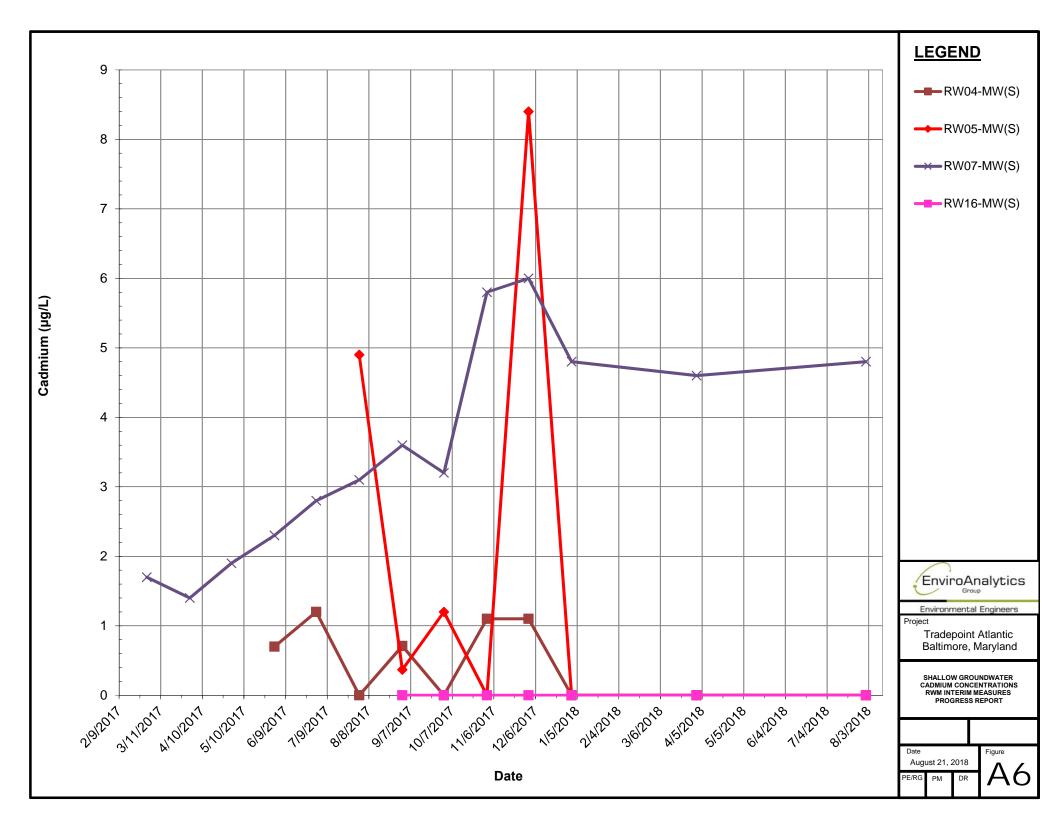


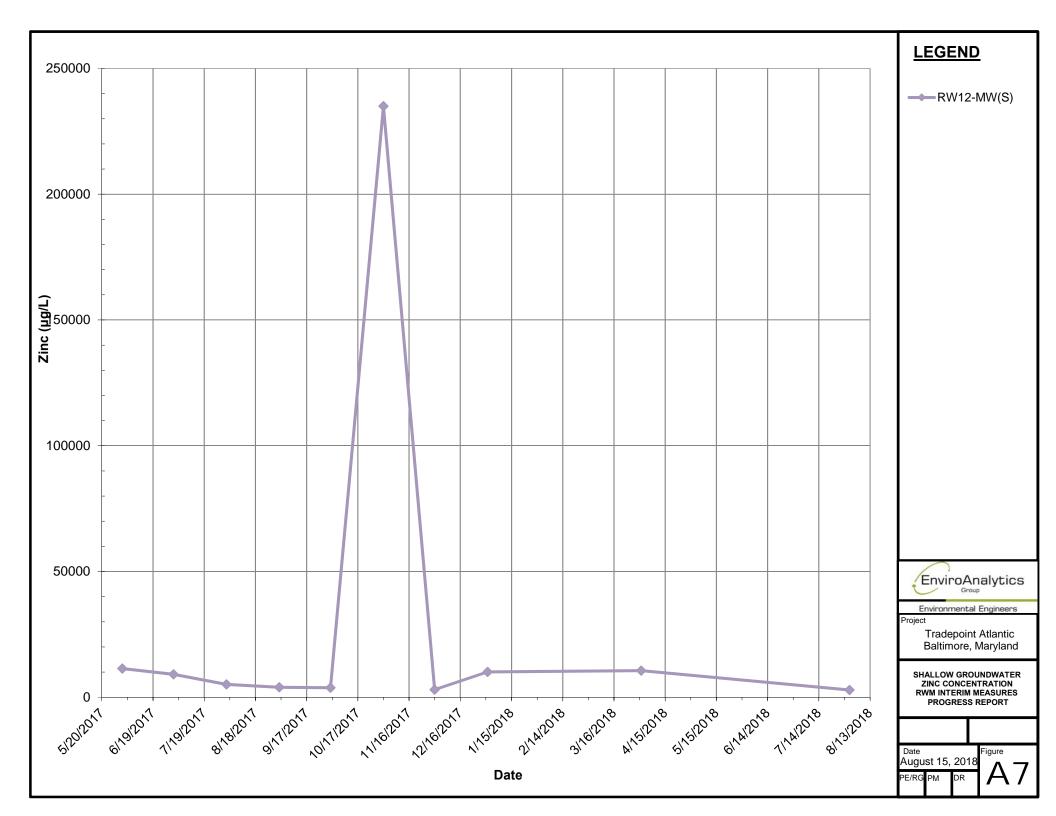


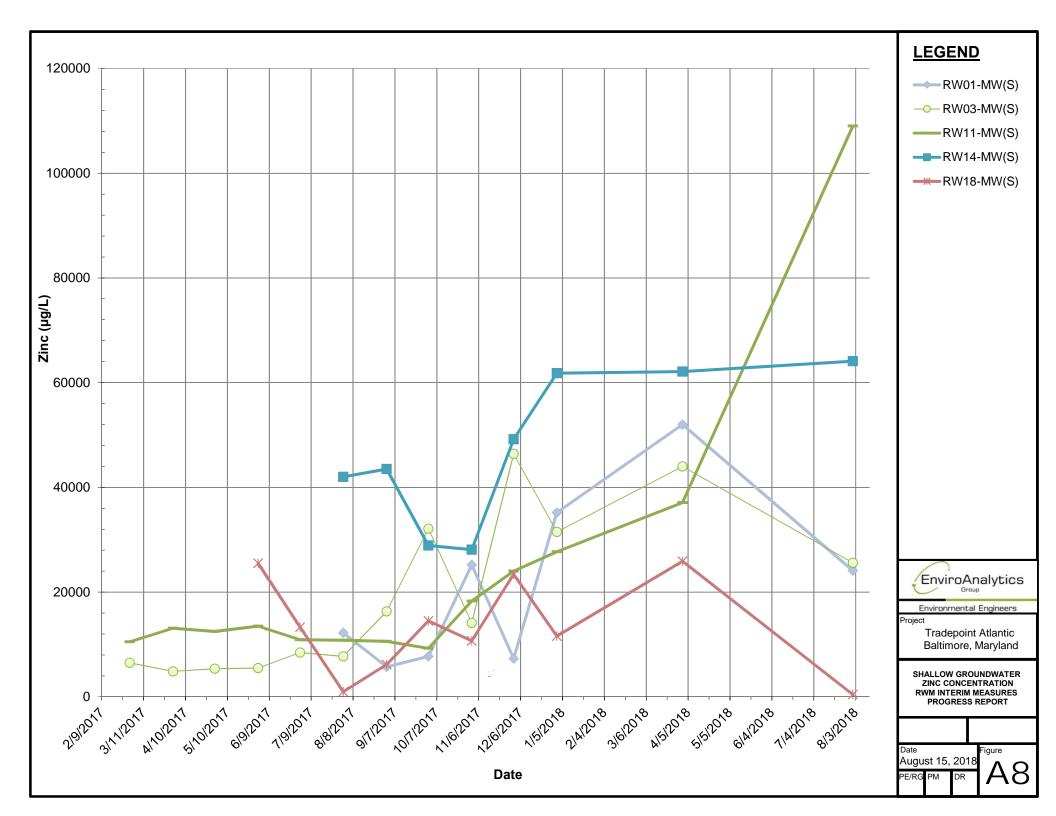


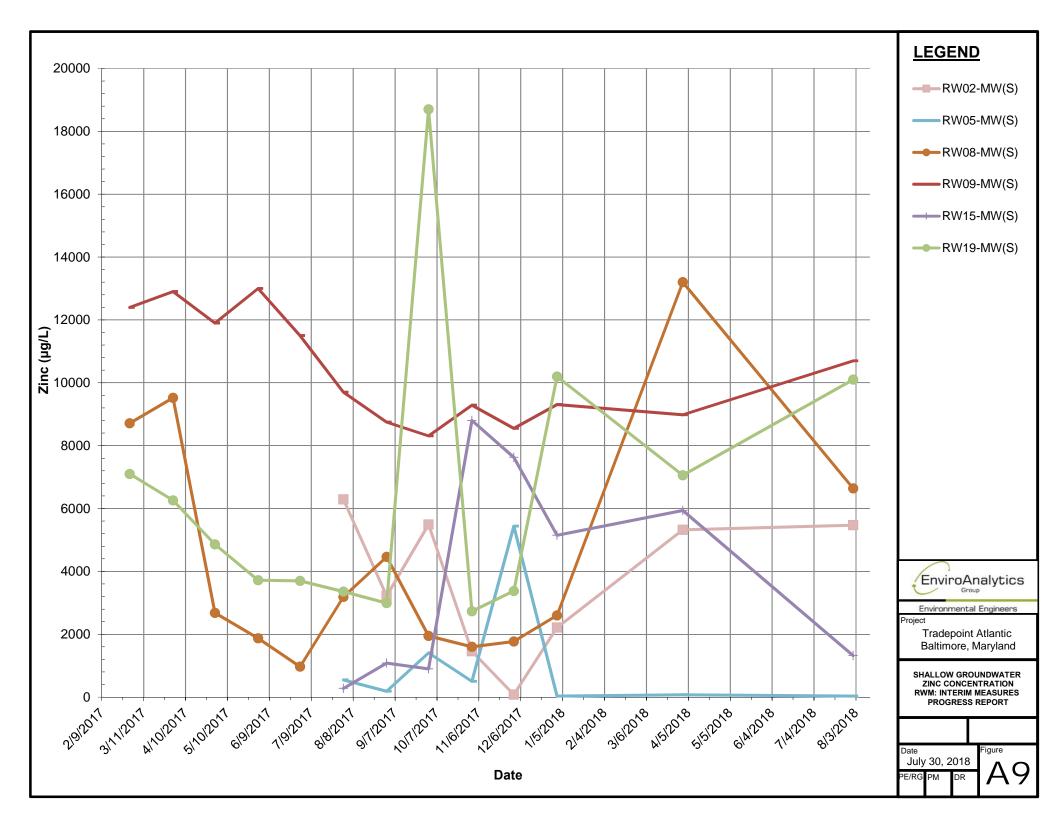


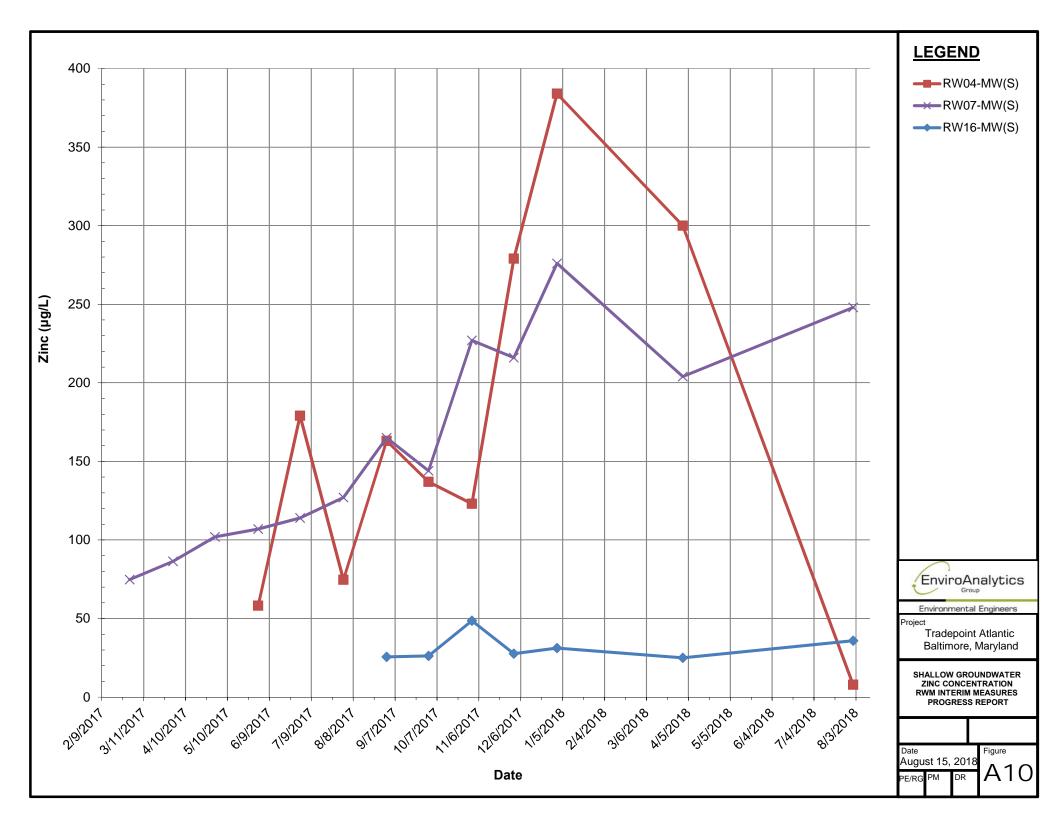


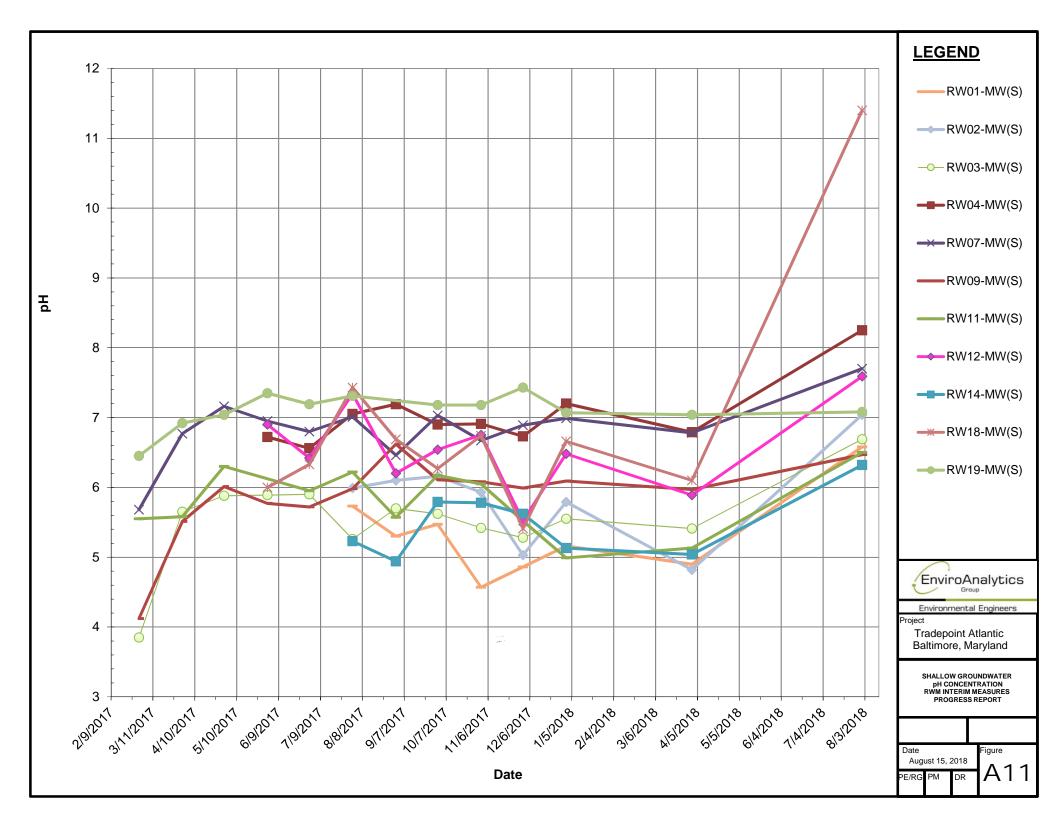


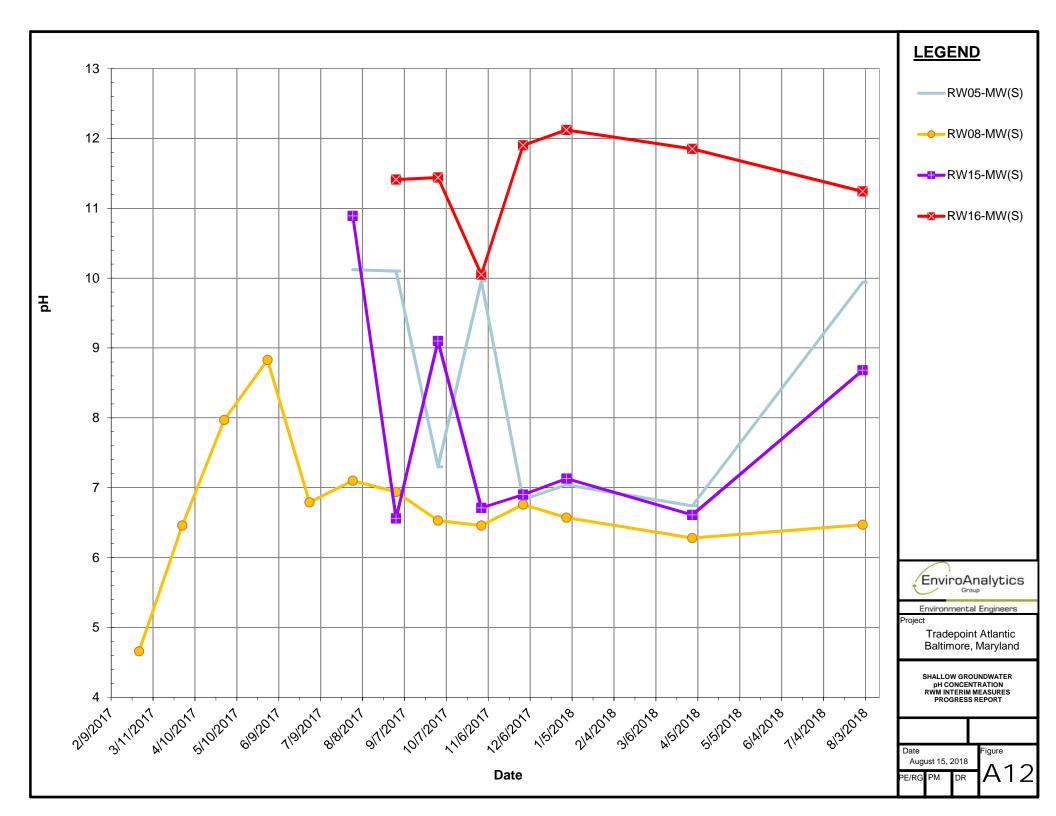


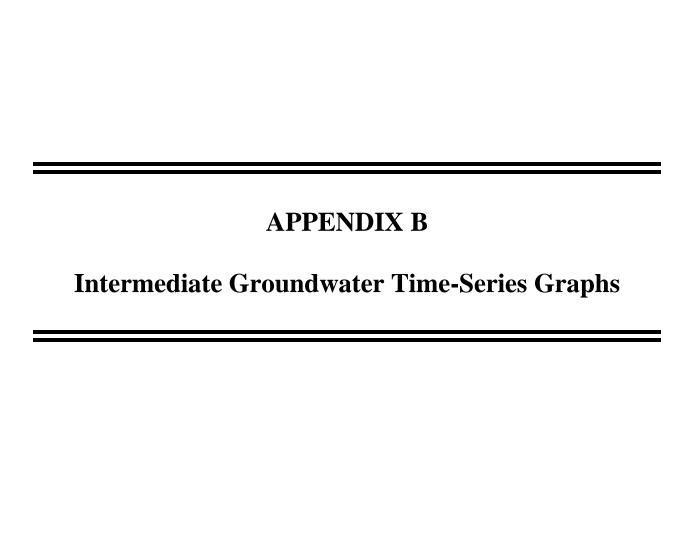


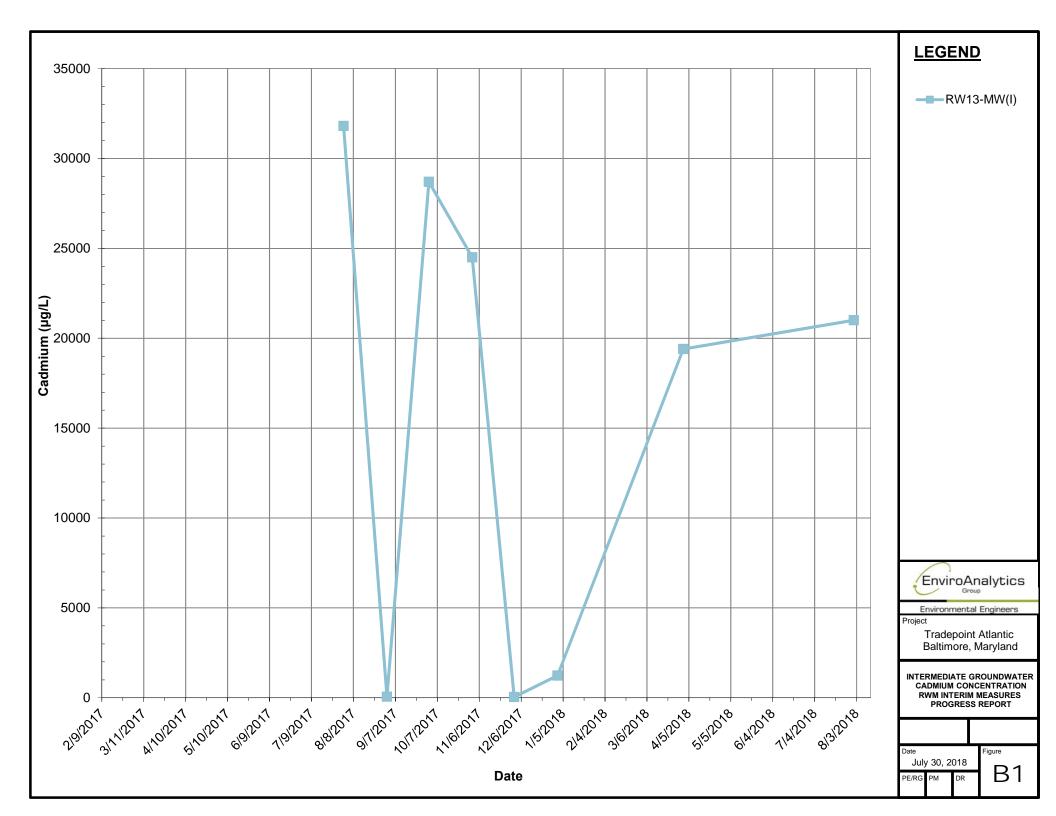


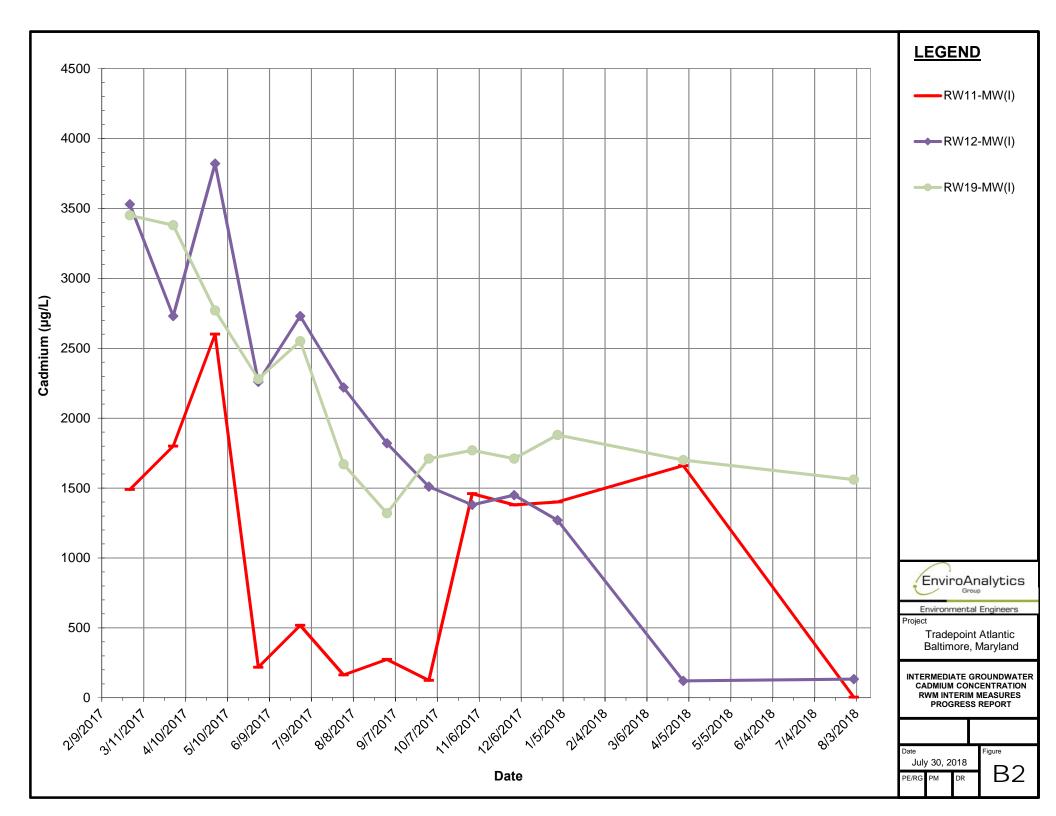


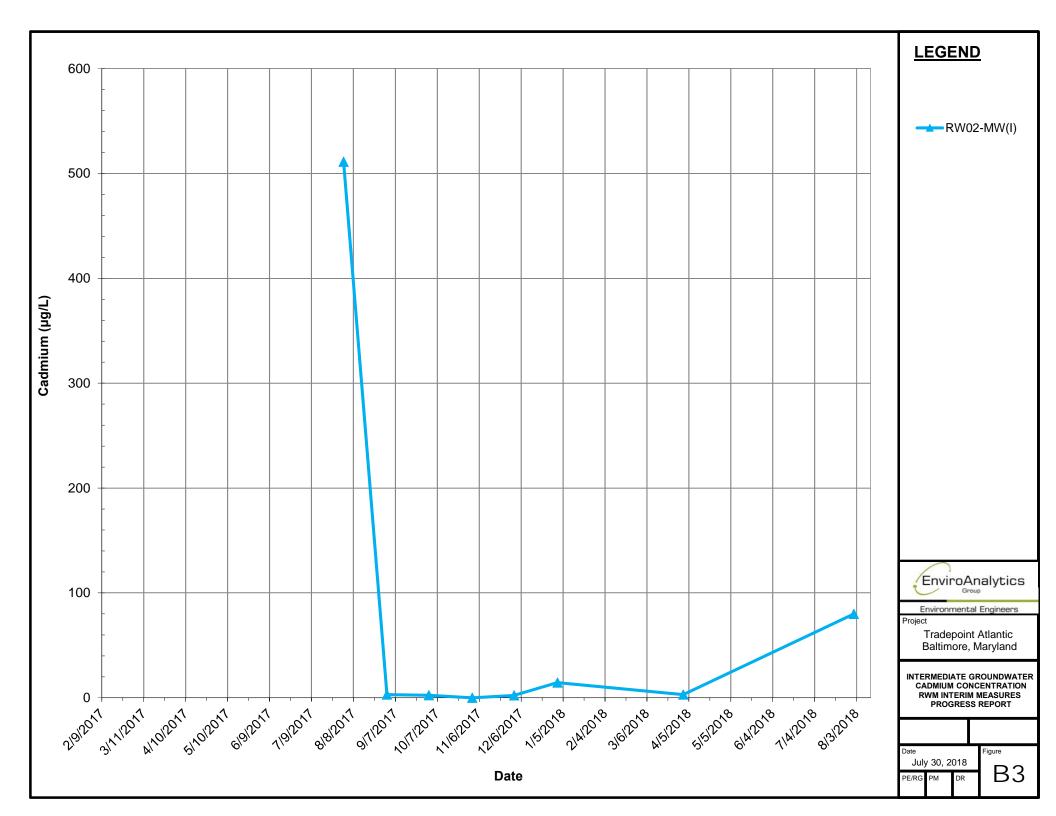


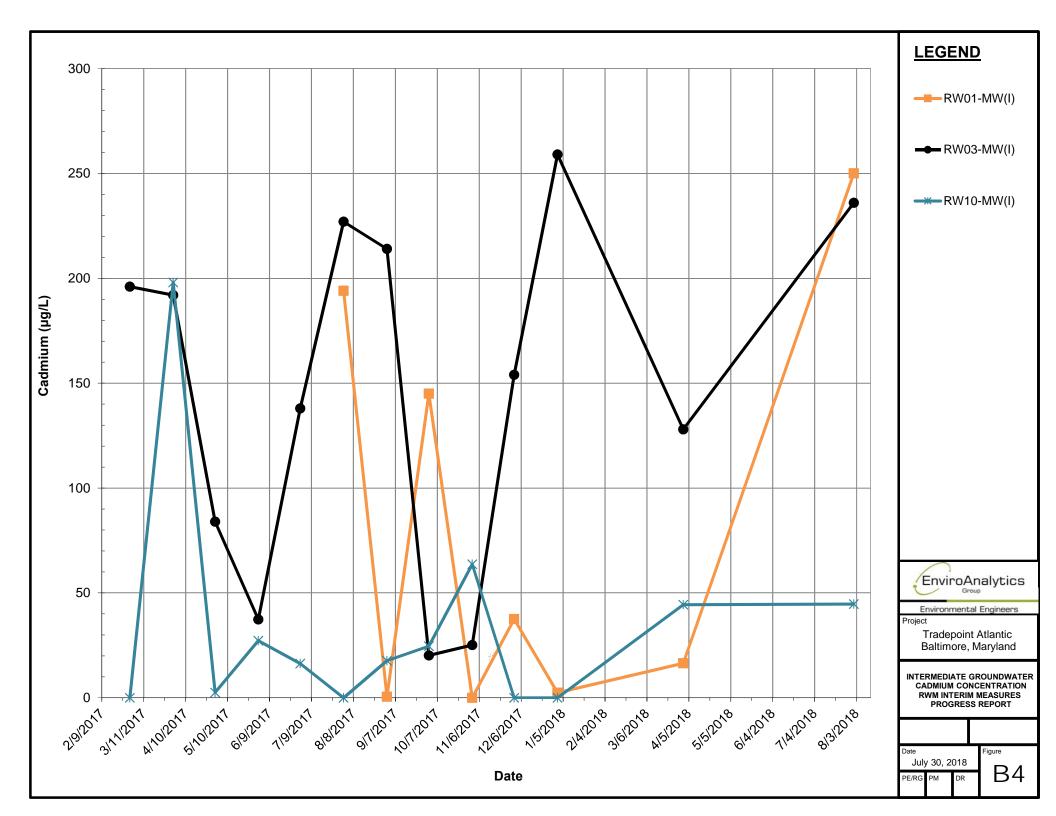


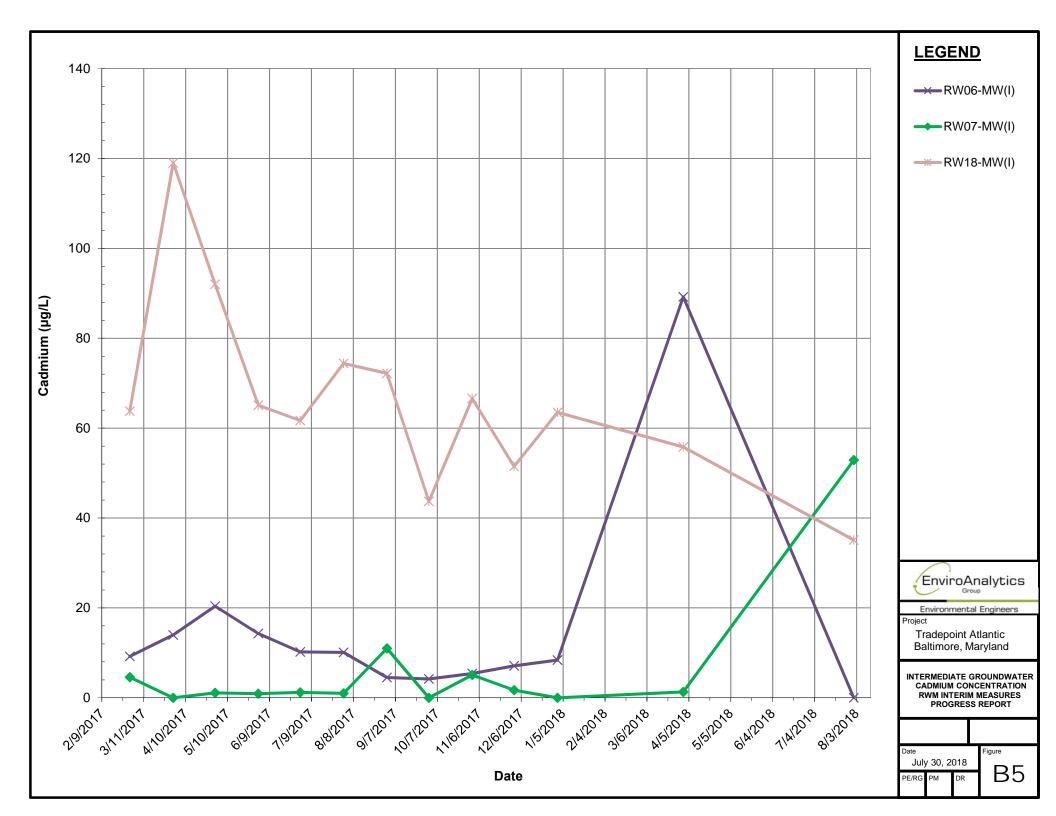


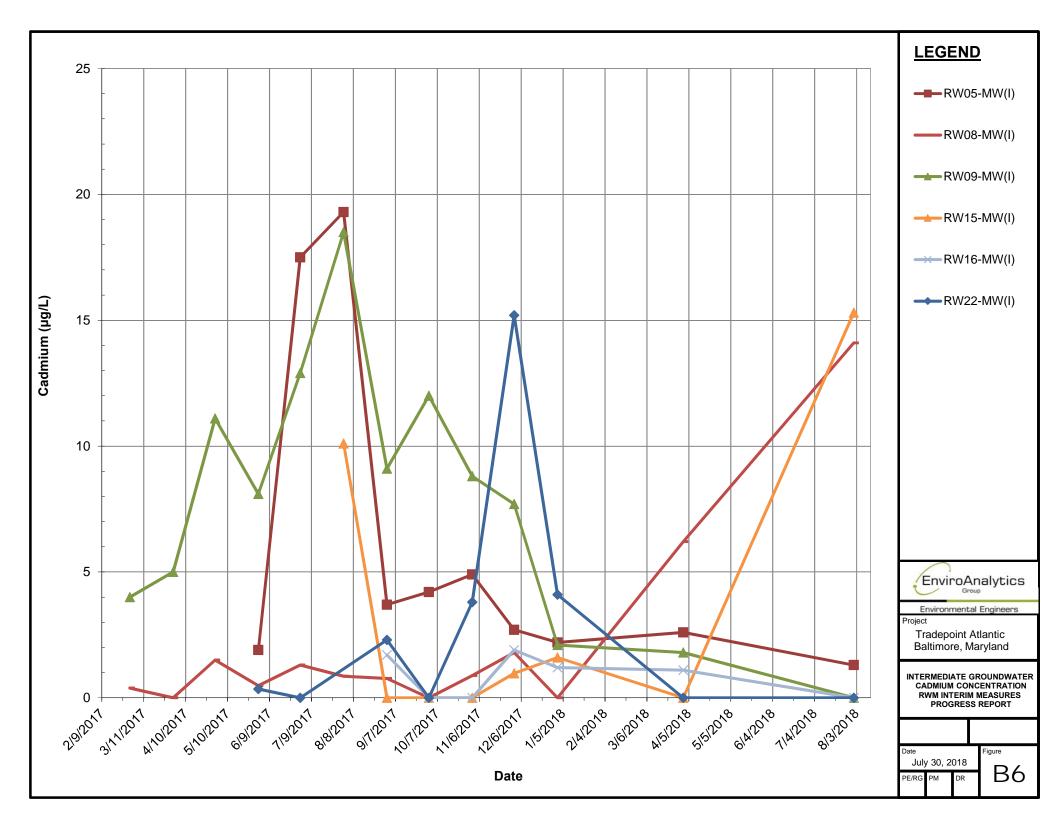


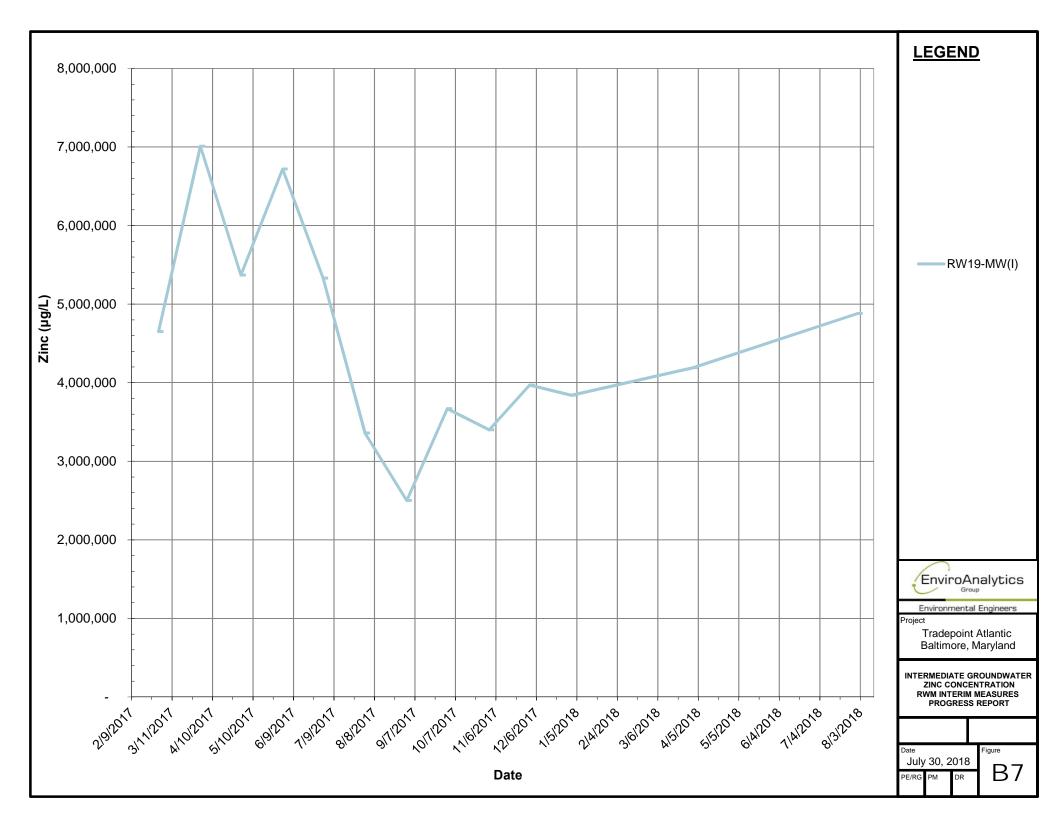


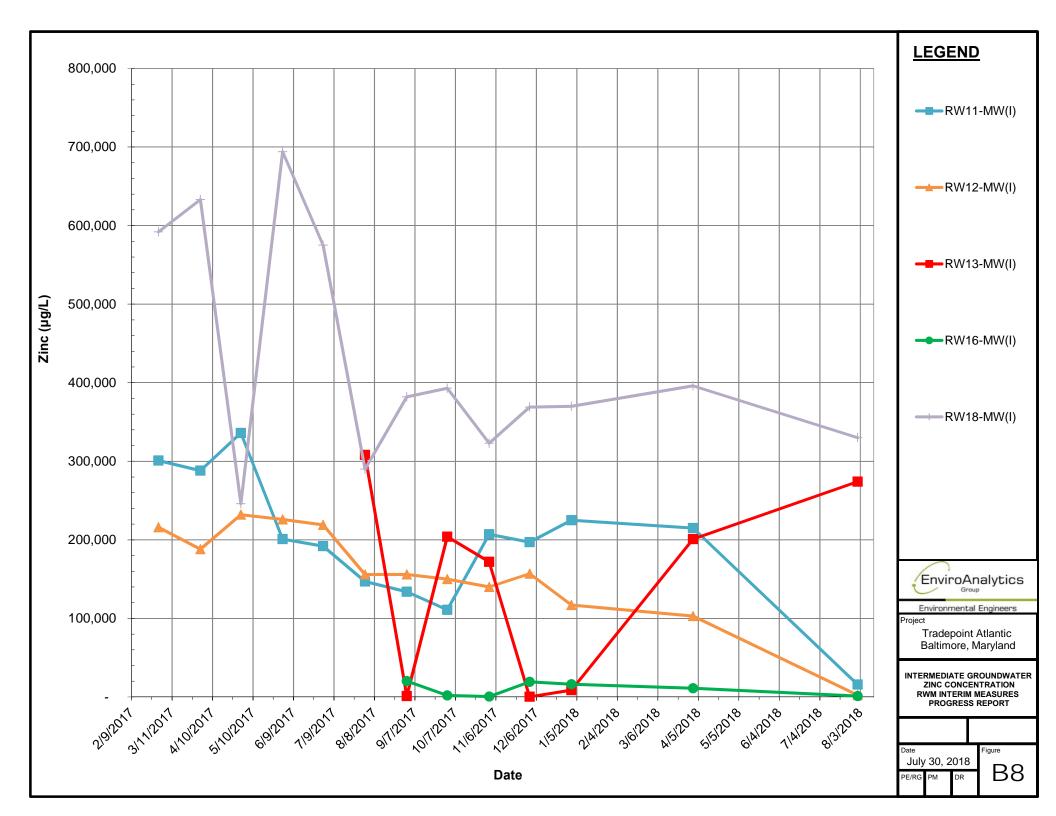


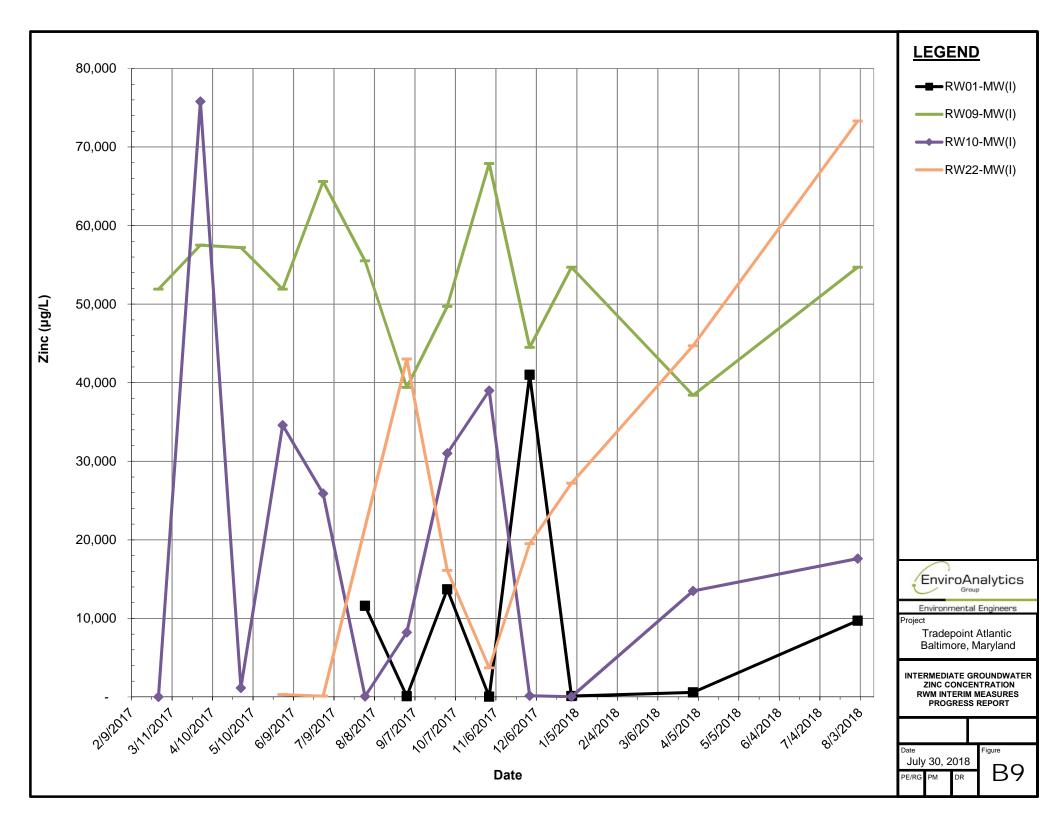


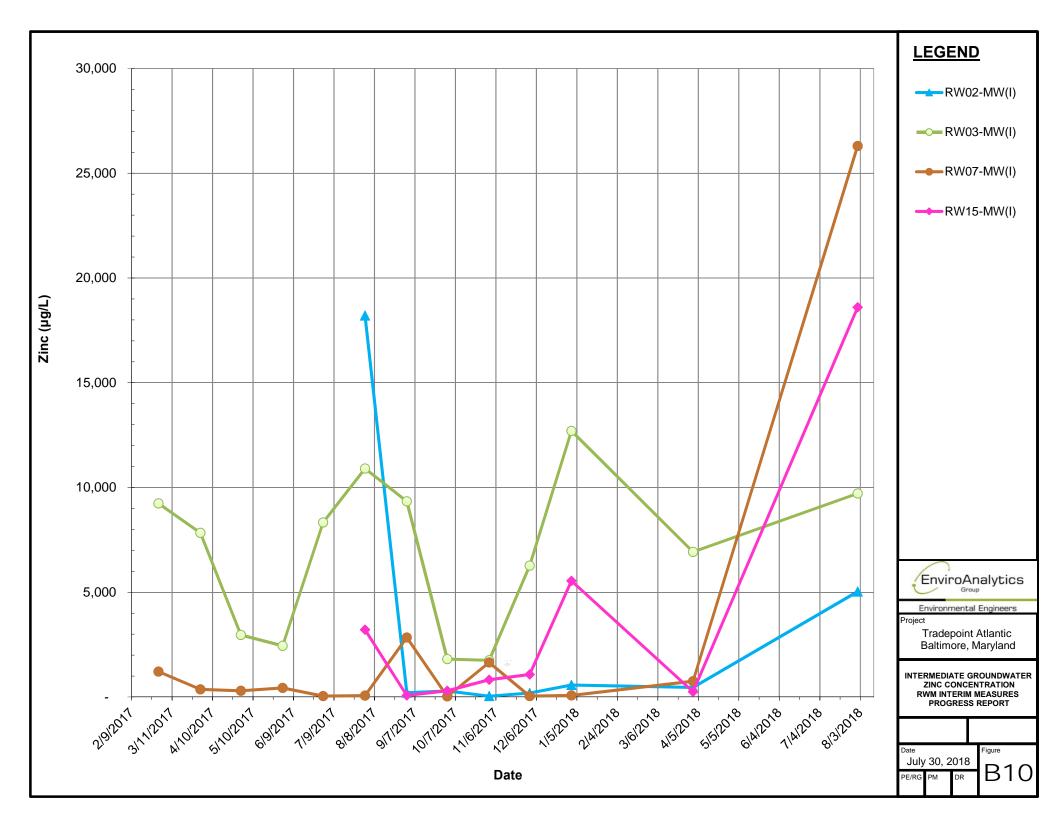


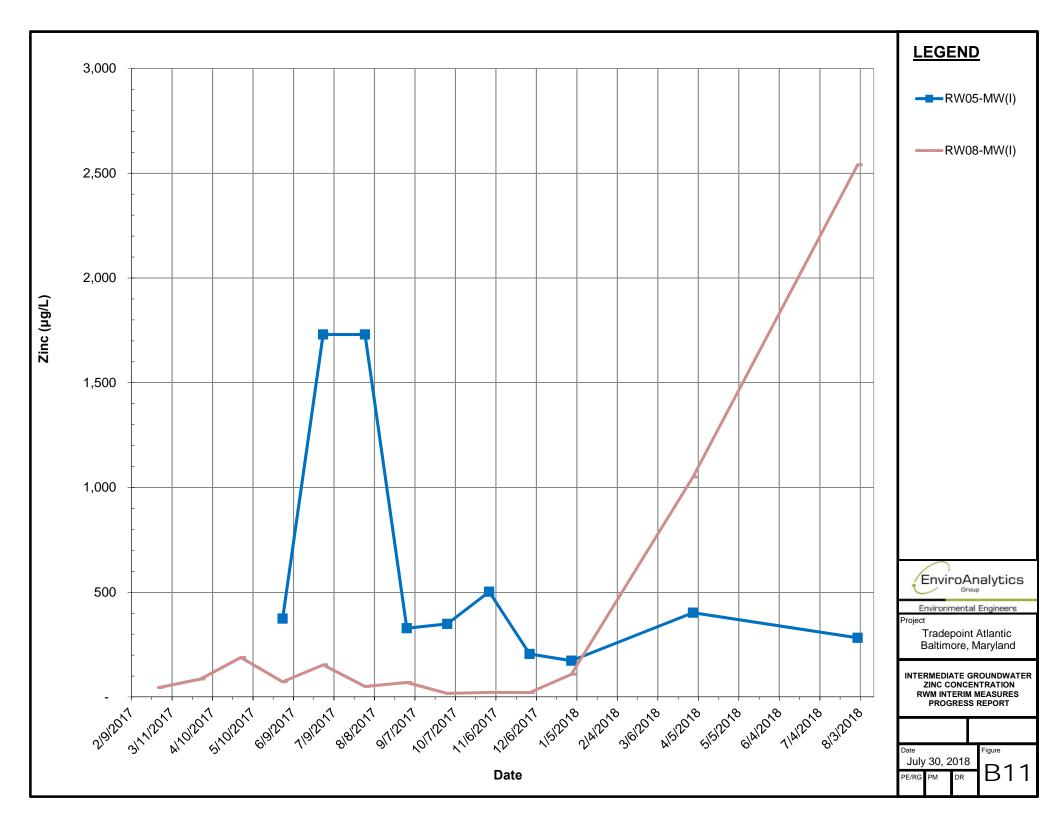


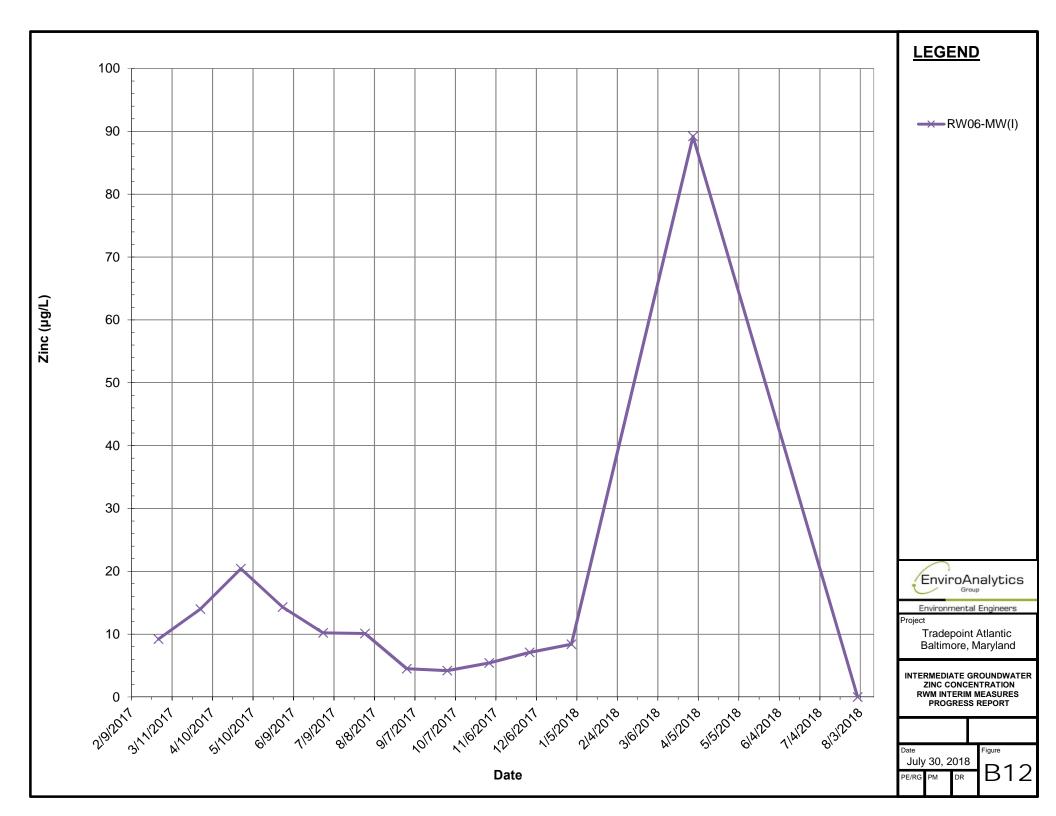


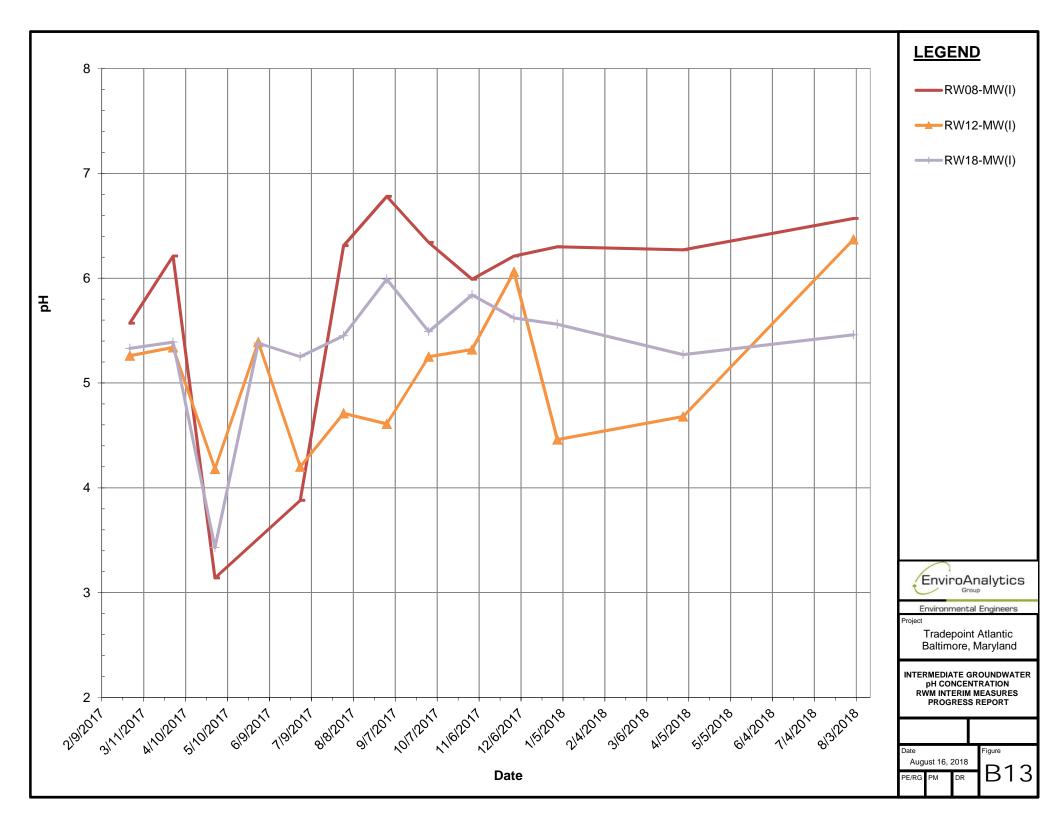


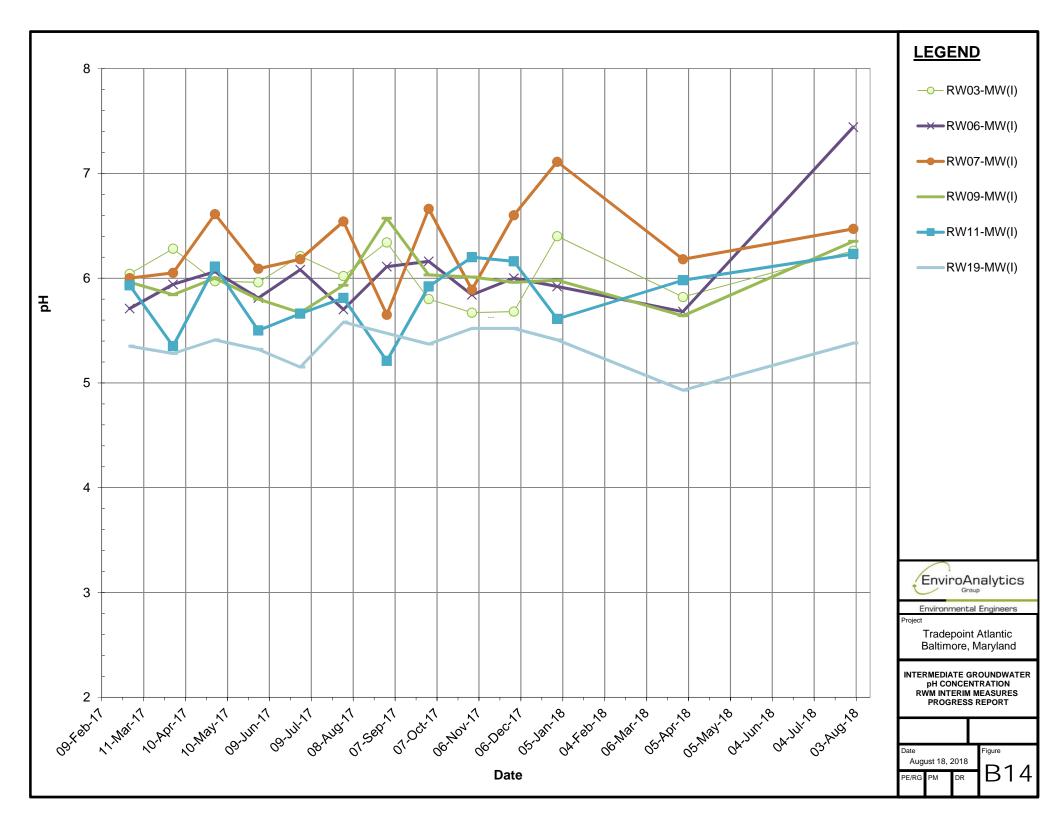


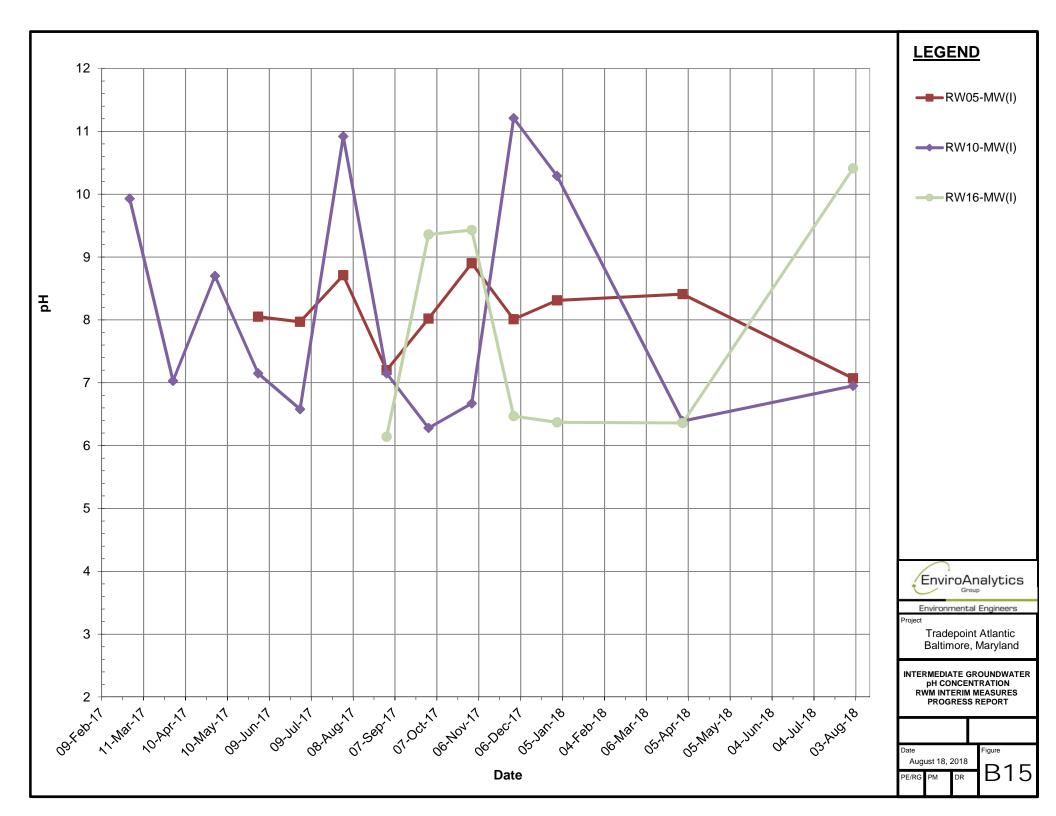


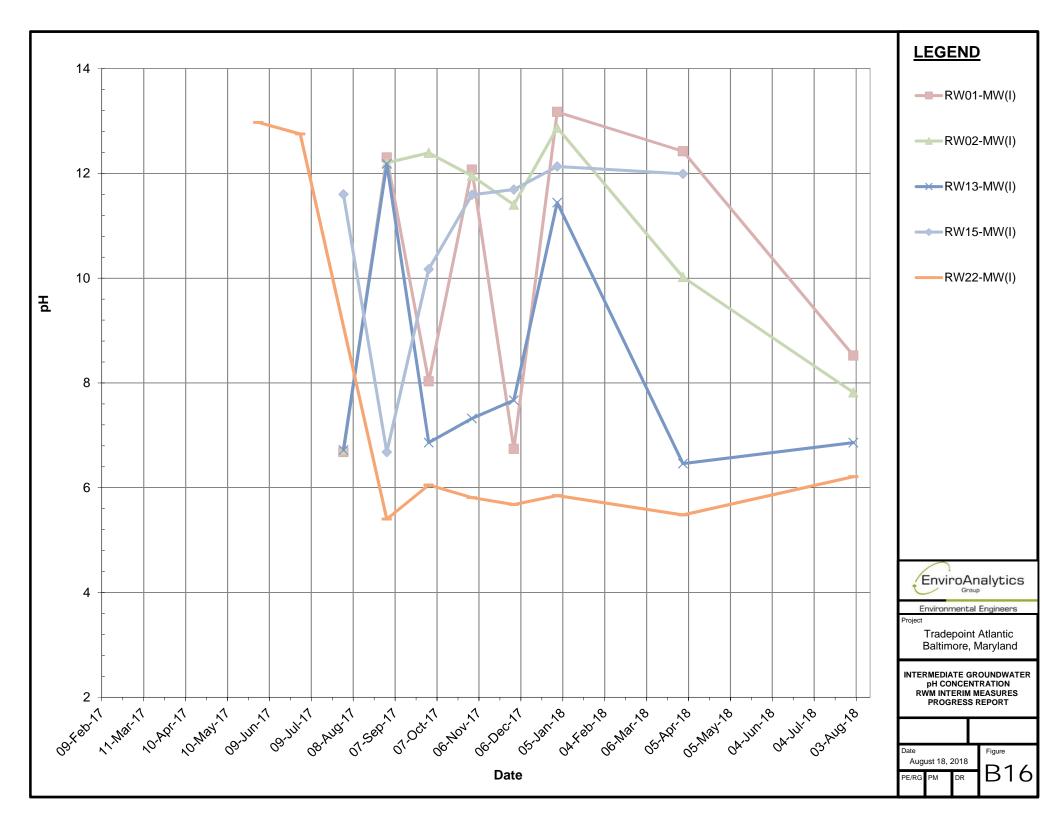












APPENDIX C Laboratory Data from Recent Sampling

Appendix C Lab Sample ID Conversion Chart

Several wells at the Rod and Wire Mill area of Sparrows Point have undergone name changes at some point during their existence. Specifically, some well names have changed so that they are different from those that were used in the laboratory reports contained in this appendix. The following chart is meant to act as a guide to match up well names used in this appendix with those used in the rest of the report.

Well ID in rest of IM	Well ID in this Appendix
Progress Report	(Lab Reports)
RW01-MW(IA)	RW01-MW(I)
RW01-MW(SA)	RW01-MW(S)
RW02-MW(IA)	RW02-MW(I)
RW02-MW(SA)	RW02-MW(S)
RW05-MW(IA)	RW05-MW(I)
RW15-MW(IA)	RW15-MW(I)
RW15-MW(SA)	RW15-MW(S)
RW17-MW(SA)	RW17-MW(S)
RW15-MW(I)	RW20-MW(I)
RW15-MW(S)	RW20-MW(S)
RW22-MW(I)	RW21-MW(I)
RW05-MW(I)	RW22-MW(I)
RW05-MW(S)	RW22-MW(S)
RW20-MW(S)	RW23-MW(S)
RW17-MW(S)	RW24-MW(S)
RW21-MW(S)	RW25-MW(S)

(724)850-5600



February 17, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Area A Parcel A3
Pace Project No.: 30210492

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on February 10, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Trip Blank sample analysis canceled as no VOC analysis is being preformed on any sample.

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

Sincerely,

Samantha Bayura

Samontha Bayune

samantha.bayura@pacelabs.com

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc. Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Area A Parcel A3

Pace Project No.: 30210492

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Indiana Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

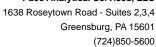
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Area A Parcel A3

Pace Project No.: 30210492

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30210492001	RW01 - MW (S)	Water	02/10/17 10:47	02/10/17 21:40
30210492002	RW01 - MW (I)	Water	02/10/17 11:34	02/10/17 21:40
30210492003	RW02 - MW (S)	Water	02/10/17 12:20	02/10/17 21:40
30210492004	RW02 - MW (I)	Water	02/10/17 12:50	02/10/17 21:40
30210492005	RW03 - MW (S)	Water	02/10/17 14:50	02/10/17 21:40
30210492006	RW03 - MW (I)	Water	02/10/17 15:35	02/10/17 21:40
30210492007	Trip Blank	Water	02/10/17 00:01	02/10/17 21:40

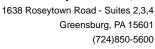


SAMPLE ANALYTE COUNT

Project: Area A Parcel A3

Pace Project No.: 30210492

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30210492001	RW01 - MW (S)	EPA 6010C	PJD	2
30210492002	RW01 - MW (I)	EPA 6010C	PJD	2
30210492003	RW02 - MW (S)	EPA 6010C	PJD	2
30210492004	RW02 - MW (I)	EPA 6010C	PJD	2
30210492005	RW03 - MW (S)	EPA 6010C	PJD	2
30210492006	RW03 - MW (I)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Area A Parcel A3

Pace Project No.: 30210492

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 17, 2017

General Information:

6 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Area A Parcel A3

Pace Project No.: 30210492

Date: 02/17/2017 04:37 PM

Sample: RW01 - MW (S)	Lab ID:	30210492001	Collecte	d: 02/10/17	7 10:47	Received: 02/	10/17 21:40 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
6010C MET ICP	— — — — — — — — — — — — — — — — — — —	Method: EPA 6	010C Pren	paration Met	hod: F	PA 3005A			
Cadmium	2.4J	ug/L	3.0	0.34	1		02/17/17 00:34	7440-43-9	
Zinc	13200	ug/L	100	10.8	10	02/16/17 08:33	02/17/17 01:10	7440-66-6	





Project: Area A Parcel A3

Pace Project No.: 30210492

Date: 02/17/2017 04:37 PM

Sample: RW01 - MW (I)	Lab ID:	30210492002	Collecte	d: 02/10/17	' 11:34	Received: 02/	/10/17 21:40 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	401	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 00:36	7440-43-9	
Zinc	12900	ug/L	100	10.8	10	02/16/17 08:33	02/17/17 01:13	7440-66-6	





Project: Area A Parcel A3

Pace Project No.: 30210492

Date: 02/17/2017 04:37 PM

Sample: RW02 - MW (S)	Lab ID:	30210492003	Collecte	d: 02/10/1	7 12:20	Received: 02/	10/17 21:40 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF ——	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	9.8	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 00:53	7440-43-9	
Zinc	45200	ug/L	1000	108	100	02/16/17 08:33	02/17/17 01:25	7440-66-6	





Project: Area A Parcel A3

Pace Project No.: 30210492

Sample: RW02 - MW (I)	Lab ID:	30210492004	Collecte	d: 02/10/17	12:50	Received: 02/	10/17 21:40 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	41.3	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 00:56	7440-43-9	
Zinc	2740	ug/L	10.0	1.1	1	02/16/17 08:33	02/17/17 00:56	7440-66-6	





Project: Area A Parcel A3

Pace Project No.: 30210492

Date: 02/17/2017 04:37 PM

Sample: RW03 - MW (S)	Lab ID:	30210492005	Collecte	d: 02/10/17	14:50	Received: 02/	10/17 21:40 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	7.9	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 00:58	7440-43-9	
Zinc	6200	ug/L	100	10.8	10	02/16/17 08:33	02/17/17 01:27	7440-66-6	





Project: Area A Parcel A3

Pace Project No.: 30210492

Sample: RW03 - MW (I)	Lab ID:	30210492006	Collecte	d: 02/10/17	7 15:35	Received: 02/	/10/17 21:40 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	189	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 01:01	7440-43-9	
Zinc	9740	ug/L	100	10.8	10	02/16/17 08:33	02/17/17 01:33	7440-66-6	



QUALITY CONTROL DATA

Area A Parcel A3 Project:

Pace Project No.: 30210492

Zinc

Zinc

Date: 02/17/2017 04:37 PM

QC Batch: 249474 Analysis Method: **EPA 6010C** QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

Associated Lab Samples: 30210492001, 30210492002, 30210492003, 30210492004, 30210492005, 30210492006

METHOD BLANK: 1227019 Matrix: Water

1227020

Associated Lab Samples: 30210492001, 30210492002, 30210492003, 30210492004, 30210492005, 30210492006

Blank Reporting Limit MDL Qualifiers Parameter Units Result Analyzed Cadmium 3.0 U 3.0 02/16/17 23:50 ug/L 0.34 ug/L 10.0 U 10.0 1 1 02/16/17 23:50

LABORATORY CONTROL SAMPLE: Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 500 510 102 80-120 ug/L Zinc 500 496 99 80-120 ug/L

MATRIX SPIKE SAMPLE: 1227022 MS % Rec 30210492002 Spike MS Parameter Units Result Conc. Result % Rec Limits Qualifiers Cadmium 401 ug/L 500 926 105 75-125 12900 Zinc ug/L 500 13400 112 75-125

MATRIX SPIKE SAMPLE: 1227024 30210609003 MS MS Spike % Rec % Rec Parameter Qualifiers Units Result Conc. Result Limits Cadmium 3.8 520 103 75-125 500 ug/L 1080 500 1490 75-125 Zinc ug/L 82

SAMPLE DUPLICATE: 1227021 30210492002 Dup Max Parameter Units Result Result RPD RPD Qualifiers Cadmium ug/L 401 415 3 20 12900 13200 3 20 Zinc ug/L

SAMPLE DUPLICATE: 1227023 30210609003 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers Cadmium ug/L 3.8 3.9 2 20

ug/L

1080

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

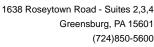
1070

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REPORT OF LABORATORY ANALYSIS

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





QUALIFIERS

Project: Area A Parcel A3
Pace Project No.: 30210492

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

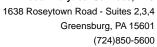
U - Indicates the compound was analyzed for, but not detected.

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

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

TNI - The NELAC Institute.

Date: 02/17/2017 04:37 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Area A Parcel A3

Pace Project No.: 30210492

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30210492001	RW01 - MW (S)	EPA 3005A	249474	EPA 6010C	249566
30210492002	RW01 - MW (I)	EPA 3005A	249474	EPA 6010C	249566
30210492003	RW02 - MW (S)	EPA 3005A	249474	EPA 6010C	249566
30210492004	RW02 - MW (I)	EPA 3005A	249474	EPA 6010C	249566
30210492005	RW03 - MW (S)	EPA 3005A	249474	EPA 6010C	249566
30210492006	RW03 - MW (I)	EPA 3005A	249474	EPA 6010C	249566

F-ALL-Q-020rev.06, 2-Feb-2007

CHAIN-OF-CUSTODY / Analytical Request Document

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

P DRINKING WATER T OTHER ğ GROUND WATER Page: Θ REGULATORY AGENCY L RCRA Requested Analysis Filtered (Y/N) Site Location STATE ☐ NPDES CV! TSU T (T) No. of Lot 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 0 0 M Company Name: EnviroAnalytics Group Samantha Bayura Laura Sargent Invoice Information: Reference: Pace Project Manager: Pace Profile #: Section C Attention: Address: G S A L Project Number: D. C. C. L. L. V. C. Report To: James Calenda Required Project Information: Project Name: PO Number: Section B Copy To: -icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 1430 Sparrows Point Blvd Required Client Information:
Company: EnviroAnalytics Group Pace Analytical" Fax: Requested Due Date/TAT: Phone: 314-620-3056 Section A Email To:

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Important Note. By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days. 30210492

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Sample Con	dition Upon Rece	ipt P	ittsk	ourg	h		w
Pace Analytical	Client Name:		(Spa	WOM2	Project# <u>0 2 1 0 4 9 2</u>	
	UPS USPS Clier	nt 🗆	Comn	nercial	Pace Other _		
Custody Seal on Coole	er/Box Present: yes		no	Seal	s intact: yes [no	
Thermometer Used	Ce	Type	of Ice	: (We	Blue None		
Cooler Temperature	Observed Temp 2	2	° C	Corr	ection Factor: 10, 2	°C Final Temp: 2.4 °C	
Temp should be above free			•				ARCH
						Date and Initials of person examining contents:	2/11/1
Comments:		Yes	No	N/A		contents: 2 1011	- [] []
Chain of Custody Preser	nt:				1.		1211111
Chain of Custody Filled (Out:	/			2.		_
Chain of Custody Reling	uished:	/			3.		
Sampler Name & Signat	ure on COC:	/			4.		_
Sample Labels match Co	OC:	/			5.		
-Includes date/time/IE	Matrix:	INT	^				_
Samples Arrived within H	Hold Time:				6.		
Short Hold Time Analys	sis (<72hr remaining):				7.		_
Rush Turn Around Time		/			8.		
Sufficient Volume:	•	/			9.		
Correct Containers Used	•				10.		
-Pace Containers Use					7		
Containers Intact:		/			11.		
Orthophosphate field filte	ered			/	12.		
Organic Samples chec				1	13.]
Filtered volume received					14.		
All containers have been ch		/			15.		
All containers needing prese compliance with EPA recom		1			10.		
					Initial when		
exceptions. VOA, colifor	rm, TOC, O&G, Phenolics				completed . Lot # of added	preservation	1
					preservative		4
Headspace in VOA Vials	(>6mm):		/		16. VOAS VECON	ved empty	_
Trip Blank Present:					17.		
Trip Blank Custody Seals	Present						
Rad Aqueous Samples	Screened > 0.5 mrem/hr				Initial when completed:	Date:	
Client Notification/ Reso	olution:	I.					
Person Contacted:				Date/	Time:	Contacted By:	_
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A check in this I	box indicates that addi	tional	infor	matio	n has been stored ir	n ereports.	

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



February 17, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on February 13, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samuella Bayune

samantha.bayura@pacelabs.com

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282 South Dakota Certification

Tanasasa Cartification # TN

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30210609001	RW 07-MW(S)	Water	02/13/17 09:25	02/13/17 23:00
30210609002	RW 07-MW(I)	Water	02/13/17 10:20	02/13/17 23:00
30210609003	RW 08-MW(S)	Water	02/13/17 11:20	02/13/17 23:00
30210609004	Duplicate	Water	02/13/17 00:01	02/13/17 23:00
30210609005	RW 08-MW(I)	Water	02/13/17 12:10	02/13/17 23:00
30210609006	RW 09-MW(S)	Water	02/13/17 13:40	02/13/17 23:00
30210609007	RW 09-MW(I)	Water	02/13/17 14:20	02/13/17 23:00
30210609008	RW 11-MW(S)	Water	02/13/17 15:15	02/13/17 23:00
30210609009	Field Blank	Water	02/13/17 16:25	02/13/17 23:00

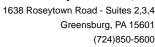


SAMPLE ANALYTE COUNT

Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30210609001	RW 07-MW(S)	EPA 6010C	PJD	2
30210609002	RW 07-MW(I)	EPA 6010C	PJD	2
30210609003	RW 08-MW(S)	EPA 6010C	PJD	2
30210609004	Duplicate	EPA 6010C	PJD	2
30210609005	RW 08-MW(I)	EPA 6010C	PJD	2
30210609006	RW 09-MW(S)	EPA 6010C	PJD	2
30210609007	RW 09-MW(I)	EPA 6010C	PJD	2
30210609008	RW 11-MW(S)	EPA 6010C	PJD	2
30210609009	Field Blank	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 17, 2017

General Information:

9 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Sample: RW 07-MW(S)	Lab ID:	Lab ID: 30210609001			7 09:25	Received: 02/	13/17 23:00 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.8J	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 00:09	7440-43-9	
Zinc	81.6	ug/L	10.0	1.1	1	02/16/17 08:33	02/17/17 00:09	7440-66-6	





Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Sample: RW 07-MW(I)	Lab ID:	30210609002	Collecte	d: 02/13/17	7 10:20	Received: 02/	13/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
6010C MET ICP		Method: EPA 6				-			
Cadmium	1.2J	ug/L	3.0	0.34	1		02/17/17 00:11	7440-43-9	
Zinc	944	ug/L	10.0	1.1	1	02/16/17 08:33	02/17/17 00:11	7440-66-6	





Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Sample: RW 08-MW(S)	Lab ID:	30210609003	Collecte	d: 02/13/17	11:20	Received: 02/	13/17 23:00 Ma	atrix: Water	
Davassatassa	Daguita	Llaita	Report	MDI	D E	Duamanad	A a la a al	CACNI	0
Parameters	Results	Units -	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.8	ug/L	3.0	0.34	1	02/16/17 08:33	02/16/17 23:55	7440-43-9	
Zinc	1080	ug/L	10.0	1.1	1	02/16/17 08:33	02/16/17 23:55	7440-66-6	





Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Sample: Duplicate	Lab ID:	30210609004	Collecte	d: 02/13/17	7 00:01	Received: 02/	13/17 23:00 Ma	atrix: Water	
Dava	Daguita	Llaita	Report	MDI	D E	Duamanad	A a l a al	CACNI	0
Parameters	Results -	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.8J	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 00:19	7440-43-9	
Zinc	86.2	ug/L	10.0	1.1	1	02/16/17 08:33	02/17/17 00:19	7440-66-6	





Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Date: 02/17/2017 04:38 PM

Sample: RW 08-MW(I)	Lab ID:	30210609005	Collecte	d: 02/13/17	7 12:10	Received: 02/	13/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	0.49J	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 00:22	7440-43-9	
Zinc	178	ug/L	10.0	1.1	1	02/16/17 08:33	02/17/17 00:22	7440-66-6	





Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Sample: RW 09-MW(S)	Lab ID:	30210609006	Collecte	d: 02/13/17	13:40	Received: 02/	13/17 23:00 Ma	atrix: Water	
Parameters	Results	Lloito	Report Limit	MDL	DF	Droporod	Analyzad	CAS No.	Ougl
Parameters	— Results	Units -		IVIDE .	DF	Prepared	Analyzed		Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	22.3	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 00:24	7440-43-9	
Zinc	14500	ug/L	100	10.8	10	02/16/17 08:33	02/17/17 01:03	7440-66-6	





Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Sample: RW 09-MW(I)	Lab ID:	30210609007	Collecte	d: 02/13/17	7 14:20	Received: 02/	13/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
- I didilicicis				IVIDE			Analyzeu		— Quai
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.1	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 00:26	7440-43-9	
Zinc	51000	ug/L	1000	108	100	02/16/17 08:33	02/17/17 01:05	7440-66-6	





Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Sample: RW 11-MW(S)	Lab ID:	30210609008	Collecte	d: 02/13/17	' 15:15	Received: 02/	13/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
- Tarameters							Analyzed		- Quai
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	0.78J	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 00:29	7440-43-9	
Zinc	8790	ug/L	100	10.8	10	02/16/17 08:33	02/17/17 01:08	7440-66-6	





Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Sample: Field Blank	Lab ID:	30210609009	Collecte	d: 02/13/17	7 16:25	Received: 02/	13/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A		-	
Cadmium	3.0 U	ug/L	3.0	0.34	1	02/16/17 08:33	02/17/17 00:31	7440-43-9	
Zinc	3.4J	ug/L	10.0	1.1	1	02/16/17 08:33	02/17/17 00:31	7440-66-6	



QUALITY CONTROL DATA

Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Date: 02/17/2017 04:38 PM

QC Batch: 249474 Analysis Method: EPA 6010C QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

30210609001, 30210609002, 30210609003, 30210609004, 30210609005, 30210609006, 30210609007, Associated Lab Samples:

30210609008, 30210609009

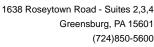
METHOD BLANK: 1227019 Matrix: Water

	609001, 302106090 609008, 302106090	02, 30210609003, 302 09	10609004, 3	0210609005, 30	210609006, 30	0210609007,	
	,		Reporting				
Parameter	Units	Result —	Limit	MDL 	Analyzed	I Qualifier	S
Cadmium	ug/L	3.0 U	3.0				
Zinc	ug/L	10.0 U	10.0	1.1	02/16/17 23	:50	
LABORATORY CONTROL SAMPLE	E: 1227020						
Parameter	Units	Spike LC Conc. Res		LCS % Rec	% Rec Limits	Qualifiers	
Cadmium	ug/L	500	510	102	80-120	_	
Zinc	ug/L	500	496	99	80-120		
MATRIX SPIKE SAMPLE:	1227022						
Parameter	Units	30210492002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	401	500	926	105	75-125	
Zinc	ug/L	12900	500	13400	112	75-125	
MATRIX SPIKE SAMPLE:	1227024						
Parameter	Units	30210609003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	3.8	500	520	103	75-125	
Zinc	ug/L	1080	500	1490	82	75-125	
SAMPLE DUPLICATE: 1227021							
Parameter	Units	30210492002 Result	Dup Result	RPD	Max RPD	Qualifiers	_
Cadmium	ug/L	401	415	3	3 2	20	
Zinc	ug/L	12900	13200	3	3 2	20	
SAMPLE DUPLICATE: 1227023							
Parameter	Units	30210609003 Result	Dup Result	RPD	Max RPD	Qualifiers	_
Cadmium	ug/L	3.8	3.9	2	2	20	_
Zinc	ug/L	1080	1070			20	

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

REPORT OF LABORATORY ANALYSIS

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





QUALIFIERS

Project: Area A Parcel A3 GW

Pace Project No.: 30210609

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

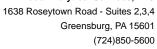
U - Indicates the compound was analyzed for, but not detected.

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

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

TNI - The NELAC Institute.

Date: 02/17/2017 04:38 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Area A Parcel A3 GW

Pace Project No.: 30210609

Date: 02/17/2017 04:38 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30210609001	RW 07-MW(S)	EPA 3005A	249474	EPA 6010C	249566
30210609002	RW 07-MW(I)	EPA 3005A	249474	EPA 6010C	249566
30210609003	RW 08-MW(S)	EPA 3005A	249474	EPA 6010C	249566
30210609004	Duplicate	EPA 3005A	249474	EPA 6010C	249566
30210609005	RW 08-MW(I)	EPA 3005A	249474	EPA 6010C	249566
30210609006	RW 09-MW(S)	EPA 3005A	249474	EPA 6010C	249566
30210609007	RW 09-MW(I)	EPA 3005A	249474	EPA 6010C	249566
30210609008	RW 11-MW(S)	EPA 3005A	249474	EPA 6010C	249566
30210609009	Field Blank	EPA 3005A	249474	EPA 6010C	249566

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical www.pacciaba.com

Section A	Y.	Section B						٠,	Section C	J.												<u></u>			40		*******		
Require	Cien	Required Project Information:	ject Ir	nformation				-	Invoice Information:	Informa	tion:							ı					rage.		and the second	ō	/		
Company:	y: EnviroAnalytics Group	Report To: James Calenda	аше	s Calen	da			`	Attention:	i.	Laura	Laura Sargent	ent									•							
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····	Section D Valid Matrix Codes Required Client Information MATRIX COL	odes CODE		(awo	COLL	COLLECTED					reser	Preservatives	Se	11.00	↑ N/A					-		us cong	-						\overline{M}
	DRINKING WATER WASTE WATER WASTE WATER PRODUCT SOIL/SOLID OIL	WY WY SI OL	see valid codes	SERAB C=CC	COMPOSITE	COMPOSITE END/GRAB	AB AB	юггестіои	S		-			nessensespilitä	1				A0747 7			bo		3		3	3		
# WƏTI	SAMPLE ID AWPE A-Z, 0-9 /) OTHER Sample IDs MUST BE UNIQUE TISSUE	S & P & P		SAMPLE TYPE (G	U N	at A C	<u> </u>	D TA 9MBT BJ9MA8	# OF CONTAINER:	J ₂ SO₄ npreserved	ICI INO ³	19OH	Va₂S₂O₃ Methanol	Nater	Analysis Test OC/8260B	3002820D	RO/8015B	3RO/8015B METALS/60100	Nercury/7471A or	exavalent Chromiu	otal Cyanide/9 CB/8082 (soil	+ ns lato	il and Grease/10 il and Grease/90	sesidual Chlorine	ć	Ċ	3	- - -	
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Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Page 18 of 19

3021060a

anh

Sample Condition Upon Rece	ipt P	ittsb	urg	h 30210	0609
Face Analytical		(•		
Client Name:			1/1	oAnd	Project #
Courier: Fed Ex UPS USPS Clien	nt 🗆	Comn	nercial	Pace Other	
Custody Seal on Cooler/Box Present: yes	7	no	Seal	s intact: yes	no
Thermometer Used	Type	of Ice:	We	Blue None	
Cooler Temperature Observed Temp	9	° C		ection Factor: -()	°C Final Temp: 1,8 °C
Temp should be above freezing to 6°C	_!	•			
				•	Date and Initials of person examining contents:
Comments:	Yes	No	N/A		
Chain of Custody Present:	X		<u> </u>	1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X		<u> </u>	3.	
Sampler Name & Signature on COC:	X			4.	
Sample Labels match COC:	X		<u> </u>	5.	
-Includes date/time/ID Matrix:	<u> </u>				
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	\times			8.	
Sufficient Volume:	X			9.	
Correct Containers Used:	\times			10.	
-Pace Containers Used:	\times				
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Organic Samples checked for dechlorination:			X	13.	
Filtered volume received for Dissolved tests			X	14.	
All containers have been checked for preservation.	X			15. 11/2	
All containers needing preservation are found to be in compliance with EPA recommendation.	X			PILL	
				Initial when OAR	Date/time of
exceptions: VOA, coliform, TOC, O&G, Phenolics				Lot # of added	preservation
				preservative	
Headspace in VOA Vials (>6mm):			X	16.	
Trip Blank Present:		\mathbb{X}_{-}		17.	
Trip Blank Custody Seals Present			X		
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed:	Date:
Client Notification/ Resolution:			-10, 2005, 2000		
Person Contacted:			Date/	Γime:	Contacted By:
Comments/ Resolution:					

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

A check in this box indicates that additional information has been stored in ereports.

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



February 22, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on February 15, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samuella Bayune

samantha.bayura@pacelabs.com

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification

Illinois Certification Indiana Certification

Iowa Certification #: 391 Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706

North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282 South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30210854001	RW16-MW(S)	Water	02/14/17 09:15	02/15/17 22:00
30210854002	RW16-MW(I)	Water	02/14/17 10:05	02/15/17 22:00
30210854003	RW15-MW(I)	Water	02/14/17 10:55	02/15/17 22:00
30210854004	RW15-MW(S)	Water	02/14/17 11:50	02/15/17 22:00
30210854005	RW19-MW(S)	Water	02/14/17 12:35	02/15/17 22:00
30210854006	RW19-MW(I)	Water	02/14/17 13:15	02/15/17 22:00
30210854007	RW18-MW(I)	Water	02/14/17 15:30	02/15/17 22:00
30210854008	RW10-MW(I)	Water	02/15/17 10:20	02/15/17 22:00
30210854009	RW13-MW(I)	Water	02/15/17 12:10	02/15/17 22:00
30210854010	Duplicate	Water	02/15/17 00:01	02/15/17 22:00
30210854011	Trip Blank	Water	02/15/17 00:01	02/15/17 22:00
30210854012	Field Blank	Water	02/15/17 15:40	02/15/17 22:00
30210854013	RW12-MW(I)	Water	02/15/17 15:18	02/15/17 22:00

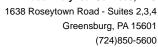


SAMPLE ANALYTE COUNT

Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30210854001	RW16-MW(S)	EPA 6010C	KAS	2
30210854002	RW16-MW(I)	EPA 6010C	KAS	2
30210854003	RW15-MW(I)	EPA 6010C	KAS	2
30210854004	RW15-MW(S)	EPA 6010C	KAS	2
30210854005	RW19-MW(S)	EPA 6010C	KAS	2
30210854006	RW19-MW(I)	EPA 6010C	KAS	2
30210854007	RW18-MW(I)	EPA 6010C	KAS	2
30210854008	RW10-MW(I)	EPA 6010C	KAS	18
		EPA 6010C	PJD	18
		EPA 7470A	PJD	1
		EPA 7470A	PJD	1
		EPA 8270D by SIM	TMK	20
		EPA 8270D	EAC	62
		EPA 8260B	LEL	55
		EPA 7196A	PAS	1
		EPA 9012B	LEP	1
30210854009	RW13-MW(I)	EPA 6010C	KAS	18
		EPA 6010C	PJD	18
		EPA 7470A	PJD	1
		EPA 7470A	PJD	1
		EPA 8270D by SIM	TMK	20
		EPA 8270D	EAC	62
		EPA 8260B	LEL	55
		EPA 7196A	PAS	1
		EPA 9012B	LEP	1
30210854010	Duplicate	EPA 6010C	KAS	18
		EPA 6010C	PJD	18
		EPA 7470A	PJD	1
		EPA 7470A	PJD	1
		EPA 8270D by SIM	TMK	20
		EPA 8270D	EAC	62
		EPA 8260B	LEL	55
		EPA 7196A	PAS	1
		EPA 9012B	LEP	1
30210854011	Trip Blank	EPA 8260B	LEL	55
30210854012	Field Blank	EPA 6010C	KAS	18
		EPA 7470A	PJD	1





SAMPLE ANALYTE COUNT

Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 8270D by SIM	TMK	20
		EPA 8270D	EAC	62
		EPA 8260B	LEL	55
		EPA 7196A	PAS	1
		EPA 9012B	LEP	1
30210854013	RW12-MW(I)	EPA 6010C	KAS	2



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

General Information:

12 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 249761

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

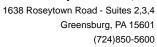
- DUP (Lab ID: 1229013)
 - Aluminum
 - Antimony

Additional Comments:

Batch Comments:

Cd and Zn failed for the serial dilution.

• QC Batch: 249839





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

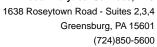
Analyte Comments:

QC Batch: 249761

1c: Cd and Zn failed for the serial dilution.

- BLANK (Lab ID: 1229011)
 - Silver
 - Aluminum
 - Arsenic
 - Barium
 - Beryllium
 - Cadmium
 - Cobalt
 - Chromium
 - Copper
 - Iron
 - Manganese
 - Nickel
 - Lead
 - Antimony
 - Selenium
 - Thallium
 - Vanadium
 - Zinc
- DUP (Lab ID: 1229013)
 - Silver
 - Aluminum
 - Arsenic
 - Barium
 - Beryllium
 - Cadmium
 - Cobalt
 - Chromium
 - Copper
 - Iron
 - Manganese
 - Nickel
 - Lead
 - Antimony
 - Selenium
 - ThalliumVanadium
 - Zinc
- DUP (Lab ID: 1229016)
 - Silver
 - Aluminum
 - Arsenic
 - Barium

REPORT OF LABORATORY ANALYSIS





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

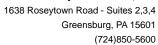
Analyte Comments:

QC Batch: 249761

1c: Cd and Zn failed for the serial dilution.

- DUP (Lab ID: 1229016)
 - Beryllium
 - Cadmium
 - Cobalt
 - Chromium
 - Copper
 - Iron
 - Manganese
 - Nickel
 - Lead
 - Antimony
 - Selenium
 - Thallium
 - VanadiumZinc
- Duplicate (Lab ID: 30210854010)
 - Silver
 - Aluminum
 - Arsenic
 - Barium
 - Beryllium
 - Cadmium
 - Cobalt
 - Chromium
 - Copper
 - Iron
 - Manganese
 - Nickel
 - Lead
 - Antimony
 - Selenium
 - Thallium
 - Vanadium
 - Zinc
- Field Blank (Lab ID: 30210854012)
 - Silver
 - Aluminum
 - Arsenic
 - Barium
 - Beryllium
 - Cadmium
 - Cobalt
 - Chromium

REPORT OF LABORATORY ANALYSIS





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

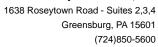
Analyte Comments:

QC Batch: 249761

1c: Cd and Zn failed for the serial dilution.

- Field Blank (Lab ID: 30210854012)
 - Copper
 - Iron
 - Manganese
 - Nickel
 - Lead
 - Antimony
 - Selenium
 - Thallium
 - Vanadium
 - Zinc
- LCS (Lab ID: 1229012)
 - Silver
 - Aluminum
 - Arsenic
 - Barium
 - Beryllium
 - Cadmium
 - Cobalt
 - Chromium
 - Copper
 - Iron
 - Manganese
 - Nickel
 - Lead
 - Antimony
 - Selenium
 - Thallium
 - Vanadium
 - Zinc
- MS (Lab ID: 1229014)
 - Silver
 - Aluminum
 - Arsenic
 - Barium
 - Beryllium
 - Cadmium
 - Cobalt
 - Chromium
 - Copper
 - Iron
 - Manganese
 - Nickel

REPORT OF LABORATORY ANALYSIS





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

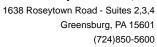
Analyte Comments:

QC Batch: 249761

1c: Cd and Zn failed for the serial dilution.

- MS (Lab ID: 1229014)
 - Lead
 - Antimony
 - Selenium
 - Thallium
 - Vanadium
 - Zinc
- MS (Lab ID: 1229017)
 - Silver
 - Aluminum
 - Arsenic
 - Barium
 - Beryllium
 - Cadmium
 - Cobalt
 - Chromium
 - Copper
 - Iron
 - Manganese
 - Nickel
 - Lead
 - Antimony
 - Selenium
 - Thallium
 - Vanadium
 - Zinc
- MSD (Lab ID: 1229015)
 - Silver
 - Aluminum
 - Arsenic
 - Barium
 - Beryllium
 - Cadmium
 - Cobalt
 - Chromium
 - Copper
 - Iron
 - Manganese
 - Nickel
 - Lead
 - Antimony
 - Selenium
 - Thallium

REPORT OF LABORATORY ANALYSIS





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

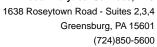
Analyte Comments:

QC Batch: 249761

1c: Cd and Zn failed for the serial dilution.

- MSD (Lab ID: 1229015)
 - Vanadium
 - Zinc
- RW10-MW(I) (Lab ID: 30210854008)
 - Silver
 - Aluminum
 - Arsenic
 - Barium
 - Beryllium
 - Cadmium
 - Cobalt
 - Chromium
 - Copper
 - Iron
 - Manganese
 - Nickel
 - Lead
 - Antimony
 - Selenium
 - Thallium
 - Vanadium
 - Zinc
- RW12-MW(I) (Lab ID: 30210854013)
 - Cadmium
 - Zinc
- RW13-MW(I) (Lab ID: 30210854009)
 - Silver
 - Aluminum
 - Arsenic
 - Barium
 - Beryllium
 - Cadmium
 - Cobalt
 - Chromium
 - Copper
 - Iron
 - Manganese
 - Nickel
 - Lead
 - Antimony
 - Selenium
 - Thallium
 - Vanadium

REPORT OF LABORATORY ANALYSIS





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

Analyte Comments:

QC Batch: 249761

1c: Cd and Zn failed for the serial dilution.

- RW13-MW(I) (Lab ID: 30210854009)
 - Zinc
- RW15-MW(I) (Lab ID: 30210854003)
 - Cadmium Zinc
- RW15-MW(S) (Lab ID: 30210854004)
 - Cadmium
 - Zinc
- RW16-MW(I) (Lab ID: 30210854002)
 - Cadmium
 - Zinc
- RW16-MW(S) (Lab ID: 30210854001)
 - Cadmium
 - Zinc
- RW18-MW(I) (Lab ID: 30210854007)
 - Cadmium
 - Zinc
- RW19-MW(I) (Lab ID: 30210854006)
 - Cadmium
 - Zinc
- RW19-MW(S) (Lab ID: 30210854005)
 - Cadmium
 - Zinc





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 6010C

Description:6010C MET ICP,DissolvedClient:EnviroAnalytics Group, LLCDate:February 22, 2017

General Information:

3 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Serial dilution failed for Ni and Zinc

QC Batch: 249814

Analyte Comments:

QC Batch: 249737

2c: Serial dilution failed for Ni and Zinc

- BLANK (Lab ID: 1228946)
 - · Silver, Dissolved
 - Aluminum, Dissolved
 - Arsenic, Dissolved
 - · Barium, Dissolved
 - Beryllium, Dissolved
 - · Cadmium, Dissolved





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 6010C

Description: 6010C MET ICP,Dissolved **Client:** EnviroAnalytics Group, LLC

Date: February 22, 2017

Analyte Comments:

QC Batch: 249737

2c: Serial dilution failed for Ni and Zinc

- BLANK (Lab ID: 1228946)
 - · Cobalt, Dissolved
 - Chromium, Dissolved
 - Copper, Dissolved
 - Iron, Dissolved
 - Manganese, Dissolved
 - Nickel, Dissolved
 - Lead, Dissolved
 - Antimony, Dissolved
 - · Selenium, Dissolved
 - Thallium, Dissolved
 - Vanadium, Dissolved
 - · Zinc, Dissolved
- DUP (Lab ID: 1228948)
 - Silver, Dissolved
 - Aluminum, Dissolved
 - Arsenic, Dissolved
 - · Barium, Dissolved
 - Beryllium, Dissolved
 - Cadmium, Dissolved
 - Cobalt, Dissolved
 - Chromium, Dissolved
 - Copper, Dissolved
 - Iron, Dissolved
 - Manganese, Dissolved
 - · Nickel, Dissolved
 - Lead, Dissolved
 - Antimony, Dissolved
 - Selenium, Dissolved
 - Thallium, Dissolved
 - Vanadium, Dissolved
 - · Zinc, Dissolved
- Duplicate (Lab ID: 30210854010)
 - · Silver, Dissolved
 - Aluminum, Dissolved
 - Arsenic, Dissolved
 - Barium, Dissolved
 - Beryllium, Dissolved
 - Cadmium, Dissolved
 - · Cobalt, Dissolved
 - Chromium, Dissolved
 - Copper, Dissolved
 - Iron, Dissolved

REPORT OF LABORATORY ANALYSIS



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 6010C

Description: 6010C MET ICP,Dissolved **Client:** EnviroAnalytics Group, LLC

Date: February 22, 2017

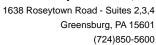
Analyte Comments:

QC Batch: 249737

2c: Serial dilution failed for Ni and Zinc

- Duplicate (Lab ID: 30210854010)
 - Manganese, Dissolved
 - · Nickel, Dissolved
 - Lead, Dissolved
 - Antimony, Dissolved
 - Selenium, Dissolved
 - Thallium, Dissolved
 - Vanadium, Dissolved
 - · Zinc, Dissolved
- LCS (Lab ID: 1228947)
 - · Silver, Dissolved
 - Aluminum, Dissolved
 - · Arsenic, Dissolved
 - Barium, Dissolved
 - · Beryllium, Dissolved
 - Cadmium, Dissolved
 - Cobalt, Dissolved
 - Chromium, Dissolved
 - Copper, Dissolved
 - Iron, Dissolved
 - Manganese, Dissolved
 - · Nickel, Dissolved
 - Lead, Dissolved
 - Antimony, Dissolved
 - Selenium, Dissolved
 - Thallium, Dissolved
 - Vanadium, Dissolved
- Zinc, Dissolved
- MS (Lab ID: 1228949)
 - Silver, Dissolved
 - Aluminum, Dissolved
 - Arsenic, Dissolved
 - Barium, DissolvedBeryllium, Dissolved
 - Cadmium, Dissolved
 - · Cobalt, Dissolved
 - Chromium, Dissolved
 - Copper, Dissolved
 - Iron, Dissolved
 - Manganese, Dissolved
 - Nickel, Dissolved
 - Lead, Dissolved
 - Antimony, Dissolved

REPORT OF LABORATORY ANALYSIS





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 6010C

Description: 6010C MET ICP,Dissolved **Client:** EnviroAnalytics Group, LLC

Date: February 22, 2017

Analyte Comments:

QC Batch: 249737

2c: Serial dilution failed for Ni and Zinc

- MS (Lab ID: 1228949)
 - Selenium, Dissolved
 - Thallium, Dissolved
 - Vanadium, Dissolved
 - · Zinc, Dissolved
- MSD (Lab ID: 1228950)
 - · Silver, Dissolved
 - Aluminum, Dissolved
 - Arsenic, Dissolved
 - · Barium, Dissolved
 - · Beryllium, Dissolved
 - · Cadmium, Dissolved
 - · Cobalt, Dissolved
 - Chromium, Dissolved
 - Copper, Dissolved
 - Iron, Dissolved
 - Manganese, Dissolved
 - Nickel, Dissolved
 - Lead, Dissolved
 - Antimony, Dissolved
 - Selenium, Dissolved
 - Thallium, Dissolved
 - Vanadium, Dissolved
 - · Zinc, Dissolved
- RW10-MW(I) (Lab ID: 30210854008)
 - · Silver, Dissolved
 - Aluminum, Dissolved
 - Arsenic, Dissolved
 - Barium, Dissolved
 - · Beryllium, Dissolved
 - Cadmium, Dissolved
 - · Cobalt, Dissolved
 - Chromium, Dissolved
 - Copper, Dissolved
 - Iron, Dissolved
 - Manganese, Dissolved
 - Nickel, Dissolved
 - · Lead, Dissolved
 - Antimony, Dissolved
 - · Selenium, Dissolved
 - Thallium, Dissolved
 - · Vanadium, Dissolved
 - · Zinc, Dissolved

REPORT OF LABORATORY ANALYSIS



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: **EPA 6010C**

Description: 6010C MET ICP, Dissolved Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

Analyte Comments:

QC Batch: 249737

2c: Serial dilution failed for Ni and Zinc • RW13-MW(I) (Lab ID: 30210854009)

- Silver, Dissolved
- Aluminum, Dissolved
- Arsenic, Dissolved
- · Barium, Dissolved
- Beryllium, Dissolved
- Cadmium, Dissolved
- · Cobalt, Dissolved
- Chromium, Dissolved
- Copper, Dissolved
- Iron, Dissolved
- Manganese, Dissolved
- Nickel, Dissolved
- Lead, Dissolved
- Antimony, Dissolved
- Selenium, Dissolved
- Thallium, Dissolved
- Vanadium, Dissolved
- Zinc, Dissolved





Area A Parcel A3 GW Project:

Pace Project No.: 30210854

Method: **EPA 7470A Description:** 7470 Mercury

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

General Information:

4 samples were analyzed for EPA 7470A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

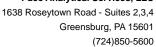
Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 7470A

Description: 7470 Mercury, Dissolved **Client:** EnviroAnalytics Group, LLC

Date: February 22, 2017

General Information:

3 samples were analyzed for EPA 7470A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

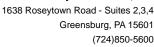
Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method:EPA 8270D by SIMDescription:8270D MSSV PAH by SIMClient:EnviroAnalytics Group, LLCDate:February 22, 2017

General Information:

4 samples were analyzed for EPA 8270D by SIM. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Surrogates:

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

Method Blank:

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

QC Batch: 249730

- B: Analyte was detected in the associated method blank.
 - BLANK for HBN 249730 [OEXT/310 (Lab ID: 1228917)
 - Naphthalene

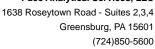
Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Additional Comments:





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 8270D

Description: 8270D MSSV Organics
Client: EnviroAnalytics Group, LLC
Date: February 22, 2017

General Information:

4 samples were analyzed for EPA 8270D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Surrogates:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Additional Comments:





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 8260B Description: 8260B MSV

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

General Information:

5 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Surrogates

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

Method Blank:

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

QC Batch: 249543

B: Analyte was detected in the associated method blank.

- BLANK for HBN 249543 [MSV/3274 (Lab ID: 1227273)
 - Acetone

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Additional Comments:

Analyte Comments:

QC Batch: 249543

C9: Common Laboratory Contaminant.

- BLANK (Lab ID: 1227273)
 - Acetone
 - Methylene Chloride





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 7196A

Description:7196 Chromium, HexavalentClient:EnviroAnalytics Group, LLCDate:February 22, 2017

General Information:

4 samples were analyzed for EPA 7196A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Method Blank:

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

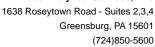
Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Additional Comments:





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Method: EPA 9012B

Description: 9012B Cyanide, Total **Client:** EnviroAnalytics Group, LLC

Date: February 22, 2017

General Information:

4 samples were analyzed for EPA 9012B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 9012B with any exceptions noted below.

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Additional Comments:

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





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW16-MW(S) Lab ID: 30210854001 Collected: 02/14/17 09:15 Received: 02/15/17 22:00 Matrix: Water

Comments: • Sample time of collection on bottle did not match COC. Revised COC provided.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP	A 6010C Prep	paration Me	thod: E	PA 3005A			
Cadmium	22.9	ug/L	3.0	0.34	1	02/20/17 11:01	02/21/17 18:45	7440-43-9	1c
Zinc	3370	ug/L	10.0	1.1	1	02/20/17 11:01	02/21/17 18:45	7440-66-6	1c





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW16-MW(I) Lab ID: 30210854002 Collected: 02/14/17 10:05 Received: 02/15/17 22:00 Matrix: Water

Comments: • Sample time of collection on bottle did not match COC. Revised COC provided.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP/	A 6010C Prep	aration Me	thod: E	PA 3005A			
Cadmium Zinc	12.1 86300	ug/L ug/L	3.0 1000	0.34 108	1 100	02/20/17 11:01 02/20/17 11:01	02/21/17 18:47 02/21/17 19:03		1c 1c





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW15-MW(I) Lab ID: 30210854003 Collected: 02/14/17 10:55 Received: 02/15/17 22:00 Matrix: Water

Comments: • Sample time of coll	lection on bottle di	d not match	COC. Revise	d COC pro	vided.				
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prepa	aration Met	thod: El	PA 3005A			
Cadmium	103	ug/L	3.0	0.34	1	02/20/17 11:01	02/21/17 18:50	7440-43-9	1c
Zinc	92600	ug/L	1000	108	100	02/20/17 11:01	02/21/17 19:05	7440-66-6	1c





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW15-MW(S) Lab ID: 30210854004 Collected: 02/14/17 11:50 Received: 02/15/17 22:00 Matrix: Water

Comments: • Sample time of collection on bottle did not match COC. Revised COC provided.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP	A 6010C Prep	aration Me	thod: E	PA 3005A			
Cadmium	44.7	ug/L	3.0	0.34	1	02/20/17 11:01	02/21/17 18:52	7440-43-9	1c
Zinc	3470	ug/L	10.0	1.1	1	02/20/17 11:01	02/21/17 18:52	7440-66-6	1c





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW19-MW(S) Lab ID: 30210854005 Collected: 02/14/17 12:35 Received: 02/15/17 22:00 Matrix: Water

Comments: • Sample time of collection on bottle did not match COC. Revised COC provided.

Report **Parameters** Results Units Limit MDL DF Prepared Analyzed CAS No. Qual **6010C MET ICP** Analytical Method: EPA 6010C Preparation Method: EPA 3005A Cadmium 14.8 ug/L 3.0 0.34 02/20/17 11:01 02/21/17 18:54 7440-43-9 1 1c 10100 ug/L 1000 108 02/20/17 11:01 02/21/17 19:07 7440-66-6 Zinc 100 1c





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW19-MW(I) Lab ID: 30210854006 Collected: 02/14/17 13:15 Received: 02/15/17 22:00 Matrix: Water

Comments: • Sample time of collection on bottle did not match COC. Revised COC provided.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP/	A 6010C Prepa	aration Me	thod: EF	PA 3005A			
Cadmium	3760	ug/L	300	34.4	100	02/20/17 11:01	02/21/17 19:15	7440-43-9	1c
Zinc	5900000	ug/L	50000	5400	5000	02/20/17 11:01	02/22/17 01:04	7440-66-6	1c





Project: Area A Parcel A3 GW

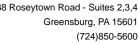
Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW18-MW(I) Lab ID: 30210854007 Collected: 02/14/17 15:30 Received: 02/15/17 22:00 Matrix: Water

Comments: • Sample time of collection on bottle did not match COC. Revised COC provided.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP	A 6010C Prep	aration Me	thod: E	PA 3005A			
Cadmium	70.3	ug/L	3.0	0.34	1	02/20/17 11:01	02/21/17 19:00	7440-43-9	1c
Zinc	728000	ug/L	5000	540	500	02/20/17 11:01	02/21/17 21:45	7440-66-6	1c



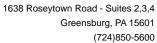


Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW10-MW(I)	Lab ID:	30210854008	Collected: 02/15/17 10:20			Received: 02/15/17 22:00 Matrix: Water			
	Decelle	11.26	Report	MDI 55			A b l	0.0	•
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prepa	ration Met	hod: EF	PA 3005A			
Aluminum	80.7	ug/L	50.0	16.8	1	02/20/17 11:01	02/21/17 17:01	7429-90-5	1c
Antimony	6.0 U	ug/L	6.0	2.8	1	02/20/17 11:01	02/21/17 17:01	7440-36-0	1c
Arsenic	15.0	ug/L	5.0	4.0	1	02/20/17 11:01	02/21/17 17:01	7440-38-2	1c
Barium	98.1	ug/L	10.0	0.53	1	02/20/17 11:01	02/21/17 17:01	7440-39-3	1c
Beryllium	1.0 U	ug/L	1.0	0.22	1	02/20/17 11:01	02/21/17 17:01	7440-41-7	1c
Cadmium	446	ug/L	3.0	0.34	1	02/20/17 11:01	02/21/17 17:01	7440-43-9	1c
Chromium	5.0 U	ug/L	5.0	0.53	1	02/20/17 11:01	02/21/17 17:01	7440-47-3	1c
Cobalt	57.4	ug/L	5.0	0.23	1	02/20/17 11:01	02/21/17 17:01	7440-48-4	1c
Copper	5.0 U	ug/L	5.0	1.3	1	02/20/17 11:01	02/21/17 17:01	7440-50-8	1c
Iron	148000	ug/L	7000	984	100	02/20/17 11:01	02/21/17 21:21	7439-89-6	1c
Lead	5.0 U	ug/L	5.0	4.0	1	02/20/17 11:01	02/21/17 17:01	7439-92-1	1c
Manganese	10300	ug/L	500	70.7	100	02/20/17 11:01	02/21/17 21:21	7439-96-5	1c
Nickel	33.3	ug/L	10.0	0.85	1	02/20/17 11:01	02/21/17 17:01	7440-02-0	1c
Selenium	8.0 U	ug/L	8.0	4.4	1	02/20/17 11:01	02/21/17 17:01	7782-49-2	1c
Silver	1.5J	ug/L	6.0	0.56	1	02/20/17 11:01	02/21/17 17:01	7440-22-4	1c
Thallium	10.0 U	ug/L	10.0	2.7	1	02/20/17 11:01	02/21/17 17:01	7440-28-0	1c
Vanadium	5.0 U	ug/L	5.0	0.27	1	02/20/17 11:01	02/21/17 17:01	7440-62-2	1c
Zinc	104000	ug/L	1000	108	100	02/20/17 11:01	02/21/17 21:21	7440-66-6	1c
6010C MET ICP, Dissolved	Analytical	Method: EPA 6	010C Prepa	ration Met	hod: EF	PA 3005A			
Iron, Dissolved	164000	ug/L	7000	984	100	02/20/17 08:25	02/20/17 23:34	7439-89-6	2c
Manganese, Dissolved	11100	ug/L	500	70.7	100	02/20/17 08:25	02/20/17 23:34	7439-96-5	2c
Zinc, Dissolved	111000	ug/L	1000	108	100	02/20/17 08:25	02/20/17 23:34	7440-66-6	2c
Aluminum, Dissolved	50.0 U	ug/L	50.0	16.8	1	02/20/17 08:25	02/20/17 22:41		2c
Antimony, Dissolved	6.0 U	ug/L	6.0	2.8	1	02/20/17 08:25	02/20/17 22:41		2c
Arsenic, Dissolved	13.9	ug/L	5.0	4.0	1	02/20/17 08:25	02/20/17 22:41		2c
Barium, Dissolved	98.3	ug/L	10.0	0.53	1	02/20/17 08:25	02/20/17 22:41		2c
Beryllium, Dissolved	1.0 U	ug/L	1.0	0.22	1	02/20/17 08:25	02/20/17 22:41		2c
Cadmium, Dissolved	455	ug/L	3.0	0.34	1	02/20/17 08:25	02/20/17 22:41		2c
Chromium, Dissolved	5.0 U	ug/L	5.0	0.53	1	02/20/17 08:25	02/20/17 22:41		2c
Cobalt, Dissolved	59.3	ug/L	5.0	0.23	1	02/20/17 08:25	02/20/17 22:41		2c
Copper, Dissolved	5.0 U	ug/L	5.0	1.3	1	02/20/17 08:25	02/20/17 22:41		2c
Lead, Dissolved	5.0 U	ug/L	5.0	4.0	1	02/20/17 08:25	02/20/17 22:41		2c
Nickel, Dissolved	37.0	ug/L	10.0	0.85	1		02/20/17 22:41		2c
Selenium, Dissolved	8.0 U	ug/L	8.0	4.4	1		02/20/17 22:41		2c
Silver, Dissolved	2.4J	ug/L	6.0	0.56	1		02/20/17 22:41		2c
Thallium, Dissolved	10.0 U	ug/L	10.0	2.7	1		02/20/17 22:41		2c
Vanadium, Dissolved	5.0 U	ug/L	5.0	0.27	1		02/20/17 22:41		2c
7470 Mercury	Analytical	Method: EPA 7	470A Prepa	ration Met	hod: EP				
Mercury	0.20 U	ug/L	0.20	0.017	1	02/20/17 12:01	02/20/17 23:56	7439-97-6	
7470 Mercury, Dissolved	Analytical	Method: EPA 7	470A Prepa	ration Met	hod: EP	A 7470A			
•·	•		•						





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW10-MW(I)	Lab ID:	30210854008	Collected	d: 02/15/17	10:20	Received: 02/	15/17 22:00 M	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
8270D MSSV PAH by SIM	Analytical	Method: EPA 82	270D by SI	M Preparat	ion Me	thod: EPA 3510C			
Acenaphthene	0.10 U	ug/L	0.10	0.016	1	02/20/17 08:38	02/20/17 21:34	83-32-9	
Acenaphthylene	0.10 U	ug/L	0.10	0.014	1	02/20/17 08:38	02/20/17 21:34	208-96-8	
Anthracene	0.030J	ug/L	0.10	0.013	1	02/20/17 08:38	02/20/17 21:34	120-12-7	
Benzo(a)anthracene	0.10 U	ug/L	0.10	0.015	1	02/20/17 08:38	02/20/17 21:34	56-55-3	
Benzo(a)pyrene	0.10 U	ug/L	0.10	0.0072	1	02/20/17 08:38	02/20/17 21:34	50-32-8	
Benzo(b)fluoranthene	0.10 U	ug/L	0.10	0.016	1	02/20/17 08:38	02/20/17 21:34	205-99-2	
Benzo(g,h,i)perylene	0.10 U	ug/L	0.10	0.019	1	02/20/17 08:38	02/20/17 21:34	191-24-2	
Benzo(k)fluoranthene	0.10 U	ug/L	0.10	0.011	1	02/20/17 08:38	02/20/17 21:34	207-08-9	
Chrysene	0.10 U	ug/L	0.10	0.0076	1	02/20/17 08:38	02/20/17 21:34	218-01-9	
Dibenz(a,h)anthracene	0.10 U	ug/L	0.10	0.028	1	02/20/17 08:38	02/20/17 21:34	53-70-3	
1,4-Dioxane (p-Dioxane)	1.0	ug/L	0.10	0.029	1	02/20/17 08:38	02/20/17 19:36	123-91-1	
Fluoranthene	0.018J	ug/L	0.10	0.011	1	02/20/17 08:38	02/20/17 21:34	206-44-0	
Fluorene	0.019J	ug/L	0.10	0.016	1	02/20/17 08:38	02/20/17 21:34	86-73-7	
Indeno(1,2,3-cd)pyrene	0.10 U	ug/L	0.10	0.028	1	02/20/17 08:38	02/20/17 21:34	193-39-5	
2-Methylnaphthalene	0.11	ug/L	0.10	0.021	1	02/20/17 08:38	02/20/17 21:34	91-57-6	
Naphthalene	5.5	ug/L	0.10	0.018	1	02/20/17 08:38	02/20/17 21:34	91-20-3	
Phenanthrene	0.023J	ug/L	0.10	0.016	1	02/20/17 08:38	02/20/17 21:34	85-01-8	
Pyrene	0.10 U	ug/L	0.10	0.013	1	02/20/17 08:38	02/20/17 21:34	129-00-0	
Surrogates		ŭ							
2-Fluorobiphenyl (S)	49	%	19-123		1	02/20/17 08:38	02/20/17 21:34	321-60-8	
Terphenyl-d14 (S)	86	%	58-130		1	02/20/17 08:38	02/20/17 21:34	1718-51-0	
8270D MSSV Organics	Analytical	Method: EPA 82	270D Prep	aration Met	hod: EF	PA 3510C			
Acenaphthene	0.56J	ug/L	1.0	0.24	1	02/20/17 08:38	02/20/17 18:34	83-32-9	
Acenaphthylene	0.91J	ug/L	1.0	0.25	1	02/20/17 08:38	02/20/17 18:34	208-96-8	
Acetophenone	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38	02/20/17 18:34	98-86-2	
Anthracene	1.0 U	ug/L	1.0	0.13	1	02/20/17 08:38	02/20/17 18:34	120-12-7	
Benzaldehyde	1.0 U	ug/L	1.0	0.71	1	02/20/17 08:38	02/20/17 18:34	100-52-7	
Benzo(a)anthracene	1.0 U	ug/L	1.0	0.25	1	02/20/17 08:38	02/20/17 18:34	56-55-3	
Benzo(a)pyrene	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 18:34	50-32-8	
Benzo(b)fluoranthene	1.0 U	ug/L	1.0	0.18	1	02/20/17 08:38	02/20/17 18:34	205-99-2	
Benzo(g,h,i)perylene	1.0 U	ug/L	1.0	0.16	1	02/20/17 08:38	02/20/17 18:34	191-24-2	
Benzo(k)fluoranthene	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 18:34	207-08-9	
Biphenyl (Diphenyl)	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38	02/20/17 18:34	92-52-4	
Caprolactam	1.1J	ug/L	2.5	0.14	1	02/20/17 08:38			
Carbazole	3.4	ug/L	1.0	0.14	1	02/20/17 08:38			
4-Chloroaniline	1.0 U	ug/L	1.0	0.34	1	02/20/17 08:38			
bis(2-Chloroethoxy)methane	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38			
bis(2-Chloroethyl) ether	1.0 U	ug/L	1.0	0.33	1	02/20/17 08:38			
bis(2-Chloroisopropyl) ether	1.0 U	ug/L	1.0	0.27	1	02/20/17 08:38			
2-Chloronaphthalene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38			
2-Chlorophenol	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38			
		-				02/20/17 08:38			
·	1.0 ()	UG/I	1 ()	(1 / /			(1///()/1/10 34	718-01-9	
Chrysene	1.0 U 1.0 U	ug/L ug/l	1.0 1.0	0.27 0.18	1				
•	1.0 U 1.0 U 1.0 U	ug/L ug/L ug/L	1.0 1.0 1.0	0.27 0.18 0.59	1 1 1	02/20/17 08:38 02/20/17 08:38 02/20/17 08:38	02/20/17 18:34	53-70-3	



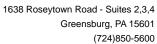


Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW10-MW(I)	Lab ID:	30210854008	Collected	d: 02/15/17	10:20	Received: 02/	15/17 22:00 M	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qua
3270D MSSV Organics	Analytical	Method: EPA 8	270D Prepa	aration Metl	nod: EF	PA 3510C			
Diethylphthalate	1.0 U	ug/L	1.0	0.20	1	02/20/17 08:38	02/20/17 18:34	84-66-2	
2,4-Dimethylphenol	1.0 U	ug/L	1.0	0.47	1	02/20/17 08:38	02/20/17 18:34	105-67-9	
Di-n-butylphthalate	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 18:34	84-74-2	
2,4-Dinitrophenol	2.5 U	ug/L	2.5	0.45	1	02/20/17 08:38	02/20/17 18:34	51-28-5	
2,4-Dinitrotoluene	1.0 U	ug/L	1.0	0.69	1	02/20/17 08:38	02/20/17 18:34	121-14-2	
2,6-Dinitrotoluene	1.0 U	ug/L	1.0	0.23	1	02/20/17 08:38	02/20/17 18:34	606-20-2	
Di-n-octylphthalate	1.0 U	ug/L	1.0	0.22	1	02/20/17 08:38	02/20/17 18:34	117-84-0	
ois(2-Ethylhexyl)phthalate	1.0 U	ug/L	1.0	0.20	1	02/20/17 08:38	02/20/17 18:34	117-81-7	
Fluoranthene	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 18:34	206-44-0	
Fluorene	1.0 U	ug/L	1.0	0.24	1	02/20/17 08:38	02/20/17 18:34	86-73-7	
Hexachloro-1,3-butadiene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 18:34	87-68-3	
Hexachlorobenzene	1.0 U	ug/L	1.0	0.12	1	02/20/17 08:38	02/20/17 18:34	118-74-1	
Hexachlorocyclopentadiene	1.0 U	ug/L	1.0	0.61	1	02/20/17 08:38	02/20/17 18:34	77-47-4	
Hexachloroethane	1.0 U	ug/L	1.0	0.27	1	02/20/17 08:38	02/20/17 18:34	67-72-1	
ndeno(1,2,3-cd)pyrene	1.0 U	ug/L	1.0	0.14	1	02/20/17 08:38	02/20/17 18:34	193-39-5	
sophorone	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 18:34		
· 2-Methylnaphthalene	1.6	ug/L	1.0	0.28	1	02/20/17 08:38	02/20/17 18:34	91-57-6	
2-Methylphenol(o-Cresol)	1.0 U	ug/L	1.0	0.28	1	02/20/17 08:38	02/20/17 18:34		
3&4-Methylphenol(m&p Cresol)	14.7	ug/L	2.0	0.47	1	02/20/17 08:38	02/20/17 18:34		
Naphthalene	7.5	ug/L	1.0	0.31	1	02/20/17 08:38	02/20/17 18:34	91-20-3	
2-Nitroaniline	2.5 U	ug/L	2.5	0.59	1	02/20/17 08:38	02/20/17 18:34		
1-Nitroaniline	2.5 U	ug/L	2.5	0.32	1	02/20/17 08:38	02/20/17 18:34		
Nitrobenzene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 18:34		
N-Nitroso-di-n-propylamine	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38	02/20/17 18:34		
N-Nitrosodiphenylamine	1.0 U	ug/L	1.0	0.39	1	02/20/17 08:38	02/20/17 18:34		
Pentachlorophenol	2.5 U	ug/L	2.5	0.64	1	02/20/17 08:38	02/20/17 18:34		
Phenanthrene	1.0 U	ug/L	1.0	0.15	1	02/20/17 08:38	02/20/17 18:34		
Phenol	0.56J	ug/L	1.0	0.19	1	02/20/17 08:38	02/20/17 18:34		
Pyrene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 18:34		
1,2,4,5-Tetrachlorobenzene	1.0 U	ug/L	1.0	0.27	1	02/20/17 08:38	02/20/17 18:34		
2,3,4,6-Tetrachlorophenol	1.0 U	ug/L	1.0	0.53	1	02/20/17 08:38	02/20/17 18:34		
2,4,5-Trichlorophenol	2.5 U	ug/L	2.5	0.62	1	02/20/17 08:38	02/20/17 18:34		
2,4,6-Trichlorophenol	1.0 U	ug/L	1.0	0.60	1	02/20/17 08:38	02/20/17 18:34		
Surrogates		49/L	1.0	0.00	•	02/20/11 00:00	02/20/11 10:01	00 00 2	
Nitrobenzene-d5 (S)	48	%	16-112		1	02/20/17 08:38	02/20/17 18:34	4165-60-0	
2-Fluorobiphenyl (S)	39	%	18-115		1		02/20/17 18:34		
Ferphenyl-d14 (S)	65	%	54-118		1		02/20/17 18:34		
Phenol-d6 (S)	20	%	10-48		1		02/20/17 18:34		
2-Fluorophenol (S)	30	%	10-76		1		02/20/17 18:34		
2,4,6-Tribromophenol (S)	60	%	27-129		1		02/20/17 18:34		
8260B MSV	Analytical	Method: EPA 8	260B						
Acetone	12.1	ug/L	10.0	3.5	1		02/17/17 00:34	67-64-1	В
Benzene	2.3	ug/L	1.0	0.21	1		02/17/17 00:34	71-43-2	
Bromodichloromethane	1.0 U	ug/L	1.0	0.24	1		02/17/17 00:34		
Bromoform	1.0 U	ug/L	1.0	0.30	1		02/17/17 00:34		





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW10-MW(I)	Lab ID:	30210854008	Collecte	d: 02/15/17	10:20	Received: 02	2/15/17 22:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF_	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical	Method: EPA 8	260B						
Bromomethane	1.0 U	ug/L	1.0	0.53	1		02/17/17 00:34	74-83-9	
2-Butanone (MEK)	8.9J	ug/L	10.0	2.4	1		02/17/17 00:34	78-93-3	
Carbon disulfide	1.0 U	ug/L	1.0	0.34	1		02/17/17 00:34	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.47	1		02/17/17 00:34	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.14	1		02/17/17 00:34	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.68	1		02/17/17 00:34	75-00-3	
Chloroform	0.76J	ug/L	1.0	0.40	1		02/17/17 00:34	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.51	1		02/17/17 00:34	74-87-3	
Cyclohexane	10.0 U	ug/L	10.0	0.59	1		02/17/17 00:34	110-82-7	
1,2-Dibromo-3-chloropropane	5.0 U	ug/L	5.0	0.54	1		02/17/17 00:34	96-12-8	
Dibromochloromethane	1.0 U	ug/L	1.0	0.29	1		02/17/17 00:34	124-48-1	
1,2-Dibromoethane (EDB)	1.0 U	ug/L	1.0	0.22	1		02/17/17 00:34	106-93-4	
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.17	1		02/17/17 00:34	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/17/17 00:34	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.21	1		02/17/17 00:34	106-46-7	
Dichlorodifluoromethane	1.0 U	ug/L	1.0	0.17	1		02/17/17 00:34	75-71-8	
1,1-Dichloroethane	3.0	ug/L	1.0	0.37	1		02/17/17 00:34	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.30	1		02/17/17 00:34	107-06-2	
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.85	1		02/17/17 00:34	540-59-0	
1,1-Dichloroethene	0.26J	ug/L	1.0	0.20	1		02/17/17 00:34	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.56	1		02/17/17 00:34	156-59-2	
rans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.29	1		02/17/17 00:34	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.29	1		02/17/17 00:34		
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.14	1		02/17/17 00:34		
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.17	1		02/17/17 00:34		
Ethylbenzene	1.0 U	ug/L	1.0	0.24	1		02/17/17 00:34		
2-Hexanone	10.0 U	ug/L	10.0	0.25	1		02/17/17 00:34		
sopropylbenzene (Cumene)	1.0 U	ug/L	1.0	0.12	1		02/17/17 00:34		
Methyl acetate	5.0 U	ug/L	5.0	0.59	1		02/17/17 00:34		
Methylene Chloride	1.0 U	ug/L	1.0	0.55	1		02/17/17 00:34		
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.32	1		02/17/17 00:34		
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.21	1		02/17/17 00:34		
Styrene	1.3	ug/L	1.0	0.17	1		02/17/17 00:34		
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.21	1		02/17/17 00:34		
Tetrachloroethene	1.0 U	ug/L	1.0	0.43	1		02/17/17 00:34		
Toluene	1.5	ug/L	1.0	0.21	1		02/17/17 00:34		
1,2,3-Trichlorobenzene	2.0 U	ug/L	2.0	0.36	1		02/17/17 00:34		
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.34	1		02/17/17 00:34		
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.53	1		02/17/17 00:34		
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.33	1		02/17/17 00:34		
Trichloroethene	0.28J	ug/L	1.0	0.21	1		02/17/17 00:34		
Trichlorofluoromethane	1.0 U	ug/L ug/L	1.0	0.20	1		02/17/17 00:34		
1,1,2-Trichlorotrifluoroethane	50.0 U	ug/L ug/L	50.0	0.31	1		02/17/17 00:34		
√inyl chloride	1.0 U	ug/L ug/L	1.0	0.33	1		02/17/17 00:34		
•	3.4	-	3.0	0.33	1		02/17/17 00:34 02/17/17 00:34		
Xylene (Total)		ug/L							
m&p-Xylene	1.4J	ug/L	2.0	0.28	1		02/17/17 00:34	179001-23-1	



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW10-MW(I)	Lab ID:	30210854008	Collecte	d: 02/15/17	10:20	Received: 02/	15/17 22:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
r ai ai i letei s	- Nesulis				DI	· ————	- Analyzeu		Quai
8260B MSV	Analytical	Method: EPA 8	260B						
o-Xylene	2.0	ug/L	1.0	0.19	1		02/17/17 00:34	95-47-6	
Surrogates		-							
4-Bromofluorobenzene (S)	99	%	78-117		1		02/17/17 00:34	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-128		1		02/17/17 00:34	17060-07-0	
Toluene-d8 (S)	100	%	59-140		1		02/17/17 00:34	2037-26-5	
Dibromofluoromethane (S)	96	%	66-132		1		02/17/17 00:34	1868-53-7	
7196 Chromium, Hexavalent	Analytical	Method: EPA 7	196A						
Chromium, Hexavalent	10.0 U	ug/L	10.0	1.7	1		02/15/17 23:01	18540-29-9	
9012B Cyanide, Total	Analytical	Method: EPA 9	012B Prep	aration Met	hod: EF	PA 9012B			
Cyanide	0.010 U	mg/L	0.010	0.0018	1	02/21/17 16:28	02/21/17 20:38	57-12-5	



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW13-MW(I) Lab ID: 30210854009 Collected: 02/15/17 12:10 Received: 02/15/17 22:00 Matrix: Water

Comments: • As per client do not preform MS/MSD for 1,4-Dioxane due to limited sample volume.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP	A 6010C Prep	aration Me	thod: El	PA 3005A			
Aluminum	66.3	ug/L	50.0	16.8	1	02/20/17 11:01	02/21/17 16:45	7429-90-5	1c,D6
Antimony	18.8	ug/L	6.0	2.8	1	02/20/17 11:01	02/21/17 16:45	7440-36-0	1c,D6
Arsenic	7.0	ug/L	5.0	4.0	1	02/20/17 11:01	02/21/17 16:45	7440-38-2	1c
Barium	31.3	ug/L	10.0	0.53	1	02/20/17 11:01	02/21/17 16:45	7440-39-3	1c
Beryllium	1.0 U	ug/L	1.0	0.22	1	02/20/17 11:01	02/21/17 16:45		1c
Cadmium	54900	ug/L	3000	344	1000	02/20/17 11:01	02/22/17 01:10	7440-43-9	1c,ML
Chromium	5.0 U	ug/L	5.0	0.53	1	02/20/17 11:01	02/21/17 16:45	7440-47-3	1c
Cobalt	444	ug/L	5.0	0.23	1	02/20/17 11:01	02/21/17 16:45		1c
Copper	5.0 U	ug/L	5.0	1.3	1	02/20/17 11:01	02/21/17 16:45		1c
Iron	377000	ug/L	70000	9840	1000	02/20/17 11:01	02/22/17 01:10		1c,ML
Lead	5.0 U	ug/L	5.0	4.0	1	02/20/17 11:01	02/21/17 16:45		1c,
Manganese	24800	ug/L	5000	707	1000	02/20/17 11:01	02/22/17 01:10		1c,ML
Nickel	297	ug/L	10.0	0.85	1	02/20/17 11:01	02/21/17 16:45		1c,
Selenium	8.0 U	ug/L	8.0	4.4	1	02/20/17 11:01	02/21/17 16:45		1c
Silver	5.7J	ug/L	6.0	0.56	1	02/20/17 11:01	02/21/17 16:45		1c
Thallium	10.0 U	ug/L	10.0	2.7	1	02/20/17 11:01	02/21/17 16:45		1c
Vanadium	25.0 U	ug/L	25.0	1.4	5	02/20/17 11:01	02/21/17 10:45		1c
Zinc	600000	ug/L	10000	1080	1000	02/20/17 11:01	02/22/17 01:10		1c,ML
6010C MET ICP,Dissolved		-	A 6010C Prep				02/22/17 01.10	7440-00-0	TO, IVIL
·	-						00/00/47 00 50	7440.00.0	0 -
Vanadium, Dissolved	25.0 U	ug/L	25.0	1.4	5	02/20/17 08:25	02/20/17 22:58		2c
Zinc, Dissolved	677000	ug/L	10000	1080	1000	02/20/17 08:25	02/20/17 23:39		2c,ML
Aluminum, Dissolved	50.0 U	ug/L	50.0	16.8	1	02/20/17 08:25	02/20/17 22:25		2c
Antimony, Dissolved	11.0	ug/L	6.0	2.8	1	02/20/17 08:25	02/20/17 22:25		2c
Arsenic, Dissolved	5.0 U	ug/L	5.0	4.0	1	02/20/17 08:25	02/20/17 22:25		2c
Barium, Dissolved	33.9	ug/L	10.0	0.53	1	02/20/17 08:25	02/20/17 22:25		2c
Beryllium, Dissolved	1.0 U	ug/L	1.0	0.22	1	02/20/17 08:25	02/20/17 22:25		2c
Chromium, Dissolved	5.0 U	ug/L	5.0	0.53	1	02/20/17 08:25	02/20/17 22:25		2c
Cobalt, Dissolved	417	ug/L	5.0	0.23	1	02/20/17 08:25	02/20/17 22:25		2c
Copper, Dissolved	5.0 U	ug/L	5.0	1.3	1	02/20/17 08:25	02/20/17 22:25		2c
Lead, Dissolved	5.0 U	ug/L	5.0	4.0	1	02/20/17 08:25	02/20/17 22:25		2c
Nickel, Dissolved	293	ug/L	10.0	0.85	1	02/20/17 08:25	02/20/17 22:25		2c
Selenium, Dissolved	8.0 U	ug/L	8.0	4.4	1	02/20/17 08:25	02/20/17 22:25	7782-49-2	2c
Silver, Dissolved	7.9	ug/L	6.0	0.56	1	02/20/17 08:25	02/20/17 22:25		2c
Thallium, Dissolved	10.0 U	ug/L	10.0	2.7	1	02/20/17 08:25	02/20/17 22:25		2c
Cadmium, Dissolved	66300	ug/L	300	34.4	100	02/20/17 08:25	02/20/17 23:08	7440-43-9	2c,MH, ML
Iron, Dissolved	484000	ug/L	7000	984	100	02/20/17 08:25	02/20/17 23:08	7439-89-6	2c,MH, ML
Manganese, Dissolved	27800	ug/L	500	70.7	100	02/20/17 08:25	02/20/17 23:08	7439-96-5	2c,MH, ML
7470 Mercury	Analytical	Method: EP	A 7470A Prep	aration Met	hod: EF	PA 7470A			
Mercury	0.20 U	ug/L	0.20	0.017	1	02/20/17 12:01	02/20/17 23:47	7439-97-6	

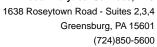


Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Collected: 02/15/17 12:10 Received: 02/15/17 22:00 Sample: RW13-MW(I) Lab ID: 30210854009 Matrix: Water • As per client do not preform MS/MSD for 1,4-Dioxane due to limited sample volume. Report **Parameters** Results Units Limit MDL DF Prepared Analyzed CAS No. Qual Analytical Method: EPA 7470A Preparation Method: EPA 7470A 7470 Mercury, Dissolved 0.20 U 0.20 0.017 Mercury, Dissolved ug/L 02/20/17 11:59 02/21/17 00:08 7439-97-6 8270D MSSV PAH by SIM Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3510C 0.60 0.10 0.016 02/20/17 08:38 02/20/17 21:52 83-32-9 М Acenaphthene ug/L 1 ug/L 0.10 0.014 02/20/17 08:38 02/20/17 21:52 208-96-8 М Acenaphthylene 1.2 1 0.034J ug/L 0.10 0.013 02/20/17 08:38 02/20/17 21:52 120-12-7 Anthracene 1 Benzo(a)anthracene 0.10 U ug/L 0.10 0.015 1 02/20/17 08:38 02/20/17 21:52 56-55-3 Benzo(a)pyrene 0.10 U ug/L 0.10 0.0072 1 02/20/17 08:38 02/20/17 21:52 50-32-8 Benzo(b)fluoranthene 0.10 U ug/L 0.10 0.016 1 02/20/17 08:38 02/20/17 21:52 205-99-2 0.10 U 0.10 0.019 02/20/17 08:38 02/20/17 21:52 191-24-2 Benzo(g,h,i)perylene ug/L 1 0.011 Benzo(k)fluoranthene 0.10 U ug/L 0.10 1 02/20/17 08:38 02/20/17 21:52 207-08-9 Chrysene 0.10 U ug/L 0.10 0.0076 1 02/20/17 08:38 02/20/17 21:52 218-01-9 0.10 U ug/L 0.10 0.028 02/20/17 08:38 02/20/17 21:52 53-70-3 Dibenz(a,h)anthracene 1 0.029 02/20/17 20:03 123-91-1 1,4-Dioxane (p-Dioxane) 0.10 1 02/20/17 08:38 1.1 ug/L Fluoranthene 0.10 U 0.10 0.011 1 02/20/17 08:38 02/20/17 21:52 206-44-0 ug/L Fluorene 0.10 U ug/L 0.10 0.016 1 02/20/17 08:38 02/20/17 21:52 86-73-7 Indeno(1,2,3-cd)pyrene 0.10 U ug/L 0.10 0.028 1 02/20/17 08:38 02/20/17 21:52 193-39-5 2-Methylnaphthalene 1.5 ug/L 0.10 0.021 1 02/20/17 08:38 02/20/17 21:52 91-57-6 ML Naphthalene 6.6 ug/L 0.10 0.018 1 ML Phenanthrene 0.019J ug/L 0.10 0.016 1 Pyrene 0.10 U 0.013 1 02/20/17 08:38 02/20/17 21:52 129-00-0 ug/L 0.10 Surrogates 2-Fluorobiphenyl (S) 51 % 19-123 1 02/20/17 08:38 02/20/17 21:52 321-60-8 Terphenyl-d14 (S) % 58-130 88 1 8270D MSSV Organics Analytical Method: EPA 8270D Preparation Method: EPA 3510C 1.0 U 0.24 ML Acenaphthene ug/L 1.0 02/20/17 08:38 02/20/17 18:56 83-32-9 0.25 Acenaphthylene 1.0 U ug/L 1.0 1 02/20/17 08:38 02/20/17 18:56 208-96-8 ML 0.29 Acetophenone 1.0 U ug/L 1.0 1 02/20/17 08:38 02/20/17 18:56 98-86-2 Anthracene 1.0 U ug/L 1.0 0.13 1 02/20/17 08:38 02/20/17 18:56 120-12-7 ML 1.0 0.71 Benzaldehyde 1.0 U ug/L 1 02/20/17 08:38 02/20/17 18:56 100-52-7 Benzo(a)anthracene 1.0 U ug/L 1.0 0.25 1 02/20/17 08:38 02/20/17 18:56 56-55-3 Benzo(a)pyrene 1.0 U ug/L 1.0 0.11 1 02/20/17 08:38 02/20/17 18:56 50-32-8 1.0 U ug/L 1.0 0.18 1 02/20/17 08:38 02/20/17 18:56 205-99-2 Benzo(b)fluoranthene 1.0 U 1.0 0.16 1 02/20/17 08:38 02/20/17 18:56 191-24-2 Benzo(g,h,i)perylene ug/L 1.0 02/20/17 18:56 207-08-9 Benzo(k)fluoranthene 1.0 U ug/L 0.11 1 02/20/17 08:38 1.0 U 0.29 02/20/17 18:56 92-52-4 Biphenyl (Diphenyl) ug/L 1.0 1 02/20/17 08:38 ML 2.5 U Caprolactam ug/L 2.5 0.15 1 02/20/17 08:38 02/20/17 18:56 105-60-2 Carbazole 0.14J ug/L 1.0 0.141 02/20/17 08:38 02/20/17 18:56 86-74-8 4-Chloroaniline 1.0 U ug/L 1.0 0.34 1 02/20/17 08:38 02/20/17 18:56 106-47-8 bis(2-Chloroethoxy)methane 1.0 U ug/L 1.0 0.26 1 02/20/17 08:38 02/20/17 18:56 111-91-1 bis(2-Chloroethyl) ether 1.0 U ug/L 1.0 0.33 1 02/20/17 08:38 02/20/17 18:56 111-44-4 1.0 U 0.27 02/20/17 18:56 108-60-1 bis(2-Chloroisopropyl) ether ug/L 1.0 1 02/20/17 08:38 2-Chloronaphthalene 1.0 U ua/L 1.0 0.26 1 02/20/17 08:38 02/20/17 18:56 91-58-7 ML 2-Chlorophenol 1.0 U 0.29 02/20/17 08:38 02/20/17 18:56 95-57-8 ug/L 1.0





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW13-MW(I) Lab ID: 30210854009 Collected: 02/15/17 12:10 Received: 02/15/17 22:00 Matrix: Water

Comments: • As per client do not preform MS/MSD for 1,4-Dioxane due to limited sample volume.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV Organics	Analytical	Method: EP	A 8270D Prep	aration Met	hod: E	PA 3510C			
Chrysene	1.0 U	ug/L	1.0	0.27	1	02/20/17 08:38	02/20/17 18:56	218-01-9	
Dibenz(a,h)anthracene	1.0 U	ug/L	1.0	0.18	1	02/20/17 08:38	02/20/17 18:56	53-70-3	
3,3'-Dichlorobenzidine	1.0 U	ug/L	1.0	0.60	1	02/20/17 08:38	02/20/17 18:56	91-94-1	ML
2,4-Dichlorophenol	1.0 U	ug/L	1.0	0.32	1	02/20/17 08:38	02/20/17 18:56	120-83-2	
Diethylphthalate	0.26J	ug/L	1.0	0.20	1	02/20/17 08:38	02/20/17 18:56	84-66-2	ML
2,4-Dimethylphenol	1.0J	ug/L	1.0	0.47	1	02/20/17 08:38	02/20/17 18:56	105-67-9	
Di-n-butylphthalate	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 18:56	84-74-2	
2,4-Dinitrophenol	2.5 U	ug/L	2.5	0.45	1	02/20/17 08:38	02/20/17 18:56	51-28-5	
2,4-Dinitrotoluene	1.0 U	ug/L	1.0	0.70	1	02/20/17 08:38	02/20/17 18:56	121-14-2	ML
2,6-Dinitrotoluene	1.0 U	ug/L	1.0	0.23	1	02/20/17 08:38	02/20/17 18:56	606-20-2	ML
Di-n-octylphthalate	1.0 U	ug/L	1.0	0.22	1	02/20/17 08:38	02/20/17 18:56		
bis(2-Ethylhexyl)phthalate	1.0 U	ug/L	1.0	0.20	1	02/20/17 08:38	02/20/17 18:56	117-81-7	
Fluoranthene	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 18:56		
Fluorene	1.0 U	ug/L	1.0	0.24	1	02/20/17 08:38	02/20/17 18:56		ML
Hexachloro-1,3-butadiene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 18:56		ML
Hexachlorobenzene	1.0 U	ug/L	1.0	0.12	1	02/20/17 08:38	02/20/17 18:56		ML
Hexachlorocyclopentadiene	1.0 U	ug/L	1.0	0.61	1	02/20/17 08:38	02/20/17 18:56		
Hexachloroethane	1.0 U	ug/L	1.0	0.27	1	02/20/17 08:38	02/20/17 18:56		ML
Indeno(1,2,3-cd)pyrene	1.0 U	ug/L	1.0	0.14	1	02/20/17 08:38	02/20/17 18:56		
Isophorone	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 18:56		
2-Methylnaphthalene	1.0 U	ug/L	1.0	0.28	1	02/20/17 08:38	02/20/17 18:56		ML
2-Methylphenol(o-Cresol)	1.0 U	ug/L	1.0	0.28	1	02/20/17 08:38	02/20/17 18:56		
3&4-Methylphenol(m&p Cresol)	4.6	ug/L	2.0	0.48	1	02/20/17 08:38	02/20/17 18:56	00 10 1	
Naphthalene	5.5	ug/L	1.0	0.31	1	02/20/17 08:38	02/20/17 18:56	91-20-3	ML
2-Nitroaniline	2.5 U	ug/L	2.5	0.59	1	02/20/17 08:38	02/20/17 18:56		
4-Nitroaniline	2.5 U	ug/L	2.5	0.32	1	02/20/17 08:38	02/20/17 18:56		
Nitrobenzene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 18:56		
N-Nitroso-di-n-propylamine	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38	02/20/17 18:56		
N-Nitrosodiphenylamine	1.0 U	ug/L	1.0	0.39	1	02/20/17 08:38	02/20/17 18:56		
Pentachlorophenol	2.5 U	ug/L	2.5	0.65	1	02/20/17 08:38	02/20/17 18:56		
Phenanthrene	1.0 U	ug/L	1.0	0.15	1	02/20/17 08:38	02/20/17 18:56		ML
Phenol	0.27J	ug/L	1.0	0.19	1	02/20/17 08:38	02/20/17 18:56		
Pyrene	1.0 U	ug/L	1.0	0.16	1	02/20/17 08:38	02/20/17 18:56		
1,2,4,5-Tetrachlorobenzene	1.0 U	ug/L	1.0	0.27	1	02/20/17 08:38	02/20/17 18:56		ML
2,3,4,6-Tetrachlorophenol	1.0 U	ug/L	1.0	0.53	1	02/20/17 08:38	02/20/17 18:56		
2,4,5-Trichlorophenol	2.5 U	ug/L	2.5	0.63	1		02/20/17 18:56		
2,4,6-Trichlorophenol	1.0 U	ug/L	1.0	0.60	1		02/20/17 18:56		
Surrogates	0	~9, -	0	0.00	•	32,20,11 00.00	52,20,11 10.00	22 00 2	
Nitrobenzene-d5 (S)	47	%	16-112		1	02/20/17 08:38	02/20/17 18:56	4165-60-0	
2-Fluorobiphenyl (S)	41	%	18-115		1	02/20/17 08:38	02/20/17 18:56		
Terphenyl-d14 (S)	65	%	54-118		1	02/20/17 08:38	02/20/17 18:56		
Phenol-d6 (S)	21	%	10-48		1	02/20/17 08:38	02/20/17 18:56		
2-Fluorophenol (S)	29	%	10-76		1	02/20/17 08:38	02/20/17 18:56		
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Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW13-MW(I) Lab ID: 30210854009 Collected: 02/15/17 12:10 Received: 02/15/17 22:00 Matrix: Water

Comments: • As per client do not preform MS/MSD for 1,4-Dioxane due to limited sample volume.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical	Method: EP	A 8260B						
Acetone	10.0 U	ug/L	10.0	3.5	1		02/17/17 01:00	67-64-1	МН
Benzene	1.6	ug/L	1.0	0.21	1		02/17/17 01:00	71-43-2	
Bromodichloromethane	1.0 U	ug/L	1.0	0.24	1		02/17/17 01:00	75-27-4	
Bromoform	1.0 U	ug/L	1.0	0.30	1		02/17/17 01:00	75-25-2	
Bromomethane	1.0 U	ug/L	1.0	0.53	1		02/17/17 01:00	74-83-9	
2-Butanone (MEK)	10.0 U	ug/L	10.0	2.4	1		02/17/17 01:00	78-93-3	
Carbon disulfide	1.0 U	ug/L	1.0	0.34	1		02/17/17 01:00	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.47	1		02/17/17 01:00		
Chlorobenzene	1.0 U	ug/L	1.0	0.14	1		02/17/17 01:00		
Chloroethane	1.0 U	ug/L	1.0	0.68	1		02/17/17 01:00		
Chloroform	0.59J	ug/L	1.0	0.40	1		02/17/17 01:00		
Chloromethane	1.0 U	ug/L	1.0	0.51	1		02/17/17 01:00		
Cyclohexane	10.0 U	ug/L	10.0	0.59	1		02/17/17 01:00		
1,2-Dibromo-3-chloropropane	5.0 U	ug/L	5.0	0.54	1		02/17/17 01:00		
Dibromochloromethane	1.0 U	ug/L	1.0	0.29	1		02/17/17 01:00		
1,2-Dibromoethane (EDB)	1.0 U	ug/L	1.0	0.22	1		02/17/17 01:00	_	
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.17	1		02/17/17 01:00		
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/17/17 01:00		
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.20	1		02/17/17 01:00		
Dichlorodifluoromethane	1.0 U	ug/L ug/L	1.0	0.21	1		02/17/17 01:00		
1,1-Dichloroethane	0.70J	ug/L ug/L	1.0	0.17	1		02/17/17 01:00		
1,2-Dichloroethane	1.0 U	ug/L ug/L	1.0	0.30	1		02/17/17 01:00		
1,2-Dichloroethene (Total)	1.5J	ug/L ug/L	2.0	0.30	1		02/17/17 01:00		
	0.36J	ug/L ug/L	1.0	0.83	1		02/17/17 01:00		
1,1-Dichloroethene					1				
cis-1,2-Dichloroethene	1.3 1.0 U	ug/L	1.0	0.56 0.29	1		02/17/17 01:00		
trans-1,2-Dichloroethene		ug/L	1.0	0.29			02/17/17 01:00		
1,2-Dichloropropane	1.0 U	ug/L	1.0		1		02/17/17 01:00		
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.14	1		02/17/17 01:00		
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.17	1		02/17/17 01:00		
Ethylbenzene	1.0 U	ug/L	1.0	0.24	1		02/17/17 01:00		
2-Hexanone	10.0 U	ug/L	10.0	0.25	1		02/17/17 01:00		
Isopropylbenzene (Cumene)	1.0 U	ug/L	1.0	0.12	1		02/17/17 01:00		
Methyl acetate	5.0 U	ug/L	5.0	0.59	1		02/17/17 01:00		
Methylene Chloride	1.0 U	ug/L	1.0	0.55	1		02/17/17 01:00		
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.32	1		02/17/17 01:00		
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.21	1		02/17/17 01:00		
Styrene	1.0 U	ug/L	1.0	0.17	1		02/17/17 01:00		
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.21	1		02/17/17 01:00		
Tetrachloroethene	1.0 U	ug/L	1.0	0.43	1		02/17/17 01:00		
Toluene	0.27J	ug/L	1.0	0.21	1		02/17/17 01:00		
1,2,3-Trichlorobenzene	2.0 U	ug/L	2.0	0.36	1		02/17/17 01:00		
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.34	1		02/17/17 01:00	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.53	1		02/17/17 01:00	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.21	1		02/17/17 01:00	79-00-5	
Trichloroethene	1.2	ug/L	1.0	0.20	1		02/17/17 01:00	79-01-6	



Project: Area A Parcel A3 GW

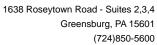
Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW13-MW(I) Lab ID: 30210854009 Collected: 02/15/17 12:10 Received: 02/15/17 22:00 Matrix: Water

Comments: • As per client do not preform MS/MSD for 1,4-Dioxane due to limited sample volume.

			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical	Method: EPA	A 8260B						
Trichlorofluoromethane	1.0 U	ug/L	1.0	0.31	1		02/17/17 01:00	75-69-4	
1,1,2-Trichlorotrifluoroethane	50.0 U	ug/L	50.0	0.39	1		02/17/17 01:00	76-13-1	
Vinyl chloride	0.52J	ug/L	1.0	0.33	1		02/17/17 01:00	75-01-4	
Xylene (Total)	3.0 U	ug/L	3.0	0.47	1		02/17/17 01:00	1330-20-7	
m&p-Xylene	2.0 U	ug/L	2.0	0.28	1		02/17/17 01:00	179601-23-1	
o-Xylene	1.0 U	ug/L	1.0	0.19	1		02/17/17 01:00	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	78-117		1		02/17/17 01:00	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-128		1		02/17/17 01:00	17060-07-0	
Toluene-d8 (S)	101	%	59-140		1		02/17/17 01:00	2037-26-5	
Dibromofluoromethane (S)	97	%	66-132		1		02/17/17 01:00	1868-53-7	
7196 Chromium, Hexavalent	Analytical	Method: EPA	A 7196A						
Chromium, Hexavalent	23000J	ug/L	100000	16900	10000		02/16/17 00:06	18540-29-9	
9012B Cyanide, Total	Analytical	Method: EPA	A 9012B Prep	aration Me	thod: EF	PA 9012B			
Cyanide	0.010 U	mg/L	0.010	0.0018	1	02/21/17 16:28	02/21/17 20:32	57-12-5	



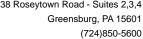


Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: Duplicate	Lab ID:	30210854010	Collected	d: 02/15/17	7 00:01	Received: 02/	15/17 22:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: EF	PA 3005A			
Aluminum	70.0	ug/L	50.0	16.8	1	02/20/17 11:01	02/21/17 17:04	7429-90-5	1c
Antimony	3.4J	ug/L	6.0	2.8	1	02/20/17 11:01	02/21/17 17:04	7440-36-0	1c
Arsenic	12.6	ug/L	5.0	4.0	1	02/20/17 11:01	02/21/17 17:04	7440-38-2	1c
Barium	101	ug/L	10.0	0.53	1	02/20/17 11:01	02/21/17 17:04	7440-39-3	1c
Beryllium	1.0 U	ug/L	1.0	0.22	1	02/20/17 11:01	02/21/17 17:04	7440-41-7	1c
Cadmium	464	ug/L	3.0	0.34	1	02/20/17 11:01	02/21/17 17:04	7440-43-9	1c
Chromium	5.0 U	ug/L	5.0	0.53	1	02/20/17 11:01	02/21/17 17:04	7440-47-3	1c
Cobalt	59.6	ug/L	5.0	0.23	1	02/20/17 11:01	02/21/17 17:04	7440-48-4	1c
Copper	5.0 U	ug/L	5.0	1.3	1	02/20/17 11:01	02/21/17 17:04	7440-50-8	1c
Iron	153000	ug/L	7000	984	100	02/20/17 11:01	02/21/17 21:23	7439-89-6	1c
Lead	5.0 U	ug/L	5.0	4.0	1	02/20/17 11:01	02/21/17 17:04	7439-92-1	1c
Manganese	10700	ug/L	500	70.7	100	02/20/17 11:01	02/21/17 21:23	7439-96-5	1c
Nickel	34.8	ug/L	10.0	0.85	1	02/20/17 11:01	02/21/17 17:04	7440-02-0	1c
Selenium	8.0 U	ug/L	8.0	4.4	1	02/20/17 11:01	02/21/17 17:04	7782-49-2	1c
Silver	1.7J	ug/L	6.0	0.56	1	02/20/17 11:01	02/21/17 17:04	7440-22-4	1c
Thallium	10.0 U	ug/L	10.0	2.7	1	02/20/17 11:01	02/21/17 17:04	7440-28-0	1c
Vanadium	5.0 U	ug/L	5.0	0.27	1	02/20/17 11:01	02/21/17 17:04		1c
Zinc	105000	ug/L	1000	108	100	02/20/17 11:01	02/21/17 21:23		1c
6010C MET ICP, Dissolved	Analytical	Method: EPA 6	010C Prep	aration Met	hod: EF	PA 3005A			
Iron, Dissolved	172000	ug/L	7000	984	100	02/20/17 08:25	02/20/17 23:36	7439-89-6	2c
Manganese, Dissolved	11700	ug/L	500	70.7	100	02/20/17 08:25	02/20/17 23:36		2c
Zinc, Dissolved	116000	ug/L	1000	108	100	02/20/17 08:25	02/20/17 23:36		2c
Aluminum, Dissolved	50.0 U	ug/L	50.0	16.8	1	02/20/17 08:25	02/20/17 22:44		2c
Antimony, Dissolved	6.0 U	ug/L	6.0	2.8	1	02/20/17 08:25	02/20/17 22:44		2c
Arsenic, Dissolved	10.8	ug/L	5.0	4.0	1	02/20/17 08:25			2c
Barium, Dissolved	102	ug/L	10.0	0.53	1	02/20/17 08:25			2c
Beryllium, Dissolved	1.0 U	ug/L	1.0	0.22	1	02/20/17 08:25	02/20/17 22:44		2c
Cadmium, Dissolved	461	ug/L	3.0	0.34	1	02/20/17 08:25	02/20/17 22:44		2c
Chromium, Dissolved	5.0 U	ug/L	5.0	0.53	1	02/20/17 08:25	02/20/17 22:44		2c
Cobalt, Dissolved	61.4	ug/L	5.0	0.23	1	02/20/17 08:25			2c
Copper, Dissolved	5.0 U	ug/L	5.0	1.3	1	02/20/17 08:25	02/20/17 22:44		2c
Lead, Dissolved	5.0 U	ug/L ug/L	5.0	4.0	1	02/20/17 08:25	02/20/17 22:44		2c
Nickel, Dissolved	38.6	ug/L	10.0	0.85	1		02/20/17 22:44		2c
Selenium, Dissolved	8.0 U	ug/L ug/L	8.0	4.4	1		02/20/17 22:44		2c
	2.3J	-			1		02/20/17 22:44		2c 2c
Silver, Dissolved Thallium, Dissolved	2.33 10.0 U	ug/L ug/L	6.0 10.0	0.56 2.7			02/20/17 22:44		
Vanadium, Dissolved	5.0 U	ug/L ug/L	5.0	0.27	1 1		02/20/17 22:44		2c 2c
7470 Mercury		Method: EPA 7					02/20/11 22:11	7 1 10 02 2	20
Mercury	0.20 U	ug/L	0.20	0.017	1		02/20/17 23:58	7439-97-6	
7470 Mercury, Dissolved		Method: EPA 7					5.00		
Mercury, Dissolved	0.20 U	ug/L	0.20	0.017	1		02/21/17 00:23	7439-97-6	
Wichouty, Dissolved	0.20 0	ug/ L	0.20	0.017	'	02/20/11 11.33	02/21/11 00.23	1-10.00-01-0	





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: Duplicate	Lab ID:	30210854010	Collecte	d: 02/15/17	00:01	Received: 02/	15/17 22:00 M	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
3270D MSSV PAH by SIM	Analytical	Method: EPA 82	270D by SI	M Preparat	ion Me	thod: EPA 3510C			
Acenaphthene	0.53	ug/L	0.10	0.016	1	02/20/17 08:38	02/20/17 22:09	83-32-9	
Acenaphthylene	1.0	ug/L	0.10	0.014	1	02/20/17 08:38	02/20/17 22:09	208-96-8	
Anthracene	0.037J	ug/L	0.10	0.013	1	02/20/17 08:38	02/20/17 22:09	120-12-7	
Benzo(a)anthracene	0.10 U	ug/L	0.10	0.015	1	02/20/17 08:38	02/20/17 22:09	56-55-3	
Benzo(a)pyrene	0.10 U	ug/L	0.10	0.0072	1	02/20/17 08:38	02/20/17 22:09	50-32-8	
Benzo(b)fluoranthene	0.10 U	ug/L	0.10	0.016	1	02/20/17 08:38	02/20/17 22:09	205-99-2	
Benzo(g,h,i)perylene	0.10 U	ug/L	0.10	0.019	1	02/20/17 08:38	02/20/17 22:09	191-24-2	
Benzo(k)fluoranthene	0.10 U	ug/L	0.10	0.011	1	02/20/17 08:38	02/20/17 22:09	207-08-9	
Chrysene	0.10 U	ug/L	0.10	0.0076	1	02/20/17 08:38	02/20/17 22:09	218-01-9	
Dibenz(a,h)anthracene	0.10 U	ug/L	0.10	0.028	1	02/20/17 08:38	02/20/17 22:09	53-70-3	
1,4-Dioxane (p-Dioxane)	0.92	ug/L	0.10	0.029	1	02/20/17 08:38	02/20/17 20:29	123-91-1	
Fluoranthene	0.10 U	ug/L	0.10	0.011	1	02/20/17 08:38	02/20/17 22:09	206-44-0	
Fluorene	0.10 U	ug/L	0.10	0.016	1	02/20/17 08:38	02/20/17 22:09	86-73-7	
Indeno(1,2,3-cd)pyrene	0.10 U	ug/L	0.10	0.028	1	02/20/17 08:38	02/20/17 22:09	193-39-5	
2-Methylnaphthalene	1.5	ug/L	0.10	0.021	1	02/20/17 08:38	02/20/17 22:09	91-57-6	
Naphthalene	5.9	ug/L	0.10	0.018	1	02/20/17 08:38	02/20/17 22:09	91-20-3	
Phenanthrene	0.018J	ug/L	0.10	0.016	1	02/20/17 08:38	02/20/17 22:09		
Pyrene	0.10 U	ug/L	0.10	0.013	1	02/20/17 08:38	02/20/17 22:09		
Surrogates		J							
2-Fluorobiphenyl (S)	43	%	19-123		1	02/20/17 08:38	02/20/17 22:09	321-60-8	
Terphenyl-d14 (S)	86	%	58-130		1	02/20/17 08:38	02/20/17 22:09	1718-51-0	
8270D MSSV Organics	Analytical	Method: EPA 82	270D Prep	aration Met	hod: EF	PA 3510C			
Acenaphthene	0.55J	ug/L	1.0	0.24	1	02/20/17 08:38	02/20/17 20:00	83-32-9	
Acenaphthylene	0.78J	ug/L	1.0	0.25	1	02/20/17 08:38	02/20/17 20:00	208-96-8	
Acetophenone	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38	02/20/17 20:00	98-86-2	
Anthracene	1.0 U	ug/L	1.0	0.13	1	02/20/17 08:38	02/20/17 20:00	120-12-7	
Benzaldehyde	1.0 U	ug/L	1.0	0.71	1	02/20/17 08:38	02/20/17 20:00	100-52-7	
Benzo(a)anthracene	1.0 U	ug/L	1.0	0.25	1	02/20/17 08:38	02/20/17 20:00	56-55-3	
Benzo(a)pyrene	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38			
Benzo(b)fluoranthene	1.0 U	ug/L	1.0	0.18	1	02/20/17 08:38	02/20/17 20:00	205-99-2	
Benzo(g,h,i)perylene	1.0 U	ug/L	1.0	0.16	1	02/20/17 08:38	02/20/17 20:00		
Benzo(k)fluoranthene	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 20:00		
Biphenyl (Diphenyl)	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38			
Caprolactam	2.5 U	ug/L	2.5	0.15	1		02/20/17 20:00		
Carbazole	3.6	ug/L	1.0	0.14	1	02/20/17 08:38	02/20/17 20:00		
4-Chloroaniline	1.0 U	ug/L	1.0	0.34	1	02/20/17 08:38	02/20/17 20:00		
bis(2-Chloroethoxy)methane	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38			
bis(2-Chloroethyl) ether	1.0 U	ug/L	1.0	0.33	1	02/20/17 08:38			
bis(2-Chloroisopropyl) ether	1.0 U	ug/L	1.0	0.33	1	02/20/17 08:38			
2-Chloronaphthalene	1.0 U	ug/L ug/L	1.0	0.26	1	02/20/17 08:38			
2-Chlorophenol	1.0 U	ug/L ug/L	1.0	0.20	1	02/20/17 08:38			
Chrysene	1.0 U	ug/L ug/L	1.0	0.29	1	02/20/17 08:38	02/20/17 20:00		
	1.0 U	_		0.27	1	02/20/17 08:38			
Dibenz(a,h)anthracene		ug/L	1.0						
3,3'-Dichlorobenzidine	1.0 U	ug/L	1.0	0.60	1		02/20/17 20:00		
2,4-Dichlorophenol	1.0 U	ug/L	1.0	0.32	1	02/20/17 08:38	02/20/17 20:00	120-83-2	



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: Duplicate	Lab ID:	30210854010	Collecte	d: 02/15/17	7 00:01	Received: 02/	15/17 22:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
8270D MSSV Organics	Analytical	Method: EPA 82	270D Prep	aration Met	hod: EF	PA 3510C			
Diethylphthalate	1.0 U	ug/L	1.0	0.20	1	02/20/17 08:38	02/20/17 20:00	84-66-2	
2,4-Dimethylphenol	1.0 U	ug/L	1.0	0.47	1	02/20/17 08:38	02/20/17 20:00	105-67-9	
Di-n-butylphthalate	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 20:00	84-74-2	
2,4-Dinitrophenol	2.5 U	ug/L	2.5	0.45	1	02/20/17 08:38	02/20/17 20:00	51-28-5	
2,4-Dinitrotoluene	1.0 U	ug/L	1.0	0.70	1	02/20/17 08:38	02/20/17 20:00	121-14-2	
2,6-Dinitrotoluene	1.0 U	ug/L	1.0	0.23	1	02/20/17 08:38	02/20/17 20:00	606-20-2	
Di-n-octylphthalate	1.0 U	ug/L	1.0	0.22	1	02/20/17 08:38	02/20/17 20:00	117-84-0	
bis(2-Ethylhexyl)phthalate	1.0 U	ug/L	1.0	0.20	1	02/20/17 08:38	02/20/17 20:00	117-81-7	
Fluoranthene	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 20:00	206-44-0	
Fluorene	1.0 U	ug/L	1.0	0.24	1	02/20/17 08:38	02/20/17 20:00	86-73-7	
Hexachloro-1,3-butadiene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 20:00	87-68-3	
Hexachlorobenzene	1.0 U	ug/L	1.0	0.12	1	02/20/17 08:38	02/20/17 20:00	118-74-1	
Hexachlorocyclopentadiene	1.0 U	ug/L	1.0	0.61	1	02/20/17 08:38	02/20/17 20:00	77-47-4	
Hexachloroethane	1.0 U	ug/L	1.0	0.27	1	02/20/17 08:38	02/20/17 20:00	67-72-1	
Indeno(1,2,3-cd)pyrene	1.0 U	ug/L	1.0	0.14	1	02/20/17 08:38	02/20/17 20:00	193-39-5	
Isophorone	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 20:00	78-59-1	
2-Methylnaphthalene	1.4	ug/L	1.0	0.28	1	02/20/17 08:38	02/20/17 20:00	91-57-6	
2-Methylphenol(o-Cresol)	1.0 U	ug/L	1.0	0.28	1	02/20/17 08:38	02/20/17 20:00	95-48-7	
3&4-Methylphenol(m&p Cresol)	13.2	ug/L	2.0	0.48	1	02/20/17 08:38	02/20/17 20:00		
Naphthalene	6.8	ug/L	1.0	0.31	1	02/20/17 08:38	02/20/17 20:00	91-20-3	
2-Nitroaniline	2.5 U	ug/L	2.5	0.59	1	02/20/17 08:38	02/20/17 20:00	88-74-4	
4-Nitroaniline	2.5 U	ug/L	2.5	0.32	1	02/20/17 08:38	02/20/17 20:00	100-01-6	
Nitrobenzene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 20:00	98-95-3	
N-Nitroso-di-n-propylamine	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38	02/20/17 20:00	621-64-7	
N-Nitrosodiphenylamine	1.0 U	ug/L	1.0	0.39	1	02/20/17 08:38	02/20/17 20:00	86-30-6	
Pentachlorophenol	2.5 U	ug/L	2.5	0.65	1	02/20/17 08:38	02/20/17 20:00	87-86-5	
Phenanthrene	1.0 U	ug/L	1.0	0.15	1	02/20/17 08:38	02/20/17 20:00	85-01-8	
Phenol	0.51J	ug/L	1.0	0.19	1	02/20/17 08:38	02/20/17 20:00	108-95-2	
Pyrene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 20:00	129-00-0	
1,2,4,5-Tetrachlorobenzene	1.0 U	ug/L	1.0	0.27	1	02/20/17 08:38	02/20/17 20:00	95-94-3	
2,3,4,6-Tetrachlorophenol	1.0 U	ug/L	1.0	0.53	1	02/20/17 08:38	02/20/17 20:00	58-90-2	
2,4,5-Trichlorophenol	2.5 U	ug/L	2.5	0.63	1	02/20/17 08:38	02/20/17 20:00		
2,4,6-Trichlorophenol	1.0 U	ug/L	1.0	0.60	1	02/20/17 08:38	02/20/17 20:00		
Surrogates		J							
Nitrobenzene-d5 (S)	41	%	16-112		1	02/20/17 08:38	02/20/17 20:00	4165-60-0	
2-Fluorobiphenyl (S)	35	%	18-115		1	02/20/17 08:38	02/20/17 20:00	321-60-8	
Terphenyl-d14 (S)	71	%	54-118		1	02/20/17 08:38	02/20/17 20:00	1718-51-0	
Phenol-d6 (S)	18	%	10-48		1	02/20/17 08:38	02/20/17 20:00	13127-88-3	
2-Fluorophenol (S)	27	%	10-76		1	02/20/17 08:38	02/20/17 20:00	367-12-4	
2,4,6-Tribromophenol (S)	59	%	27-129		1	02/20/17 08:38	02/20/17 20:00	118-79-6	
8260B MSV	Analytical	Method: EPA 82	260B						
Acetone	12.0	ug/L	10.0	3.5	1		02/17/17 01:26	67-64-1	В
Benzene	2.3	ug/L	1.0	0.21	1		02/17/17 01:26	71-43-2	
Bromodichloromethane	1.0 U	ug/L	1.0	0.24	1		02/17/17 01:26	75-27-4	
Bromoform	1.0 U	ug/L	1.0	0.30	1		02/17/17 01:26		



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: Duplicate	Lab ID:	30210854010	Collecte	d: 02/15/17	00:01	Received: 02	2/15/17 22:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
8260B MSV	Analytical	Method: EPA 8	260B						
Bromomethane	1.0 U	ug/L	1.0	0.53	1		02/17/17 01:26	74-83-9	
2-Butanone (MEK)	9.2J	ug/L	10.0	2.4	1		02/17/17 01:26	78-93-3	
Carbon disulfide	1.0 U	ug/L	1.0	0.34	1		02/17/17 01:26	75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.47	1		02/17/17 01:26	56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.14	1		02/17/17 01:26	108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.68	1		02/17/17 01:26	75-00-3	
Chloroform	0.72J	ug/L	1.0	0.40	1		02/17/17 01:26	67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.51	1		02/17/17 01:26	74-87-3	
Cyclohexane	10.0 U	ug/L	10.0	0.59	1		02/17/17 01:26	110-82-7	
1,2-Dibromo-3-chloropropane	5.0 U	ug/L	5.0	0.54	1		02/17/17 01:26	96-12-8	
Dibromochloromethane	1.0 U	ug/L	1.0	0.29	1		02/17/17 01:26	124-48-1	
1,2-Dibromoethane (EDB)	1.0 U	ug/L	1.0	0.22	1		02/17/17 01:26	106-93-4	
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.17	1		02/17/17 01:26	95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/17/17 01:26	541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.21	1		02/17/17 01:26	106-46-7	
Dichlorodifluoromethane	1.0 U	ug/L	1.0	0.17	1		02/17/17 01:26	75-71-8	
1,1-Dichloroethane	2.9	ug/L	1.0	0.37	1		02/17/17 01:26	75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.30	1		02/17/17 01:26	107-06-2	
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.85	1		02/17/17 01:26	540-59-0	
1,1-Dichloroethene	0.28J	ug/L	1.0	0.20	1		02/17/17 01:26	75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.56	1		02/17/17 01:26	156-59-2	
rans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.29	1		02/17/17 01:26	156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.29	1		02/17/17 01:26	78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.14	1		02/17/17 01:26	10061-01-5	
rans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.17	1		02/17/17 01:26	10061-02-6	
Ethylbenzene	1.0 U	ug/L	1.0	0.24	1		02/17/17 01:26	100-41-4	
2-Hexanone	10.0 U	ug/L	10.0	0.25	1		02/17/17 01:26	591-78-6	
sopropylbenzene (Cumene)	1.0 U	ug/L	1.0	0.12	1		02/17/17 01:26	98-82-8	
Methyl acetate	5.0 U	ug/L	5.0	0.59	1		02/17/17 01:26	79-20-9	
Methylene Chloride	1.0 U	ug/L	1.0	0.55	1		02/17/17 01:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.32	1		02/17/17 01:26	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.21	1		02/17/17 01:26	1634-04-4	
Styrene	1.0 U	ug/L	1.0	0.17	1		02/17/17 01:26	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.21	1		02/17/17 01:26	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.43	1		02/17/17 01:26	127-18-4	
Toluene	1.5	ug/L	1.0	0.21	1		02/17/17 01:26		
1,2,3-Trichlorobenzene	2.0 U	ug/L	2.0	0.36	1		02/17/17 01:26		
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.34	1		02/17/17 01:26	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.53	1		02/17/17 01:26		
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.21	1		02/17/17 01:26		
Trichloroethene	1.0 U	ug/L	1.0	0.20	1		02/17/17 01:26		
Trichlorofluoromethane	1.0 U	ug/L	1.0	0.31	1		02/17/17 01:26		
1,1,2-Trichlorotrifluoroethane	50.0 U	ug/L	50.0	0.39	1		02/17/17 01:26		
Vinyl chloride	1.0 U	ug/L	1.0	0.33	1		02/17/17 01:26		
Xylene (Total)	3.5	ug/L	3.0	0.47	1		02/17/17 01:26		
m&p-Xylene	1.4J	ug/L	2.0	0.28	1		02/17/17 01:26		



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: Duplicate	Lab ID:	30210854010	Collecte	d: 02/15/17	00:01	Received: 02/	/15/17 22:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical	Method: EPA 8	260B						
o-Xylene Surrogates	2.1	ug/L	1.0	0.19	1		02/17/17 01:26	95-47-6	
4-Bromofluorobenzene (S)	99	%	78-117		1		02/17/17 01:26	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-128		1		02/17/17 01:26	17060-07-0	
Toluene-d8 (S)	102	%	59-140		1		02/17/17 01:26	2037-26-5	
Dibromofluoromethane (S)	94	%	66-132		1		02/17/17 01:26	1868-53-7	
7196 Chromium, Hexavalent	Analytical	Method: EPA 7	196A						
Chromium, Hexavalent	10.0 U	ug/L	10.0	1.7	1		02/15/17 23:03	18540-29-9	
9012B Cyanide, Total	Analytical	Method: EPA 9	012B Prep	aration Met	nod: EF	PA 9012B			
Cyanide	0.010 U	mg/L	0.010	0.0018	1	02/21/17 16:28	02/21/17 20:39	57-12-5	





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: Trip Blank	Lab ID:	30210854011	Collecte	d: 02/15/17	7 00:01	Received: 02	2/15/17 22:00 N	Matrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF_	Prepared	Analyzed	CAS No.	Qua
8260B MSV	Analytical	Method: EPA 8	260B						
Acetone	10.0 U	ug/L	10.0	3.5	1		02/16/17 23:4	3 67-64-1	
Benzene	1.0 U	ug/L	1.0	0.21	1		02/16/17 23:4	3 71-43-2	
Bromodichloromethane	1.0 U	ug/L	1.0	0.24	1		02/16/17 23:4	3 75-27-4	
Bromoform	1.0 U	ug/L	1.0	0.30	1		02/16/17 23:4	3 75-25-2	
Bromomethane	1.0 U	ug/L	1.0	0.53	1		02/16/17 23:4	3 74-83-9	
2-Butanone (MEK)	10.0 U	ug/L	10.0	2.4	1		02/16/17 23:4	3 78-93-3	
Carbon disulfide	1.0 U	ug/L	1.0	0.34	1		02/16/17 23:4	3 75-15-0	
Carbon tetrachloride	1.0 U	ug/L	1.0	0.47	1		02/16/17 23:4	3 56-23-5	
Chlorobenzene	1.0 U	ug/L	1.0	0.14	1		02/16/17 23:4	3 108-90-7	
Chloroethane	1.0 U	ug/L	1.0	0.68	1		02/16/17 23:4	3 75-00-3	
Chloroform	1.0 U	ug/L	1.0	0.40	1		02/16/17 23:4	3 67-66-3	
Chloromethane	1.0 U	ug/L	1.0	0.51	1		02/16/17 23:4	3 74-87-3	
Cyclohexane	10.0 U	ug/L	10.0	0.59	1		02/16/17 23:4	3 110-82-7	
1,2-Dibromo-3-chloropropane	5.0 U	ug/L	5.0	0.54	1		02/16/17 23:4	3 96-12-8	
Dibromochloromethane	1.0 U	ug/L	1.0	0.29	1		02/16/17 23:4	3 124-48-1	
1,2-Dibromoethane (EDB)	1.0 U	ug/L	1.0	0.22	1		02/16/17 23:4	3 106-93-4	
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.17	1		02/16/17 23:4	3 95-50-1	
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/16/17 23:4	3 541-73-1	
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.21	1		02/16/17 23:4	3 106-46-7	
Dichlorodifluoromethane	1.0 U	ug/L	1.0	0.17	1		02/16/17 23:4	3 75-71-8	
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.37	1		02/16/17 23:4	3 75-34-3	
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.30	1		02/16/17 23:4	3 107-06-2	
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.85	1		02/16/17 23:4	3 540-59-0	
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.20	1		02/16/17 23:4	3 75-35-4	
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.56	1		02/16/17 23:4	3 156-59-2	
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.29	1		02/16/17 23:4	3 156-60-5	
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.29	1		02/16/17 23:4	3 78-87-5	
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.14	1		02/16/17 23:4	3 10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.17	1		02/16/17 23:4	3 10061-02-6	
Ethylbenzene	1.0 U	ug/L	1.0	0.24	1		02/16/17 23:4	3 100-41-4	
2-Hexanone	10.0 U	ug/L	10.0	0.25	1		02/16/17 23:4	3 591-78-6	
Isopropylbenzene (Cumene)	1.0 U	ug/L	1.0	0.12	1		02/16/17 23:4		
Methyl acetate	5.0 U	ug/L	5.0	0.59	1		02/16/17 23:4	3 79-20-9	
Methylene Chloride	1.0 U	ug/L	1.0	0.55	1		02/16/17 23:4	3 75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.32	1		02/16/17 23:4	3 108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.21	1		02/16/17 23:4		
Styrene	1.0 U	ug/L	1.0	0.17	1		02/16/17 23:4	3 100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.21	1		02/16/17 23:4		
Tetrachloroethene	1.0 U	ug/L	1.0	0.43	1		02/16/17 23:4		
Toluene	1.0 U	ug/L	1.0	0.21	1		02/16/17 23:4		
1,2,3-Trichlorobenzene	2.0 U	ug/L	2.0	0.36	1		02/16/17 23:4		
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.34	1		02/16/17 23:4		
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.53	1		02/16/17 23:4		
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.21	1		02/16/17 23:4		
Trichloroethene	0.29J	ug/L	1.0	0.20	1		02/16/17 23:4		
Trichlorofluoromethane	1.0 U	ug/L	1.0	0.20	1		02/16/17 23:4		



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: Trip Blank	Lab ID:	Lab ID: 30210854011			00:01	Received: 02/15/17 22:00 Matrix: Water			ŧ r	
			Report							
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual	
8260B MSV	Analytical	Method: EPA 8	3260B							
1,1,2-Trichlorotrifluoroethane	50.0 U	ug/L	50.0	0.39	1		02/16/17 23:43	76-13-1		
Vinyl chloride	1.0 U	ug/L	1.0	0.33	1		02/16/17 23:43	75-01-4		
Xylene (Total)	3.0 U	ug/L	3.0	0.47	1		02/16/17 23:43	1330-20-7		
m&p-Xylene	2.0 U	ug/L	2.0	0.28	1		02/16/17 23:43	179601-23-1		
o-Xylene	1.0 U	ug/L	1.0	0.19	1		02/16/17 23:43	95-47-6		
Surrogates		_								
4-Bromofluorobenzene (S)	99	%	78-117		1		02/16/17 23:43	460-00-4		
1,2-Dichloroethane-d4 (S)	94	%	70-128		1		02/16/17 23:43	17060-07-0		
Toluene-d8 (S)	102	%	59-140		1		02/16/17 23:43	2037-26-5		
Dibromofluoromethane (S)	94	%	66-132		1		02/16/17 23:43	1868-53-7		



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: Field Blank	Lab ID:	30210854012	Collected	1: 02/15/17	15:40	Received: 02/	15/17 22:00 Ma	atrix: Water	
Damanatana	December	11-26-	Report	MDI	DE	Decreased	A b d	040 N=	0
Parameters	Results -	Units	Limit	MDL -	DF	Prepared	Analyzed	CAS No.	Qua
6010C MET ICP	Analytical	Method: EPA 6	010C Prepa	aration Met	hod: EF	PA 3005A			
Aluminum	50.0 U	ug/L	50.0	16.8	1	02/20/17 11:01	02/21/17 18:19	7429-90-5	1c
Antimony	6.0 U	ug/L	6.0	2.8	1	02/20/17 11:01	02/21/17 18:19	7440-36-0	1c
Arsenic	5.0 U	ug/L	5.0	4.0	1	02/20/17 11:01	02/21/17 18:19	7440-38-2	1c
Barium	10.0 U	ug/L	10.0	0.53	1	02/20/17 11:01	02/21/17 18:19	7440-39-3	1c
Beryllium	1.0 U	ug/L	1.0	0.22	1	02/20/17 11:01	02/21/17 18:19	7440-41-7	1c
Cadmium	3.0 U	ug/L	3.0	0.34	1	02/20/17 11:01	02/21/17 18:19	7440-43-9	1c
Chromium	0.57J	ug/L	5.0	0.53	1	02/20/17 11:01	02/21/17 18:19	7440-47-3	1c
Cobalt	5.0 U	ug/L	5.0	0.23	1	02/20/17 11:01	02/21/17 18:19	7440-48-4	1c
Copper	3.0J	ug/L	5.0	1.3	1	02/20/17 11:01	02/21/17 18:19	7440-50-8	1c
Iron	70.0 U	ug/L	70.0	9.8	1	02/20/17 11:01	02/21/17 18:19	7439-89-6	1c
Lead	5.0 U	ug/L	5.0	4.0	1	02/20/17 11:01	02/21/17 18:19	7439-92-1	1c
Manganese	5.0 U	ug/L	5.0	0.71	1	02/20/17 11:01	02/21/17 18:19	7439-96-5	1c
Nickel	10.0 U	ug/L	10.0	0.85	1	02/20/17 11:01	02/21/17 18:19	7440-02-0	1c
Selenium	8.0 U	ug/L	8.0	4.4	1	02/20/17 11:01	02/21/17 18:19	7782-49-2	1c
Silver	6.0 U	ug/L	6.0	0.56	1	02/20/17 11:01	02/21/17 18:19	7440-22-4	1c
Thallium	10.0 U	ug/L	10.0	2.7	1	02/20/17 11:01	02/21/17 18:19	7440-28-0	1c
Vanadium	5.0 U	ug/L	5.0	0.27	1	02/20/17 11:01	02/21/17 18:19		1c
Zinc	10.0 U	ug/L	10.0	1.1	1	02/20/17 11:01	02/21/17 18:19		1c
7470 Mercury	Analytical	Method: EPA 7	470A Prepa	aration Meth	nod: EP	A 7470A			
Mercury	0.20 U	ug/L	0.20	0.017	1	02/20/17 12:01	02/21/17 00:03	7439-97-6	
8270D MSSV PAH by SIM	Analytical	Method: EPA 8	270D by SIN		ion Met	hod: EPA 3510C			
Acenaphthene	0.10 U	ug/L	0.10	0.016	1	02/20/17 08:38	02/20/17 22:27	83-32-9	
Acenaphthylene	0.10 U	ug/L	0.10	0.014	1	02/20/17 08:38	02/20/17 22:27	208-96-8	
Anthracene	0.10 U	ug/L	0.10	0.013	1	02/20/17 08:38	02/20/17 22:27	120-12-7	
Benzo(a)anthracene	0.10 U	ug/L	0.10	0.015	1	02/20/17 08:38	02/20/17 22:27	56-55-3	
Benzo(a)pyrene	0.10 U	ug/L	0.10	0.0072	1	02/20/17 08:38	02/20/17 22:27	50-32-8	
Benzo(b)fluoranthene	0.10 U	ug/L	0.10	0.016	1	02/20/17 08:38	02/20/17 22:27	205-99-2	
Benzo(g,h,i)perylene	0.10 U	ug/L	0.10	0.019	1	02/20/17 08:38	02/20/17 22:27	191-24-2	
Benzo(k)fluoranthene	0.10 U	ug/L	0.10	0.011	1	02/20/17 08:38	02/20/17 22:27	207-08-9	
Chrysene	0.10 U	ug/L	0.10	0.0076	1	02/20/17 08:38	02/20/17 22:27	218-01-9	
Dibenz(a,h)anthracene	0.10 U	ug/L	0.10	0.028	1	02/20/17 08:38	02/20/17 22:27	53-70-3	
1,4-Dioxane (p-Dioxane)	0.10 U	ug/L	0.10	0.029	1	02/20/17 08:38	02/20/17 20:52	123-91-1	
Fluoranthene	0.10 U	ug/L	0.10	0.011	1	02/20/17 08:38	02/20/17 22:27	206-44-0	
Fluorene	0.10 U	ug/L	0.10	0.016	1	02/20/17 08:38	02/20/17 22:27		
Indeno(1,2,3-cd)pyrene	0.10 U	ug/L	0.10	0.028	1	02/20/17 08:38			
2-Methylnaphthalene	0.042J	ug/L	0.10	0.021	1		02/20/17 22:27		
Naphthalene	0.063J	ug/L	0.10	0.018	1	02/20/17 08:38			В
Phenanthrene	0.022J	ug/L	0.10	0.016	1	02/20/17 08:38			
Pyrene	0.10 U	ug/L	0.10	0.013	1	02/20/17 08:38			
•	00	~g/ =	5.10	0.010	•			0 00 0	
Surrogates									
Surrogates 2-Fluorobiphenyl (S)	52	%	19-123		1	02/20/17 08:38	02/20/17 22:27	321-60-8	



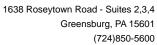


Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: Field Blank	Lab ID:	30210854012	Collecte	d: 02/15/17	15:40	Received: 02/	15/17 22:00 M	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
8270D MSSV Organics	Analytica	Method: EPA 8	270D Prep	aration Met	hod: EF	PA 3510C			
Acenaphthene	1.0 U	ug/L	1.0	0.24	1	02/20/17 08:38	02/20/17 20:22	83-32-9	
Acenaphthylene	1.0 U	ug/L	1.0	0.25	1	02/20/17 08:38	02/20/17 20:22	208-96-8	
Acetophenone	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38	02/20/17 20:22	98-86-2	
Anthracene	1.0 U	ug/L	1.0	0.13	1	02/20/17 08:38	02/20/17 20:22	120-12-7	
Benzaldehyde	1.0 U	ug/L	1.0	0.71	1	02/20/17 08:38	02/20/17 20:22	100-52-7	
Benzo(a)anthracene	1.0 U	ug/L	1.0	0.25	1	02/20/17 08:38	02/20/17 20:22	56-55-3	
Benzo(a)pyrene	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 20:22	50-32-8	
Benzo(b)fluoranthene	1.0 U	ug/L	1.0	0.18	1	02/20/17 08:38	02/20/17 20:22	205-99-2	
Benzo(g,h,i)perylene	1.0 U	ug/L	1.0	0.16	1	02/20/17 08:38	02/20/17 20:22	191-24-2	
Benzo(k)fluoranthene	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 20:22	207-08-9	
Biphenyl (Diphenyl)	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38	02/20/17 20:22	92-52-4	
Caprolactam	2.5 U	ug/L	2.5	0.15	1	02/20/17 08:38	02/20/17 20:22	105-60-2	
Carbazole	1.0 U	ug/L	1.0	0.14	1	02/20/17 08:38	02/20/17 20:22	86-74-8	
4-Chloroaniline	1.0 U	ug/L	1.0	0.34	1	02/20/17 08:38	02/20/17 20:22	106-47-8	
bis(2-Chloroethoxy)methane	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 20:22	111-91-1	
bis(2-Chloroethyl) ether	1.0 U	ug/L	1.0	0.33	1	02/20/17 08:38	02/20/17 20:22	111-44-4	
bis(2-Chloroisopropyl) ether	1.0 U	ug/L	1.0	0.27	1	02/20/17 08:38	02/20/17 20:22	108-60-1	
2-Chloronaphthalene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 20:22	91-58-7	
2-Chlorophenol	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38	02/20/17 20:22	95-57-8	
Chrysene	1.0 U	ug/L	1.0	0.27	1	02/20/17 08:38	02/20/17 20:22	218-01-9	
Dibenz(a,h)anthracene	1.0 U	ug/L	1.0	0.18	1	02/20/17 08:38			
3,3'-Dichlorobenzidine	1.0 U	ug/L	1.0	0.60	1	02/20/17 08:38	02/20/17 20:22		
2,4-Dichlorophenol	1.0 U	ug/L	1.0	0.32	1	02/20/17 08:38	02/20/17 20:22	120-83-2	
Diethylphthalate	1.0 U	ug/L	1.0	0.20	1	02/20/17 08:38	02/20/17 20:22		
2,4-Dimethylphenol	1.0 U	ug/L	1.0	0.47	1	02/20/17 08:38	02/20/17 20:22		
Di-n-butylphthalate	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 20:22		
2,4-Dinitrophenol	2.5 U	ug/L	2.5	0.45	1	02/20/17 08:38	02/20/17 20:22		
2,4-Dinitrotoluene	1.0 U	ug/L	1.0	0.70	1	02/20/17 08:38	02/20/17 20:22		
2,6-Dinitrotoluene	1.0 U	ug/L	1.0	0.23	1	02/20/17 08:38	02/20/17 20:22		
Di-n-octylphthalate	1.0 U	ug/L	1.0	0.22	1	02/20/17 08:38			
bis(2-Ethylhexyl)phthalate	0.25J	ug/L	1.0	0.20	1	02/20/17 08:38			
Fluoranthene	1.0 U	ug/L	1.0	0.11	1	02/20/17 08:38	02/20/17 20:22		
Fluorene	1.0 U	ug/L	1.0	0.24	1	02/20/17 08:38	02/20/17 20:22		
Hexachloro-1,3-butadiene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38			
Hexachlorobenzene	1.0 U	ug/L	1.0	0.12	1		02/20/17 20:22		
Hexachlorocyclopentadiene	1.0 U	ug/L	1.0	0.61	1		02/20/17 20:22		
Hexachloroethane	1.0 U	ug/L	1.0	0.27	1		02/20/17 20:22		
Indeno(1,2,3-cd)pyrene	1.0 U	ug/L	1.0	0.14	1		02/20/17 20:22		
Isophorone	1.0 U	ug/L	1.0	0.14	1		02/20/17 20:22		
2-Methylnaphthalene	1.0 U	ug/L	1.0	0.28	1		02/20/17 20:22		
2-Methylphenol(o-Cresol)	1.0 U	ug/L	1.0	0.28	1		02/20/17 20:22		
3&4-Methylphenol(m&p Cresol)	2.0 U	_	2.0	0.28	1		02/20/17 20:22		
, , , ,		ug/L			1		02/20/17 20:22		
Naphthalene	1.0 U	ug/L	1.0	0.31			02/20/17 20:22 02/20/17 20:22		
2-Nitroaniline	2.5 U	ug/L	2.5	0.59	1				
4-Nitroaniline	2.5 U	ug/L	2.5	0.32	1		02/20/17 20:22		
Nitrobenzene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 20:22	98-95-3	





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: Field Blank	Lab ID:	30210854012	Collected:	02/15/17	15:40	Received: 02/	15/17 22:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
8270D MSSV Organics	Analytical	Method: EPA 8	270D Prepa	ration Meth	nod: EF	PA 3510C			
N-Nitroso-di-n-propylamine	1.0 U	ug/L	1.0	0.29	1	02/20/17 08:38	02/20/17 20:22	621-64-7	
N-Nitrosodiphenylamine	1.0 U	ug/L	1.0	0.39	1	02/20/17 08:38	02/20/17 20:22	86-30-6	
Pentachlorophenol	2.5 U	ug/L	2.5	0.65	1	02/20/17 08:38	02/20/17 20:22	87-86-5	
Phenanthrene	1.0 U	ug/L	1.0	0.15	1	02/20/17 08:38	02/20/17 20:22	85-01-8	
Phenol	1.0 U	ug/L	1.0	0.19	1	02/20/17 08:38	02/20/17 20:22	108-95-2	
Pyrene	1.0 U	ug/L	1.0	0.26	1	02/20/17 08:38	02/20/17 20:22	129-00-0	
1,2,4,5-Tetrachlorobenzene	1.0 U	ug/L	1.0	0.27	1	02/20/17 08:38	02/20/17 20:22	95-94-3	
2,3,4,6-Tetrachlorophenol	1.0 U	ug/L	1.0	0.53	1	02/20/17 08:38	02/20/17 20:22	58-90-2	
2,4,5-Trichlorophenol	2.5 U	ug/L	2.5	0.63	1	02/20/17 08:38	02/20/17 20:22	95-95-4	
2,4,6-Trichlorophenol	1.0 U	ug/L	1.0	0.60	1	02/20/17 08:38	02/20/17 20:22		
Surrogates		- J. -	•••				· · · ··-	-	
Nitrobenzene-d5 (S)	53	%	16-112		1	02/20/17 08:38	02/20/17 20:22	4165-60-0	
2-Fluorobiphenyl (S)	47	%	18-115		1	02/20/17 08:38	02/20/17 20:22		
Terphenyl-d14 (S)	71	%	54-118		1	02/20/17 08:38	02/20/17 20:22	1718-51-0	
Phenol-d6 (S)	22	%	10-48		1	02/20/17 08:38	02/20/17 20:22	13127-88-3	
2-Fluorophenol (S)	32	%	10-76		1	02/20/17 08:38	02/20/17 20:22		
2,4,6-Tribromophenol (S)	50	%	27-129		1	02/20/17 08:38	02/20/17 20:22		
3260B MSV	Analytical	Method: EPA 8	260B						
Acetone	10.0 U	ug/L	10.0	3.5	1		02/17/17 00:09	67-64-1	
Benzene	1.0 U	ug/L	1.0	0.21	1		02/17/17 00:09	71-43-2	
Bromodichloromethane	1.0 U	ug/L	1.0	0.24	1		02/17/17 00:09		
Bromoform	1.0 U	ug/L	1.0	0.30	1		02/17/17 00:09		
Bromomethane	1.0 U	ug/L	1.0	0.53	1		02/17/17 00:09		
2-Butanone (MEK)	10.0 U	ug/L	10.0	2.4	1		02/17/17 00:09		
Carbon disulfide	1.0 U	ug/L	1.0	0.34	1		02/17/17 00:09		
Carbon tetrachloride	1.0 U	ug/L	1.0	0.47	1		02/17/17 00:09		
Chlorobenzene	1.0 U	ug/L	1.0	0.14	1		02/17/17 00:09		
Chloroethane	1.0 U	ug/L	1.0	0.68	1		02/17/17 00:09		
Chloroform	0.95J	ug/L	1.0	0.40	1		02/17/17 00:09		
Chloromethane	1.0 U	ug/L	1.0	0.51	1		02/17/17 00:09		
Cyclohexane	10.0 U	ug/L	10.0	0.59	1		02/17/17 00:09		
1,2-Dibromo-3-chloropropane	5.0 U	ug/L	5.0	0.54	1		02/17/17 00:09		
Dibromochloromethane	1.0 U	ug/L	1.0	0.29	1		02/17/17 00:09		
		•							
1,2-Dibromoethane (EDB)	1.0 U	ug/L	1.0	0.22	1		02/17/17 00:09		
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.17	1		02/17/17 00:09		
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.26	1		02/17/17 00:09		
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.21	1		02/17/17 00:09		
Dichlorodifluoromethane	1.0 U	ug/L	1.0	0.17	1		02/17/17 00:09		
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.37	1		02/17/17 00:09		
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.30	1		02/17/17 00:09		
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.85	1		02/17/17 00:09		
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.20	1		02/17/17 00:09		
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.56	1		02/17/17 00:09		
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.29	1		02/17/17 00:09		
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.29	1		02/17/17 00:09	78-87-5	



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: Field Blank	Lab ID:	30210854012	Collected	: 02/15/17	15:40	Received: 02/	15/17 22:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
8260B MSV	Analytical	Method: EPA 8	260B						
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.14	1		02/17/17 00:09	10061-01-5	
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.17	1		02/17/17 00:09	10061-02-6	
Ethylbenzene	1.0 U	ug/L	1.0	0.24	1		02/17/17 00:09	100-41-4	
2-Hexanone	10.0 U	ug/L	10.0	0.25	1		02/17/17 00:09	591-78-6	
Isopropylbenzene (Cumene)	1.0 U	ug/L	1.0	0.12	1		02/17/17 00:09	98-82-8	
Methyl acetate	5.0 U	ug/L	5.0	0.59	1		02/17/17 00:09	79-20-9	
Methylene Chloride	1.0 U	ug/L	1.0	0.55	1		02/17/17 00:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	0.32	1		02/17/17 00:09	108-10-1	
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.21	1		02/17/17 00:09	1634-04-4	
Styrene	1.0 U	ug/L	1.0	0.17	1		02/17/17 00:09	100-42-5	
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.21	1		02/17/17 00:09	79-34-5	
Tetrachloroethene	1.0 U	ug/L	1.0	0.43	1		02/17/17 00:09	127-18-4	
Toluene	1.0 U	ug/L	1.0	0.21	1		02/17/17 00:09	108-88-3	
1,2,3-Trichlorobenzene	2.0 U	ug/L	2.0	0.36	1		02/17/17 00:09		
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.34	1		02/17/17 00:09	120-82-1	
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.53	1		02/17/17 00:09	71-55-6	
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.21	1		02/17/17 00:09		
Trichloroethene	0.22J	ug/L	1.0	0.20	1		02/17/17 00:09	79-01-6	
Trichlorofluoromethane	1.0 U	ug/L	1.0	0.31	1		02/17/17 00:09	75-69-4	
1,1,2-Trichlorotrifluoroethane	50.0 U	ug/L	50.0	0.39	1		02/17/17 00:09	76-13-1	
Vinyl chloride	1.0 U	ug/L	1.0	0.33	1		02/17/17 00:09	75-01-4	
Xylene (Total)	3.0 U	ug/L	3.0	0.47	1		02/17/17 00:09	1330-20-7	
m&p-Xylene	2.0 U	ug/L	2.0	0.28	1		02/17/17 00:09		
o-Xylene	1.0 U	ug/L	1.0	0.19	1		02/17/17 00:09	95-47-6	
Surrogates		J							
4-Bromofluorobenzene (S)	101	%	78-117		1		02/17/17 00:09	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-128		1		02/17/17 00:09	17060-07-0	
Toluene-d8 (S)	100	%	59-140		1		02/17/17 00:09	2037-26-5	
Dibromofluoromethane (S)	93	%	66-132		1		02/17/17 00:09	1868-53-7	
7196 Chromium, Hexavalent	Analytical	Method: EPA 7	196A						
Chromium, Hexavalent	10.0 U	ug/L	10.0	1.7	1		02/15/17 23:03	18540-29-9	
9012B Cyanide, Total	Analytical	Method: EPA 9	012B Prepa	ration Met	hod: EP/	A 9012B			
Cyanide	0.010 U	mg/L	0.010	0.0018	1	00/04/47 46:00	02/21/17 20:40	E7 10 E	



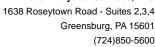


Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Sample: RW12-MW(I)	Lab ID:	Lab ID: 30210854013			7 15:18	Received: 02/	/15/17 22:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Cadmium	4740	ug/L	300	34.4	100	02/20/17 11:01	02/21/17 21:31	7440-43-9	1c
Zinc	249000	ug/L	1000	108	100	02/20/17 11:01	02/21/17 21:31	7440-66-6	1c,MH





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

QC Batch: 249769 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Associated Lab Samples: 30210854008, 30210854009, 30210854010, 30210854012

METHOD BLANK: 1229081 Matrix: Water
Associated Lab Samples: 30210854008, 30210854009, 30210854010, 30210854012

Blank Reporting

Parameter Units Result Limit MDL Analyzed Qualifiers

Mercury ug/L 0.20 U 0.20 0.017 02/20/17 23:43

LABORATORY CONTROL SAMPLE: 1229082

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Mercury ug/L 1.0 100 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1229084 1229085

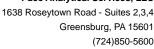
MS MSD 30210854009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual 0.20 U 2.5 75-125 20 Mercury ug/L 2.5 2.5 2.4 97 101

SAMPLE DUPLICATE: 1229083

 Parameter
 Units
 Result Result RPD
 Max RPD
 Qualifiers

 Mercury
 ug/L
 0.20 U
 0.20 U
 20

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





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

QC Batch: 249768 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury Dissolved

Associated Lab Samples: 30210854008, 30210854009, 30210854010

METHOD BLANK: 1229076 Matrix: Water

Associated Lab Samples: 30210854008, 30210854009, 30210854010

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Mercury, Dissolved ug/L 0.20 U 0.20 0.017 02/21/17 00:05

LABORATORY CONTROL SAMPLE: 1229077

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Mercury, Dissolved ug/L 0.91 91 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1229079 1229080

MS MSD 30210854009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Mercury, Dissolved 0.20 U 2.4 75-125 20 ug/L 2.5 2.5 2.4 98 94

SAMPLE DUPLICATE: 1229078

 Parameter
 Units
 Result Result RPD
 Max RPD
 Qualifiers

 Mercury, Dissolved
 ug/L
 0.20 U
 0.20 U
 20

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



Area A Parcel A3 GW Project:

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

QC Batch: 249761 Analysis Method: EPA 6010C QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

30210854001, 30210854002, 30210854003, 30210854004, 30210854005, 30210854006, 30210854007, Associated Lab Samples:

30210854008, 30210854009, 30210854010, 30210854012, 30210854013

METHOD BLANK: 1229011 Matrix: Water

30210854001, 30210854002, 30210854003, 30210854004, 30210854005, 30210854006, 30210854007,Associated Lab Samples:

30210854008, 30210854009, 30210854010, 30210854012, 30210854013

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Aluminum	ug/L	50.0 U	50.0	16.8	02/21/17 16:41	1c
Antimony	ug/L	6.0 U	6.0	2.8	02/21/17 16:41	1c
Arsenic	ug/L	5.0 U	5.0	4.0	02/21/17 16:41	1c
Barium	ug/L	10.0 U	10.0	0.53	02/21/17 16:41	1c
Beryllium	ug/L	1.0 U	1.0	0.22	02/21/17 16:41	1c
Cadmium	ug/L	3.0 U	3.0	0.34	02/21/17 16:41	1c
Chromium	ug/L	5.0 U	5.0	0.53	02/21/17 16:41	1c
Cobalt	ug/L	5.0 U	5.0	0.23	02/21/17 16:41	1c
Copper	ug/L	5.0 U	5.0	1.3	02/21/17 16:41	1c
Iron	ug/L	70.0 U	70.0	9.8	02/21/17 16:41	1c
Lead	ug/L	5.0 U	5.0	4.0	02/21/17 16:41	1c
Manganese	ug/L	5.0 U	5.0	0.71	02/21/17 16:41	1c
Nickel	ug/L	10.0 U	10.0	0.85	02/21/17 16:41	1c
Selenium	ug/L	8.0 U	8.0	4.4	02/21/17 16:41	1c
Silver	ug/L	6.0 U	6.0	0.56	02/21/17 16:41	1c
Thallium	ug/L	10.0 U	10.0	2.7	02/21/17 16:41	1c
Vanadium	ug/L	5.0 U	5.0	0.27	02/21/17 16:41	1c
Zinc	ug/L	10.0 U	10.0	1.1	02/21/17 16:41	1c

LABORATORY CONTROL SAMPLE	: 1229012					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Aluminum	ug/L	5000	5120	102	80-120	1c
Antimony	ug/L	500	493	99	80-120	1c
Arsenic	ug/L	500	460	92	80-120	1c
Barium	ug/L	500	518	104	80-120	1c
Beryllium	ug/L	500	526	105	80-120	1c
Cadmium	ug/L	500	488	98	80-120	1c
Chromium	ug/L	500	475	95	80-120	1c
Cobalt	ug/L	500	463	93	80-120	1c
Copper	ug/L	500	521	104	80-120	1c
ron	ug/L	5000	5240	105	80-120	1c
_ead	ug/L	500	459	92	80-120	1c
Manganese	ug/L	500	519	104	80-120	1c
Nickel	ug/L	500	484	97	80-120	1c
Selenium	ug/L	500	485	97	80-120	1c
Silver	ug/L	250	246	99	80-120	1c
- Thallium	ug/L	500	473	95	80-120	1c

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



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

LABORATORY CONTROL SAMPLE: 1229012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vanadium	ug/L	500	461	92	80-120	
Zinc	ug/L	500	493	99	80-120	

MATRIX SPIKE & MATRIX S	SPIKE DUPLICA	ATE: 12290	14		1229015							
			MS	MSD								
	3	0210854009	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Aluminum	ug/L	66.3	5000	5000	5110	5080	101	100	75-125	1	20	1c
Antimony	ug/L	18.8	500	500	504	512	97	99	75-125	2	20	1c
Arsenic	ug/L	7.0	500	500	522	507	103	100	75-125	3	20	1c
Barium	ug/L	31.3	500	500	547	538	103	101	75-125	2	20	1c
Beryllium	ug/L	1.0 U	500	500	526	524	105	105	75-125	0	20	1c
Cadmium	ug/L	54900	500	500	51900	48500	-612	-1290	75-125	7	20	1c,ML
Chromium	ug/L	5.0 U	500	500	479	471	96	94	75-125	2	20	1c
Cobalt	ug/L	444	500	500	975	958	106	103	75-125	2	20	1c
Copper	ug/L	5.0 U	500	500	527	524	105	105	75-125	1	20	1c
Iron	ug/L	377000	5000	5000	380000	358000	60	-376	75-125	6	20	1c,ML
Lead	ug/L	5.0 U	500	500	476	470	95	94	75-125	1	20	1c
Manganese	ug/L	24800	500	500	24600	23000	-42	-358	75-125	7	20	1c,ML
Nickel	ug/L	297	500	500	771	754	95	91	75-125	2	20	1c
Selenium	ug/L	8.0 U	500	500	572	554	114	111	75-125	3	20	1c
Silver	ug/L	5.7J	250	250	269	270	105	106	75-125	0	20	1c
Thallium	ug/L	10.0 U	500	500	431	424	86	85	75-125	1	20	1c
Vanadium	ug/L	25.0 U	500	500	440	433	88	87	75-125	2	20	1c
Zinc	ug/L	600000	500	500	559000	524000	-8360	-15300	75-125	6	20	1c,ML

MATRIX SPIKE SAMPLE:	1229017						
		30210854013	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Aluminum	ug/L	35.8J	5000	4940	98	75-125	1c
Antimony	ug/L	6.0 U	500	478	96	75-125 <i>′</i>	1c
Arsenic	ug/L	5.0 U	500	513	103	75-125 <i>′</i>	1c
Barium	ug/L	10.4	500	488	96	75-125 <i>′</i>	1c
Beryllium	ug/L	1.0 U	500	538	108	75-125 <i>′</i>	1c
Cadmium	ug/L	4740	500	5350	122	75-125 <i>′</i>	1c
Chromium	ug/L	5.0 U	500	490	98	75-125 <i>′</i>	1c
Cobalt	ug/L	67.6	500	584	103	75-125 <i>′</i>	1c
Copper	ug/L	5.0 U	500	513	103	75-125 <i>′</i>	1c
Iron	ug/L	107000	5000	112000	96	75-125 <i>′</i>	1c
Lead	ug/L	5.0 U	500	468	94	75-125 <i>′</i>	1c
Manganese	ug/L	9130	500	9660	106	75-125 <i>′</i>	1c
Nickel	ug/L	58.4	500	521	92	75-125 <i>′</i>	1c
Selenium	ug/L	8.0 U	500	543	109	75-125 <i>′</i>	1c
Silver	ug/L	1.6J	250	254	101	75-125 <i>′</i>	1c

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



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

MATRIX SPIKE SAMPLE:	1229017						
		30210854013	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Thallium	ug/L	10.0 U	500	432	86	75-125	1c
Vanadium	ug/L	5.0 U	500	467	93	75-125	1c
Zinc	ug/L	249000	500	250000	260	75-125	1c,MH

		30210854009	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Aluminum	ug/L	66.3	83.6	23	20	1c,D6
Antimony	ug/L	18.8	13.8	30	20	1c, D6
Arsenic	ug/L	7.0	4.5J		20	1c
Barium	ug/L	31.3	31.4	0	20	1c
Beryllium	ug/L	1.0 U	1.0 U		20	1c
Cadmium	ug/L	54900	52300	5	20	1c
Chromium	ug/L	5.0 U	5.0 U		20	1c
Cobalt	ug/L	444	452	2	20	1c
Copper	ug/L	5.0 U	5.0 U		20	1c
ron	ug/L	377000	361000	4	20	1c
_ead	ug/L	5.0 U	5.0 U		20	1c
Manganese	ug/L	24800	24200	2	20	1c
Nickel	ug/L	297	301	1	20	1c
Selenium	ug/L	8.0 U	8.0 U		20	1c
Silver	ug/L	5.7J	5.8J		20	1c
⁻ hallium	ug/L	10.0 U	10.0 U		20	1c
/anadium	ug/L	25.0 U	25.0 U		20	1c
Zinc	ug/L	600000	575000	4	20	1c

SAMPLE DUPLICATE: 1229016						
		30210854013	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Aluminum	ug/L	35.8J	25.3J		20	1c
Antimony	ug/L	6.0 U	6.0 U		20	1c
Arsenic	ug/L	5.0 U	5.0 U		20	1c
Barium	ug/L	10.4	10.4	0	20	1c
Beryllium	ug/L	1.0 U	1.0 U		20	1c
Cadmium	ug/L	4740	4850	2	20	1c
Chromium	ug/L	5.0 U	5.0 U		20	1c
Cobalt	ug/L	67.6	67.8	0	20	1c
Copper	ug/L	5.0 U	5.0 U		20	1c
Iron	ug/L	107000	108000	1	20	1c
Lead	ug/L	5.0 U	5.0 U		20	1c
Manganese	ug/L	9130	9320	2	20	1c
Nickel	ug/L	58.4	59.1	1	20	1c
Selenium	ug/L	8.0 U	8.0 U		20	1c
Silver	ug/L	1.6J	1.1J		20	1c

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALITY CONTROL DATA

Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

SAMPLE DUPLICATE: 1229016

		30210854013	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Thallium	ug/L	10.0 U	10.0 U		2	0 1c
Vanadium	ug/L	5.0 U	5.0 U		2	0 1c
Zinc	ug/L	249000	255000	2	2	0 1c

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Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

QC Batch: 249737 Analysis Method: EPA 6010C

QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET Dissolved

Associated Lab Samples: 30210854008, 30210854009, 30210854010

METHOD BLANK: 1228946 Matrix: Water

Associated Lab Samples: 30210854008, 30210854009, 30210854010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	50.0 U	50.0	16.8	02/20/17 22:55	2c
•	ū					
Antimony, Dissolved	ug/L	6.0 U	6.0	2.8	02/20/17 22:55	2c
Arsenic, Dissolved	ug/L	5.0 U	5.0	4.0	02/20/17 22:55	2c
Barium, Dissolved	ug/L	10.0 U	10.0	0.53	02/20/17 22:55	2c
Beryllium, Dissolved	ug/L	1.0 U	1.0	0.22	02/20/17 22:55	2c
Cadmium, Dissolved	ug/L	3.0 U	3.0	0.34	02/20/17 22:55	2c
Chromium, Dissolved	ug/L	5.0 U	5.0	0.53	02/20/17 22:55	2c
Cobalt, Dissolved	ug/L	5.0 U	5.0	0.23	02/20/17 22:55	2c
Copper, Dissolved	ug/L	5.0 U	5.0	1.3	02/20/17 22:55	2c
Iron, Dissolved	ug/L	70.0 U	70.0	9.8	02/20/17 22:55	2c
Lead, Dissolved	ug/L	5.0 U	5.0	4.0	02/20/17 22:55	2c
Manganese, Dissolved	ug/L	5.0 U	5.0	0.71	02/20/17 22:55	2c
Nickel, Dissolved	ug/L	1.1J	10.0	0.85	02/20/17 22:55	2c
Selenium, Dissolved	ug/L	8.0 U	8.0	4.4	02/20/17 22:55	2c
Silver, Dissolved	ug/L	6.0 U	6.0	0.56	02/20/17 22:55	2c
Thallium, Dissolved	ug/L	10.0 U	10.0	2.7	02/20/17 22:55	2c
Vanadium, Dissolved	ug/L	5.0 U	5.0	0.27	02/20/17 22:55	2c
Zinc, Dissolved	ug/L	2.5J	10.0	1.1	02/20/17 22:55	2c

LABORATORY CONTROL SAMPLE:	1228947					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Aluminum, Dissolved	ug/L	5000	4440	89	80-120 2	C
Antimony, Dissolved	ug/L	500	465	93	80-120 2	С
Arsenic, Dissolved	ug/L	500	451	90	80-120 2	С
Barium, Dissolved	ug/L	500	462	92	80-120 2	С
Beryllium, Dissolved	ug/L	500	468	94	80-120 2	С
Cadmium, Dissolved	ug/L	500	481	96	80-120 2	С
Chromium, Dissolved	ug/L	500	475	95	80-120 2	С
Cobalt, Dissolved	ug/L	500	452	90	80-120 2	С
Copper, Dissolved	ug/L	500	459	92	80-120 2	С
Iron, Dissolved	ug/L	5000	4510	90	80-120 2	С
Lead, Dissolved	ug/L	500	451	90	80-120 2	С
Manganese, Dissolved	ug/L	500	458	92	80-120 2	С
Nickel, Dissolved	ug/L	500	479	96	80-120 2	С
Selenium, Dissolved	ug/L	500	477	95	80-120 2	С
Silver, Dissolved	ug/L	250	236	94	80-120 2	С
Thallium, Dissolved	ug/L	500	461	92	80-120 2	С
Vanadium, Dissolved	ug/L	500	464	93	80-120 2	С
Zinc, Dissolved	ug/L	500	489	98	80-120 2	С

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Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

MATRIX SPIKE & MATRIX SP	IKE DUPLICA	ATE: 12289	49		1228950							
			MS	MSD								
	3	0210854009	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Aluminum, Dissolved	ug/L	50.0 U	5000	5000	4940	4950	99	99	75-125	0	20	2c
Antimony, Dissolved	ug/L	11.0	500	500	502	507	98	99	75-125	1	20	2c
Arsenic, Dissolved	ug/L	5.0 U	500	500	498	507	99	101	75-125	2	20	2c
Barium, Dissolved	ug/L	33.9	500	500	539	540	101	101	75-125	0	20	2c
Beryllium, Dissolved	ug/L	1.0 U	500	500	507	510	101	102	75-125	1	20	2c
Cadmium, Dissolved	ug/L	66300	500	500	67800	66400	298	22	75-125	2	20	2c,MH, ML
Chromium, Dissolved	ug/L	5.0 U	500	500	489	499	98	100	75-125	2	20	2c
Cobalt, Dissolved	ug/L	417	500	500	928	942	102	105	75-125	2	20	2c
Copper, Dissolved	ug/L	5.0 U	500	500	504	509	101	102	75-125	1	20	2c
Iron, Dissolved	ug/L	484000	5000	5000	499000	482000	302	-24	75-125	3	20	2c,MH, ML
Lead, Dissolved	ug/L	5.0 U	500	500	470	484	94	97	75-125	3	20	2c
Manganese, Dissolved	ug/L	27800	500	500	28800	27800	204	4	75-125	4	20	2c,MH, ML
Nickel, Dissolved	ug/L	293	500	500	764	778	94	97	75-125	2	20	2c
Selenium, Dissolved	ug/L	8.0 U	500	500	542	548	108	110	75-125	1	20	2c
Silver, Dissolved	ug/L	7.9	250	250	269	270	105	105	75-125	0	20	2c
Thallium, Dissolved	ug/L	10.0 U	500	500	426	438	85	88	75-125	3	20	2c
Vanadium, Dissolved	ug/L	25.0 U	500	500	441	450	88	90	75-125	2	20	2c
Zinc, Dissolved	ug/L	677000	500	500	676000	661000	-100	-3120	75-125	2	20	2c,ML

Parameter	Units	30210854009 Result	Dup Result	RPD	Max RPD	Qualifiers
Aluminum, Dissolved	ug/L	50.0 U	50.0 U		20	 2c
Antimony, Dissolved	ug/L	11.0	11.2	2	20	2c
Arsenic, Dissolved	ug/L	5.0 U	5.0 U		20	2c
Barium, Dissolved	ug/L	33.9	33.0	3	20	2c
Beryllium, Dissolved	ug/L	1.0 U	1.0 U		20	2c
Cadmium, Dissolved	ug/L	66300	69000	4	20	2c
Chromium, Dissolved	ug/L	5.0 U	5.0 U		20	2c
Cobalt, Dissolved	ug/L	417	429	3	20	2c
Copper, Dissolved	ug/L	5.0 U	5.0 U		20	2c
Iron, Dissolved	ug/L	484000	506000	4	20	2c
Lead, Dissolved	ug/L	5.0 U	5.0 U		20	2c
Manganese, Dissolved	ug/L	27800	29200	5	20	2c
Nickel, Dissolved	ug/L	293	301	3	20	2c
Selenium, Dissolved	ug/L	8.0 U	8.0 U		20	2c
Silver, Dissolved	ug/L	7.9	8.1	3	20	2c
Thallium, Dissolved	ug/L	10.0 U	10.0 U		20	2c
Vanadium, Dissolved	ug/L	25.0 U	25.0 U		20	2c
Zinc, Dissolved	ug/L	677000	705000	4	20	2c

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Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

 QC Batch:
 249543
 Analysis Method:
 EPA 8260B

 QC Batch Method:
 EPA 8260B
 Analysis Description:
 8260B MSV

 Associated Lab Samples:
 30210854008, 30210854009, 30210854010, 30210854011, 30210854012

METHOD BLANK: 1227273 Matrix: Water

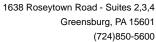
Associated Lab Samples: 30210854008, 30210854009, 30210854010, 30210854011, 30210854012

,	,	Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.53	02/16/17 17:43	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.21	02/16/17 17:43	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.21	02/16/17 17:43	
1,1,2-Trichlorotrifluoroethane	ug/L	50.0 U	50.0	0.39	02/16/17 17:43	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.37	02/16/17 17:43	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.20	02/16/17 17:43	
1,2,3-Trichlorobenzene	ug/L	2.0 U	2.0	0.36	02/16/17 17:43	
1,2,4-Trichlorobenzene	ug/L	1.0 U	1.0	0.34	02/16/17 17:43	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.54	02/16/17 17:43	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.22	02/16/17 17:43	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.17	02/16/17 17:43	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.30	02/16/17 17:43	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.29	02/16/17 17:43	
1,3-Dichlorobenzene	ug/L	1.0 U	1.0	0.26	02/16/17 17:43	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	02/16/17 17:43	
2-Butanone (MEK)	ug/L	10.0 U	10.0	2.4	02/16/17 17:43	
2-Hexanone	ug/L	10.0 U	10.0	0.25	02/16/17 17:43	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.32	02/16/17 17:43	
Acetone	ug/L	10.3	10.0	3.5	02/16/17 17:43	C9
Benzene	ug/L	1.0 U	1.0	0.21	02/16/17 17:43	
Bromodichloromethane	ug/L	1.0 U	1.0	0.24	02/16/17 17:43	
Bromoform	ug/L	1.0 U	1.0	0.30	02/16/17 17:43	
Bromomethane	ug/L	1.0 U	1.0	0.53	02/16/17 17:43	
Carbon disulfide	ug/L	1.0 U	1.0	0.34	02/16/17 17:43	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.47	02/16/17 17:43	
Chlorobenzene	ug/L	1.0 U	1.0	0.14	02/16/17 17:43	
Chloroethane	ug/L	1.0 U	1.0	0.68	02/16/17 17:43	
Chloroform	ug/L	1.0 U	1.0	0.40	02/16/17 17:43	
Chloromethane	ug/L	1.0 U	1.0	0.51	02/16/17 17:43	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.56	02/16/17 17:43	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	02/16/17 17:43	
Cyclohexane	ug/L	10.0 U	10.0	0.59	02/16/17 17:43	
Dibromochloromethane	ug/L	1.0 U	1.0	0.29	02/16/17 17:43	
Dichlorodifluoromethane	ug/L	1.0 U	1.0	0.17	02/16/17 17:43	
Ethylbenzene	ug/L	1.0 U	1.0	0.24	02/16/17 17:43	
Isopropylbenzene (Cumene)	ug/L	1.0 U	1.0	0.12	02/16/17 17:43	
m&p-Xylene	ug/L	2.0 U	2.0	0.28	02/16/17 17:43	
Methyl acetate	ug/L	5.0 U	5.0	0.59	02/16/17 17:43	
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.21	02/16/17 17:43	
Methylene Chloride	ug/L	1.6	1.0	0.55	02/16/17 17:43	C9
o-Xylene	ug/L	1.0 U	1.0	0.19	02/16/17 17:43	

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Project: Area A Parcel A3 GW

Pace Project No.: 30210854

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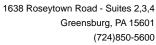
METHOD BLANK: 1227273 Matrix: Water

Associated Lab Samples: 30210854008, 30210854009, 30210854010, 30210854011, 30210854012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
					7 11 141 / 204	
Styrene	ug/L	1.0 U	1.0	0.17	02/16/17 17:43	
Tetrachloroethene	ug/L	1.0 U	1.0	0.43	02/16/17 17:43	
Toluene	ug/L	1.0 U	1.0	0.21	02/16/17 17:43	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.29	02/16/17 17:43	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	02/16/17 17:43	
Trichloroethene	ug/L	1.0 U	1.0	0.20	02/16/17 17:43	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.31	02/16/17 17:43	
Vinyl chloride	ug/L	1.0 U	1.0	0.33	02/16/17 17:43	
Xylene (Total)	ug/L	3.0 U	3.0	0.47	02/16/17 17:43	
1,2-Dichloroethane-d4 (S)	%	94	70-128		02/16/17 17:43	
4-Bromofluorobenzene (S)	%	103	78-117		02/16/17 17:43	
Dibromofluoromethane (S)	%	95	66-132		02/16/17 17:43	
Toluene-d8 (S)	%	100	59-140		02/16/17 17:43	

LABORATORY CONTROL SAMPLE:	1227274					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1-Trichloroethane	ug/L		17.8	89	79-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.2	96	64-130	
1,1,2-Trichloroethane	ug/L	20	20.0	100	78-118	
1,1,2-Trichlorotrifluoroethane	ug/L	20	13.8J	69	39-138	
1,1-Dichloroethane	ug/L	20	18.0	90	77-124	
1,1-Dichloroethene	ug/L	20	17.0	85	74-127	
1,2,3-Trichlorobenzene	ug/L	20	21.2	106	73-140	
1,2,4-Trichlorobenzene	ug/L	20	19.7	99	81-130	
1,2-Dibromo-3-chloropropane	ug/L	20	16.3	81	53-133	
1,2-Dibromoethane (EDB)	ug/L	20	18.2	91	69-126	
1,2-Dichlorobenzene	ug/L	20	18.8	94	83-117	
1,2-Dichloroethane	ug/L	20	17.9	89	73-118	
1,2-Dichloropropane	ug/L	20	18.6	93	77-126	
1,3-Dichlorobenzene	ug/L	20	18.6	93	83-119	
1,4-Dichlorobenzene	ug/L	20	18.7	94	83-119	
2-Butanone (MEK)	ug/L	20	17.3	86	55-134	
2-Hexanone	ug/L	20	25.4	127	78-156	
4-Methyl-2-pentanone (MIBK)	ug/L	20	17.6	88	63-121	
Acetone	ug/L	20	19.1	96	51-144	
Benzene	ug/L	20	17.3	87	80-113	
Bromodichloromethane	ug/L	20	19.6	98	78-121	
Bromoform	ug/L	20	17.8	89	71-130	
Bromomethane	ug/L	20	23.5	117	58-154	
Carbon disulfide	ug/L	20	18.5	93	66-152	
Carbon tetrachloride	ug/L	20	17.6	88	69-133	
Chlorobenzene	ug/L	20	19.4	97	85-116	
Chloroethane	ug/L	20	17.6	88	76-136	

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Project: Area A Parcel A3 GW

30210854 Pace Project No.:

Date: 02/22/2017 02:36 PM

ABORATORY CONTROL SAMPLE:	1227274				_	
		Spike	LCS	LCS	% Rec	0 ""
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
hloroform	ug/L	20	17.5	87	76-118	
hloromethane	ug/L	20	16.6	83	67-148	
s-1,2-Dichloroethene	ug/L	20	17.7	89	77-126	
s-1,3-Dichloropropene	ug/L	20	19.0	95	75-119	
yclohexane	ug/L	20	17.9	89	65-146	
ibromochloromethane	ug/L	20	22.0	110	66-131	
ichlorodifluoromethane	ug/L	20	11.7	59	10-175	
thylbenzene	ug/L	20	18.1	90	80-115	
opropylbenzene (Cumene)	ug/L	20	17.4	87	78-114	
&p-Xylene	ug/L	40	35.9	90	82-116	
ethyl acetate	ug/L	20	18.8	94	56-155	
ethyl-tert-butyl ether	ug/L	20	17.0	85	82-126	
ethylene Chloride	ug/L	20	22.5	112	61-142	
Xylene	ug/L	20	17.7	88	81-113	
yrene	ug/L	20	18.2	91	84-120	
trachloroethene	ug/L	20	19.2	96	82-120	
luene	ug/L	20	19.6	98	82-116	
ns-1,2-Dichloroethene	ug/L	20	17.5	87	76-125	
ns-1,3-Dichloropropene	ug/L	20	16.8	84	73-119	
ichloroethene	ug/L	20	17.9	90	84-116	
richlorofluoromethane	ug/L	20	15.7	79	59-138	
inyl chloride	ug/L	20	15.7	79	63-133	
ylene (Total)	ug/L	60	53.6	89	82-115	
2-Dichloroethane-d4 (S)	%			94	70-128	
Bromofluorobenzene (S)	%			100	78-117	
promofluoromethane (S)	%			101	66-132	
oluene-d8 (S)	%			106	59-140	

MATRIX SPIKE & MATRIX SPIK	E DUPLICA	TE: 12272	77		1227278							
			MS	MSD								
	3	0210854009	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	16.5	17.0	83	85	54-140	3	30	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	16.3	17.2	82	86	54-124	5	30	
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	17.1	17.8	86	89	58-120	4	30	
1,1,2-Trichlorotrifluoroethane	ug/L	50.0 U	20	20	13.7J	13.5J	68	68	41-186		30	
1,1-Dichloroethane	ug/L	0.70J	20	20	17.8	17.9	86	86	55-133	0	30	
1,1-Dichloroethene	ug/L	0.36J	20	20	17.3	17.8	85	87	48-141	3	30	
1,2,3-Trichlorobenzene	ug/L	2.0 U	20	20	13.3	15.6	66	78	40-123	16	30	
1,2,4-Trichlorobenzene	ug/L	1.0 U	20	20	14.0	15.8	70	79	33-130	12	30	
1,2-Dibromo-3- chloropropane	ug/L	5.0 U	20	20	11.7	12.5	59	63	23-126	7	30	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	20	20	16.4	16.9	82	85	58-115	3	30	
1,2-Dichlorobenzene	ug/L	1.0 U	20	20	16.0	16.6	80	83	57-124	4	30	
1,2-Dichloroethane	ug/L	1.0 U	20	20	16.2	16.3	81	82	58-123	1	30	

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Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

MATRIX SPIKE & MATRIX SPII	KE DUPLIC	CATE: 12272			1227278							
		00040054005	MS	MSD	MC	MOD	MC	MOD	0/ 5			
Parameter	Units	30210854009 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qu
1,2-Dichloropropane	ug/L	1.0 U	20	20	16.9	18.0	85	90	55-125	6	30	
I,3-Dichlorobenzene	ug/L	1.0 U	20	20	16.1	16.8	81	84	62-113	4	30	
1,4-Dichlorobenzene	ug/L	1.0 U	20	20	16.2	16.5	81	83	61-111	2	30	
2-Butanone (MEK)	ug/L	10.0 U	20	20	19.9	18.6	88	81	43-128	7	30	
2-Hexanone	ug/L	10.0 U	20	20	26.0	24.8	130	124	43-135	5	30	
1-Methyl-2-pentanone MIBK)	ug/L	10.0 U	20	20	17.4	16.6	87	83	47-123	5	30	
Acetone	ug/L	10.0 U	20	20	33.3	30.7	167	153	10-150	8	30	MH
Benzene	ug/L	1.6	20	20	17.7	18.1	81	83	63-123	2	30	
Bromodichloromethane	ug/L	1.0 U	20	20	16.7	17.2	83	86	55-127	3	30	
Bromoform	ug/L	1.0 U	20	20	12.4	12.8	62	64	44-131	3	30	
Bromomethane	ug/L	1.0 U	20	20	21.6	22.3	108	112	10-149	3	30	
Carbon disulfide	ug/L	1.0 U	20	20	18.4	18.1	92	91	47-158	2	30	
Carbon tetrachloride	ug/L	1.0 U	20	20	15.7	16.5	79	82	44-155	5	30	
Chlorobenzene	ug/L	1.0 U	20	20	17.0	17.8	85	89	57-121	5	30	
Chloroethane	ug/L	1.0 U	20	20	19.5	18.1	97	91	57-156	7	30	
Chloroform	ug/L	0.59J	20	20	16.6	17.1	80	82	56-132	3	30	
Chloromethane	ug/L	1.0 U	20	20	18.8	18.6	94	93	42-163	1	30	
is-1,2-Dichloroethene	ug/L	1.3	20	20	17.6	18.1	82	84	46-139	3	30	
is-1,3-Dichloropropene	ug/L	1.0 U	20	20	15.6	16.2	78	81	55-119	4	30	
Cyclohexane	ug/L	10.0 U	20	20	18.6	18.5	93	92	24-167	1		
Dibromochloromethane	ug/L	1.0 U	20	20	16.2	17.4	81	87	52-129	7	30	
Dichlorodifluoromethane	ug/L	1.0 U	20	20	13.1	11.8	66	59	10-175	11	30	
Ethylbenzene	ug/L	1.0 U	20	20	16.0	17.0	80	85	70-120	6	30	
sopropylbenzene (Cumene)	ug/L	1.0 U	20	20	15.6	16.1	78	81	71-129	3	30	
n&p-Xylene	ug/L	2.0 U	40	40	32.6	34.4	81	86	70-123	5	30	
Methyl acetate	ug/L	5.0 U	20	20	15.4	14.4	77	72	25-127	7	30	
Methyl-tert-butyl ether	ug/L	1.0 U	20	20	16.3	15.7	81	79	63-143	3	30	
Methylene Chloride	ug/L	1.0 U	20	20	20.6	20.6	103	103	38-134	0	30	
o-Xylene	ug/L	1.0 U	20	20	15.8	17.0	79	85	68-122	7	30	
Styrene	ug/L	1.0 U	20	20	16.1	17.0	80	85	49-135	6	30	
etrachloroethene	ug/L	1.0 U	20	20	16.6	17.7	83	89	53-125	6	30	
oluene	ug/L	0.27J	20	20	16.9	17.9	83	88	66-124	6	30	
rans-1,2-Dichloroethene	ug/L	1.0 U	20	20	17.4	17.7	86	87	52-136	1	30	
rans-1,3-Dichloropropene	ug/L	1.0 U	20	20	13.4	14.3	67	71	54-118	6	30	
richloroethene	ug/L	1.2	20	20	17.7	18.4	83	86	50-127	4	30	
richlorofluoromethane	ug/L	1.0 U	20	20	16.2	16.2	81	81	63-167	1	30	
/inyl chloride	ug/L	0.52J	20	20	17.7	16.8	86	82	54-149	5	30	
(Ylene (Total)	ug/L	3.0 U	60	60	48.4	51.4	81	86	68-123	6	30	
,2-Dichloroethane-d4 (S)	%						97	94	70-128			
I-Bromofluorobenzene (S)	%						102	100	78-117			
Dibromofluoromethane (S)	%						100	96	66-132			
Toluene-d8 (S)	%						101	103	59-140			

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



Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

QC Batch: 249730 Analysis Method: EPA 8270D by SIM

QC Batch Method: EPA 3510C Analysis Description: 8270D Water PAH by SIM MSSV

Associated Lab Samples: 30210854008, 30210854009, 30210854010, 30210854012

METHOD BLANK: 1228917 Matrix: Water
Associated Lab Samples: 30210854008, 30210854009, 30210854010, 30210854012

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	0.10 U	0.10	0.029	02/20/17 18:49	
2-Methylnaphthalene	ug/L	0.10 U	0.10	0.021	02/20/17 21:17	
Acenaphthene	ug/L	0.10 U	0.10	0.016	02/20/17 21:17	
Acenaphthylene	ug/L	0.10 U	0.10	0.014	02/20/17 21:17	
Anthracene	ug/L	0.10 U	0.10	0.012	02/20/17 21:17	
Benzo(a)anthracene	ug/L	0.10 U	0.10	0.014	02/20/17 21:17	
Benzo(a)pyrene	ug/L	0.10 U	0.10	0.0071	02/20/17 21:17	
Benzo(b)fluoranthene	ug/L	0.10 U	0.10	0.016	02/20/17 21:17	
Benzo(g,h,i)perylene	ug/L	0.10 U	0.10	0.019	02/20/17 21:17	
Benzo(k)fluoranthene	ug/L	0.10 U	0.10	0.011	02/20/17 21:17	
Chrysene	ug/L	0.10 U	0.10	0.0075	02/20/17 21:17	
Dibenz(a,h)anthracene	ug/L	0.10 U	0.10	0.028	02/20/17 21:17	
Fluoranthene	ug/L	0.10 U	0.10	0.010	02/20/17 21:17	
Fluorene	ug/L	0.10 U	0.10	0.016	02/20/17 21:17	
Indeno(1,2,3-cd)pyrene	ug/L	0.10 U	0.10	0.027	02/20/17 21:17	
Naphthalene	ug/L	0.057J	0.10	0.018	02/20/17 21:17	
Phenanthrene	ug/L	0.10 U	0.10	0.015	02/20/17 21:17	
Pyrene	ug/L	0.10 U	0.10	0.012	02/20/17 21:17	
2-Fluorobiphenyl (S)	%	63	19-123		02/20/17 21:17	
Terphenyl-d14 (S)	%	93	58-130		02/20/17 21:17	

LABORATORY CONTROL SAMPLE:	1228918					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
2-Methylnaphthalene	ug/L	2	1.2	61	47-103	
Acenaphthene	ug/L	2	1.2	61	48-104	
Acenaphthylene	ug/L	2	1.2	61	44-109	
Anthracene	ug/L	2	1.3	63	49-112	
Benzo(a)anthracene	ug/L	2	1.8	90	63-109	
Benzo(a)pyrene	ug/L	2	1.8	89	51-98	
Benzo(b)fluoranthene	ug/L	2	2.0	99	41-139	
Benzo(g,h,i)perylene	ug/L	2	1.8	92	44-124	
Benzo(k)fluoranthene	ug/L	2	1.7	87	58-125	
Chrysene	ug/L	2	1.8	88	62-115	
Dibenz(a,h)anthracene	ug/L	2	1.8	91	55-124	
Fluoranthene	ug/L	2	1.5	75	65-112	
Fluorene	ug/L	2	1.3	64	49-108	
ndeno(1,2,3-cd)pyrene	ug/L	2	1.8	91	54-125	
Naphthalene	ug/L	2	1.2	62	42-107	
Phenanthrene	ug/L	2	1.3	63	50-109	

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Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

LABORATORY CONTROL SAMPLE:	1228918					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Pyrene	ug/L		1.5	75	64-109	
2-Fluorobiphenyl (S)	%			60	19-123	
Terphenyl-d14 (S)	%			85	58-130	
LABORATORY CONTROL SAMPLE:	1228919					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L		0.58	29	10-79	
2-Fluorobiphenyl (S)	%			55	19-123	
Terphenyl-d14 (S)	%			87	58-130	

MATRIX SPIKE & MATRIX SPIKE DUF	LICATE: 12289	20		1228921							
		MS	MSD								
	30210854009	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter Uni	ts Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
2-Methylnaphthalene ug/	L 1.5	2	2	1.3	1.2	-12	-14	47-103	4	20	ML
Acenaphthene ug/	L 0.60	2	2	1.0	1.1	22	23	48-104	2	20	ML
Acenaphthylene ug/	L 1.2	2	2	1.4	1.4	10	11	44-109	2	20	ML
Anthracene ug/	L 0.034J	2	2	1.4	1.3	65	65	49-112	1	20	
Benzo(a)anthracene ug/	L 0.10 U	2	2	2.0	1.8	96	91	63-109	6	20	
Benzo(a)pyrene ug/	L 0.10 U	2	2	1.8	1.7	89	85	51-98	5	20	
Benzo(b)fluoranthene ug/	L 0.10 U	2	2	1.8	1.7	91	83	41-139	10	20	
Benzo(g,h,i)perylene ug/	L 0.10 U	2	2	1.6	1.6	79	79	44-124	1	20	
Benzo(k)fluoranthene ug/	L 0.10 U	2	2	1.7	1.6	84	77	58-125	9	20	
Chrysene ug/	L 0.10 U	2	2	1.8	1.6	86	82	62-115	6	20	
Dibenz(a,h)anthracene ug/	L 0.10 U	2	2	1.6	1.6	78	78	55-124	1	20	
Fluoranthene ug/		2	2	1.8	1.8	91	86	65-112	5	20	
Fluorene ug/	L 0.10 U	2	2	1.2	1.3	58	63	49-108	8	20	
Indeno(1,2,3-cd)pyrene ug/	L 0.10 U	2	2	1.6	1.5	77	76	54-125	1	20	
Naphthalene ug/	L 6.6	2	2	5.9	6.1	-32	-21	42-107	4	20	ML
Phenanthrene ug/	L 0.019J	2	2	1.4	1.4	68	66	50-109	3	20	
Pyrene ug/	L 0.10 U	2	2	1.8	1.7	88	84	64-109	5	20	
2-Fluorobiphenyl (S) %						48	49	19-123		20	
Terphenyl-d14 (S) %						86	81	58-130		20	

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Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

QC Batch: 249729 Analysis Method: EPA 8270D

QC Batch Method: EPA 3510C Analysis Description: 8270D Water MSSV

Associated Lab Samples: 30210854008, 30210854009, 30210854010, 30210854012

METHOD BLANK: 1228913 Matrix: Water Associated Lab Samples: 30210854008, 30210854009, 30210854010, 30210854012

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	1.0 U	1.0	0.27	02/20/17 17:29	
2,3,4,6-Tetrachlorophenol	ug/L	1.0 U	1.0	0.52	02/20/17 17:29	
2,4,5-Trichlorophenol	ug/L	2.5 U	2.5	0.62	02/20/17 17:29	
2,4,6-Trichlorophenol	ug/L	1.0 U	1.0	0.59	02/20/17 17:29	
2,4-Dichlorophenol	ug/L	1.0 U	1.0	0.32	02/20/17 17:29	
2,4-Dimethylphenol	ug/L	1.0 U	1.0	0.46	02/20/17 17:29	
2,4-Dinitrophenol	ug/L	2.5 U	2.5	0.44	02/20/17 17:29	
2,4-Dinitrotoluene	ug/L	1.0 U	1.0	0.69	02/20/17 17:29	
2,6-Dinitrotoluene	ug/L	1.0 U	1.0	0.23	02/20/17 17:29	
2-Chloronaphthalene	ug/L	1.0 U	1.0	0.25	02/20/17 17:29	
2-Chlorophenol	ug/L	1.0 U	1.0	0.28	02/20/17 17:29	
2-Methylnaphthalene	ug/L	1.0 U	1.0	0.28	02/20/17 17:29	
2-Methylphenol(o-Cresol)	ug/L	1.0 U	1.0	0.28	02/20/17 17:29	
2-Nitroaniline	ug/L	2.5 U	2.5	0.58	02/20/17 17:29	
3&4-Methylphenol(m&p Cresol)	ug/L	2.0 U	2.0	0.47	02/20/17 17:29	
3,3'-Dichlorobenzidine	ug/L	1.0 U	1.0	0.59	02/20/17 17:29	
4-Chloroaniline	ug/L	1.0 U	1.0	0.33	02/20/17 17:29	
4-Nitroaniline	ug/L	2.5 U	2.5	0.32	02/20/17 17:29	
Acenaphthene	ug/L	1.0 U	1.0	0.23	02/20/17 17:29	
Acenaphthylene	ug/L	1.0 U	1.0	0.25	02/20/17 17:29	
Acetophenone	ug/L	1.0 U	1.0	0.29	02/20/17 17:29	
Anthracene	ug/L	1.0 U	1.0	0.13	02/20/17 17:29	
Benzaldehyde	ug/L	1.0 U	1.0	0.70	02/20/17 17:29	
Benzo(a)anthracene	ug/L	1.0 U	1.0	0.25	02/20/17 17:29	
Benzo(a)pyrene	ug/L	1.0 U	1.0	0.11	02/20/17 17:29	
Benzo(b)fluoranthene	ug/L	1.0 U	1.0	0.18	02/20/17 17:29	
Benzo(g,h,i)perylene	ug/L	1.0 U	1.0	0.16	02/20/17 17:29	
Benzo(k)fluoranthene	ug/L	1.0 U	1.0	0.11	02/20/17 17:29	
Biphenyl (Diphenyl)	ug/L	1.0 U	1.0	0.29	02/20/17 17:29	
bis(2-Chloroethoxy)methane	ug/L	1.0 U	1.0	0.26	02/20/17 17:29	
bis(2-Chloroethyl) ether	ug/L	1.0 U	1.0	0.33	02/20/17 17:29	
bis(2-Chloroisopropyl) ether	ug/L	1.0 U	1.0	0.27	02/20/17 17:29	
bis(2-Ethylhexyl)phthalate	ug/L	1.0 U	1.0	0.20	02/20/17 17:29	
Caprolactam	ug/L	2.5 U	2.5	0.14	02/20/17 17:29	
Carbazole	ug/L	1.0 U	1.0	0.13	02/20/17 17:29	
Chrysene	ug/L	1.0 U	1.0	0.27	02/20/17 17:29	
Di-n-butylphthalate	ug/L	1.0 U	1.0	0.11	02/20/17 17:29	
Di-n-octylphthalate	ug/L	1.0 U	1.0	0.22	02/20/17 17:29	
Dibenz(a,h)anthracene	ug/L	1.0 U	1.0	0.18	02/20/17 17:29	
Diethylphthalate	ug/L	1.0 U	1.0	0.20	02/20/17 17:29	
Fluoranthene	ug/L	1.0 U	1.0	0.10	02/20/17 17:29	

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Project: Area A Parcel A3 GW

Pace Project No.: 30210854

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METHOD BLANK: 1228913 Matrix: Water
Associated Lab Samples: 30210854008, 30210854009, 30210854010, 30210854012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluorene	ug/L	1.0 U	1.0	0.24	02/20/17 17:29	
Hexachloro-1,3-butadiene	ug/L	1.0 U	1.0	0.26	02/20/17 17:29	
Hexachlorobenzene	ug/L	1.0 U	1.0	0.12	02/20/17 17:29	
Hexachlorocyclopentadiene	ug/L	1.0 U	1.0	0.60	02/20/17 17:29	
Hexachloroethane	ug/L	1.0 U	1.0	0.26	02/20/17 17:29	
Indeno(1,2,3-cd)pyrene	ug/L	1.0 U	1.0	0.14	02/20/17 17:29	
Isophorone	ug/L	1.0 U	1.0	0.26	02/20/17 17:29	
N-Nitroso-di-n-propylamine	ug/L	1.0 U	1.0	0.29	02/20/17 17:29	
N-Nitrosodiphenylamine	ug/L	1.0 U	1.0	0.39	02/20/17 17:29	
Naphthalene	ug/L	1.0 U	1.0	0.31	02/20/17 17:29	
Nitrobenzene	ug/L	1.0 U	1.0	0.25	02/20/17 17:29	
Pentachlorophenol	ug/L	2.5 U	2.5	0.64	02/20/17 17:29	
Phenanthrene	ug/L	1.0 U	1.0	0.15	02/20/17 17:29	
Phenol	ug/L	1.0 U	1.0	0.19	02/20/17 17:29	
Pyrene	ug/L	1.0 U	1.0	0.26	02/20/17 17:29	
2,4,6-Tribromophenol (S)	%	48	27-129		02/20/17 17:29	
2-Fluorobiphenyl (S)	%	47	18-115		02/20/17 17:29	
2-Fluorophenol (S)	%	37	10-76		02/20/17 17:29	
Nitrobenzene-d5 (S)	%	51	16-112		02/20/17 17:29	
Phenol-d6 (S)	%	26	10-48		02/20/17 17:29	
Terphenyl-d14 (S)	%	68	54-118		02/20/17 17:29	

LABORATORY CONTROL SAMPLE	: 1228914					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	10	5.0	50	47-107	
2,3,4,6-Tetrachlorophenol	ug/L	10	6.2	62	42-141	
2,4,5-Trichlorophenol	ug/L	10	7.3	73	50-132	
2,4,6-Trichlorophenol	ug/L	10	5.4	54	41-142	
2,4-Dichlorophenol	ug/L	10	5.5	55	40-90	
2,4-Dimethylphenol	ug/L	10	5.2	52	34-84	
2,4-Dinitrophenol	ug/L	10	7.0	70	10-156	
2,4-Dinitrotoluene	ug/L	10	7.3	73	59-137	
2,6-Dinitrotoluene	ug/L	10	6.5	65	52-139	
2-Chloronaphthalene	ug/L	10	5.2	52	42-120	
2-Chlorophenol	ug/L	10	5.6	56	39-109	
2-Methylnaphthalene	ug/L	10	4.5	45	36-78	
2-Methylphenol(o-Cresol)	ug/L	10	6.0	60	35-105	
2-Nitroaniline	ug/L	10	6.9	69	51-139	
3&4-Methylphenol(m&p Cresol)	ug/L	10	6.1	61	35-102	
3,3'-Dichlorobenzidine	ug/L	10	7.4	74	51-138	
4-Chloroaniline	ug/L	10	5.0	50	22-98	
4-Nitroaniline	ug/L	10	9.6	96	50-165	
Acenaphthene	ug/L	10	5.9	59	48-120	

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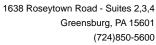
Project: Area A Parcel A3 GW

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LABORATORY CONTROL SAMPLE	: 1228914					
Danie	11.5	Spike	LCS	LCS	% Rec	0
Parameter	Units	Conc	Result	% Rec	Limits	Qualifiers
Acenaphthylene	ug/L	10	5.9	59	46-119	
Acetophenone	ug/L	10	6.3	63	45-109	
Anthracene	ug/L	10	6.7	67	56-124	
Benzaldehyde	ug/L	10	7.7	77	10-175	
Benzo(a)anthracene	ug/L	10	8.2	82	63-130	
Benzo(a)pyrene	ug/L	10	8.2	82	61-128	
Benzo(b)fluoranthene	ug/L	10	8.4	84	60-142	
Benzo(g,h,i)perylene	ug/L	10	8.4	84	27-157	
Benzo(k)fluoranthene	ug/L	10	9.3	93	55-145	
Biphenyl (Diphenyl)	ug/L	10	5.6	56	46-113	
bis(2-Chloroethoxy)methane	ug/L	10	5.4	54	40-91	
bis(2-Chloroethyl) ether	ug/L	10	6.9	69	39-111	
bis(2-Chloroisopropyl) ether	ug/L	10	7.5	75	30-123	
bis(2-Ethylhexyl)phthalate	ug/L	10	11.0	110	52-145	
Caprolactam	ug/L	10	3.5	35	12-41	
Carbazole	ug/L	10	8.8	88	58-133	
Chrysene	ug/L	10	8.5	85	61-133	
Di-n-butylphthalate	ug/L	10	9.5	95	60-140	
Di-n-octylphthalate	ug/L	10	11.9	119	43-152	
Dibenz(a,h)anthracene	ug/L	10	9.0	90	38-153	
Diethylphthalate	ug/L	10	7.5	75	58-133	
Fluoranthene	ug/L	10	8.3	83	63-129	
Fluorene	ug/L	10	6.2	62	51-123	
Hexachloro-1,3-butadiene	ug/L	10	4.0	40	30-87	
Hexachlorobenzene	ug/L	10	6.6	66	52-137	
Hexachlorocyclopentadiene	ug/L	10	3.2	32	20-96	
Hexachloroethane	ug/L	10	4.6	46	30-101	
Indeno(1,2,3-cd)pyrene	ug/L	10	8.7	87	37-154	
Isophorone	ug/L	10	5.4	54	40-94	
N-Nitroso-di-n-propylamine	ug/L	10	6.9	69	42-122	
N-Nitrosodiphenylamine	ug/L	10	5.1	51	38-105	
Naphthalene	ug/L	10	4.4	44	36-83	
Nitrobenzene	ug/L	10	5.2	52	38-91	
Pentachlorophenol	ug/L	10	8.8	88	22-151	
Phenanthrene	ug/L	10	6.6	66	55-126	
Phenol	ug/L	10	3.4	34	17-57	
Pyrene	ug/L	10	8.1	81	57-136	
2,4,6-Tribromophenol (S)	%			64	27-129	
2-Fluorobiphenyl (S)	%			53	18-115	
2-Fluorophenol (S)	%			38	10-76	
Nitrobenzene-d5 (S)	%			47	16-112	
Phenol-d6 (S)	%			30	10-48	
Terphenyl-d14 (S)	%			77	54-118	

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





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

MATRIX SPIKE & MATRIX SPIR	VE DOUBLI	CATE: 12289	MSD	1228916								
		30210854009	MS Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD		Qu
1,2,4,5-Tetrachlorobenzene	ug/L	1.0 U	10.2	10.2	3.7	3.4	36	33	47-107	8	25	ML
2,3,4,6-Tetrachlorophenol	ug/L	1.0 U	10.2	10.2	6.0	5.6	59	55	42-141	7	25	
2,4,5-Trichlorophenol	ug/L	2.5 U	10.2	10.2	5.8	5.6	57	55	50-132	4	25	
2,4,6-Trichlorophenol	ug/L	1.0 U	10.2	10.2	4.9	4.2	48	41	41-142	17	25	
2,4-Dichlorophenol	ug/L	1.0 U	10.2	10.2	4.9	4.5	48	44	40-90	10	25	
2,4-Dimethylphenol	ug/L	1.0J	10.2	10.2	5.6	5.1	45	40	34-84	10	25	
2,4-Dinitrophenol	ug/L	2.5 U	10.2	10.2	7.9	6.6	78	65	10-156	19	25	
2,4-Dinitrotoluene	ug/L	1.0 U	10.2	10.2	6.4	5.7	63	56	59-137	13		ML
2,6-Dinitrotoluene	ug/L	1.0 U	10.2	10.2	5.5	4.6	54	45	52-139	18		ML
2-Chloronaphthalene	ug/L	1.0 U	10.2	10.2	4.2	3.7	41	37	42-120	11		ML
2-Chlorophenol	ug/L	1.0 U	10.2	10.2	5.0	4.6	49	45	39-109	8	25	
2-Methylnaphthalene	ug/L	1.0 U	10.2	10.2	3.6	3.2	35	30	36-78	13		ML
2-Methylphenol(o-Cresol)	ug/L	1.0 U	10.2	10.2	4.9	4.5	48	45	35-105	8	25	IVIL
2-Nitroaniline	ug/L	2.5 U	10.2	10.2	6.4	5.4	63	53	51-139	16	25	
3&4-Methylphenol(m&p Cresol)	ug/L	4.6	10.2	10.2	9.5	11.1	48	64	35-102	16	25	
3,3'-Dichlorobenzidine	ug/L	1.0 U	10.2	10.2	1.2	1.3	12	13	51-138	11	25	ML
I-Chloroaniline	ug/L	1.0 U	10.2	10.2	3.9	3.7	39	36	22-98	7	25	
I-Nitroaniline	ug/L	2.5 U	10.2	10.2	9.2	8.0	90	78	50-165	14	25	
Acenaphthene	ug/L	1.0 U	10.2	10.2	4.5	4.0	45	39	48-120	13		ML
Acenaphthylene	ug/L	1.0 U	10.2	10.2	4.6	4.0	45	40	46-119	14		ML
Acetophenone	ug/L	1.0 U	10.2	10.2	5.5	5.4	53	52	45-109	2	25	
Anthracene	ug/L	1.0 U	10.2	10.2	5.6	5.4	54	53	56-124	3		ML
Benzaldehyde	ug/L	1.0 U	10.2	10.2	6.4	5.5	61	52	10-175	15	25	
Benzo(a)anthracene	ug/L	1.0 U	10.2	10.2	7.4	7.1	72	70	63-130	3	25	
Benzo(a)pyrene	ug/L	1.0 U	10.2	10.2	7.2	6.9	70	68	61-128	3	25	
Benzo(b)fluoranthene	ug/L	1.0 U	10.2	10.2	7.4	7.2	72	71	60-142	2	25	
Benzo(g,h,i)perylene	ug/L	1.0 U	10.2	10.2	7.7	7.7	76	75	27-157	1	25	
Benzo(k)fluoranthene	ug/L	1.0 U	10.2	10.2	7.2	6.8	71	67	55-145	6	25	
Biphenyl (Diphenyl)	ug/L	1.0 U	10.2	10.2	4.2	3.8	41	37	46-113	12		ML
ois(2-Chloroethoxy)methane	ug/L	1.0 U	10.2	10.2	4.6	4.2	45	42	40-113	8	25	IVIL
ois(2-Chloroethyl) ether	ug/L	1.0 U	10.2	10.2	5.7	5.0	56	49	39-111	12	25	
ois(2-Chloroisopropyl) ether	ug/L	1.0 U	10.2	10.2	6.1	5.5	60	54	30-123	11	25	
pis(2-Ethylhexyl)phthalate	ug/L ug/L	1.0 U	10.2	10.2	9.0	9.1	86	88	52-145	1	25	
	_	2.5 U	10.2	10.2	2.9	2.9	29	29	12-41	0	25	
Caprolactam	ug/L		10.2	10.2	2.9 8.5	8.1	82	78	58-133	5	25	
Carbazole	ug/L	0.14J										
Chrysene	ug/L	1.0 U	10.2	10.2	7.1	6.8	70 70	67	61-133	4	25	
Di-n-butylphthalate	ug/L	1.0 U	10.2	10.2	8.2	8.0	79	78	60-140	2	25	
Di-n-octylphthalate	ug/L	1.0 U	10.2	10.2	9.3	9.3	91	91	43-152	0	25	
Dibenz(a,h)anthracene	ug/L	1.0 U	10.2	10.2	7.7	7.8	76	77	38-153	1	25	
Diethylphthalate	ug/L	0.26J	10.2	10.2	6.6	6.0	62	56	58-133	11		ML
Fluoranthene	ug/L	1.0 U	10.2	10.2	7.1	6.8	70	67	63-129	5	25	
Fluorene	ug/L	1.0 U	10.2	10.2	4.9	4.2	48	41	51-123	15		ML
Hexachloro-1,3-butadiene	ug/L	1.0 U	10.2	10.2	2.6	2.3	26	23	30-87	11		ML
Hexachlorobenzene	ug/L	1.0 U	10.2	10.2	5.1	4.6	50	45	52-137	12		ML
Hexachlorocyclopentadiene	ug/L	1.0 U	10.2	10.2	2.6	2.1	26	21	20-96	22	25	

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



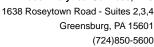
Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

MATRIX SPIKE & MATRIX SPI	KE DUPLICA	TE: 12289	15		1228916							
			MS	MSD								
	3	0210854009	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Hexachloroethane	ug/L	1.0 U	10.2	10.2	3.1	2.7	30	27	30-101	13	25	ML
Indeno(1,2,3-cd)pyrene	ug/L	1.0 U	10.2	10.2	7.8	7.6	76	75	37-154	2	25	
Isophorone	ug/L	1.0 U	10.2	10.2	4.5	4.1	44	41	40-94	9	25	
N-Nitroso-di-n-propylamine	ug/L	1.0 U	10.2	10.2	6.0	6.1	59	60	42-122	2	25	
N-Nitrosodiphenylamine	ug/L	1.0 U	10.2	10.2	4.7	4.2	46	41	38-105	10	25	
Naphthalene	ug/L	5.5	10.2	10.2	7.8	6.8	23	13	36-83	14	25	ML
Nitrobenzene	ug/L	1.0 U	10.2	10.2	4.6	4.2	45	41	38-91	10	25	
Pentachlorophenol	ug/L	2.5 U	10.2	10.2	8.8	8.5	87	84	22-151	4	25	
Phenanthrene	ug/L	1.0 U	10.2	10.2	6.2	5.4	60	53	55-126	13	25	ML
Phenol	ug/L	0.27J	10.2	10.2	2.7	2.4	23	21	17-57	12	25	
Pyrene	ug/L	1.0 U	10.2	10.2	6.8	6.7	67	66	57-136	2	25	
2,4,6-Tribromophenol (S)	%						62	58	27-129			
2-Fluorobiphenyl (S)	%						40	36	18-115			
2-Fluorophenol (S)	%						30	28	10-76			
Nitrobenzene-d5 (S)	%						42	39	16-112			
Phenol-d6 (S)	%						21	19	10-48			
Terphenyl-d14 (S)	%						63	62	54-118			

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





Area A Parcel A3 GW Project:

Pace Project No.: 30210854

Chromium, Hexavalent

Date: 02/22/2017 02:36 PM

QC Batch: 249461 Analysis Method: EPA 7196A

QC Batch Method: EPA 7196A Analysis Description: 7196 Chromium, Hexavalent

30210854008, 30210854009, 30210854010, 30210854012 Associated Lab Samples:

METHOD BLANK: 1226998 Matrix: Water Associated Lab Samples:

30210854008, 30210854009, 30210854010, 30210854012

Blank Reporting

MDL Limit Qualifiers Parameter Units Result Analyzed

Chromium, Hexavalent 10.0 U 10.0 1.7 02/15/17 23:00 ug/L

23000J 2500000

LABORATORY CONTROL SAMPLE: 1226999

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Chromium, Hexavalent ug/L 250 259 104 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1227000 1227001

ug/L

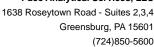
MS MSD 30210854009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual 2500000 2480000 75-125 20

2460000

98

98

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





Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

QC Batch: 249924 Analysis Method: EPA 9012B

QC Batch Method: EPA 9012B Analysis Description: 9012B Cyanide, Total

Associated Lab Samples: 30210854008, 30210854009, 30210854010, 30210854012

METHOD BLANK: 1229718 Matrix: Water

Associated Lab Samples: 30210854008, 30210854009, 30210854010, 30210854012

Blank Reporting

Parameter Units Result Limit MDL Analyzed Qualifiers

Cyanide mg/L 0.010 U 0.010 0.0018 02/21/17 20:27

LABORATORY CONTROL SAMPLE: 1229719

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cyanide mg/L .2 0.20 100 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1229835 1229836

MS MSD 30210854009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual 0.010 U 0.098 90-110 2 20 Cyanide mg/L .1 .1 0.10 100 98

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



QUALIFIERS

Project: Area A Parcel A3 GW

Pace Project No.: 30210854

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 249814

[1] Serial dilution failed for Ni and Zinc

Batch: 249839

[1] Cd and Zn failed for the serial dilution.

ANALYTE QUALIFIERS

Date: 02/22/2017 02:36 PM

1c Cd and Zn failed for the serial dilution.2c Serial dilution failed for Ni and Zinc

B Analyte was detected in the associated method blank.

C9 Common Laboratory Contaminant.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

high.

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased

low.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Area A Parcel A3 GW

Pace Project No.: 30210854

Date: 02/22/2017 02:36 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
30210854001	RW16-MW(S)	EPA 3005A	 249761	EPA 6010C	249839
0210854002	RW16-MW(I)	EPA 3005A	249761	EPA 6010C	249839
0210854003	RW15-MW(I)	EPA 3005A	249761	EPA 6010C	249839
0210854004	RW15-MW(S)	EPA 3005A	249761	EPA 6010C	249839
0210854005	RW19-MW(S)	EPA 3005A	249761	EPA 6010C	249839
0210854006	RW19-MW(I)	EPA 3005A	249761	EPA 6010C	249839
0210854007	RW18-MW(I)	EPA 3005A	249761	EPA 6010C	249839
0210854008	RW10-MW(I)	EPA 3005A	249761	EPA 6010C	249839
0210854009	RW13-MW(I)	EPA 3005A	249761	EPA 6010C	249839
0210854010	Duplicate	EPA 3005A	249761	EPA 6010C	249839
0210854012	Field Blank	EPA 3005A	249761	EPA 6010C	249839
0210854013	RW12-MW(I)	EPA 3005A	249761	EPA 6010C	249839
0210854008	RW10-MW(I)	EPA 3005A	249737	EPA 6010C	249814
0210854009	RW13-MW(I)	EPA 3005A	249737	EPA 6010C	249814
0210854010	Duplicate	EPA 3005A	249737	EPA 6010C	249814
0210854008	RW10-MW(I)	EPA 7470A	249769	EPA 7470A	249791
0210854009	RW13-MW(I)	EPA 7470A	249769	EPA 7470A	249791
0210854010	Duplicate	EPA 7470A	249769	EPA 7470A	249791
0210854012	Field Blank	EPA 7470A	249769	EPA 7470A	249791
0210854008	RW10-MW(I)	EPA 7470A	249768	EPA 7470A	249790
0210854009	RW13-MW(I)	EPA 7470A	249768	EPA 7470A	249790
0210854010	Duplicate	EPA 7470A	249768	EPA 7470A	249790
0210854008	RW10-MW(I)	EPA 3510C	249730	EPA 8270D by SIM	249815
0210854009	RW13-MW(I)	EPA 3510C	249730	EPA 8270D by SIM	249815
0210854010	Duplicate	EPA 3510C	249730	EPA 8270D by SIM	249815
0210854012	Field Blank	EPA 3510C	249730	EPA 8270D by SIM	249815
0210854008	RW10-MW(I)	EPA 3510C	249729	EPA 8270D	249841
0210854009	RW13-MW(I)	EPA 3510C	249729	EPA 8270D	249841
0210854010	Duplicate	EPA 3510C	249729	EPA 8270D	249841
0210854012	Field Blank	EPA 3510C	249729	EPA 8270D	249841
0210854008	RW10-MW(I)	EPA 8260B	249543		
0210854009	RW13-MW(I)	EPA 8260B	249543		
0210854010	Duplicate	EPA 8260B	249543		
0210854011	Trip Blank	EPA 8260B	249543		
0210854012	Field Blank	EPA 8260B	249543		
0210854008	RW10-MW(I)	EPA 7196A	249461		
0210854009	RW13-MW(I)	EPA 7196A	249461		
0210854010	Duplicate	EPA 7196A	249461		
0210854012	Field Blank	EPA 7196A	249461		
0210854008	RW10-MW(I)	EPA 9012B	249924	EPA 9012B	249999
0210854009	RW13-MW(I)	EPA 9012B	249924	EPA 9012B	249999
0210854010	Duplicate	EPA 9012B	249924	EPA 9012B	249999
0210854012	Field Blank	EPA 9012B	249924	EPA 9012B	249999



CHAIN-OF-CU The Chain-of-Custody is :

IL DOCUME

WO#:30210854



Section C Section A Section B Required Project Information: Invoice Information: Required Client Information: Company: EnviroAnalytics Group Report To: James Calenda Laura Sargent Copy To: Company Name: EnviroAnalytics Group Address: REGULATORY AGENCY 1430 Sparrows Point Blvd 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Address: DRINKING WATER Sparrows Point, MD 21219 GROUND WATER Pace Quote PO Number: Email To: RCRA OTHER jcalenda@enviroanalyticsgroup.com ☐ UST Reference: Pace Project Samantha Bayura Phone: 314-620-3056 Project Name: Site Location Manager: MD roiect Number: Pace Profile #: Requested Due Date/TAT: STATE. 22-Requested Analysis Filtered (Y/N) Valid Matrix Codes C=COMP) COLLECTED Preservatives Required Client Information MATRIX CODE codes to l DRINKING WATER DW WT Oil and Grease/1664A (aq SAMPLE TEMP AT COLLECTION WATER COMPOSITE Mercury/7471A or 7470A COMPOSITE END/GRAB WASTE WATER otal Cyanide/9012A START (see valid PRODUCT (G=GRAB OL WP AR OT SOIL/SOLID Oil and Grease/9071 lexavalent Chromium OIL WIPE CONTAINERS WETALS/6010C PCB/8082 (soil) SAMPLE ID **SVOC 8270D** GRO/8045B MATRIX CODE (A-Z, 0-9 / ,-) VOC/8260B Analysis Sample IDs MUST BE UNIQUE Methanol Na₂S₂O₃ SAMPLE Other Ī 오 Pace Project No./ Lab I.D. DATE TIME TIME WT 6 6 24 2-14-1 1456 1210 10 2 A. TIME SAMPLE CONDITIONS ADDITIONAL COMMENTS DATE ACCEPTED BY / AFFILIATION RELINGUISHED BY / AFFILIATION Data Package Required? (Y/N): Data Validation Required? (Y/N): If data package is required, attach data package checklist 7200 SAMPLER NAME AND SIGNATURE Sealed (Y/N) Temp in °C eceived on (Y/N) PRINT Name of SAMPLER: ustody (**DATE Signed** 으 (MM/DD/YY): SIGNATURE of SAMPLER:



CHAIN-OF-CU

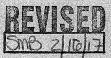
DY / Analytical Request Document

The Chain-of-Custody is :

L DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Company: EnviroAnalytics Group Report To: Jame		Section C Invoice Information: Attention: Laura Sargent	Page: Of O
	is Caleriua	Edd d Guigott	
			REGULATORY/AGENCY
Sparrows Point, MD 21219			" F NPDES GROUND WATER DRINKING WATER
Email To: <u>jcalenda@enviroanalyticsgroup.com</u> PO Number:	walting Po	Pace Quote Reference:	F UST F RCRA F OTHER
Phone: 314-620-3056 Fax: Project Name:	rea A Farcall A3	Pace Project Samantha Bayura Manager:	Site Location
Requested Due Date/TAT: 2 2 2 7 Project Number:	twanticp Projet	Pace Profile #:	STATE: MD
		Request	ed Analysis Filtered (Y/N)
Section D Required Client Information Section D Required Client Information MATRIX CODE 2	COLLECTED	Preservatives Z	
PRODUCT SL SOIL/SOILD OL OIL WP 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	COLLECTED COMPOSITE COMPOSITE END/GRAB COMPOSITE END/GRAB SAWDIE TIME DATE TIME SAWDIE TIME		GRO/8015B PCB/8082 (soil) METALS/6010C Oil and Grease/9071B (soil) Mercury/7471A or 7470A Hexavalent Chromium/7196A Total Cyanide/9012A Oil and Grease/1664A (aq) PCB/680 (aq) Residual Chloring (Y/N) Residual Chloring (Y/N) A A A C C C C C C C C C C
ITEM # #	DATE TIME DATE TIME OF	# OF CON Unpreser H ₂ SO ₄ HNO ₃ HCI NaOH NaOH Na ₂ S ₂ O ₃ Methanol Other Other SVOC/82(SVOC 8)	METT DOI and METT DOI and METT DOI BOOK BOOK BOOK BOOK BOOK BOOK BOOK BO
RWIZ-MW(I) WI	6 2-15-17/518		A13
2			
3			
- 10 mg/m			
1			
9			
40.			
at .			
2			
ADDITIONAL COMMENTS RELINQU	I(SHED BY / AFFILIATION DATE	TIME: ACCEPTED BY / AFFILIATION	DATE TIME SAMPLE CONDITIONS
Data Package Required?(YN):	49 21517	1635 David Stellson	ace 3/15/17/1025
Data Validation Required? (Y/N):	I dellaren 3/15/17	185 Ticker Take	[2-x-17-1900] Y D Y
If data package is required, attach data package checklist.	CH2 2-15-17	2200 Al lace	2-15-17 2200 2.1/65 Y N /Y
			0
Page 78	SAMPLER NAME AND SIGNA		on Ic
9 78 of 8	PRINT Name of SAMPLER: SIGNATURE of SAMPLER:	DATE CL	







JY / Analytical Request Document L DOCUMENT, All relevant fields must be completed accurately.



	Section B Required Project Information:		Section C Invoice Informati	ion:	e de la companya de l	Page:	\ of	<u>2</u>				
	Report To: James Calenda		Attention; [Laura Sargent								
1430 Sparrows Point Blvd	Сору Та:		100	e: EnviroAnalytics G		REGULATORY AGENCY		Sales Control				
Sparrows Point, MD 21219			Address:	1650 Des Peres Road, Sulle 3	303 St. Louis, MO 63131	□ NPDES □ GROUND	DWATER [D	RINKING WATER				
jcalenda@enviroanalyticsgroup.com	PO Number: AUS ZCLY	NG PO	Pace Quote Reference:			□ UST □ RCRA	Г	COTHER				
314-620-3056 FBX: F	Project Name: Area A	164 155 16	Pace Project Meneger	Samantha Bayura		Site Location MD						
I Due Date/TAT: 2-22-17	Project Number: Auscus 4		Pace Profile #:		A CONTRACTOR	STATE:	<u> — ////////////////////////////////////</u>					
				The state of the s		Analysis:Filtered (Y/N)						
ORMKING WATER DI WATER W WASTE WATER P	CODE 90 dw OOW	COLLECTED APOSITE COMPOSITE		Preservatives	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	(soil) (2 (soil) 2 (soil) 2 (soil) 4 (aq)	2					
SAMPLE ID PRODUCT SI SOL/SOL/D OIL W WPE AF AF AF OTHER TS Sample IDs MUST BE UNIQUE TISSUE	C	END/GRAE SARVING AWAITE TEMP AT COLLECT	# OF CONTAINERS Unpreserved H ₂ SO ₄	HNO ₃ HCI NaOH Na ₅ S ₂ O ₃ Methanol	4 Analysis Test 4 VOC/8260B SVOC 8270D DRO/8045B 7274-74 GRO/6045B 715-44	coil) 10C 3/9071B A or 747 In/9012 (e/1664	PCB/680 Residual C	Project No./ Lab I.D.				
R1116-mu(s)	WT G-	2-14-17-9-15						<u>XV</u>				
RW(B-MW(I)	WTG	2-14-171005						<u> </u>				
RWIS-MULT)	WT 6	27417/055					and a substitute of the control of t	5 <u>03</u>				
2W15 - MW(5)	WTG	2-14-17 11 50						<u> 204</u>				
PW19-mu(5)	W. G.	2-14-17 1235			 			006				
2W19-MW(I)	W(G	2-14-171315			1- 		The state of the s	<u> </u>				
2W18-mis (=)	WT G	2-14-17 1530			1 1 1 1 1 1 1			M3				
LWIZ-MU(I)	WT G	745-17 1518	931	12 1				008				
W10-mW(I)	VI G	215-17 1020	17 9 3	69			l Ms	lmsD 009				
W13- mW(I)	WIG	2/5-17 [210	19/31	23				NIN T				
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Feld Blank	WT C	A CONTRACTOR OF THE PROPERTY O	TIME		DIBY LARFILIATION	DATE: TIME		IPLE CONDITIONS				
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ge Required? (Y/N)!)	the of	2-15-17	11822									
tion Required? (Y/N)	And the second s											
e is required, attach data package checklist.			100 M									
Page		SAMPLER:NAME:AND SIGN	ATURE	Section (F)	17 Supplied 27 Sept. 1885.		2 0 <u>2</u>	N) N) act				
e 79 of 82		PRINT Name of SAMPLER SIGNATURE of SAMPLER	e Jis	so Perru	and a control of the	2-15/17	Temp in "C Received on Ice	Custody Sealed Cooler (YYN) Samples Intact (YYN)				





CHAIN-OF-CU DY / Analytical Request Document The Chain-of-Custody is: L. DOCUMENT. All relevant fields must be completed accurately.

www.pacaiabs.com	Section B					100			ction						•						F	ege:	and and control of the control of th	ereprisa		**************************************	
Information: EnviroAnalytics Group	Required Pr Report To:					0.9		ARTON STATE	oice in ention	format	on: Laura	Sarge	ent					1			L			Construction of the constr	ett. L.	the second of the second	
430 Sparrows Point Blvd	Copy Ta:							C	mpany	/ Name	En	viroA	nalytic	s Gro	que			REG	ULAT	ORY A	GEN	GY	(Article)		Total	Period September 1995	* Administration of
parrows Point, MD 21219	40.0							Ac	dress:	. 1	1650 Dei	s Peres	Road, S	uite 30	3 St. L	ouis, MO	63131	T NPDES GROUND WATER DRINKING WATER						entroperaturo per Fil			
alenda@enviroanalyticsgroup.com	PO Number	Α.		/ 1	<u>Λ</u> 0		and the		Pace Quota Reference						1-	UST	Г	R	CRA		「 OTHER \						
20-3056 Fax:	Project Nam			<u>4n</u>		0 1 43	, 40	Б.	ice Proj		Sama	ntha l	Bayura	a				Sit	Loca	tion		MD					
Date/TAT: 2-22-17	Project Numb	oer:	NATIONAL PROPERTY.	PERSONAL PROPERTY AND	th		AND RESIDENCE TO SECURITION.	P	ce Pro	ille #;	-11.7]	57/	新发展的	-						
V-211			<u> </u>	عدي	``` `	5									Water Charles	Requ	estec	Anal	ysis F	litere	a (Y/N); 	¥///				
D Valid Matrix C If Client Information MATRIX DIRECTOR WATER WATER WATER WASTE WATER PRODUCT SOLUSCUD	CODE DW WT WW P SL OL	valid codes to left)	GRAB C=COMP)	COMP		CTED COMPO	OSITE RAB	LECTION	A3012		Prese	rvativ	res		Tu.				71B (soil)	7470A	m/7196A 1012A	664A (aq)	(Y/N)				
SAMPLE ID AR (A-Z, 0-97) OTHER TISSUE	WP AR OT TS	MATRIX CODE (sue valid	SAMPLE TYPE (G=GH					SAMPLE TEMP AT COUL	# OF CONTAINERS	Unpreserved H,SO,	HNOs	NaOH	Na ₂ S ₂ O ₃ Methanol	Other	Analysis Test	SVOC 8270D	DRO/8015B	GRU/80/13B PCB/8082 (soil)	METALS/6010C	Mercury/7471A or	Total Cyanide/9012A	Oil and Grease/1664A (aq	PCB/680 (aq) Residual Chlorine			085)	
		MA	SAN	DATE	TIME	DATE	TIME	100000000000000000000000000000000000000	* Z	5 ヹ	宝宝		ž≥	191	-	> 0 /	95	<u> </u>	<u>≥ c</u>	7	エト	- 1011			M	N.	
rip Blank						9-15-17				ME			AGG	EPTE	D.BY.	/AFFIL				DATE		TIME			SAMPL	E CONDITIC	ins.
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Page	<u> </u>				SAMPI	ER NA	AE AND	SIGN	ATUR	E	- Alle			- 3	=: 4-1							1.0	4	, E	8 €	Se /	8 2
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0 8 8					223 (2001) 41: 14:35	NATURE		and the second second				1	\overline{a}			D	ATE S	lgned D/YY):_	2	∦ <	, -	-17			Ĕ	<u>1 2 .</u>	1

Sample Condition Upon Receipt Pittsburgh

Pace Analytical Client Name:	<u>_</u> 5	pa	<u>(10</u>	US Project #	_
Courier: Fed Ex UPS USPS Clien					
Custody Seal on Cooler/Box Present:		no	Seals	s intact: yes no	
Thermometer Used	Туре	of Ice	: (Wei	Blue None	
Cooler Temperature Observed Temp 2.7	11,0	o°c	Corr	ection Factor: -0.\ °C Final Temp: Z.\ \ \ \ \ \ °C	
Temp should be above freezing to 6°C	•			·	~
		1	1	Date and Initials of person examining contents;	
Comments:	Yes	No	N/A	PC 2-15-17	-
Chain of Custody Present:	\vdash			1.	-
Chain of Custody Filled Out:	\vdash		-	2.	_
Chain of Custody Relinquished:		 	-	3.	4
Sampler Name & Signature on COC:		ļ		5. Jample times & Sample IDs do	_
Sample Labels match COC:			1	5. Sample times & sample 1 lbs do	1/5 O comed.
-Includes date/time/ID Matrix:	<u> </u>		т	not match COC. No sample RW15- 6 Ne Rec'd two 10	INWIT) KELITORA
Samples Arrived within Hold Time:		Ī	ļ	6. Ne Rec'arus la	RUIS-MU(S)
Short Hold Time Analysis (<72hr remaining):	<u> </u>			7.	
Rush Turn Around Time Requested:		[<u> </u>	8.	Grelonfication
Sufficient Volume:			ļi	9.	1 ADEC IOTA TOCAL
Correct Containers Used:			<u> </u>	10.	
-Pace Containers Used:			<u> </u>		
Containers Intact:				11.	
Orthophosphate field filtered				12.	
Organic Samples checked for dechlorination:				13.	
Filtered volume received for Dissolved tests				14.	
All containers have been checked for preservation,				15.	
All containers needing preservation are found to be in compliance with EPA recommendation.					
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed C preservation Z-15-17	
				Lot# of added preservative	
Headspace in VOA Vials (>6mm):				16.	
Trip Blank Present:				17.	
Trip Blank Custody Seals Present					
Rad Aqueous Samples Screened > 0.5 mrem/hr				Initial when completed: PC Date: 7-15-17	
Client Notification/ Resolution:					-
Person Contacted: USa Percon			Date/	Time: 2 16 9- 2 17 Contacted By: SmB	_
Comments/Resolution: Ornanted for	$^{\circ}$ $^{\circ}$	lar	fic	ation on ahalysis Request	ed
4150 Requested Rensed	, OC	00	<u>a</u>	darification on sample Ucollec	tran
time alle to discrepancie	ببك	Det	we	en COC and Duttes"	·
- Kevised COC Re	<u>r 7</u>	V	0	2ma11 2/11/2/3	-
-no package need	ed			8	-
A check in this box indicates that addi	tional	infor	matio	n has been stored in ereports.	

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Sparrows project 30210854 presented the following problems:

- 7 sample times did not match COC/labels
- 2 samples came in marked RW15-MW(S) and no samples were marked RW15-MW(I) $\,$

	Sample Time	COC/Label Time
RW16-MW(S) RW16-MW(I) RW15-MW(I)	0915 1005	0838 0925
RW15-MW(S)	1055 1150	1020 - I - 7 1105 - 9 - 4
RW19-MW(S) RW19-MW(I) RW18-MW(I)	1235 1315 1530	1200

(724)850-5600



February 22, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Area A Parcel AB GW

Pace Project No.: 30211148

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on February 17, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samuella Bayune

samantha.bayura@pacelabs.com

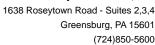
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Area A Parcel AB GW

Pace Project No.: 30211148

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Area A Parcel AB GW

Pace Project No.: 30211148

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30211148001	RW11-MW (I)	Water	02/16/17 09:40	02/17/17 22:00
30211148002	RW06-MW (I)	Water	02/16/17 11:00	02/17/17 22:00
30211148003	RW05-MW (I)	Water	02/16/17 12:08	02/17/17 22:00
30211148004	RW21-PZM 023	Water	02/16/17 13:40	02/17/17 22:00
30211148005	RW20-PZM 020	Water	02/16/17 14:38	02/17/17 22:00
30211148006	RW17-PZM 019	Water	02/16/17 15:34	02/17/17 22:00
30211148007	RW01-PZM 020	Water	02/16/17 16:20	02/17/17 22:00
30211148008	RW13-PZM 020	Water	02/17/17 09:43	02/17/17 22:00
30211148009	RW24-50 ft	Water	02/17/17 11:00	02/17/17 22:00
30211148010	RW23-50 ft	Water	02/17/17 12:00	02/17/17 22:00
30211148011	RW10-PZM 020	Water	02/17/17 12:55	02/17/17 22:00

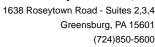


SAMPLE ANALYTE COUNT

Project: Area A Parcel AB GW

Pace Project No.: 30211148

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30211148001	RW11-MW (I)	EPA 6010C	PJD	2
30211148002	RW06-MW (I)	EPA 6010C	PJD	2
30211148003	RW05-MW (I)	EPA 6010C	PJD	2
30211148004	RW21-PZM 023	EPA 6010C	PJD	2
30211148005	RW20-PZM 020	EPA 6010C	PJD	2
30211148006	RW17-PZM 019	EPA 6010C	PJD	2
30211148007	RW01-PZM 020	EPA 6010C	PJD	2
30211148008	RW13-PZM 020	EPA 6010C	PJD	2
30211148009	RW24-50 ft	EPA 6010C	PJD	2
30211148010	RW23-50 ft	EPA 6010C	PJD	2
30211148011	RW10-PZM 020	EPA 6010C	PJD	2





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

General Information:

11 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Serial dilution failed for Cd and Zn

QC Batch: 249840
 PDS failed for Zn

• QC Batch: 249840

Analyte Comments:

QC Batch: 249763

1c: PDS failed for Zn

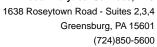
• BLANK (Lab ID: 1229034)

Cadmium

• Zinc

• DUP (Lab ID: 1229036)

Cadmium





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

Analyte Comments:

QC Batch: 249763

1c: PDS failed for Zn

• DUP (Lab ID: 1229036)

• Zinc

• DUP (Lab ID: 1229039)

• Cadmium

Zinc

• LCS (Lab ID: 1229035)

• Cadmium

• Zinc

• MS (Lab ID: 1229037)

• Cadmium

• Zinc

• MS (Lab ID: 1229040)

• Cadmium

• Zinc

• MSD (Lab ID: 1229038)

• Cadmium

Zinc

• RW01-PZM 020 (Lab ID: 30211148007)

Cadmium

• Zinc

• RW05-MW (I) (Lab ID: 30211148003)

Cadmium

• Zinc

• RW06-MW (I) (Lab ID: 30211148002)

• Cadmium

• Zinc

• RW10-PZM 020 (Lab ID: 30211148011)

Cadmium

• Zinc

• RW11-MW (I) (Lab ID: 30211148001)

• Cadmium

• Zinc

• RW13-PZM 020 (Lab ID: 30211148008)

Cadmium

Zinc

• RW17-PZM 019 (Lab ID: 30211148006)

Cadmium

• Zinc

• RW20-PZM 020 (Lab ID: 30211148005)

• Cadmium

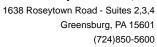
• Zinc

• RW21-PZM 023 (Lab ID: 30211148004)

• Cadmium

REPORT OF LABORATORY ANALYSIS

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





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

Analyte Comments:

QC Batch: 249763

1c: PDS failed for Zn

• RW21-PZM 023 (Lab ID: 30211148004)

Zinc

• RW23-50 ft (Lab ID: 30211148010)

CadmiumZinc

• RW24-50 ft (Lab ID: 30211148009)

Cadmium

• Zinc

2c: Serial dilution failed for Cd and Zn

• BLANK (Lab ID: 1229034)

Cadmium

• Zinc

• DUP (Lab ID: 1229036)

Cadmium

• Zinc

• DUP (Lab ID: 1229039)

• Cadmium

• Zinc

• LCS (Lab ID: 1229035)

Cadmium

Zinc

• MS (Lab ID: 1229037)

• Cadmium

• Zinc

• MS (Lab ID: 1229040)

Cadmium

• Zinc

• MSD (Lab ID: 1229038)

• Cadmium

• Zinc

• RW01-PZM 020 (Lab ID: 30211148007)

Cadmium

• Zinc

• RW05-MW (I) (Lab ID: 30211148003)

Cadmium

• Zinc

• RW06-MW (I) (Lab ID: 30211148002)

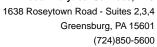
• Cadmium

• Zinc

• RW10-PZM 020 (Lab ID: 30211148011)

Cadmium

• Zinc





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: February 22, 2017

Analyte Comments:

QC Batch: 249763

2c: Serial dilution failed for Cd and Zn

- RW11-MW (I) (Lab ID: 30211148001)
 - Cadmium
 - Zinc
- RW13-PZM 020 (Lab ID: 30211148008)
 - Cadmium
 - Zinc
- RW17-PZM 019 (Lab ID: 30211148006)
 - Cadmium
 - Zinc
- RW20-PZM 020 (Lab ID: 30211148005)
 - Cadmium
 - Zinc
- RW21-PZM 023 (Lab ID: 30211148004)
 - Cadmium
 - Zinc
- RW23-50 ft (Lab ID: 30211148010)
 - Cadmium
 - Zinc
- RW24-50 ft (Lab ID: 30211148009)
 - Cadmium
 - Zinc

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





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Sample: RW11-MW (I)	Lab ID:	30211148001	Collecte	d: 02/16/17	7 09:40	Received: 02/	/17/17 22:00 Ma	atrix: Water			
			Report								
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A											
Cadmium	1690	ug/L	3.0	0.34	1	02/20/17 11:04	02/21/17 01:32	7440-43-9	1c,2c		
Zinc	368000	ug/L	1000	108	100	02/20/17 11:04	02/21/17 02:43	7440-66-6	1c,2c, ML		





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Sample: RW06-MW (I)	Lab ID:	30211148002	Collecte	d: 02/16/17	7 11:00	Received: 02/	17/17 22:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	12.5	ug/L	3.0	0.34	1	02/20/17 11:04	02/21/17 01:47	7440-43-9	1c,2c
Zinc	1900	ug/L	10.0	1.1	1	02/20/17 11:04	02/21/17 01:47	7440-66-6	1c,2c





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Sample: RW05-MW (I)	Lab ID:	Lab ID: 30211148003			7 12:08	Received: 02/	17/17 22:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1070	ug/L	3.0	0.34	1	02/20/17 11:04	02/21/17 01:50	7440-43-9	1c,2c
Zinc	22900	ug/L	1000	108	100	02/20/17 11:04	02/21/17 02:57	7440-66-6	1c,2c





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Sample: RW21-PZM 023	Lab ID:	30211148004	Collecte	d: 02/16/17	7 13:40	Received: 02/	17/17 22:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1170	ug/L	3.0	0.34	1	02/20/17 11:04	02/21/17 02:07	7440-43-9	1c,2c
Zinc	12300	ug/L	1000	108	100	02/20/17 11:04	02/21/17 03:00	7440-66-6	1c,2c





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Sample: RW20-PZM 020	Lab ID:	30211148005	Collecte	d: 02/16/17	7 14:38	Received: 02/	/17/17 22:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	thod: El	PA 3005A			
Cadmium	7.2	ug/L	3.0	0.34	1	02/20/17 11:04	02/21/17 02:09	7440-43-9	1c,2c
Zinc	5250	ug/L	1000	108	100	02/20/17 11:04	02/21/17 03:02	7440-66-6	1c,2c





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Sample: RW17-PZM 019	Lab ID:	30211148006	Collecte	d: 02/16/1	7 15:34	Received: 02/	17/17 22:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	7580	ug/L	300	34.4	100	02/20/17 11:04	02/21/17 03:05	7440-43-9	1c,2c
Zinc	198000	ug/L	1000	108	100	02/20/17 11:04	02/21/17 03:05	7440-66-6	1c,2c





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Sample: RW01-PZM 020	Lab ID:	30211148007	Collecte	d: 02/16/17	7 16:20	Received: 02/	/17/17 22:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	paration Met	hod: El	PA 3005A			-, ·
Cadmium	91.5	ug/L	3.0	0.34	1	02/20/17 11:04	02/21/17 02:14	7440-43-9	1c,2c
Zinc	113000	ug/L	1000	108	100	02/20/17 11:04	02/21/17 03:12	7440-66-6	1c.2c





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Sample: RW13-PZM 020	Lab ID:	30211148008	Collecte	d: 02/17/17	7 09:43	Received: 02/	17/17 22:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	115	ug/L	3.0	0.34	1	02/20/17 11:04	02/21/17 02:16	7440-43-9	1c,2c
Zinc	44300	ug/L	1000	108	100	02/20/17 11:04	02/21/17 03:14	7440-66-6	1c,2c





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Sample: RW24-50 ft	Lab ID:	30211148009	Collecte	d: 02/17/1	7 11:00	Received: 02/	/17/17 22:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	23600	ug/L	300	34.4	100	02/20/17 11:04	02/21/17 03:17	7440-43-9	1c,2c
Zinc	561000	ug/L	10000	1080	1000	02/20/17 11:04	02/21/17 03:29	7440-66-6	1c,2c





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Sample: RW23-50 ft	Lab ID:	30211148010	Collecte	d: 02/17/1	7 12:00	Received: 02/	17/17 22:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	3410	ug/L	3.0	0.34	1	02/20/17 11:04	02/21/17 02:21	7440-43-9	1c,2c
Zinc	176000	ug/L	1000	108	100	02/20/17 11:04	02/21/17 03:19	7440-66-6	1c,2c





Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Sample: RW10-PZM 020	Lab ID: 30211148011 Co			d: 02/17/1	7 12:55	Received: 02/	17/17 22:00 Ma	trix: Water	•
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	paration Me	thod: El	PA 3005A			
Cadmium Zinc	71.6 150000	ug/L ug/L	3.0 1000	0.34 108	1 100	02/20/17 11:04 02/20/17 11:04	02/21/17 02:24 02/21/17 03:22		1c,2c 1c,2c, MH



Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

QC Batch: 249763 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30211148001, 30211148002, 30211148003, 30211148004, 30211148005, 30211148006, 30211148007,

30211148008, 30211148009, 30211148010, 30211148011

METHOD BLANK: 1229034 Matrix: Water

Parameter		Units	Blank Result		porting Limit	MDL		Analy	70d	Ous	alifiers		
												_	
Cadmium		ug/L		3.0 U	3.0			02/21/17	-	-, -			
Zinc		ug/L	10	0.0 U	10.0		1.1	02/21/17	01:28	1c,2c			
LABORATORY CONTROL SA		229035											
			Spike	LCS		LCS	%	Rec					
Parameter		Units	Conc.	Resul	t	% Rec	Lir	nits	Qua	alifiers			
Cadmium		ug/L	500		520	104		80-120	1c,2c				
Zinc		ug/L	500		514	103		80-120	1c,2c				
MATRIX SPIKE & MATRIX SP	IKE DUPLI	CATE: 122903	 37		1229038								
			MS	MSD									
			Spike	Spike	MS	MSD	MS	MS	SD	% Rec		Max	
		30211148001	Spike	Opinto	IVIO								_
Parameter	Units	30211148001 Result	Conc.	Conc.	Result	Result	% Red	c % F	Rec	Limits	RPD	RPD	Qua
	Units ug/L		•	•		Result 2080		2 % F 89	Rec 77	Limits 75-125			1c,2c
Cadmium		Result	Conc.	Conc.	Result			89			3	20	1c,2c 1c,2c
Parameter Cadmium Zinc	ug/L	Result 1690	500 -	500 -	Result 2140	2080		89	77	75-125	3	20	1c,2c
Cadmium	ug/L ug/L	Result 1690	500 -	500 500	Result 2140	2080		89	77	75-125	3	20	1c,2c 1c,2c

MATRIX SPIKE SAMPLE:	1229040	30211148011	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	71.6	500	570	100	75-125	1c,2c
Zinc	ug/L	150000	500	151000	320	75-125	1c,2c,MH

SAMPLE DUPLICATE: 1229036						
		30211148001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	1690	1730	2	20	0 1c,2c
Zinc	ua/L	368000	366000	1	20	0 1c.2c

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALITY CONTROL DATA

Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

SAMPLE DUPLICATE: 1229039						
		30211148011	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	71.6	71.2	1	2	20 1c,2c
Zinc	ug/L	150000	156000	4	2	20 1c,2c

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Area A Parcel AB GW

Pace Project No.: 30211148

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 249840

[1] Serial dilution failed for Cd and Zn

[2] PDS failed for Zn

ANALYTE QUALIFIERS

Date: 02/22/2017 11:36 AM

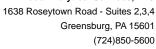
1c PDS failed for Zn

2c Serial dilution failed for Cd and Zn

Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased MH

Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased ML

low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Area A Parcel AB GW

Pace Project No.: 30211148

Date: 02/22/2017 11:36 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30211148001	RW11-MW (I)	EPA 3005A	249763	EPA 6010C	249840
30211148002	RW06-MW (I)	EPA 3005A	249763	EPA 6010C	249840
30211148003	RW05-MW (I)	EPA 3005A	249763	EPA 6010C	249840
30211148004	RW21-PZM 023	EPA 3005A	249763	EPA 6010C	249840
30211148005	RW20-PZM 020	EPA 3005A	249763	EPA 6010C	249840
30211148006	RW17-PZM 019	EPA 3005A	249763	EPA 6010C	249840
30211148007	RW01-PZM 020	EPA 3005A	249763	EPA 6010C	249840
30211148008	RW13-PZM 020	EPA 3005A	249763	EPA 6010C	249840
30211148009	RW24-50 ft	EPA 3005A	249763	EPA 6010C	249840
30211148010	RW23-50 ft	EPA 3005A	249763	EPA 6010C	249840
30211148011	RW10-PZM 020	EPA 3005A	249763	EPA 6010C	249840

-

:

CHAIN-OF-CU

WO#:30211148

DRINKING WATER OTHER ៰៓ I GROUND WATER Page: Ω RCRA REGULATORY AGENCY STATE Site Location T NPDES T UST 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Company Name: EnviroAnalytics Group L DOCUMENT, All relevant Pace Cuote
Reference:
Pace Project Samantha Bayura
Manager:
Pace Profile #: JY / Analytica Laura Sargent invoice information: Section C Attention: Address: The Chain-of-Custody is : Section B
Required Project Information:
Report To: James Calenda Project Name: Project Number: PO Number: Copy To: icalenda@enviroanalyticsgroup.com C Sparrows Point, MD 21219 1430 Sparrows Point Blvd EnviroAnalytics Group F. Analytical www.peceses.com

Section A
Required Client Information:
Company: EnviroAnalyt

Address:

²hone: 314-620-3056 Requested Due Date/TAT:

Email To:

Sandra throw Sand					100	3		C								100	Segui	estec	Ana	Requested Analysis Filtered (Y/N)	FIIte	red	N								
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WT G	# M3TI	Sample IDs MUST BE UNIQUE TISSUE							tool September 1980 - The september 1980	Unpreserved		нсі	· · · · · · · · · · · · · · · · · · ·	Methanol	- M - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1					OF16/6010			NebinsyO lsto					B2.1	: ::::::::::::::::::::::::::::::::::::		:
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	- 52	RW31-PZM	3		Jr. I		2 2	751	_	7.000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						Ĺ	\downarrow	\vdash		\vdash	_		T	╁	<u> </u>					
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A SAMPLER: Cooler (Y/N) Temp in °C	date	a package is required, attach data package checklist.		11/2		34	15	27	50	SZ	Ų	\ \frac{1}{2}	T	1.		O'		0		3	7	2	12		. ,		>	\			$ \rangle$
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of SAMPLER. (MM/DD/NY): A CONTROLL CONTROL						g.	INT Nam		## H	3	R	0	3	13	į.									1	, uj di	ю ра/		as ye	(Y) €E		
						JIS	SNATUR		 	J.	12	14	1	- Common of	1	≥ ۵	TE SI	gned 777):	1.0	7		1100			Ter			opsno	hooD		

Sample Condition Upon Receipt Pittsburgh

Face Analytical Clie	ent Name:	5	Dar	(OC	uS	Project #
Courier:						
Custody Seal on Cooler/Box	Present: 🗌 yes		ño	Seals	intact: yes	☐ no
	~	Timo	of Ico.	Met	Blue None	
Cooler Temperature Obse	erved Temp 2	4	۰c	Corre	ection Factor <u>: -C</u>	C Final Temp: Z.3 °C
emp should be above freezing to						Date and Initials of person examining
					•	contents: 7-17-17
Comments:		Yes	No	N/A		PI C-11-1
Chain of Custody Present:					11.	
Chain of Custody Filled Out:		The state of the s			2	
Chain of Custody Relinquished	:	Salar Marie		ļ	3.	
Sampler Name & Signature on	COC:			<u> </u>	4.	
Sample Labels match COC:			<u> </u>		5.	
-Includes date/time/ID	Matrix:	<u> </u>	I	Т		
Samples Arrived within Hold Ti	me:	A STATE OF THE PARTY OF THE PAR		<u> </u>	6.	
Short Hold Time Analysis (<7	2hr remaining):		in the second	ļ	7.	
Rush Turn Around Time Req	uested:	A STATE OF THE PARTY OF THE PAR		ļ	8.	
Sufficient Volume:		19			9.	·
Correct Containers Used:		A STATE OF THE PARTY OF THE PAR			10.	
-Pace Containers Used:		ASSESSED BY				
Containers Intact:					11.	
Orthophosphate field filtered				Se de la constitución de la cons	12.	
Organic Samples checked f	or dechlorination:				13.	
Filtered volume received for Di	ssolved tests				14.	
All containers have been checked	for preservation.			No. of London	15.	
All containers needing preservation	are found to be in			C Barrella		
compliance with EPA recommenda	ition.			12	Initial when	Date/time of
exceptions: VOA, coliform, TO	OC, O&G, Phenolics				completed (preservation Z-17-17
					Lot # of added preservative	
		T -		J.	16.	
Headspace in VOA Vials (>6n	nm):		<u> </u>		17.	
Trip Blank Present:				A STATE OF THE PARTY OF THE PAR	1	
Trip Blank Custody Seals Pres Rad Aqueous Samples Scree	ened > 0.5 mrem/hr				Initial when completed:	C Date: 2-17-17
Client Notification/ Resolution	on:					Outlanted Divi
Person Contacted:				_Date/	Time:	Contacted By:
Comments/ Resolution:						
☐ A check in this box						

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



March 08, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Area A Parcel A3 GW Pace Project No.: 30212070

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on February 28, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Area A Parcel A3 GW

Pace Project No.: 30212070

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification

Illinois Certification Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888

Montana Certification #: Cert 0082

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

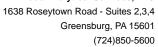
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Area A Parcel A3 GW

Pace Project No.: 30212070

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30212070001	RW13-MWI	Water	02/28/17 11:24	02/28/17 22:10





SAMPLE ANALYTE COUNT

Project: Area A Parcel A3 GW

Pace Project No.: 30212070

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30212070001	RW13-MWI	EPA 8270D by SIM	TMK	3



PROJECT NARRATIVE

Project: Area A Parcel A3 GW

Pace Project No.: 30212070

Method:EPA 8270D by SIMDescription:8270D MSSV PAH by SIMClient:EnviroAnalytics Group, LLC

Date: March 08, 2017

General Information:

1 sample was analyzed for EPA 8270D by SIM. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Surrogates:

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

QC Batch: 250912

S0: Surrogate recovery outside laboratory control limits.

- RW13-MWI (Lab ID: 30212070001)
 - Terphenyl-d14 (S)

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

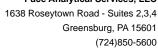
Additional Comments:

Analyte Comments:

QC Batch: 250912

1c: This sample was re-extracted. Surrogate recovery in the re-extract was acceptable and the re-extract results were comparable to the original results. The original, in hold, results are reported.

- RW13-MWI (Lab ID: 30212070001)
 - Terphenyl-d14 (S)





PROJECT NARRATIVE

Project: Area A Parcel A3 GW

Pace Project No.: 30212070

Method:EPA 8270D by SIMDescription:8270D MSSV PAH by SIMClient:EnviroAnalytics Group, LLC

Date: March 08, 2017

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





Project: Area A Parcel A3 GW

Pace Project No.: 30212070

Date: 03/08/2017 10:53 AM

Sample: RW13-MWI	Lab ID:	30212070001	Collected	d: 02/28/17	7 11:24	Received: 02/	28/17 22:10 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical	Method: EPA 8	3270D by SI	M Prepara	tion Me	ethod: EPA 3510C			
1,4-Dioxane (p-Dioxane) Surrogates	0.65	ug/L	0.10	0.030	1	03/03/17 09:06	03/03/17 17:29	123-91-1	
2-Fluorobiphenyl (S)	42	%	19-123		1	03/03/17 09:06	03/03/17 17:29	321-60-8	
Terphenyl-d14 (S)	48	%	58-130		1	03/03/17 09:06	03/03/17 17:29	1718-51-0	1c,S0



QUALITY CONTROL DATA

EPA 8270D by SIM

Project: Area A Parcel A3 GW

Pace Project No.: 30212070

Date: 03/08/2017 10:53 AM

QC Batch: 250912

QC Batch Method: EPA 3510C Analysis Description: 8270D Water PAH by SIM MSSV

Associated Lab Samples: 30212070001

METHOD BLANK: 1234494 Matrix: Water

Associated Lab Samples: 30212070001

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	0.10 U	0.10	0.029	03/03/17 16:44	
2-Fluorobiphenyl (S)	%	64	19-123		03/03/17 16:44	
Terphenyl-d14 (S)	%	90	58-130		03/03/17 16:44	

Analysis Method:

LABORATORY CONTROL SAMPLE: 1234495 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers 1,4-Dioxane (p-Dioxane) ug/L 2 0.40 20 10-79 2-Fluorobiphenyl (S) % 61 19-123 Terphenyl-d14 (S) % 73 58-130

MATRIX SPIKE & MATRIX SP	IKE DUPLICA	TE: 12344	96		1234497							
			MS	MSD								
	3	0212070001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	0.65	2.1	2	1.0	1.0	18	18	10-79	1	20	
2-Fluorobiphenyl (S)	%						53	54	19-123		20	
Terphenyl-d14 (S)	%						70	58	58-130		20	

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Area A Parcel A3 GW

Pace Project No.: 30212070

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

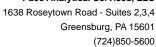
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 03/08/2017 10:53 AM

- 1c This sample was re-extracted. Surrogate recovery in the re-extract was acceptable and the re-extract results were comparable to the original results. The original, in hold, results are reported.
- S0 Surrogate recovery outside laboratory control limits.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Area A Parcel A3 GW

Pace Project No.: 30212070

Date: 03/08/2017 10:53 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30212070001	RW13-MWI	EPA 3510C	250912	EPA 8270D by SIM	251052

F-ALL-Q-020rev.06, 2-Feb-2007

СНАІN-С WO#: 30212070

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The Chain-of-Cu

Pace Analytical

☐ DRINKING WATER OTHER ğ GROUND WATER Page: REGULATORY AGENCY Δ F RCRA Requested Analysis Filtered (Y/N) STATE: NPDES Site Location TSU _ 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Company Name: EnviroAnalytics Group Samantha Bayura Laura Sargent Reference:
Pace Project
Manager:
Pace Profile #: Attention: Address: A Parcel A36W 00 MOREGEI PO Number: AU & LY WAY Report To: James Calenda Section B
Required Project Information: Project Name: Kirea Project Number: Copy To: 37-17 icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 1430 Sparrows Point Blvd Section A
Required Client Information:
Company: EnviroAnalytics Group 314-620-3056 Requested Due Date/TAT: Email To: Address:

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	Section D Valid Matrix Codes Required Client Information MATRIX CODE	Ш	(awo	O	COLLECTED	<u>.</u>			Pre	Preservatives	tives		N/A		\blacksquare					Z							
	DOUGSOLD ST. SOLSOLD ST. SOLSO	see valid codes	SERAB C=C	COMPOSITE START		COMPOSITE END/GRAB	COLLECTION	91			""		^ ;					A3617/m			1664A (ad	(lios) & \\(\(\) \(\) \(\)					
#	Sample IDs MUST BE UNIQUE TISSUE TS	X CODE (a) aqyt a					ONTAINER Served					seT sisy	8270D 8270D			0109/SJ 0 A1747/v	uimondO ine	Nabinsy(lios) S80	1108/ 200 XO/Q	Grease/	Grease/90 al Chlorine					
# M3T1		ІЯТАМ	SAMPLI	DATE TIP	TIME DATE	TIME		# OF C	FONH OS ^z H	HCI	O _s S _s bN	Methar DI Wat		300S	DRO/8	GRO/8		eisvaxeH		h-1		_		ace Pro	ject No	Pace Project No./ Lab I.D.	
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Sample Condition Upon Receipt Pittsburgh SParrows Project # 30212070 Pace Analytical Client Name: Courier: Fed Ex UPS USPS Client Commercial Pace Other Tracking #: Custody Seal on Cooler/Box Present: yes no Seals intact: yes no Type of ice: (Wet) Blue None Thermometer Used Correction Factor: +0,2 °C Final Temp: /.0 Observed Temp ______ C Cooler Temperature Temp should be above freezing to 6°C Date and Initials of person examining contents: N/A Yes No Comments: Chain of Custody Present: Chain of Custody Filled Out: Chain of Custody Relinquished: Sampler Name & Signature on COC: Sample Labels match COC: W -Includes date/time/ID Matrix: Samples Arrived within Hold Time: Short Hold Time Analysis (<72hr remaining): Rush Turn Around Time Requested: Sufficient Volume: 10. Correct Containers Used: -Pace Containers Used: Containers Intact: 12. Orthophosphate field filtered 13. Organic Samples checked for dechlorination: 14. Filtered volume received for Dissolved tests All containers have been checked for preservation. 15. All containers needing preservation are found to be in compliance with EPA recommendation. Date/time of Initial when preservation exceptions: VOA, coliform, TOC, O&G, Phenolics completed Lot # of added preservative 16. Headspace in VOA Vials (>6mm): 17. Trip Blank Present: Trip Blank Custody Seals Present Initial when Rad Aqueous Samples Screened > 0.5 mrem/hr

 \sqcup A check in this box indicates that additional information has been stored in ereports.

Client Notification/ Resolution:

Person Contacted: Comments/ Resolution: _

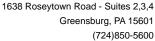
Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

completed:

Date:

Date/Time: Contacted By:





April 03, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Parcel A3 Baseline Pace Project No.: 30214343

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on March 27, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Parcel A3 Baseline

Pace Project No.: 30214343

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

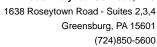
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



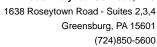


SAMPLE SUMMARY

Project: Parcel A3 Baseline

Pace Project No.: 30214343

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30214343001	RW01-MWI	Water	03/27/17 10:44	03/27/17 22:20
30214343002	RW01-MWS	Water	03/27/17 12:16	03/27/17 22:20
30214343003	RW02-MWI	Water	03/27/17 13:40	03/27/17 22:20
30214343004	RW02-MWS	Water	03/27/17 14:49	03/27/17 22:20
30214343005	RW03-MWI	Water	03/27/17 16:13	03/27/17 22:20



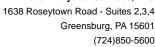


SAMPLE ANALYTE COUNT

Project: Parcel A3 Baseline

Pace Project No.: 30214343

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30214343001	RW01-MWI	EPA 6010C	PJD	2
30214343002	RW01-MWS	EPA 6010C	PJD	2
30214343003	RW02-MWI	EPA 6010C	PJD	2
30214343004	RW02-MWS	EPA 6010C	PJD	2
30214343005	RW03-MWI	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Parcel A3 Baseline

Pace Project No.: 30214343

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 03, 2017

General Information:

5 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Parcel A3 Baseline

Pace Project No.: 30214343

Date: 04/03/2017 03:21 PM

Sample: RW01-MWI	Lab ID:	30214343001	Collecte	d: 03/27/17	10:44	Received: 03/	27/17 22:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	1060	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 21:42	7440-43-9	
Zinc	17800	ug/L	100	10.8	10	03/31/17 08:28	03/31/17 23:19	7440-66-6	MH





Project: Parcel A3 Baseline

Pace Project No.: 30214343

Date: 04/03/2017 03:21 PM

Sample: RW01-MWS	Lab ID:	30214343002	Collecte	d: 03/27/17	12:16	Received: 03/	27/17 22:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	2.9J	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 21:56	7440-43-9	
Zinc	10800	ug/L	100	10.8	10	03/31/17 08:28	03/31/17 23:33	7440-66-6	





Project: Parcel A3 Baseline

Pace Project No.: 30214343

Date: 04/03/2017 03:21 PM

Sample: RW02-MWI	Lab ID:	30214343003	Collecte	d: 03/27/17	13:40	Received: 03/	/27/17 22:20 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	284	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 21:59	7440-43-9	
Zinc	9110	ug/L	100	10.8	10	03/31/17 08:28	03/31/17 23:36	7440-66-6	





Project: Parcel A3 Baseline

Pace Project No.: 30214343

Date: 04/03/2017 03:21 PM

Sample: RW02-MWS	Lab ID:	30214343004	Collecte	d: 03/27/17	7 14:49	Received: 03/	27/17 22:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	9.1	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:07	7440-43-9	
Zinc	34600	ug/L	100	10.8	10	03/31/17 08:28	03/31/17 23:38	7440-66-6	





Project: Parcel A3 Baseline

Pace Project No.: 30214343

Date: 04/03/2017 03:21 PM

Sample: RW03-MWI	Lab ID:	30214343005	Collecte	d: 03/27/17	7 16:13	Received: 03/	27/17 22:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	196	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:09	7440-43-9	
Zinc	9240	ug/L	100	10.8	10	03/31/17 08:28	03/31/17 23:41	7440-66-6	



QUALITY CONTROL DATA

Project: Parcel A3 Baseline

Pace Project No.: 30214343

SAMDLE DUDLICATE: 1250122

Date: 04/03/2017 03:21 PM

 QC Batch:
 253957
 Analysis Method:
 EPA 6010C

 QC Batch Method:
 EPA 3005A
 Analysis Description:
 6010C MET

 Associated Lab Samples:
 30214343001, 30214343002, 30214343003, 30214343004, 30214343005

METHOD BLANK: 1250131 Matrix: Water

Associated Lab Samples: 30214343001, 30214343002, 30214343003, 30214343004, 30214343005

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	03/31/17 21:38	
Zinc	ug/L	10.0 U	10.0	1.1	03/31/17 21:38	

LABORATORY CONTROL SAMPLE:	1250132					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	503	101	80-120	
Zinc	ug/L	500	515	103	80-120	

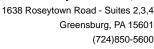
MATRIX SPIKE & MATRIX SPIK	E DUPLIC	ATE: 12501;	34		1250135							
			MS	MSD								
	;	30214343001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	1060	500	500	1610	1620	110	112	75-125	0	20	
Zinc	ug/L	17800	500	500	18400	18700	122	174	75-125	1	20	MH

MATRIX SPIKE SAMPLE:	1250137						
		30214454006	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	11.0	500	526	103	75-125	
Zinc	ug/L	8710	500	9270	112	75-125	

SAMPLE DOFLICATE. 1250155		30214343001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	1060	1080	1	20	
Zinc	ug/L	17800	18100	2	20	

SAMPLE DUPLICATE: 1250136						
		30214454006	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	11.0	11.1	1	20	
Zinc	ug/L	8710	8840	2	20	

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





QUALIFIERS

Project: Parcel A3 Baseline

Pace Project No.: 30214343

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

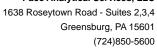
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 04/03/2017 03:21 PM

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Parcel A3 Baseline

Pace Project No.: 30214343

Date: 04/03/2017 03:21 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30214343001	RW01-MWI	EPA 3005A	253957	EPA 6010C	254032
30214343002	RW01-MWS	EPA 3005A	253957	EPA 6010C	254032
30214343003	RW02-MWI	EPA 3005A	253957	EPA 6010C	254032
30214343004	RW02-MWS	EPA 3005A	253957	EPA 6010C	254032
30214343005	RW03-MWI	EPA 3005A	253957	EPA 6010C	254032

WO#:30214343

30214343

Required Project Information:

Section B

Section A Required Client Information:

Pace Analytical

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Page:

Document

pleted accurately.

000 Pace Project No./ Lab I.D. **DRINKING WATER** otal Cadmium's 古人のみる。 Sonal Zhato OTHER ☐ GROUND WATER Residual Chlorine (Y/N) Oil and Grease/9071B (soil) Ø REGULATORY AGENCY os) A4881\ease12 bns liC RCRA Requested Analysis Filtered (Y/N) × × (lios) 2808/809 STATE: Site Location AS106/abinsyOlsto NPDES A36t T/muimondD thelevexel TSU T Mercury/7471A or 7470A NETALS/6010C 3RO/8015B 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 DRO/8015B **2VOC 8270D** \OC\850B Company Name: EnviroAnalytics Group ÎN/A Analysis Test Samantha Bayura Nethanol Laura Sargent Preservatives _EO_SS_SBN HOBN HCI HNO³ × × ^tOS^zH Pace Quote Reference: Pace Project Manager: Pace Profile # Address: Unpreserved Attention: # OF CONTAINERS SAMPLE TEMP AT COLLECTION (340 したかり 1216 1613 323 [13 | 1044 TIME Project Name: Parcel A3 Bas Line COMPOSITE END/GRAB TO TO TO TO COLLECTED DATE COMPOSITE START DATE TIME 12 160236M Report To: James Calenda - author (G=GRAB C=COMP) SAMPLE TYPE B Project Number: MATRIX CODE Y O Number: Copy To: 4-3-17 icalenda@enviroanalyticsgroup.com AIR OTHER TISSUE Sparrows Point, MD 21219 1430 Sparrows Point Blvd (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE EnviroAnalytics Group Requested Due Date/TAT: SーDA-y スまれる RWOI - MWS Fax: SAMPLE ID RWOZ - MWI RW02 - MWS - KEH Section D
Required Client Information hone: 314-620-3056 **元03**公 Rw03 ompany: mail To:

11												
12		,										
ADDITIONAL COMMENTS	RELINGUIS	RELINQUISHED BY / AFFILIATION	DATE	TIME	¥	CEPTED BY /	ACCEPTED BY / AFFILIATION	DATE	TIME	s	SAMPLE CONDITIONS	TIONS
Data Package Required? (Y(N))	Mush Hi	Sun/ Men	3/27/13	1700	A	JA 14.	Who is it	2/5 2/12	12.27			
Data Validation Required? (Y/N)	Mend	of William Style	13/22/17	1839			Marc		22.5%			
in data package is required, attach data package checklist.		TIME AREA	36.2%	0222	Auno	K.NIK		18 18 18 X	5 2200	0	2	7
			1 1)	/ 0		9	12.00 12.00				
Pa	,	SAMPLER N	PLER NAME AND SIGNATURE	NATURE				E		uo	pəje	tact
ge 1		PRINT Name	IT Name of SAMPLER:	Pharles	Ruraes)		n/A)		es In
14 of		SIGNATURE	VATURE of SAMPLER:	Mark	A. Bus	2	DATE Signed (MM/DD/YY): 3/27	41/20		Бесе	polsuO	lqms2 ()
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Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

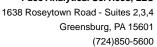
Page 14 of 15

Sample Con	dition Upon Rece	ipt P	ittsb	urg	n	
Face Analytical	Client Name:		S	XX	VONS_	Project #3021434
Courier: Fed Ex Tracking #:	UPS USPS Clier	nt 🗆	Comm	nercial	Pace Other	
Custody Seal on Coole	r/Box Present: yes		no	Seals	s intact: 🔲 yes	no
Thermometer Used	(O	Туре		We	t) Blue None	
Cooler Temperature	Observed Temp 0.	8	°C	Corr	ection Factor <u>: ⊣O</u> ،	O°C Final Temp: (),8°C
Temp should be above free:						Date and Initials of person examining
					7	contents: 12817
Comments:		Yes	No	N/A		AICH
Chain of Custody Presen	nt:				1.	
Chain of Custody Filled C	Out:				2.	
Chain of Custody Relingu	uished:				3.	
Sampler Name & Signatu	ure on COC:	/			4.	
Sample Labels match CO	DC:		L. Series		5.	
-Includes date/time/ID) Matrix:	<u>N</u>				
Samples Arrived within H	lold Time:				6.	
Short Hold Time Analys	is (<72hr remaining):		/		7.	
Rush Turn Around Time	e Requested:				8,	
Sufficient Volume:					9.	·
Correct Containers Used:					10.	
-Pace Containers Use	:d:					
Containers Intact:				un de la composición	11	
Orthophosphate field filter	red			1	12	
Organic Samples chec	ked for dechlorination:			1/	13.	•
Filtered volume received	for Dissolved tests				14.	
All containers have been che	ecked for preservation.				15.	
All containers needing preser compliance with EPA recomr	rvation are found to be in mendation.					
Organic Samples checked for dechlorination: Filtered volume received for Dissolved tests All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics			٠		Initial when completed	Date/time of preservation
					Lot # of added preservative	
leadspace in VOA Vials	(>6mm):			1	16.	
Trip Blank Present:				/,	17.	
Trip Blank Custody Seals	Present			1/		
Rad Aqueous Samples	Screened > 0.5 mrem/hr			1	Initial when completed:	Date:
Client Notification/ Reso	olution:					
				Date/1	Time:	Contacted By:
Comments/ Resolution:						

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





April 03, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Parcel A3 Baseline Pace Project No.: 30214454

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on March 28, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 **Project Manager**

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Parcel A3 Baseline

Pace Project No.: 30214454

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

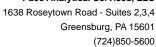
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



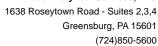


SAMPLE SUMMARY

Project: Parcel A3 Baseline

Pace Project No.: 30214454

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30214454001	RW03-MWS	Water	03/28/17 09:32	03/28/17 23:30
30214454002	RW06-MWI	Water	03/28/17 11:08	03/28/17 23:30
30214454003	RW07-MWI	Water	03/28/17 12:48	03/28/17 23:30
30214454004	RW07-MWS	Water	03/28/17 13:38	03/28/17 23:30
30214454005	RW08-MWI	Water	03/28/17 14:46	03/28/17 23:30
30214454006	RW08-MWS	Water	03/28/17 15:25	03/28/17 23:30
30214454007	RW09-MWS	Water	03/28/17 16:17	03/28/17 23:30



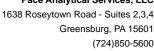


SAMPLE ANALYTE COUNT

Project: Parcel A3 Baseline

Pace Project No.: 30214454

Lab ID	Sample ID	Method	Analysts	Analytes Reported	
30214454001	RW03-MWS	EPA 6010C	PJD	2	
30214454002	RW06-MWI	EPA 6010C	PJD	2	
30214454003	RW07-MWI	EPA 6010C	PJD	2	
30214454004	RW07-MWS	EPA 6010C	PJD	2	
30214454005	RW08-MWI	EPA 6010C	PJD	2	
30214454006	RW08-MWS	EPA 6010C	PJD	2	
30214454007	RW09-MWS	EPA 6010C	PJD	2	





PROJECT NARRATIVE

Project: Parcel A3 Baseline

Pace Project No.: 30214454

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 03, 2017

General Information:

7 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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



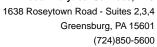


Project: Parcel A3 Baseline

Pace Project No.: 30214454

Date: 04/03/2017 03:19 PM

Sample: RW03-MWS	Lab ID:	Lab ID: 30214454001		Collected: 03/28/17 09:32			Received: 03/28/17 23:30 Matri		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A									
Cadmium Zinc	4.7 6510	ug/L ug/L	3.0 100	0.34 10.8	1 10		03/31/17 22:12 03/31/17 23:49		





Project: Parcel A3 Baseline

Pace Project No.: 30214454

Date: 04/03/2017 03:19 PM

Sample: RW06-MWI	Lab ID:	Lab ID: 30214454002		Collected: 03/28/17 11:08			28/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium	9.2	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:14	7440-43-9	
Zinc	1680	ug/L	10.0	1.1	1	03/31/17 08:28	03/31/17 22:14	7440-66-6	

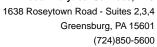




Project: Parcel A3 Baseline

Pace Project No.: 30214454

Sample: RW07-MWI	Lab ID:	Lab ID: 30214454003			Collected: 03/28/17 12:48		28/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	4.6	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:16	7440-43-9	
Zinc	1210	ug/L	10.0	1.1	1	03/31/17 08:28	03/31/17 22:16	7440-66-6	





Project: Parcel A3 Baseline

Pace Project No.: 30214454

Sample: RW07-MWS	Lab ID:	Lab ID: 30214454004			Collected: 03/28/17 13:38		28/17 23:30 Ma	atrix: Water	
5	5 "	11.76	Report	MDI		5		0404	0 1
Parameters	Results	Units	Limit ———————————————————————————————————	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.7J	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:19	7440-43-9	
Zinc	74.8	ug/L	10.0	1.1	1	03/31/17 08:28	03/31/17 22:19	7440-66-6	





Project: Parcel A3 Baseline

Pace Project No.: 30214454

Sample: RW08-MWI	Lab ID:	30214454005	Collecte	d: 03/28/17	7 14:46	Received: 03/	/28/17 23:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: EF	PA 3005A			
Cadmium Zinc	0.39J 44.6	ug/L ug/L	3.0 10.0	0.34 1.1	1 1		03/31/17 22:21 03/31/17 22:21		





Project: Parcel A3 Baseline

Pace Project No.: 30214454

Date: 04/03/2017 03:19 PM

Sample: RW08-MWS Lab ID: 30214454006 Collected: 03/28/17 15:25 Received: 03/28/17 23:30 Matrix: Water

Comments: • Sample ID, collection date and time not listd on sample container

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP/	A 6010C Prep	aration Me	thod: E	PA 3005A			
Cadmium Zinc	11.0 8710	ug/L ug/L	3.0 100	0.34 10.8	1 10		03/31/17 22:24 03/31/17 23:51		





Project: Parcel A3 Baseline

Pace Project No.: 30214454

Date: 04/03/2017 03:19 PM

Sample: RW09-MWS	Lab ID:	Lab ID: 30214454007			Collected: 03/28/17 16:17		28/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	17.5	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:36	7440-43-9	
Zinc	12400	ug/L	100	10.8	10	03/31/17 08:28	03/31/17 23:59	7440-66-6	



QUALITY CONTROL DATA

Project: Parcel A3 Baseline

Pace Project No.: 30214454

Date: 04/03/2017 03:19 PM

Zinc

QC Batch: 253957 Analysis Method: **EPA 6010C** QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

Associated Lab Samples: 30214454001, 30214454002, 30214454003, 30214454004, 30214454005, 30214454006, 30214454007

METHOD BLANK: 1250131 Matrix: Water

Associated Lab Samples: 30214454001, 30214454002, 30214454003, 30214454004, 30214454005, 30214454006, 30214454007

Blank Reporting Limit MDL Parameter Units Result Analyzed Qualifiers Cadmium 3.0 U 3.0 03/31/17 21:38 ug/L 0.34 ug/L 10.0 U 10.0 1 1 03/31/17 21:38

LABORATORY CONTROL SAMPLE: 1250132 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 500 503 101 80-120 ug/L 500 515 103 80-120 Zinc ug/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1250135 1250134 MS MSD 30214343001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 1060 500 500 1610 1620 110 112 75-125 0 20 Zinc ug/L 17800 500 500 18400 18700 122 174 75-125 20 MH

MATRIX SPIKE SAMPLE: 1250137 MS 30214454006 MS % Rec Spike Parameter Units Result Conc. Result % Rec Limits Qualifiers Cadmium 11.0 526 103 75-125 500 ug/L 8710 75-125 500 9270 112 Zinc ug/L

SAMPLE DUPLICATE: 1250133 30214343001 Dup Max Units Result Result RPD RPD Qualifiers Parameter Cadmium 1060 1080 20 ug/L 1 Zinc ug/L 17800 18100 2 20

SAMPLE DUPLICATE: 1250136 30214454006 Dup Max Units Result RPD **RPD** Qualifiers Parameter Result

Cadmium 11.0 ug/L 11.1 1 20 8710 2 Zinc ug/L 8840 20

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Parcel A3 Baseline

Pace Project No.: 30214454

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 04/03/2017 03:19 PM

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Parcel A3 Baseline

Pace Project No.: 30214454

Date: 04/03/2017 03:19 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30214454001	RW03-MWS	EPA 3005A	253957	EPA 6010C	254032
30214454002	RW06-MWI	EPA 3005A	253957	EPA 6010C	254032
30214454003	RW07-MWI	EPA 3005A	253957	EPA 6010C	254032
30214454004	RW07-MWS	EPA 3005A	253957	EPA 6010C	254032
30214454005	RW08-MWI	EPA 3005A	253957	EPA 6010C	254032
30214454006	RW08-MWS	EPA 3005A	253957	EPA 6010C	254032
30214454007	RW09-MWS	EPA 3005A	253957	EPA 6010C	254032

F-ALL-Q-020rev.06, 2-Feb-2007

CHAIN-OF-CUSTODY / Analytical Request Document

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

Face Analytical

3021445

DRINKING WATER OTHER GROUND WATER Page: ΔM REGULATORY AGENCY ☐ RCRA Requested Analysis Filtered (Y/N) Site Location STATE: NPDES ⊥SU _ 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Company Name: EnviroAnalytics Group Samantha Bayura Laura Sargent Invoice Information: Reference: Pace Project Section C ace Quote Address: Det Name: Percel A3 Baseline awaither Po Project Number: 1602 SGM Report To: James Calenda Required Project Information: Section B O Number Copy To: icalenda@enviroanalyticsgroup.com/ Sparrows Point, MD 21219 Requested Due Date/TAT: S-DAY TAT 1430 Sparrows Point Blvd Section A
Required Client Information:

The section A
Required Client Information:

The section A
Required Client BIV
The section A
Required Client Information Client BIV
The section A
Required Client Information Client BIV
The section A
Required Client Information Client Client Client
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The section Client Fax: hone: 314-620-3056 Email To:

___ Page 16 of 17

Client Name: <u>SOΩWΩΛ/S</u> Pr	30 2 1 4 4 5 4 roject #
Courier: Fed Ex UPS USPS Client Commercial Pace Other	
Custody Seal on Cooler/Box Present: yes no Seals intact: yes no	0
Thermometer Used Type of Ice: Wet Blue None	1.7
Cooler Temperature Observed Temp 1.2 °C Correction Factor: +O.C	C Final Temp: 1.2 °C
Temp should be above freezing to 6°C	Date and Initials of person examining
	contents: 3/29/11
Comments: Yes No N/A	SANCE SIZ 1111
Chain of Custody Present: 1.	
Chain of Custody Filled Out: 2.	
Chain of Custody Relinquished: 3.	
Sampler Name & Signature on COC: 4.	lace had no Idate
Sample Labels match COC: 5 5 5 5 5 5 5 5.	onasno 1.D./date/
-Includes date/time/ID Matrix: WT + HMU ON 100++	<u>le.all othersmatche</u>
Samples Arrived within Hold Time: 6.	
Short Hold Time Analysis (<72hr remaining): 7.	
Rush Turn Around Time Requested: 8.	
Sufficient Volume: 9.	·
Correct Containers Used:	
-Pace Containers Used:	
Containers Intact: 11.	
Orthophosphate field filtered 12.	
Organic Samples checked for dechlorination: 13.	
Filtered volume received for Dissolved tests 14.	
All containers have been checked for preservation. 15.	
All containers needing preservation are found to be in compliance with EPA recommendation.	
	te/time of eservation
Lot # of added preservative	
10	
Teadspace III VO/L Vidio (Vollini).	
THE BILLIK FESSER.	
Trip Blank Custody Seals Present Rad Aqueous Samples Screened > 0.5 mrem/hr Initial when	
completed: Dat	(e;
Client Notification/ Resolution:	Contacted Pur
	Contacted By:
Comments/ Resolution:	

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Greensburg, PA 15601 (724)850-5600



April 03, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Parcel A3 Baseline Pace Project No.: 30214572

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on March 29, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

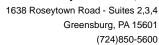
(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Parcel A3 Baseline

Pace Project No.: 30214572

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091
Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Parcel A3 Baseline

Pace Project No.: 30214572

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30214572001	RW09-MWI	Water	03/29/17 08:51	03/29/17 22:40
30214572002	RW11-MWS	Water	03/29/17 09:55	03/29/17 22:40
30214572003	RW11-MWI	Water	03/29/17 10:57	03/29/17 22:40
30214572004	RW12-MWI	Water	03/29/17 12:20	03/29/17 22:40
30214572005	RW16-MWI	Water	03/29/17 13:29	03/29/17 22:40
30214572006	RW16-MWS	Water	03/29/17 14:17	03/29/17 22:40
30214572007	RW19-MWI	Water	03/29/17 15:15	03/29/17 22:40
30214572008	RW19-MWS	Water	03/29/17 16:00	03/29/17 22:40



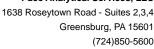


SAMPLE ANALYTE COUNT

Project: Parcel A3 Baseline

Pace Project No.: 30214572

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30214572001	RW09-MWI	EPA 6010C	PJD	2
30214572002	RW11-MWS	EPA 6010C	PJD	2
30214572003	RW11-MWI	EPA 6010C	PJD	2
30214572004	RW12-MWI	EPA 6010C	PJD	2
30214572005	RW16-MWI	EPA 6010C	PJD	2
30214572006	RW16-MWS	EPA 6010C	PJD	2
30214572007	RW19-MWI	EPA 6010C	PJD	2
30214572008	RW19-MWS	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Parcel A3 Baseline

Pace Project No.: 30214572

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 03, 2017

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Parcel A3 Baseline

Pace Project No.: 30214572

Sample: RW09-MWI	Lab ID:	Lab ID: 30214572001			7 08:51	Received: 03/	29/17 22:40 Ma	atrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP	Analytical	Analytical Method: EPA 6010C Preparation Method: EPA 3005A									
Cadmium	4.0	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:38	7440-43-9			
Zinc	51900	ug/L	1000	108	100	03/31/17 08:28	04/01/17 00:01	7440-66-6			





Project: Parcel A3 Baseline

Pace Project No.: 30214572

Sample: RW11-MWS	Lab ID:	Lab ID: 30214572002			09:55	Received: 03/	29/17 22:40 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
- I didilieters							- Analyzeu		— Quai
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	1.8J	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:40	7440-43-9	
Zinc	10500	ug/L	100	10.8	10	03/31/17 08:28	04/01/17 00:03	7440-66-6	





Project: Parcel A3 Baseline

Pace Project No.: 30214572

Date: 04/03/2017 03:16 PM

Sample: RW11-MWI	Lab ID:	30214572003	Collecte	d: 03/29/17	7 10:57	Received: 03/	29/17 22:40 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1490	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:43	7440-43-9	
Zinc	301000	ug/L	1000	108	100	03/31/17 08:28	04/01/17 00:06	7440-66-6	





Project: Parcel A3 Baseline

Pace Project No.: 30214572

Sample: RW12-MWI	Lab ID:	30214572004	Collecte	d: 03/29/17	7 12:20	Received: 03/	29/17 22:40 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3530	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:45	7440-43-9	
Zinc	216000	ug/L	1000	108	100	03/31/17 08:28	04/01/17 00:08	7440-66-6	





Project: Parcel A3 Baseline

Pace Project No.: 30214572

Sample: RW16-MWI	Lab ID:	3021457200	5 Collecte	d: 03/29/17	7 13:29	Received: 03/	29/17 22:40 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	28.6	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:48	7440-43-9	
Zinc	90300	ug/L	1000	108	100	03/31/17 08:28	04/01/17 00:11	7440-66-6	





Project: Parcel A3 Baseline

Pace Project No.: 30214572

Sample: RW16-MWS	Lab ID:	30214572006	Collecte	d: 03/29/17	' 14:17	Received: 03/	29/17 22:40 Ma	atrix: Water	
D	Danilla	11-26-	Report	MDI	D E	Danasasas	A b l	040 N	01
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	13.5	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:50	7440-43-9	
Zinc	4320	ug/L	100	10.8	10	03/31/17 08:28	04/01/17 00:18	7440-66-6	





Project: Parcel A3 Baseline

Pace Project No.: 30214572

Sample: RW19-MWI	Lab ID:	30214572007	Collecte	d: 03/29/1	7 15:15	Received: 03/	29/17 22:40 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	3450	ug/L	300	34.4	100	03/31/17 08:28	04/01/17 00:21	7440-43-9	
Zinc	4650000	ug/L	100000	10800	10000	03/31/17 08:28	04/01/17 00:27	7440-66-6	





Project: Parcel A3 Baseline

Pace Project No.: 30214572

Sample: RW19-MWS	Lab ID:	30214572008	Collecte	d: 03/29/17	16:00	Received: 03/	29/17 22:40 Ma	atrix: Water	
Down or others	Daguita	Llaita	Report	MDI	D E	Duamanad	A a la a al	CACNI	Overl
Parameters	Results -	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	6.9	ug/L	3.0	0.34	1	03/31/17 08:28	03/31/17 22:55	7440-43-9	
Zinc	7100	ug/L	100	10.8	10	03/31/17 08:28	04/01/17 00:23	7440-66-6	



QUALITY CONTROL DATA

Project: Parcel A3 Baseline

Pace Project No.: 30214572

Date: 04/03/2017 03:16 PM

QC Batch: 253957 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30214572001, 30214572002, 30214572003, 30214572004, 30214572005, 30214572006, 30214572007,

30214572008

METHOD BLANK: 1250131 Matrix: Water

Associated Lab Samples: 30214572001, 30214572002, 30214572003, 30214572004, 30214572005, 30214572006, 30214572007.

			Blank	R	eporting								
Parameter		Units	Result	t	Limit	MDL		Analyz	zed	Qua	alifiers		
Cadmium		ug/L	3	3.0 U	3.0)	0.34	03/31/17	21:38				
Zinc		ug/L	10	0.0 U	10.0)	1.1	03/31/17	21:38				
LABORATORY CONTROL SAI	MPLE: 12	250132											
Parameter		Units	Spike Conc.	LCS Resu		LCS % Rec		% Rec Limits	Qu	alifiers			
Cadmium		ug/L	500	-	503	101		80-120			•		
Zinc		ug/L	500		515	103		80-120					
MATRIX SPIKE & MATRIX SPI	IKE DUPLIC	CATE: 12501;	34		1250135								
			MS	MSD									
Parameter	Units	30214343001 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % R			% Rec Limits	RPD	Max RPD	Qua
Cadmium	ug/L	1060	500	500	1610	1620		110	112	75-125	0	20	
Zinc	ug/L	17800	500	500	18400	18700		122	174	75-125	1	20	МН
MATRIX SPIKE SAMPLE:	12	250137											
Parameter		Units	302144 Resu		Spike Conc.	MS Result		MS % Rec		% Rec Limits		Quali	fiers
Cadmium		ug/L		11.0	500	5	26	1	03	75-′	125		
Zinc		ug/L		8710	500	92	270	1	12	75-	125		
SAMPLE DUPLICATE: 1250	133												
Parameter		Units	30214343 Result		Dup Result	RPD		Max RPD		Qualifie	ers		
Cadmium		ug/L		1060	1080)	1		20				
Zinc		ug/L	1	7800	18100)	2		20				
SAMPLE DUPLICATE: 1250	136												
Б		11-9	30214454		Dup	555		Max		0. ""			
Parameter		Units	Result		Result	RPD		RPD		Qualifie	ers ——		
Cadmium		ug/L		11.0	11.1		1		20				

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

REPORT OF LABORATORY ANALYSIS

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

Max

QUALITY CONTROL DATA

Project: Parcel A3 Baseline

Pace Project No.: 30214572

Date: 04/03/2017 03:16 PM

SAMPLE DUPLICATE: 1250136 30214454006 Dup

Parameter Units Result Result RPD RPD Qualifiers

Zinc ug/L 8710 8840 2 20

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Parcel A3 Baseline

Pace Project No.: 30214572

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

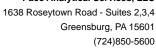
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 04/03/2017 03:16 PM

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Parcel A3 Baseline

Pace Project No.: 30214572

Date: 04/03/2017 03:16 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30214572001	RW09-MWI	EPA 3005A	253957	EPA 6010C	254032
30214572002	RW11-MWS	EPA 3005A	253957	EPA 6010C	254032
30214572003	RW11-MWI	EPA 3005A	253957	EPA 6010C	254032
30214572004	RW12-MWI	EPA 3005A	253957	EPA 6010C	254032
30214572005	RW16-MWI	EPA 3005A	253957	EPA 6010C	254032
30214572006	RW16-MWS	EPA 3005A	253957	EPA 6010C	254032
30214572007	RW19-MWI	EPA 3005A	253957	EPA 6010C	254032
30214572008	RW19-MWS	EPA 3005A	253957	EPA 6010C	254032

GROUND WATER Page: Ø REGULATORY AGENCY ☐ RCRA : Document Site Location NPDES npleted accurately. TSU T 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Company Name: EnviroAnalytics Group Samantha Bayura WO#:30214572 Laura Sargent Pace Quote Reference: Pace Project Manager: Pace Profile #: Address: Attention: 30214570 Project Name: Parcel A3 Bascline Project Number: 11.0 2 % Report To: James Calenda Section B Required Project Information: PO Number of the PO Copy To: icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 1430 Sparrows Point Blvd Pace Analytical www.pecelebs.com EnviroAnalytics Group Fax:

Section A Required Client Information:

Company:

Address:

Phone: 314-620-3056

Email To:

☐ DRINKING WATER

☐ OTHER

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Sample Condition Upon Receipt Pittsburgh Sparrows Project # 30 2 1 4 5 7 2 Face Analytical Client Name: Courier: Fed Ex UPS USPS Client Commercial Pace Other Tracking #: Seals intact: yes no Custody Seal on Cooler/Box Present: yes no Type of Ice: (Wet) Blue None Thermometer Used Observed Temp C Correction Factor: +0.0 °C Final Temp: Cooler Temperature Temp should be above freezing to 6°C Date and Initials of person examining N/A No Yes Comments: Chain of Custody Present: Chain of Custody Filled Out: Chain of Custody Relinquished: Sampler Name & Signature on COC: Sample Labels match COC: Matrix: -Includes date/time/ID Samples Arrived within Hold Time: Short Hold Time Analysis (<72hr remaining): R Rush Turn Around Time Requested: Sufficient Volume: 10. Correct Containers Used: -Pace Containers Used: 11. Containers Intact: 12 Orthophosphate field filtered 13. Organic Samples checked for dechlorination: 14. Filtered volume received for Dissolved tests All containers have been checked for preservation. 15. All containers needing preservation are found to be in compliance with EPA recommendation. Date/time of Initial when preservation exceptions: VOA, coliform, TOC, O&G, Phenolics completed Lot # of added preservative 16. Headspace in VOA Vials (>6mm): 17. Trip Blank Present: Trip Blank Custody Seals Present Initial when Rad Aqueous Samples Screened > 0.5 mrem/hr Date: completed:

Client Notification/ Resolution:

Person Contacted:

Comments/ Resolution:

Date/Time:

Comments/ Resolution:

 \square A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





April 06, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on March 30, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 **Project Manager**

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification

Idaho Certification Illinois Certification

Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133 Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

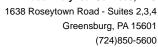
Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198

Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



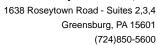


SAMPLE SUMMARY

Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30214700001	RW05-MWI	Water	03/30/17 10:05	03/30/17 23:15
30214700002	RW15-MWI	Water	03/30/17 11:12	03/30/17 23:15
30214700003	RW18-MWI	Water	03/30/17 12:22	03/30/17 23:15
30214700004	RW13-MWI	Water	03/30/17 13:37	03/30/17 23:15
30214700005	RW10-MWI	Water	03/30/17 14:35	03/30/17 23:15



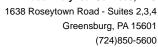


SAMPLE ANALYTE COUNT

Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30214700001	RW05-MWI	EPA 6010C	PJD	2
30214700002	RW15-MWI	EPA 6010C	PJD	2
30214700003	RW18-MWI	EPA 6010C	PJD	2
30214700004	RW13-MWI	EPA 6010C	PJD	2
30214700005	RW10-MWI	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 06, 2017

General Information:

5 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

The serial dilution exceeded the limits for Zn.

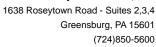
QC Batch: 254323

Analyte Comments:

QC Batch: 254242

1c: The serial dilution exceeded the limits for Zn.

- BLANK (Lab ID: 1251907)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1251909)
 - Cadmium
 - Zinc





PROJECT NARRATIVE

Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 06, 2017

Analyte Comments:

QC Batch: 254242

1c: The serial dilution exceeded the limits for Zn.

- LCS (Lab ID: 1251908)
 - Cadmium
 - Zinc
- MS (Lab ID: 1251910)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1251911)
 - Cadmium
 - Zinc
- RW05-MWI (Lab ID: 30214700001)
 - Cadmium
 - Zinc
- RW10-MWI (Lab ID: 30214700005)
 - Cadmium
 - Zinc
- RW13-MWI (Lab ID: 30214700004)
 - Cadmium
 - Zinc
- RW15-MWI (Lab ID: 30214700002)
 - Cadmium
 - Zinc
- RW18-MWI (Lab ID: 30214700003)
 - Cadmium
 - Zinc

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





Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Date: 04/06/2017 03:59 PM

Sample: RW05-MWI	Lab ID:	30214700001	Collecte	d: 03/30/17	7 10:05	Received: 03/	30/17 23:15 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	791	ug/L	3.0	0.34	1	04/04/17 11:12	04/05/17 00:34	7440-43-9	1c
Zinc	34200	ug/L	1000	108	100	04/04/17 11:12	04/05/17 01:05	7440-66-6	1c,ML





Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Date: 04/06/2017 03:59 PM

Sample: RW15-MWI	Lab ID:	30214700002	30214700002 Collected: 03/30/17 11:12 Received: 03/30/17 23:15 Matrix: Wa						ater	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	74.1	ug/L	3.0	0.34	1	04/04/17 11:12	04/05/17 00:47	7440-43-9	1c	
Zinc	95600	ua/L	1000	108	100	04/04/17 11:12	04/05/17 01:20	7440-66-6	1c	





Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Date: 04/06/2017 03:59 PM

Sample: RW18-MWI	Lab ID:	Lab ID: 30214700003 Collected: 03/30/17 12:22 Received: 03/30/17 23:15					30/17 23:15 Ma	Matrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF_	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	63.8	ug/L	3.0	0.34	1	04/04/17 11:12	04/05/17 00:50	7440-43-9	1c
Zinc	592000	ug/L	10000	1080	1000	04/04/17 11:12	04/05/17 02:15	7440-66-6	1c





Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Date: 04/06/2017 03:59 PM

Sample: RW13-MWI	Lab ID:	30214700004	Collecte	d: 03/30/17	7 13:37	Received: 03/	/30/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	thod: El	PA 3005A			
Cadmium	633	ug/L	3.0	0.34	1	04/04/17 11:12	04/05/17 01:00	7440-43-9	1c
Zinc	58200	ua/L	1000	108	100	04/04/17 11:12	04/05/17 01:31	7440-66-6	1c





Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Date: 04/06/2017 03:59 PM

Sample: RW10-MWI	Lab ID:	30214700005	4700005 Collected: 03/30/17 14:35 Received: 03/30/17 23:15 Matrix					atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.34	1	04/04/17 11:12	04/05/17 01:03	7440-43-9	1c
Zinc	20.4	ug/L	10.0	1.1	1	04/04/17 11:12	04/05/17 01:03	7440-66-6	1c



QUALITY CONTROL DATA

Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Date: 04/06/2017 03:59 PM

 QC Batch:
 254242
 Analysis Method:
 EPA 6010C

 QC Batch Method:
 EPA 3005A
 Analysis Description:
 6010C MET

 Associated Lab Samples:
 30214700001, 30214700002, 30214700003, 30214700004, 30214700005

METHOD BLANK: 1251907 Matrix: Water

Associated Lab Samples: 30214700001, 30214700002, 30214700003, 30214700004, 30214700005

Blank Reporting Limit MDL Parameter Units Result Analyzed Qualifiers Cadmium 3.0 U 3.0 04/05/17 00:29 ug/L 0.34 1c Zinc ug/L 10.0 U 10.0 1 1 04/05/17 00:29 1c

LABORATORY CONTROL SAMPLE: 1251908 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 500 510 102 80-120 1c ug/L Zinc 500 525 105 80-120 1c ug/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1251911 1251910 MSD MS 30214700001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 791 500 500 1320 1310 105 104 75-125 0 20 1c Zinc ug/L 34200 500 500 33800 34100 -88 -34 75-125 20 1c, ML

SAMPLE DUPLICATE: 1251909 30214700001 Dup Max **RPD RPD** Parameter Units Result Result Qualifiers Cadmium 791 815 3 20 1c ug/L 34200 20 1c 34300 0 Zinc ug/L

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 254323

[1] The serial dilution exceeded the limits for Zn.

ANALYTE QUALIFIERS

Date: 04/06/2017 03:59 PM

1c The serial dilution exceeded the limits for Zn.

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Parcel A3 Baseline GW

Pace Project No.: 30214700

Date: 04/06/2017 03:59 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30214700001	RW05-MWI	EPA 3005A	254242	EPA 6010C	254323
30214700002	RW15-MWI	EPA 3005A	254242	EPA 6010C	254323
30214700003	RW18-MWI	EPA 3005A	254242	EPA 6010C	254323
30214700004	RW13-MWI	EPA 3005A	254242	EPA 6010C	254323
30214700005	RW10-MWI	EPA 3005A	254242	EPA 6010C	254323

Document

leted accurately.

30914700 Invoice Information:

Required Project Information:

Section B

Section A Required Client Information:

Pace Analytical

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Page:

Pace Project No./ Lab I.D. Samples Intact (Y/N) DRINKING WATER SAMPLE CONDITIONS Please analyze and Zincouly Sustody Seale (N/Y) OTHER Cadmium Br Total Ice (Y/N) Received on GROUND WATER Residual Chlorine (Y/N) O° ni qmeT (lios) 81709/əssərə bns liC REGULATORY AGENCY Ð os) A4681\essenO bns liC In the second RCRA Requested Analysis Filtered (Y/N) TIME 1830 (lios) Z808/BDc AS106/9binsyO lsto Site Location STATE 3/20/17 NPDES DATE A3617/muimond Inalaysta UST A0T4T to A1T4Tlynoral METALS/6010C Cd3 Zabriy XX DATE Signed (MM/DD/YY): 3RO/8015B 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION DRO/8015B SVOC 8270D \OC\8560B Company Name: EnviroAnalytics Group Analysis Test ÎN/A Di Water Samantha Bayura Methanol Laura Sargent Preservatives Na₂S₂O₃ HOBN HCI Stewart EONH OS2H Pace Quote Reference: Pace Project Manager: Pace Profile #: 1622 SAMPLER NAME AND SIGNATURE Onpreserved TIME Address: 193 # OF CONTAINERS SIGNATURE of SAMPLER: PRINT Name of SAMPLER: 13/20/17 SAMPLE TEMP AT COLLECTION **≥** DATE 1337 1435 TIME 000 000 000 112 1222 COMPOSITE END/GRAB A3 Bascling COLLECTED PAG. DATE 3-30 RELINQUISHED BY / AFFILIATION TIME COMPOSITE roject Number: 160236MReport To: James Calenda DATE Project Name: Parce (G=GRAB C=COMP) **34YT 3J9MA2** B (see valid codes to left) MATRIX CODE DALL O Number Sopy To: Valid Matrix Codes
MATRIX
DENNINOWATER WY
MASTER WASTER WW
PRODUCT
SOLLSOUCH
OIL
OIL
WIPE WW WW SIL SIL OLL OLL OLL ST data package is required, attach data package icalenda@enviroanalyticsgroup.com AIR OTHER TISSUE Sparrows Point, MD 21219 1430 Sparrows Point Blvd ADDITIONAL COMMENTS RW18-MWI RW 13 - MW I RW 10 - MW] RWOS-MWI 5-0ay (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE RW 15 - MW 1 Data Validation Required? (Y個) Data Package Required?(()//N): EnviroAnalytics Group Fax: SAMPLE ID Section D Required Client Information hone: 314-620-3056 Requested Due Date/TAT: checklist company: Email To: ddress: 9 7 7 4 Ŋ 9 œ 6 # Mati N 7 Page 15 of 16

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

Sample Condition Upon Receipt Pittsburgh Sparrows Project # 30 2 14700 - 4 Face Analytical " Client Name: Courier: Fed Ex UPS USPS Client Commercial Pace Other Seals intact: yes no Custody Seal on Cooler/Box Present: yes Type of Ice: Wet Blue None Thermometer Used °C Correction Factor: +0.0°C Final Temp: 1.8 Observed Temp Cooler Temperature Temp should be above freezing to 6°C Date and Initials of person examining contents: N/A Yes No Comments: Chain of Custody Present: Chain of Custody Filled Out: 3, Chain of Custody Relinquished: Sampler Name & Signature on COC: Sample Labels match COC: -Includes date/time/ID Samples Arrived within Hold Time: 7. Short Hold Time Analysis (<72hr remaining): 8. Rush Turn Around Time Requested: 9. Sufficient Volume: 10. Correct Containers Used: -Pace Containers Used: Containers Intact: Orthophosphate field filtered 13. Organic Samples checked for dechlorination: Filtered volume received for Dissolved tests All containers have been checked for preservation. 15. All containers needing preservation are found to be in compliance with EPA recommendation. Date/time of preservation exceptions: VOA, coliform, TOC, O&G, Phenolics completed Lot # of added preservative 16. Headspace in VOA Vials (>6mm): 17. Trip Blank Present: Trip Blank Custody Seals Present Initial when Rad Aqueous Samples Screened > 0.5 mrem/hr Date: completed: Client Notification/ Resolution:

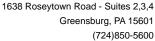
Person Contacted: _____ Date/Time: ____ Contacted By: ______

Comments/ Resolution: ______

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





April 28, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on April 25, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

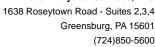
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282 South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

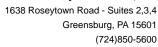


SAMPLE SUMMARY

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30217069001	RW08-MWS	Water	04/25/17 09:18	04/25/17 23:15
30217069002	RW06-MWI	Water	04/25/17 10:43	04/25/17 23:15
30217069003	RW08-MWI	Water	04/25/17 09:58	04/25/17 23:15
30217069004	RW03-MWS	Water	04/25/17 11:37	04/25/17 23:15
30217069005	RW03-MWI	Water	04/25/17 12:07	04/25/17 23:15
30217069006	RW02-MWS	Water	04/25/17 13:09	04/25/17 23:15
30217069007	RW01-MWS	Water	04/25/17 15:56	04/25/17 23:15
30217069008	RW02-MWI	Water	04/25/17 13:58	04/25/17 23:15



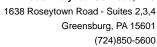


SAMPLE ANALYTE COUNT

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30217069001	RW08-MWS	EPA 6010C	PJD	2
30217069002	RW06-MWI	EPA 6010C	PJD	2
30217069003	RW08-MWI	EPA 6010C	PJD	2
30217069004	RW03-MWS	EPA 6010C	PJD	2
30217069005	RW03-MWI	EPA 6010C	PJD	2
30217069006	RW02-MWS	EPA 6010C	PJD	2
30217069007	RW01-MWS	EPA 6010C	PJD	2
30217069008	RW02-MWI	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 28, 2017

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zinc PDS failed.
• QC Batch: 256680

Analyte Comments:

QC Batch: 256626

1c: Cd and Zinc PDS failed.

- BLANK (Lab ID: 1263894)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1263896)
 - Cadmium
 - Zinc



PROJECT NARRATIVE

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 28, 2017

Analyte Comments:

QC Batch: 256626

1c: Cd and Zinc PDS failed.
• LCS (Lab ID: 1263895)

- Cadmium
- Zinc
- MS (Lab ID: 1263897)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1263898)
 - Cadmium
 - Zinc
- RW01-MWS (Lab ID: 30217069007)
 - Cadmium
 - Zinc
- RW02-MWI (Lab ID: 30217069008)
 - Cadmium
 - Zinc
- RW02-MWS (Lab ID: 30217069006)
 - Cadmium
 - Zinc
- RW03-MWI (Lab ID: 30217069005)
 - Cadmium
 - Zinc
- RW03-MWS (Lab ID: 30217069004)
 - Cadmium
 - Zinc
- RW06-MWI (Lab ID: 30217069002)
 - Cadmium
 - Zinc
- RW08-MWI (Lab ID: 30217069003)
 - Cadmium
 - Zinc
- RW08-MWS (Lab ID: 30217069001)
 - Cadmium
 - Zinc

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





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Date: 04/28/2017 03:03 PM

Sample: RW08-MWS	Lab ID:	30217069001	069001 Collected: 04/25/17 09:18 Received: 04/25/17 23:15 Matrix: Wat						r	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	7.8	ug/L	3.0	0.34	1	04/27/17 08:06	04/27/17 22:23	7440-43-9	1c	
Zinc	9520	ug/L	1000	108	100	04/27/17 08:06	04/27/17 22:59	7440-66-6	1c,MH	





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Date: 04/28/2017 03:03 PM

Sample: RW06-MWI	Lab ID:	30217069002	002 Collected: 04/25/17 10:43 Received: 04/25/17 23:15 Matrix: Wate							
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	14.0	ug/L	3.0	0.34	1	04/27/17 08:06	04/27/17 22:37	7440-43-9	1c	
Zinc	1420	ug/L	10.0	1.1	1	04/27/17 08:06	04/27/17 22:37	7440-66-6	1c	





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Date: 04/28/2017 03:03 PM

Sample: RW08-MWI	Lab ID:	30217069003	69003 Collected: 04/25/17 09:58 Received: 04/25/17 23:15 Matrix: W						Water	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A				
Cadmium	3.0 U	ug/L	3.0	0.34	1	04/27/17 08:06	04/27/17 22:39	7440-43-9	1c	
Zinc	85.0	ug/L	10.0	1.1	1	04/27/17 08:06	04/27/17 22:39	7440-66-6	1c	





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Date: 04/28/2017 03:03 PM

Sample: RW03-MWS	Lab ID:	30217069004	69004 Collected: 04/25/17 11:37 Received: 04/25/17 23:15 Matrix: Wat					atrix: Water	r	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Me	hod: El	PA 3005A				
Cadmium	3.2	ug/L	3.0	0.34	1	04/27/17 08:06	04/27/17 22:47	7440-43-9	1c	
Zinc	4860	ua/L	1000	108	100	04/27/17 08:06	04/27/17 23:21	7440-66-6	1c	





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Date: 04/28/2017 03:03 PM

Sample: RW03-MWI	Lab ID:	30217069005	7069005 Collected: 04/25/17 12:07 Received: 04/25/17 23:15 Matrix: V						:: Water	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	thod: El	PA 3005A				
Cadmium	192	ug/L	3.0	0.34	1	04/27/17 08:06	04/27/17 22:49	7440-43-9	1c	
Zinc	7830	ug/L	1000	108	100	04/27/17 08:06	04/27/17 23:34	7440-66-6	1c	





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Date: 04/28/2017 03:03 PM

Sample: RW02-MWS	Lab ID:	30217069006	Collecte	d: 04/25/17	7 13:09	Received: 04/	25/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	9.8	ug/L	3.0	0.34	1	04/27/17 08:06	04/27/17 22:52	7440-43-9	1c
Zinc	47700	ua/L	1000	108	100	04/27/17 08:06	04/27/17 23:37	7440-66-6	1c





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Date: 04/28/2017 03:03 PM

Sample: RW01-MWS	Lab ID:	30217069007	Collecte	d: 04/25/17	7 15:56	Received: 04/	25/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.7J	ug/L	3.0	0.34	1	04/27/17 08:06	04/27/17 22:54	7440-43-9	1c
Zinc	11500	ua/L	1000	108	100	04/27/17 08:06	04/27/17 23:39	7440-66-6	1c





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Date: 04/28/2017 03:03 PM

Sample: RW02-MWI	Lab ID:	30217069008	Collecte	d: 04/25/17	7 13:58	Received: 04/	25/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A			
Cadmium	296	ug/L	15.0	1.7	5	04/27/17 08:06	04/27/17 23:19	7440-43-9	1c
Zinc	10700	ug/L	1000	108	100	04/27/17 08:06	04/27/17 23:41	7440-66-6	1c



QUALITY CONTROL DATA

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Date: 04/28/2017 03:03 PM

QC Batch: 256626 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30217069001, 30217069002, 30217069003, 30217069004, 30217069005, 30217069006, 30217069007,

30217069008

METHOD BLANK: 1263894 Matrix: Water

Associated Lab Samples: 30217069001, 30217069002, 30217069003, 30217069004, 30217069005, 30217069006, 30217069007,

30217069008

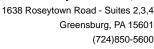
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	04/27/17 22:18	1c
Zinc	ug/L	10.0 U	10.0	1.1	04/27/17 22:18	1c

LABORATORY CONTROL SAMPLE:	1263895	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	512	102	80-120	1c
Zinc	ug/L	500	516	103	80-120	1c

MATRIX SPIKE & MATRIX SPIK	(E DUPLICA	ATE: 126389	97		1263898							
			MS	MSD								
	3	0217069001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	7.8	500	500	513	515	101	101	75-125	0	20	1c
Zinc	ug/L	9520	500	500	10400	10200	170	140	75-125	1	20	1c,MH

SAMPLE DUPLICATE: 1263896		30217069001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	7.8	7.8	0	20 1	С
Zinc	ug/L	9520	9220	3	20 1	С

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





QUALIFIERS

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 256680

[1] Cd and Zinc PDS failed.

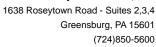
ANALYTE QUALIFIERS

Date: 04/28/2017 03:03 PM

1c Cd and Zinc PDS failed.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217069

Date: 04/28/2017 03:03 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30217069001	RW08-MWS	EPA 3005A	256626	EPA 6010C	256680
30217069002	RW06-MWI	EPA 3005A	256626	EPA 6010C	256680
30217069003	RW08-MWI	EPA 3005A	256626	EPA 6010C	256680
30217069004	RW03-MWS	EPA 3005A	256626	EPA 6010C	256680
30217069005	RW03-MWI	EPA 3005A	256626	EPA 6010C	256680
30217069006	RW02-MWS	EPA 3005A	256626	EPA 6010C	256680
30217069007	RW01-MWS	EPA 3005A	256626	EPA 6010C	256680
30217069008	RW02-MWI	EPA 3005A	256626	EPA 6010C	256680

F-ALL-Q-020rev.06, 2-Feb-2007

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical

Pace Project No./ Lab I.D. Samples Intact (Y/N) DRINKING WATER SAMPLE CONDITIONS OTHER Custody Sealed Cooler (Y/N) WO#:30217069 ŏ Received on Ice (Y/N) > GROUND WATER Residua (1 O° ni qmeT 6 Page: RCRA B REGULATORY AGENCY 12 TIME Requested Analysis Filtered (Y/N) 200 STATE Site Location DATE NPDES TSU □ DATE Signed (MM/DD/YY): 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION 10tal 21/1 + CE 2 Sompany Name: EnviroAnalytics Group JaaT sisylsnA 👃 ÎN/A Ofher Methanol Persis Laura Sargent Preservatives Na₂S₂O₃ NgOH HCI nvoice Information: HNO^3 ⁵OS²H Pace Quote Reference: Pace Project Manager: Pace Profile #: Section C E Onpreserved TIME Attention: N. N. Address: SAMPLER NAME AND SIGNATURE # OF CONTAINERS SIGNATURE of SAMPLER: PRINT Name of SAMPLER: Area A Partel A3 Basonine SAMPLE TEMP AT COLLECTION DATE 958 200 7043 702 182/10 1137 1358 81545K 556 TIME COMPOSITE END/GRAB 力 COLLECTED DATE 0 RELINQUISHED BY / AFFILIATION 170206 M TIME COMPOSITE START Awaiting DATE Report To: James Calenda Required Project Information: 8 T 6 J. J. 10 Km <u>b</u> W[6 ST (S (G=GRAB C=COMP) SAMPLE TYPE 3 7 (see valid codes to left) MATRIX CODE roject Number: Project Name: PO Number: Section B Copy To: Valid Matrix Codes
MATRIX CODE
DRAWGNS WATER
WASTER WATER
PRODUCT
SI
SI
SOLSOLID
OL DW WD If data package is required, attach data package checklist. jcalenda@enviroanalyticsgroup.com RNOZ-MUI RU06- mut RUDS-MUT PUNOI - MUSS RWOZ - MUSS Sparrows Point, MD 21219 RWOB-MUT ADDITIONAL COMMENTS 1430 Sparrows Point Blvd RW03 - mws (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE RWD8-mo EnviroAnalytics Group Data Validation Required? (Y/N) Data Package Required? (YN) SAMPLEID Section D
Required Client Information Requested Due Date/TAF: Section A Required Client Information: 314-620-3056 Email To: Company: Address: hone: £ 9 7 # W3TI œ O Page 18 of 19

30217069

Sample Condition Upon Receipt Pittsburgh

- ∱∴PaceAnalytical 	Client Name:			Er	VÍV	2A	<u>191.</u>	Project #
Courier: Fed Ex	UPS USPS Clier	nt 🔲	Comm	nercial	ф	Pace C	ther	,
Tracking #:	D D	+		01	- !44			7
Custody Seal on Cooler/	Box Present: yes	7	no		s intact:		yes _	_ no
Thermometer Used		Type	of Ice: ° C	\ /	/	e Non		↑°C Final Town: 23 °C
Cooler Temperature Temp should be above freezir	Observed Temp			Corr	ection	-actor	10.C	C Final Temp: 23 °C
remp should be above freezh	ig to o C							Date and Initials of person examining contents:
Comments:		Yes	No	N/A	7			contents: <u>139(7) 9-7</u> 67/
Chain of Custody Present:		V			1.			
Chain of Custody Filled Ou		X			2.	-		
Chain of Custody Relinguis		X			3.			
Sampler Name & Signature		X			4.			
Sample Labels match COC		X			5.			
-Includes date/time/ID	Matrix:	W			1			
Samples Arrived within Hol	Id Time:	X			6.			
Short Hold Time Analysis	s (<72hr remaining):		X		7.			
Rush Turn Around Time		X			8.			
Sufficient Volume:		X			9.			
Correct Containers Used:		X			10.			
-Pace Containers Used:	•	X]			
Containers Intact:		X			11.		•	
Orthophosphate field filtere	ed			\vee	12.			
Organic Samples checke	ed for dechlorination:			X	13.			
Filtered volume received fo	r Dissolved tests			X	14.			
All containers have been chec	ked for preservation.	X			15.	~	un	
All containers needing preserve compliance with EPA recomme		X	,			PI	766	
exceptions: VOA, coliform	, TOC, O&G, Phenolics				Initial w comple Lot # of preserv	ted \n added	<u>ONR</u>	Date/time of preservation
Headspace in VOA Vials (>6mm):			マ	16.			
Trip Blank Present:			X		17.			
Trip Blank Custody Seals P	Present		-	X	1			
Rad Aqueous Samples So				X	Initial w			Date:
Client Notification/ Resolu Person Contacted: Comments/ Resolution:				Date/	Time:			Contacted By:

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Greensburg, PA 15601 (724)850-5600



May 03, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on April 26, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

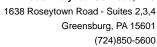
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30217178001	RW01-MWI	Water	04/26/17 11:30	04/26/17 23:50
30217178002	RW07-MWS	Water	04/26/17 12:18	04/26/17 23:50
30217178003	RW07-MWI	Water	04/26/17 13:07	04/26/17 23:50
30217178004	RW09-MWS	Water	04/26/17 13:50	04/26/17 23:50
30217178005	RW09-MWI	Water	04/26/17 14:17	04/26/17 23:50
30217178006	RW12-MWI	Water	04/26/17 15:28	04/26/17 23:50





SAMPLE ANALYTE COUNT

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30217178001	RW01-MWI	EPA 6010C	PJD	2
30217178002	RW07-MWS	EPA 6010C	PJD	2
30217178003	RW07-MWI	EPA 6010C	PJD	2
30217178004	RW09-MWS	EPA 6010C	PJD	2
30217178005	RW09-MWI	EPA 6010C	PJD	2
30217178006	RW12-MWI	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 03, 2017

General Information:

6 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed the PDS
• QC Batch: 257167

Analyte Comments:

QC Batch: 257096

1c: Cd and Zn failed the PDS

- BLANK (Lab ID: 1266420)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1266422)
 - Cadmium
 - Zinc



PROJECT NARRATIVE

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 03, 2017

Analyte Comments:

QC Batch: 257096

1c: Cd and Zn failed the PDS

- DUP (Lab ID: 1266425)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1266421)
 - Cadmium
 - Zinc
- MS (Lab ID: 1266423)
 - Cadmium
 - Zinc
- MS (Lab ID: 1266426)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1266424)
 - Cadmium
 - Zinc
- RW01-MWI (Lab ID: 30217178001)
 - Cadmium
 - Zinc
- RW07-MWI (Lab ID: 30217178003)
 - Cadmium
 - Zinc
- RW07-MWS (Lab ID: 30217178002)
 - Cadmium
 - Zinc
- RW09-MWI (Lab ID: 30217178005)
 - Cadmium
 - Zinc
- RW09-MWS (Lab ID: 30217178004)
 - Cadmium
 - Zinc
- RW12-MWI (Lab ID: 30217178006)
 - Cadmium
 - Zinc

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





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Date: 05/03/2017 10:09 AM

Sample: RW01-MWI	Lab ID:	30217178001	Collecte	d: 04/26/17	7 11:30	Received: 04/	26/17 23:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	859	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 22:11	7440-43-9	1c
Zinc	17400	ug/L	1000	108	100	05/02/17 08:25	05/03/17 01:23	7440-66-6	1c,MH





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Date: 05/03/2017 10:09 AM

Sample: RW07-MWS	Lab ID: 30217178002		Collected: 04/26/17 12:18		Received: 04/26/17 23:50 M		latrix: Water		
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium	1.4J	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 22:25	7440-43-9	1c
Zinc	86.4	ug/L	10.0	1.1	1	05/02/17 08:25	05/02/17 22:25	7440-66-6	1c





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Date: 05/03/2017 10:09 AM

Sample: RW07-MWI	Lab ID:	30217178003	Collecte	d: 04/26/17	13:07	Received: 04/	26/17 23:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 22:27	7440-43-9	1c
Zinc	364	ug/L	10.0	1.1	1	05/02/17 08:25	05/02/17 22:27	7440-66-6	1c





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Date: 05/03/2017 10:09 AM

Sample: RW09-MWS	Lab ID:	30217178004	Collecte	d: 04/26/17	7 13:50	Received: 04/	26/17 23:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	16.6	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 22:37	7440-43-9	1c
Zinc	12900	ug/L	1000	108	100	05/02/17 08:25	05/03/17 01:38	7440-66-6	1c





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Date: 05/03/2017 10:09 AM

Sample: RW09-MWI	Lab ID:	30217178005	Collecte	d: 04/26/17	7 14:17	Received: 04/	26/17 23:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	thod: El	PA 3005A			
Cadmium	5.0	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 22:40	7440-43-9	1c
Zinc	57500	ug/L	1000	108	100	05/02/17 08:25	05/03/17 01:45	7440-66-6	1c





Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Date: 05/03/2017 10:09 AM

Sample: RW12-MWI	Lab ID:	30217178006	Collecte	d: 04/26/17	7 15:28	Received: 04/	26/17 23:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	2730	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 22:42	7440-43-9	1c
Zinc	188000	ug/L	1000	108	100	05/02/17 08:25	05/03/17 01:48	7440-66-6	1c



QUALITY CONTROL DATA

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Date: 05/03/2017 10:09 AM

QC Batch: 257096 Analysis Method: EPA 6010C QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

Associated Lab Samples: 30217178001, 30217178002, 30217178003, 30217178004, 30217178005, 30217178006

METHOD BLANK: 1266420 Matrix: Water

Associated Lab Samples:

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	05/02/17 22:06	1c
Zinc	ug/L	10.0 U	10.0	1.1	05/02/17 22:06	1c

LABORATORY CONTROL SAMPLE:	1266421	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	522	104	80-120	1c
Zinc	ug/L	500	528	106	80-120) 1c

MATRIX SPIKE & MATRIX SPI	KE DUPLICA	TE: 12664	23		1266424							
			MS	MSD								
	30	0217178001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	859	500	500	1450	1420	118	111	75-125	2	20	1c
Zinc	ug/L	17400	500	500	18100	18100	132	134	75-125	0	20	1c,MH

MATRIX SPIKE SAMPLE:	1266426						
		30217316005	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	3380	500	4140	152	75-125	1c,MH
Zinc	ug/L	7010000	500	7420000	81400	75-125	1c,MH

SAMPLE DUPLICATE: 1266422						
		30217178001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	859	842		20	1c
Zinc	ug/L	17400	17400	0	20) 1c

SAMPLE DUPLICATE: 1266425		30217316005	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	3380	3430	1	20	1c
Zinc	ug/L	7010000	7060000	1	20	1c

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Pace Analytica

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 257167

[1] Cd and Zn failed the PDS

ANALYTE QUALIFIERS

Date: 05/03/2017 10:09 AM

1c Cd and Zn failed the PDS

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

hiah





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Area A Parcel A3 Baseline

Pace Project No.: 30217178

Date: 05/03/2017 10:09 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30217178001	RW01-MWI	EPA 3005A	257096	EPA 6010C	257167
30217178002	RW07-MWS	EPA 3005A	257096	EPA 6010C	257167
30217178003	RW07-MWI	EPA 3005A	257096	EPA 6010C	257167
30217178004	RW09-MWS	EPA 3005A	257096	EPA 6010C	257167
30217178005	RW09-MWI	EPA 3005A	257096	EPA 6010C	257167
30217178006	RW12-MWI	EPA 3005A	257096	EPA 6010C	257167

F-ALL-Q-020rev.06, 2-Feb-2007

Samples Intact (V/V)

Cooler (Y/N) Custody Sealed

(N/X) Received on Ice

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7350

F26-17

2350 のから

If data package is required, attach data package checklist.

Data Validation Required? (Y/M)

WO#:30217178 CHAII The Chain

nent rately.

Required Project Information;

Section B

Section A Required Client Information:

Pace Analytical

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Page:

Pace Project No./ Lab I.D. DRINKING WATER 8888 2477 SAMPLE CONDITIONS \overline{g} OTHER GROUND WATER Residual Chlorine (Y/N) RCRA ₽ REGULATORY AGENCY TIME Requested Analysis Filtered (Y/N) Site Location STATE NPDES DATE TSU _ 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION 877-412 wol Company Name: EnviroAnalytics Group JaaT sisylsnA J **∱**N /A Other Methanol Laura Sargent Na₂S₂O₃ Preservatives NaOH HCI [€]ONH Pace Quote Reference: Pace Project Manager: Pace Profile #: 372 [†]OS²H TIME Unpreserved Address: # OF CONTAINERS Troject Name: Area for Parca #3 Baselive SAMPLE TEMP AT COLLECTION 426117 DATE 17.60 1307 1350 528 4/26/17 1130 7117 TIME COMPOSITE END/GRAB 88 COLLECTED DATE TO DOTE RELINQUISHED BY / AFFILIATION TIME COMPOSITE START PO Number: Awaith DATE Report To: James Calenda 77 MITE P \mathcal{P} P (G=GRAB C=COMP) SAMPLE TYPE ٦ MATRIX CODE Copy To: Valid Matrix Codes
MATRIX
CODE
DANGAROWATER
WATER
PRODUCT
OIL
OIL
WIFE
AR
AR
OTHER
TODE 5/2/17 icalenda@enviroanalyticsgroup.com H38-103 IMM- 76/4 H381 RWOI- MUT RW09-mWS RU01120 Sparrows Point, MD 21219 1430 Sparrows Point Blvd ADDITIONAL COMMENTS (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE EnviroAnalytics Group Data Package Required? (Y/┗) Fax SAMPLE ID Requested Due Date/TAT: Lay Section D Required Client Information RNG hone: 314-620-3056 Company: Email To: Address: Ξ 9 # M3TI 5

DATE Signed (MM/DD/YY): Perm S PRINT Name of SAMPLER: SIGNATURE of SAMPLER:

Page 16 of 17

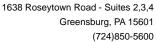
SAMPLER NAME AND SIGNATURE

Sample Condition Upon Receipt Pittsburgh Enviro Ana. Project # 30217178 Pace Analytical " Client Name: Courier: Fed Ex UPS USPS Client Commercial Pace Other Tracking #: Custody Seal on Cooler/Box Present: yes Seals intact: yes no Wet Type of Ice: Blue None Thermometer Used Correction Factor. TO C Final Temp: Observed Temp Cooler Temperature Temp should be above freezing to 6°C Date and Initials N/A No Comments: Yes Chain of Custody Present. 1. Chain of Custody Filled Out: 2. 3. Chain of Custody Relinquished: Sampler Name & Signature on COC: 5. Sample Labels match COC: -Includes date/time/ID Matrix Samples Arrived within Hold Time: Short Hold Time Analysis (<72hr remaining): Rush Turn Around Time Requested: 8. 9. Sufficient Volume: 10. Correct Containers Used: -Pace Containers Used: Containers Intact: 11. Orthophosphate field filtered 12. Organic Samples checked for dechlorination: 13. Filtered volume received for Dissolved tests All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation. Date/time of exceptions: VOA, coliform, TOC, O&G, Phenolics completed preservation Lot # of added preservative Headspace in VOA Vials (>6mm): 16. Trip Blank Present 17. Trip Blank Custody Seals Present Rad Aqueous Samples Screened > 0.5 mrem/hr nitial when completed: Date: Client Notification/ Resolution: Person Contacted: Date/Time: Comments/ Resolution:

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS, The review is in the Status section of the Workorder Edit Screen,





May 03, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on April 27, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282 South Dakota Certification

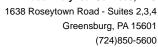
Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868

Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30217316001	RW11-MWI	Water	04/27/17 09:08	04/27/17 23:20
30217316002	RW11-MWS	Water	04/27/17 10:05	04/27/17 23:20
30217316003	RW18-MWI	Water	04/27/17 11:15	04/27/17 23:20
30217316004	RW19-MWS	Water	04/27/17 11:52	04/27/17 23:20
30217316005	RW19-MWI	Water	04/27/17 12:17	04/27/17 23:20
30217316006	RW16-MWS	Water	04/27/17 14:07	04/27/17 23:20
30217316007	RW16-MWI	Water	04/27/17 14:40	04/27/17 23:20
30217316008	RW15-MWI	Water	04/27/17 15:20	04/27/17 23:20

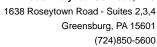


SAMPLE ANALYTE COUNT

Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30217316001	RW11-MWI	EPA 6010C	PJD	2
30217316002	RW11-MWS	EPA 6010C	PJD	2
30217316003	RW18-MWI	EPA 6010C	PJD	2
30217316004	RW19-MWS	EPA 6010C	PJD	2
30217316005	RW19-MWI	EPA 6010C	PJD	2
30217316006	RW16-MWS	EPA 6010C	PJD	2
30217316007	RW16-MWI	EPA 6010C	PJD	2
30217316008	RW15-MWI	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 03, 2017

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed the PDS
• QC Batch: 257167

Analyte Comments:

QC Batch: 257096

1c: Cd and Zn failed the PDS

- BLANK (Lab ID: 1266420)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1266422)
 - Cadmium
 - Zinc



PROJECT NARRATIVE

Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 03, 2017

Analyte Comments:

QC Batch: 257096

1c: Cd and Zn failed the PDS

- DUP (Lab ID: 1266425)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1266421)
 - Cadmium
 - Zinc
- MS (Lab ID: 1266423)
 - Cadmium
 - Zinc
- MS (Lab ID: 1266426)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1266424)
 - Cadmium
 - Zinc
- RW11-MWI (Lab ID: 30217316001)
 - Cadmium
 - Zinc
- RW11-MWS (Lab ID: 30217316002)
 - Cadmium
 - Zinc
- RW15-MWI (Lab ID: 30217316008)
 - Cadmium
 - Zinc
- RW16-MWI (Lab ID: 30217316007)
 - Cadmium
 - Zinc
- RW16-MWS (Lab ID: 30217316006)
 - Cadmium
 - Zinc
- RW18-MWI (Lab ID: 30217316003)
 - Cadmium
 - Zinc
- RW19-MWI (Lab ID: 30217316005)
 - Cadmium
 - Zinc
- RW19-MWS (Lab ID: 30217316004)
 - Cadmium
 - Zinc

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





Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Date: 05/03/2017 11:19 AM

Sample: RW11-MWI	Lab ID:	Lab ID: 30217316001			7 09:08	Received: 04/	27/17 23:20 Ma	atrix: Water	ix: Water	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A				
Cadmium	1800	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 22:45	7440-43-9	1c	
Zinc	288000	ua/L	1000	108	100	05/02/17 08:25	05/03/17 01:50	7440-66-6	1c	





Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Date: 05/03/2017 11:19 AM

Sample: RW11-MWS	Lab ID:	Lab ID: 30217316002			7 10:05	Received: 04/	27/17 23:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Me	hod: El	PA 3005A			
Cadmium	5.3	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 22:47	7440-43-9	1c
Zinc	13100	ua/L	1000	108	100	05/02/17 08:25	05/03/17 01:53	7440-66-6	1c



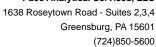


Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Date: 05/03/2017 11:19 AM

Sample: RW18-MWI	Lab ID:	Lab ID: 30217316003			7 11:15	Received: 04/	27/17 23:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Me	thod: Ef	PA 3005A			
Cadmium	119	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 22:49	7440-43-9	1c
Zinc	633000	ua/L	10000	1080	1000	05/02/17 08:25	05/03/17 02:32	7440-66-6	1c





Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Date: 05/03/2017 11:19 AM

Sample: RW19-MWS	Lab ID:	Lab ID: 30217316004			7 11:52	Received: 04/	27/17 23:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	8.5	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 22:52	7440-43-9	1c
Zinc	6260	ua/L	1000	108	100	05/02/17 08:25	05/03/17 01:57	7440-66-6	1c





Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Date: 05/03/2017 11:19 AM

Sample: RW19-MWI Lab ID: 30217316005			Collecte	d: 04/27/1	7 12:17	Received: 04/	27/17 23:20 Ma	Natrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Analytical Method: EPA 60			thod: EF	PA 3005A			
Cadmium	3380	ug/L	300	34.4	100	05/02/17 08:25	05/03/17 02:00	7440-43-9	1c,MH
Zinc	7010000	ug/L	100000	10800	10000	05/02/17 08:25	05/03/17 02:35	7440-66-6	1c,MH





Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Date: 05/03/2017 11:19 AM

Sample: RW16-MWS	Lab ID:	Lab ID: 30217316006			14:07	Received: 04/	27/17 23:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	11.9	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 23:15	7440-43-9	1c
Zinc	3350	ug/L	10.0	1.1	1	05/02/17 08:25	05/02/17 23:15	7440-66-6	1c





Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Date: 05/03/2017 11:19 AM

Sample: RW16-MWI	Lab ID:	Lab ID: 30217316007			7 14:40	Received: 04/	27/17 23:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	194	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 23:18	7440-43-9	1c
Zinc	314000	ua/L	1000	108	100	05/02/17 08:25	05/03/17 02:07	7440-66-6	1c





Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Date: 05/03/2017 11:19 AM

Sample: RW15-MWI	Lab ID:	Lab ID: 30217316008			7 15:20	Received: 04/	27/17 23:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	109	ug/L	3.0	0.34	1	05/02/17 08:25	05/02/17 23:20	7440-43-9	1c
Zinc	122000	ua/L	1000	108	100	05/02/17 08:25	05/03/17 02:22	7440-66-6	1c



QUALITY CONTROL DATA

Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Date: 05/03/2017 11:19 AM

QC Batch: 257096 Analysis Method: EPA 6010C QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

30217316001, 30217316002, 30217316003, 30217316004, 30217316005, 30217316006, 30217316007, Associated Lab Samples:

30217316008

METHOD BLANK: 1266420 Matrix: Water

30217316001, 30217316002, 30217316003, 30217316004, 30217316005, 30217316006, 30217316007,Associated Lab Samples:

	316008		Blank	Re	eporting								
Parameter	Uni	ts	Resul		Limit	MDL		Ana	lyzed	Qua	alifiers		
Cadmium	ug/			3.0 U	3.0				7 22:06			_	
Zinc	ug/	L	10).0 U	10.0		1.1	05/02/1	17 22:06	1c			
LABORATORY CONTROL SAMPLI	E: 1266421												
Parameter	Uni	ts	Spike Conc.	LCS Resu		LCS % Rec		Rec	Qı	alifiers			
Cadmium	ug/		500		522	104		80-12					
Zinc	ug/		500		528	106		80-12					
MATRIX SPIKE & MATRIX SPIKE [DUPLICATE:	126642			1266424								
	302171	70001	MS Spike	MSD Spike	MS	MSD	MS		MSD	% Rec		Max	
Parameter		esult	Conc.	Spike Conc.	Result	Result	% Re		Rec		RPD		Qual
Cadmium	ug/L	859	500	500	1450	1420		118	111	75-125	2	20	1c
Zinc	ug/L	17400	500	500	18100	18100	•	132	134	75-125	0	20	1c,MH
MATRIX SPIKE SAMPLE:	1266426												
Parameter	Uni	ts	302173 ² Resi		Spike Conc.	MS Result		MS % Rec		% Rec Limits		Quali	fiers
Cadmium	ug/			3380	500	41	 40		152		 125 1c	, MH	
Zinc	ug/		7	010000	500	74200	00	81	1400		125 10		
SAMPLE DUPLICATE: 1266422													
SAMPLE DUPLICATE: 1266422 Parameter	Uni	ts	30217178 Result		Dup Result	RPD		Ma: RPI		Qualifie	ers		
	Uni ug/										ers		
Parameter		L	Result	t	Result) 	1c	ers		
Parameter Cadmium	ug/	L	Result	859 7400	Result 842 17400			RPI	20	1c	ers		
Parameter Cadmium Zinc	ug/	L L	Result	859 7400	Result 842				20 - 20 -	1c			

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALITY CONTROL DATA

Project: Parce

Parcel A3 GW Baseline

Pace Project No.: 30217316

Date: 05/03/2017 11:19 AM

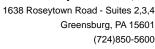
SAMPLE DUPLICATE: 1266425

30217316005 Dup Max

 Parameter
 Units
 Result
 Result
 RPD
 RPD
 Qualifiers

 Zinc
 ug/L
 7010000
 7060000
 1
 20
 1c

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





QUALIFIERS

Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 257167

[1] Cd and Zn failed the PDS

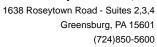
ANALYTE QUALIFIERS

Date: 05/03/2017 11:19 AM

1c Cd and Zn failed the PDS

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

hiah





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Parcel A3 GW Baseline

Pace Project No.: 30217316

Date: 05/03/2017 11:19 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30217316001	RW11-MWI	EPA 3005A	257096	EPA 6010C	257167
30217316002	RW11-MWS	EPA 3005A	257096	EPA 6010C	257167
30217316003	RW18-MWI	EPA 3005A	257096	EPA 6010C	257167
30217316004	RW19-MWS	EPA 3005A	257096	EPA 6010C	257167
30217316005	RW19-MWI	EPA 3005A	257096	EPA 6010C	257167
30217316006	RW16-MWS	EPA 3005A	257096	EPA 6010C	257167
30217316007	RW16-MWI	EPA 3005A	257096	EPA 6010C	257167
30217316008	RW15-MWI	EPA 3005A	257096	EPA 6010C	257167

Pace Analytical "

CHAIN-OF-CUSTODY / Analytical Request Document

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

いころかもしから Pace Project No./ Lab I.D. (N/Y)Sample Conditions P DRINKING WATER Sealed Cooler (Y/N) TOTHER Ice (Y/N) Received on - NPDES - GROUND WATER 25 Residual Chlorine (Y/N) TIME MD CB/680 (ad) REGULATORY AGENCY 1984 T/(Istot) muimont Chromium (total)/7196A T RCRA Page: Requested Analysis Filtered (Y/N) シンし DATE NETALS (total)/6010C exavalent Chromium (dissolved)/719 Site Location STATE: UST Otal Cyanide/9012A Mercury/7471A or 7470A Opt08/(bevlossib) 8JAT∃N DATE Signed (MM/DD/YY): 3RO/8015B ACCEPTED BY / AFFILIATION 1650 Des Peres Road, Suite 303 St. Louis, MO 6313 B3108/07C 3VOC 8270D 142 140 10 01 14 CA ompany Name: EnviroAnalytics Group JesT sisylsnA **1** // Other Samantha Bayura Methanol nd agreeing to late charges of 1.5% per month for any invoices not paid within 30 days 156 Perr Marin Laura Sargen Preservatives Na₂S₂O₃ HOBN НСІ nvoice Information: HNO³ ⁵OS^zH 1842 Pace Project Manager: Pace Profile #: 1660 Section C TIME Unpreserved ace Quote ttention: ddress: SAMPLER NAME AND SIGNATURE # OF CONTAINERS SIGNATURE of SAMPLER: PRINT Name of SAMPLER: 4/21/1 SAMPLE TEMP AT COLLECTION DATE 520 3 1217 1440 ES S NO I 1887 TIME 906 gy/cg/ 86.50 COMPOSITE END/GRAB 2 COLLECTED DATE g S RELINQUISHED BY / AFFILIATION 3 Project Number: ANSal throp TIME COMPOSITE PO Number: Awaitung Project Name: parce | A3 DATE Report To: James Calenda Required Project Information: 3 A P <u>Q</u> SAMPLE TYPE ø 0 \mathscr{C} (G=GRAB C=COMP) 7 F 7 Z 7 (see valid codes to left) MATRIX CODE Section B Copy To: Valid Matrix Codes WO#:30217316 DRINKING WATER
WATER
WASTE WATER
PRODUCT
SOIL/SOLID 4/3/2017(5 Day TAT) data package is required, attachidata package icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 1430 Sparrows Point Blvd RWIS-MWT ADDITIONAL COMMENTS RW18-MW7 Ry 16- my F Data Validation Required? (Y/M): AW 19- MUT (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE PU 19- 700 Data Package Required? (Y/N); EnviroAnalytics Group 2 16-mus けるとしころと Sand-コマプ SAMPLE ID Fax: Required Client Information Section A Required Client Information: 314-620-3056 Requested Due Date/TAT: Address: F 2 m 'n 6 9 # WHL 19 of 20

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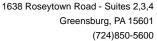
Sample Condition Upon Receipt Pittsburgh

Pace Analytical Client Name:		<u>Sn</u>	ÀVC	And Project #
Courier: Fed Ex UPS USPS Clier	nt 🗆	Comm	ercial	Pace Other
Custody Seal on Cooler/Box Present: yes		no	Seals	intact: yes no
Thermometer Used	Type	of Ice:	Wet	Blue None
Cooler Temperature Observed Temp	.6	۰c		ection Factor: TOO °C Final Temp: U/ °C
Temp should be above freezing to 6°C		•		
				Date and Initials of person examining contents:
Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	\searrow			4.
Sample Labels match COC:	X		ļ	5.
-Includes date/time/ID Matrix:	<u> W</u>		,	
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X.		7.
Rush Turn Around Time Requested:	15		<u> </u>	8.
Sufficient Volume:	>			9.
Correct Containers Used:	丛			10.
-Pace Containers Used:	X	·		
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests	-		X	14.
All containers have been checked for preservation.	17			15.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when Date/time of completed Physics preservation
	,	ı 	· · /	preservative
Headspace in VOA Vials (>6mm):	ļ	<i>,</i>	X	16.
Trip Blank Present:		工	_	17.
Trip Blank Custody Seals Present	ļ		X	
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed: Date:
Client Notification/ Resolution:				
Person Contacted:			Date/	Time: Contacted By:
Comments/ Resolution:				
	· · · · · · · · · · · · · · · · · · ·			
			·····	

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





May 03, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Area A Parcel A3 GW

Pace Project No.: 30217500

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on April 28, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Area A Parcel A3 GW

Pace Project No.: 30217500

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391 Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

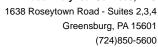
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



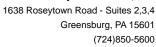


SAMPLE SUMMARY

Project: Area A Parcel A3 GW

Pace Project No.: 30217500

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
30217500001	RW05-MWI	Water	04/28/17 00:00	04/28/17 22:45	
30217500002	RW10-MWI	Water	04/28/17 13:12	04/28/17 22:45	
30217500003	RW13-MWI	Water	04/28/17 14:03	04/28/17 22:45	



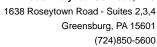


SAMPLE ANALYTE COUNT

Project: Area A Parcel A3 GW

Pace Project No.: 30217500

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30217500001	RW05-MWI	EPA 6010C	PJD	2
30217500002	RW10-MWI	EPA 6010C	PJD	2
30217500003	RW13-MWI	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Area A Parcel A3 GW

Pace Project No.: 30217500

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 03, 2017

General Information:

3 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed the PDS
• QC Batch: 257167

Analyte Comments:

QC Batch: 257096

1c: Cd and Zn failed the PDS

- BLANK (Lab ID: 1266420)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1266422)
 - Cadmium
 - Zinc



PROJECT NARRATIVE

Project: Area A Parcel A3 GW

Pace Project No.: 30217500

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 03, 2017

Analyte Comments:

QC Batch: 257096

1c: Cd and Zn failed the PDS

- DUP (Lab ID: 1266425)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1266421)
 - Cadmium
 - Zinc
- MS (Lab ID: 1266423)
 - Cadmium
 - Zinc
- MS (Lab ID: 1266426)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1266424)
 - Cadmium
 - Zinc
- RW05-MWI (Lab ID: 30217500001)
 - Cadmium
 - Zinc
- RW10-MWI (Lab ID: 30217500002)
 - Cadmium
 - Zinc
- RW13-MWI (Lab ID: 30217500003)
 - Cadmium
 - Zinc

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





Project: Area A Parcel A3 GW

Pace Project No.: 30217500

Date: 05/03/2017 11:12 AM

Sample: RW05-MWI Lab ID: 30217500001 Collected: 04/28/17 00:00 Received: 04/28/17 22:45 Matrix: Water

Comments: • Collection time not provided on COC. Report **Parameters** Results Units Limit MDL DF Prepared Analyzed CAS No. Qual **6010C MET ICP** Analytical Method: EPA 6010C Preparation Method: EPA 3005A Cadmium 1600 ug/L 3.0 0.34 1 1c Zinc 25000 ug/L 1000 108 05/02/17 08:25 05/03/17 02:25 7440-66-6 100 1c





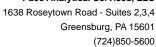
Project: Area A Parcel A3 GW

Pace Project No.: 30217500

Date: 05/03/2017 11:12 AM

Sample: RW10-MWI Lab ID: 30217500002 Collected: 04/28/17 13:12 Received: 04/28/17 22:45 Matrix: Water

Comments: • Collection time not provided on COC. Report **Parameters** Results Units Limit MDL DF Prepared Analyzed CAS No. Qual **6010C MET ICP** Analytical Method: EPA 6010C Preparation Method: EPA 3005A Cadmium 198 ug/L 3.0 0.34 1 1c Zinc 75800 ug/L 1000 108 100 1c





Project: Area A Parcel A3 GW

Pace Project No.: 30217500

Date: 05/03/2017 11:12 AM

Sample: RW13-MWI Lab ID: 30217500003 Collected: 04/28/17 14:03 Received: 04/28/17 22:45 Matrix: Water

Comments: • Collection time not provided on COC. Report **Parameters** Results Units Limit MDL DF Prepared Analyzed CAS No. Qual **6010C MET ICP** Analytical Method: EPA 6010C Preparation Method: EPA 3005A Cadmium 1370 ug/L 3.0 0.34 1 1c Zinc 70500 ug/L 1000 108 05/02/17 08:25 05/03/17 02:30 7440-66-6 100 1c



QUALITY CONTROL DATA

Project: Area A Parcel A3 GW

Pace Project No.: 30217500

Date: 05/03/2017 11:12 AM

QC Batch: 257096 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30217500001, 30217500002, 30217500003

METHOD BLANK: 1266420 Matrix: Water

Associated Lab Samples: 30217500001, 30217500002, 30217500003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	05/02/17 22:06	1c
Zinc	ug/L	10.0 U	10.0	1.1	05/02/17 22:06	1c

LABORATORY CONTROL SAMPLE: 1266421 Spike LCS LCS % Rec Result Parameter Units Conc. % Rec Limits Qualifiers Cadmium ug/L 500 522 104 80-120 1c Zinc ug/L 500 528 106 80-120 1c

MATRIX SPIKE & MATRIX SPIK	E DUPLIC	ATE: 126642	23		1266424							
			MS	MSD								
	;	30217178001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	859	500	500	1450	1420	118	111	75-125	2	20	1c
Zinc	ug/L	17400	500	500	18100	18100	132	134	75-125	0	20	1c,MH

MATRIX SPIKE SAMPLE:	1266426						
		30217316005	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	3380	500	4140	152	75-125	1c,MH
Zinc	ug/L	7010000	500	7420000	81400	75-125	1c,MH

SAMPLE DUPLICATE: 1266422						
		30217178001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	859	842	2	20	1c
Zinc	ug/L	17400	17400	0	20	1c

SAMPLE DUPLICATE: 1266425						
		30217316005	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD Qu	alifiers
Cadmium	ug/L	3380	3430	1	20 1c	
Zinc	ug/L	7010000	7060000	1	20 1c	

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



QUALIFIERS

Project: Area A Parcel A3 GW

Pace Project No.: 30217500

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 257167

[1] Cd and Zn failed the PDS

ANALYTE QUALIFIERS

Date: 05/03/2017 11:12 AM

1c Cd and Zn failed the PDS

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

hiah





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Area A Parcel A3 GW

Pace Project No.: 30217500

Date: 05/03/2017 11:12 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30217500001	RW05-MWI	EPA 3005A	257096	EPA 6010C	257167
30217500002	RW10-MWI	EPA 3005A	257096	EPA 6010C	257167
30217500003	RW13-MWI	EPA 3005A	257096	EPA 6010C	257167

F-ALL-Q-020rev.06, 2-Feb-2007

CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical www.pacelabs.com

Figure Board Coup Security School Security S	ië .	Section B Required Project Information:	Section C Invoice Information:	500 Page: Of
Multiplication of State Box 1 Art Part And Company Name Environment Manner Environment Ma	Company: EnviroAnalytics Group	Report To: James Calenda	ıra Sargent)
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	2 13	SIGNATURE of SAMPI	10000	Temp

14

Sample Condition Upon Receipt Pittsburgh a , Face Analytical Sparrons Client Name: Courier: Fed Ex UPS USPS Client Commercial Pace Other Tracking #: Custody Seal on Cooler/Box Present: yes no Seals intact: ves no Type of ice: (Wet Blue None Thermometer Used °C Correction Factor: +0.0 °C Final Temp: 1,1 Observed Temp Cooler Temperature Temp should be above freezing to 6°C Date and Initials of person examining contents N/A Comments: Yeş No Chain of Custody Present: Chain of Custody Filled Out: Chain of Custody Relinquished: Sampler Name & Signature on COC: 5. NO time (n 00), time (n 002)5 1312 003 (51403 Sample Labels match COC: -Includes date/time/ID Matrix: Samples Arrived within Hold Time: Short Hold Time Analysis (<72hr remaining): 8. Rush Turn Around Time Requested: Sufficient Volume: Correct Containers Used: 10. -Pace Containers Used: Containers Intact: 11. 12. Orthophosphate field filtered 13. Organic Samples checked for dechlorination: Filtered volume received for Dissolved tests All containers have been checked for preservation. 15. All containers needing preservation are found to be in compliance with EPA recommendation. Initial when Date/time of exceptions: VOA, coliform, TOC, O&G, Phenolics completed preservation Lot # of added preservative Headspace in VOA Vials (>6mm): 16. 17. Trip Blank Present: Trip Blank Custody Seals Present Rad Aqueous Samples Screened > 0.5 mrem/hr Initial when completed: Client Notification/ Resolution: Date/Time: Contacted By: Person Contacted: Comments/ Resolution:

 \square A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Greensburg, PA 15601 (724)850-5600



May 30, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on May 22, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30219509001	Trip Blank 1	Water	05/22/17 00:01	05/22/17 22:50
30219509002	RW-19-MW(I)	Water	05/22/17 08:41	05/22/17 22:50
30219509003	RW-19-MW(S)	Water	05/22/17 09:21	05/22/17 22:50
30219509004	RW-18-MW(I)	Water	05/22/17 10:02	05/22/17 22:50
30219509005	RW-15-MW(I)	Water	05/22/17 10:39	05/22/17 22:50
30219509006	RW-16-MW(I)	Water	05/22/17 11:18	05/22/17 22:50
30219509007	RW-16-MW(S)	Water	05/22/17 11:47	05/22/17 22:50
30219509008	RW-13-MW(I)	Water	05/22/17 12:32	05/22/17 22:50
30219509009	RW-12-MW(I)	Water	05/22/17 13:25	05/22/17 22:50
30219509010	RW-11-MW(I)	Water	05/22/17 14:17	05/22/17 22:50
30219509011	RW-11-MW(S)	Water	05/22/17 14:36	05/22/17 22:50
30219509012	RW-10-MW(I)	Water	05/22/17 15:32	05/22/17 22:50
30219509013	RW-05-MW(I)	Water	05/22/17 16:21	05/22/17 22:50

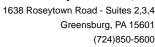


SAMPLE ANALYTE COUNT

Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30219509002	RW-19-MW(I)	EPA 6010C	PJD	2
30219509003	RW-19-MW(S)	EPA 6010C	PJD	2
30219509004	RW-18-MW(I)	EPA 6010C	PJD	2
30219509005	RW-15-MW(I)	EPA 6010C	PJD	2
30219509006	RW-16-MW(I)	EPA 6010C	PJD	2
30219509007	RW-16-MW(S)	EPA 6010C	PJD	2
30219509008	RW-13-MW(I)	EPA 6010C	PJD	2
30219509009	RW-12-MW(I)	EPA 6010C	PJD	2
30219509010	RW-11-MW(I)	EPA 6010C	PJD	2
30219509011	RW-11-MW(S)	EPA 6010C	PJD	2
30219509012	RW-10-MW(I)	EPA 6010C	PJD	2
30219509013	RW-05-MW(I)	EPA 6010C	PJD	2





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 30, 2017

General Information:

12 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed for the PDS.

• QC Batch: 259895

Zn failed on the serial dilution
• QC Batch: 259895

Analyte Comments:

QC Batch: 259796

1c: Cd and Zn failed for the PDS.

- BLANK (Lab ID: 1279742)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1279744)
 - Cadmium



Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

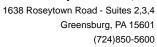
Date: May 30, 2017

Analyte Comments:

QC Batch: 259796

1c: Cd and Zn failed for the PDS.

- DUP (Lab ID: 1279744)
 - Zinc
- DUP (Lab ID: 1279747)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1279743)
 - Cadmium
 - Zinc
- MS (Lab ID: 1279745)
 - Cadmium
 - Zinc
- MS (Lab ID: 1279748)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1279746)
 - Cadmium
 - Zinc
- RW-05-MW(I) (Lab ID: 30219509013)
 - Cadmium
 - Zinc
- RW-10-MW(I) (Lab ID: 30219509012)
 - Cadmium
 - Zinc
- RW-11-MW(I) (Lab ID: 30219509010)
 - Cadmium
 - Zinc
- RW-11-MW(S) (Lab ID: 30219509011)
 - Cadmium
 - Zinc
- RW-12-MW(I) (Lab ID: 30219509009)
 - Cadmium
 - Zinc
- RW-13-MW(I) (Lab ID: 30219509008)
 - Cadmium
 - Zinc
- RW-15-MW(I) (Lab ID: 30219509005)
 - Cadmium
 - Zinc
- RW-16-MW(I) (Lab ID: 30219509006)
 - Cadmium
 - Zinc
- RW-16-MW(S) (Lab ID: 30219509007)
 - Cadmium





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 30, 2017

Analyte Comments:

QC Batch: 259796

1c: Cd and Zn failed for the PDS.

• RW-16-MW(S) (Lab ID: 30219509007)

• Zinc

• RW-18-MW(I) (Lab ID: 30219509004)

CadmiumZinc

• RW-19-MW(I) (Lab ID: 30219509002)

• Cadmium

Zinc

• RW-19-MW(S) (Lab ID: 30219509003)

• Cadmium • Zinc

2c: Zn failed on the serial dilution

• BLANK (Lab ID: 1279742)

Cadmium

• Zinc

• DUP (Lab ID: 1279744)

• Cadmium

• Zinc

• DUP (Lab ID: 1279747)

Cadmium

Zinc

• LCS (Lab ID: 1279743)

Cadmium

• Zinc

• MS (Lab ID: 1279745)

Cadmium

• Zinc

• MS (Lab ID: 1279748)

• Cadmium

• Zinc

• MSD (Lab ID: 1279746)

• Cadmium

• Zinc

• RW-05-MW(I) (Lab ID: 30219509013)

Cadmium

• Zinc

• RW-10-MW(I) (Lab ID: 30219509012)

Cadmium

• Zinc

• RW-11-MW(I) (Lab ID: 30219509010)

Cadmium

• Zinc



Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 30, 2017

Analyte Comments:

QC Batch: 259796

2c: Zn failed on the serial dilution

- RW-11-MW(S) (Lab ID: 30219509011)
 - Cadmium • Zinc
- RW-12-MW(I) (Lab ID: 30219509009)
 - Cadmium
 - Zinc
- RW-13-MW(I) (Lab ID: 30219509008)
 - Cadmium
 - Zinc
- RW-15-MW(I) (Lab ID: 30219509005)
 - Cadmium
 - Zinc
- RW-16-MW(I) (Lab ID: 30219509006)
 - Cadmium
 - Zinc
- RW-16-MW(S) (Lab ID: 30219509007)
 - Cadmium
 - Zinc
- RW-18-MW(I) (Lab ID: 30219509004)
 - Cadmium
 - Zinc
- RW-19-MW(I) (Lab ID: 30219509002)
 - Cadmium
 - Zinc
- RW-19-MW(S) (Lab ID: 30219509003)
 - Cadmium
 - Zinc

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





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-19-MW(I)	Lab ID:	30219509002	Collected	d: 05/22/1	7 08:41	Received: 05/	/22/17 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	ethod: EF	PA 3005A			
Cadmium	2770	ug/L	300	34.4	100	05/26/17 09:20	05/27/17 02:44	7440-43-9	1c,2c
Zinc	5370000	ug/L	100000	10800	10000	05/26/17 09:20	05/27/17 04:03	7440-66-6	1c,2c, ML





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-19-MW(S)	Lab ID:	30219509003	Collecte	d: 05/22/17	09:21	Received: 05/	22/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.6	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 01:33	7440-43-9	1c,2c
Zinc	4860	ug/L	100	10.8	10	05/26/17 09:20	05/27/17 02:58	7440-66-6	1c,2c





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-18-MW(I)	Lab ID:	30219509004	Collecte	d: 05/22/17	7 10:02	Received: 05/	22/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	92.0	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 01:36	7440-43-9	1c,2c
Zinc	246000	ug/L	1000	108	100	05/26/17 09:20	05/27/17 03:01	7440-66-6	1c,2c





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-15-MW(I)	Lab ID:	30219509005	Collecte	d: 05/22/17	7 10:39	Received: 05/	22/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	91.1	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 01:48	7440-43-9	1c,2c
Zinc	100000	ug/L	1000	108	100	05/26/17 09:20	05/27/17 03:03	7440-66-6	1c,2c





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-16-MW(I)	Lab ID:	30219509006	Collecte	d: 05/22/17	7 11:18	Received: 05/	22/17 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	73.9	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 01:50	7440-43-9	1c,2c
Zinc	207000	ug/L	1000	108	100	05/26/17 09:20	05/27/17 03:06	7440-66-6	1c,2c





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-16-MW(S)	Lab ID:	30219509007	Collecte	d: 05/22/17	7 11:47	Received: 05/	22/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	64.1	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 01:53	7440-43-9	1c,2c
Zinc	15800	ug/L	1000	108	100	05/26/17 09:20	05/27/17 03:13	7440-66-6	1c,2c





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-13-MW(I)	Lab ID:	30219509008	Collecte	d: 05/22/1	7 12:32	Received: 05/	22/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	5370	ug/L	300	34.4	100	05/26/17 09:20	05/27/17 03:16	7440-43-9	1c,2c
Zinc	163000	ug/L	1000	108	100	05/26/17 09:20	05/27/17 03:16	7440-66-6	1c,2c





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-12-MW(I)	Lab ID:	30219509009	Collecte	d: 05/22/17	7 13:25	Received: 05/	22/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3820	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 01:58	7440-43-9	1c,2c
Zinc	232000	ug/L	1000	108	100	05/26/17 09:20	05/27/17 03:18	7440-66-6	1c,2c





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-11-MW(I)	Lab ID:	30219509010	Collecte	d: 05/22/17	7 14:17	Received: 05/	22/17 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	2600	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 02:00	7440-43-9	1c,2c
Zinc	336000	ug/L	1000	108	100	05/26/17 09:20	05/27/17 03:20	7440-66-6	1c,2c





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-11-MW(S)	Lab ID:	30219509011	Collecte	d: 05/22/17	7 14:36	Received: 05/	22/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.8J	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 02:03	7440-43-9	1c,2c
Zinc	12500	ug/L	1000	108	100	05/26/17 09:20	05/27/17 03:23	7440-66-6	1c,2c





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-10-MW(I)	Lab ID:	30219509012	Collecte	d: 05/22/17	7 15:32	Received: 05/	22/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A		•	-
Cadmium	2.5J	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 02:05	7440-43-9	1c,2c
Zinc	1150	ug/L	10.0	1.1	1	05/26/17 09:20	05/27/17 02:05	7440-66-6	1c,2c





Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Sample: RW-05-MW(I)	Lab ID:	30219509013	Collecte	d: 05/22/17	7 16:21	Received: 05/	22/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	thod: El	PA 3005A		•	
Cadmium	397	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 02:18	7440-43-9	1c,2c
Zinc	38800	ug/L	1000	108	100	05/26/17 09:20	05/27/17 03:25	7440-66-6	1c,2c



QUALITY CONTROL DATA

Project: R&W A3 GW Sampling

Pace Project No.: 30219509

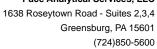
Date: 05/30/2017 04:15 PM

QC Batch: 259796 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

30219509002, 30219509003, 30219509004, 30219509005, 30219509006, 30219509007, 30219509008, Associated Lab Samples:

		9, 30219509010							0.,002.	,			
METHOD BLANK: 1279742			N	latrix: Wa	iter								
		2, 30219509003, 9, 30219509010,		011, 3021				195090	07, 3021	9509008,			
Parameter		Units	Result	t	Limit	MDL		Ana	alyzed	Qua	alifiers		
Cadmium		ug/L		3.0 U	3.0)	0.34		/17 01:12	,			
Zinc		ug/L	10	0.0 U	10.0)	1.1	05/27/	/17 01:12	2 1c,2c			
LABORATORY CONTROL SAI	MPLE: 12	279743											
			Spike	LCS		LCS		% Rec					
Parameter		Units	Conc.	Resu	ult 	% Rec		Limits	Qι 	ualifiers			
Cadmium		ug/L	500		513	103			20 1c,2c				
Zinc		ug/L	500		526	105		80-1	20 1c,2c	;			
MATRIX SPIKE & MATRIX SP	IKE DUPLIC	CATE: 127974	-		1279746								
			MS	MSD				_		o. 5			
Parameter	Units	30219509002 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % R		MSD % Rec	% Rec Limits	RPD	Max RPD	Qua
Cadmium	ug/L	2770	500	500	3390	3310		123	108	75-125	2	20	1c,2c
Zinc	ug/L	5370000	500	500	5330000	5800000	-7	7000	86800	75-125	8	20	1c,2c, ML
MATRIX SPIKE SAMPLE:	12	279748											
			3021950	09012	Spike	MS		MS		% Rec			
Parameter		Units	Resu	ult	Conc.	Result		% Re	С	Limits		Quali	fiers
Cadmium		ug/L		2.5J	500	5	16		103	75-1	 125 1d	c,2c	
Zinc		ug/L		1150	500	16	40		97	75-1	125 10	c,2c	
SAMPLE DUPLICATE: 1279	744												
Parameter		Units	30219509 Result		Dup Result	RPD		Ma RF		Qualifie	ers		
Cadmium		ug/L		2770	2770)	0		20	1c,2c			
Zinc		ug/L	5370	0000	5730000)	6		20	1c,2c			

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





QUALITY CONTROL DATA

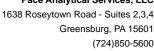
Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

SAMPLE DUPLICATE: 1279747						
		30219509012	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	2.5J	2.8J		2	0 1c,2c
Zinc	ug/L	1150	1180	3	2	0 1c,2c

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





QUALIFIERS

Project: R&W A3 GW Sampling

Pace Project No.: 30219509

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 259895

Cd and Zn failed for the PDS. [1] [2] Zn failed on the serial dilution

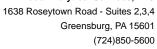
ANALYTE QUALIFIERS

Date: 05/30/2017 04:15 PM

1c Cd and Zn failed for the PDS. 2c Zn failed on the serial dilution

Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased ML

low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: R&W A3 GW Sampling

Pace Project No.: 30219509

Date: 05/30/2017 04:15 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30219509002	RW-19-MW(I)	EPA 3005A	 259796	EPA 6010C	 259895
30219509003	RW-19-MW(S)	EPA 3005A	259796	EPA 6010C	259895
30219509004	RW-18-MW(I)	EPA 3005A	259796	EPA 6010C	259895
30219509005	RW-15-MW(I)	EPA 3005A	259796	EPA 6010C	259895
30219509006	RW-16-MW(I)	EPA 3005A	259796	EPA 6010C	259895
30219509007	RW-16-MW(S)	EPA 3005A	259796	EPA 6010C	259895
30219509008	RW-13-MW(I)	EPA 3005A	259796	EPA 6010C	259895
30219509009	RW-12-MW(I)	EPA 3005A	259796	EPA 6010C	259895
30219509010	RW-11-MW(I)	EPA 3005A	259796	EPA 6010C	259895
30219509011	RW-11-MW(S)	EPA 3005A	259796	EPA 6010C	259895
30219509012	RW-10-MW(I)	EPA 3005A	259796	EPA 6010C	259895
30219509013	RW-05-MW(I)	EPA 3005A	259796	EPA 6010C	259895

Pace Analytical

ument courately.

CHAII WO#:30219509

Section A		Section B		
Required Cl	Required Client information:	Required Project Information:	3021 950 9 momanor	Page: \ of \ \
Company:	Company: EnviroAnalytics Group	Report To: James Calenda	Attention: Laura Sargent	6
Address:	1430 Sparrows Point Blvd	Capy Ta:	Company Name: EnviroAnalytics Group	REGIII ATORY AGENCY
	Sparrows Point, MD 21219	©	Address: 1650 Des Peres Road, Suite 303 St. Louis, MO 63131	NPDES CROIND WATED
Email To:	icalenda@enviroanalyticsgroup.com	PO Number:	Pace Quote	AGO T FALLER
Phone: 31	Phone: 314-620-3056 Fax:	Project Name:	Hererence: Pace Project Samantha Bayura	ation a
Requested [Requested Due Date/TAJ:	Project Number 14 0236 M	wanagar. Pace Profile #:	STATE: MD
			Requested A	Requested Analysis Filtered (VIN)

Required Client Information MATRIX DRINKING WATE WATER			_						l i				1 N		┝	\vdash	L	┝	\vdash	乚		Ĺ				
DRINKING WATE	CODE			COLLECTED	CTED				Pre	Preservatives	atives	40	4 /A													
WASTE WATER WASTE WATER PRODUCT SOLISOLID OIL (A-Z. 0-9 /) Sample IDs MUST BE UNIQUE TISSUE	WWY WWY WWY WWY WWY WWW WWY WW WW WW WW			COMPOSITE	COMPOSITE	WP AT COLLECTION		pə					∳jsə <u>T</u> s				O10C	A0747 10 A17. A9817\muimonl	AS106/ebin	(lios)	\$ <i>ስታ የ</i> ነት የአረታ <i>የነት የሚ</i> (ad	(lios) 81 Y06\əse	hlorine (Y/N)			
	·	S XINTAM YT BIMMAS	DATE	TIME	DATE TIME		# OF CONT	Unpreserv	H ^S SO [¢]	HCI	NaOH Na ₂ S ₂ O ₃	Methanol Di Water	ieylsinA↓	AOC/859	SVOC 82	DRO/801	\SJAT3N			CB/8085	ne bas liC		O leubies9	Pace Pro	ž.	Pace Project No / Lab I D
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ADDITIONAL COMMENTS	RELIN	QUISHE	ED BY / Æ	RELINQUISHED BY / AFFILIATION		DATE	_	TIME	Ľ		AC	ACCEPTED BY / AFFILIATION	D BY	AFF	LIATI.	ĕ	İ	ă	DATE	F	TIME.			SAMPLE CONDITIONS	NO.	SNS
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il udia package is required, attach data package checklist.	M	0	M	50/1/2	12 82	20	7.	787	7	13	12	7	3	ľ					224)	2250	5	2		3	2	>
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	•			SAMPLER NA		AND S	WE AND SIGNATURE	URE														٥	-	+		joe
	1907	Jan.		PRINT Name of		SAMPLER:		Robert	4	Bartz	7									۰,		° ⊓i qı	pevie	(N/Y)	1/X) 16	es Juli
	e.	gV	- -	SIGNATURE of		SAMPLER:	٦	3	A	nd Bry	1			A ₹	DATE Signed (MM/DD/YY):	3 ge 5	8	·	10	2		ne!		eol colsu0		lqms2 ()

F-ALL-Q-020rev.06, 2-Feb-2007

CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Face Analytical www.pocelebs.com

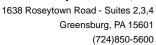
Section Required	Section A Required Client Information:	Section B Required Project Information:	Section C 302 1950	Page: 2 of
Company:	r. EnviroAnalytics Group	Report To: James Calenda	ra Sargent	
Address:	1430 Sparrows Point Blvd	Copy To:	Company Name: EnviroAnalytics Group	REGULATORY AGENCY
	Sparrows Point, MD 21219		Address: 1650 Des Peres Road, Suite 303 St. Louis, MO 63131	T NPDES I GROUND WATER I DRINKING WATER
	icalenda@envir.	PO Number:	Pace Quote Reference:	l _{norm}
Phone:	314-620-3056 Fax:	Project Name: G-u S-ma) nc A3	Pace Project Samantha Bayura	Site Location ////////////////////////////////////
Request	Requested Due Date/TAT: うしゃシシ	R. m	Paca Profile #:	STATE: MD
			Requested /	Requested Analysis Filtered (YIN)
	Section D Valid Matrix Codes Required Client Information <u>MATRIX</u> <u>COF</u>	des cone e 会 COLLECTED	Preservatives > →	
		OLLECTION WY WAT WAT WAT WAT WAT WAT WAT		A3617\rm A3617\rm AS10\rm ps) A468 (lios) B17
	SAMPLE ID wee (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE TISSUE	AbE (C=	I STOD	
#WaTi		T 3J9MAS DATE T ADMAS T ADMAS T ADMAS	Unprese H ₂ SO ₄ HUO ₃ HCI Na ₂ S ₂ O ₃ Na ₂ S ₂ O ₃	Mercury/ Total Cy Sine (S) Sine (S)
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	ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION DATE	TIME ACCEPTED BY AFFILIATION	DATE TIME SAMPLE CONDITIONS
Data F	Data Package Required? (Y(N))	Robert Bester 5Tazlin	1445 56 Ser 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5/20/2 1645
Data ∖	Data Validation Required? (Y/N))	David LA Make Leg Strates	1960 T T 1988	Stally was
checklist	n data patkage is i equilieu, atlaci i data patkage checklist.	17/19/ Hole Strain	2250 steeln stie	5 Hair 2250 1.9 4 N Y
Pa		SAMPLER NAME AND SIGNATURE	GNATURE	(N pejed (uo
ge 26 of 2		PRINT Name of SAMPLER: SIGNATURE of SAMPLER:	Rosert Sorte DATE Signed	Temp in 'Peceived' Temp in 'Peceived' Temp in 'Peceived' Temp in 'Peceived' Temp in 'Peceive' Te
27				

Sample Condition Upon Red			_)II /	-1	30	9	1 () 5
Face Analytical Client Name:	E	ΛνΓ)	OA	nalytics	Project #_				, <i>a</i>
Courier:	ent [] Com	mercia	al 🖊 Pace Other					
Custody Seal on Cooler/Box Present: 🔲 yes		no	Sea	ls intact: yes	no				•
Thermometer Used				Blue None					
Cooler Temperature Observed Temp 1	.9	_ ° C	Cor	rection Factor <u>: O</u>	O Final To				°C ing
Comments:	Yes	No	N/A	<u> </u>	contents:_	MEN C	163		_
Chain of Custody Present:				1.					
Chain of Custody Filled Out:	17			2.					
Chain of Custody Relinquished:	Control of the Contro			3.					
Sampler Name & Signature on COC:	/			4.					
Sample Labels match COC:	17			5.					
-Includes date/time/ID Matrix: W	4								
Samples Arrived within Hold Time:	1/			6.					
hort Hold Time Analysis (<72hr remaining):	-	1	1	7.					
tush Turn Around Time Requested:		1		8.					
ufficient Volume:				9.					
orrect Containers Used:	/			10.					
-Pace Containers Used:				<u> </u>					
ontainers Intact:				11.					
rthophosphate field filtered			1	12.					
rganic Samples checked for dechlorination:			Januar .	13.					
Itered volume received for Dissolved tests	-		armen .	14.					
containers have been checked for preservation.				15.					
I containers needing preservation are found to be in impliance with EPA recommendation.									
constione: V6A) poliform TOC O&G Phenolics				Initial when with	Date/time of preservation				
cceptions: YOA) coliform, TOC, O&G, Phenolics				Lot # of added preservative					
eadspace in VOA Vials (>6mm):				16.					
ip Blank Present:				17.					
ip Blank Custody Seals Present									
ad Aqueous Samples Screened > 0.5 mrem/hr				Initial when completed:	Date:				
ient Notification/ Resolution:									
Person Contacted:			Date/I	ime:	Contacted	В <u>у:</u>			
Comments/ Resolution:									

1211

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





June 01, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on May 23, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391 Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133 Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091
Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30219635001	Trip Blank 1	Water	05/23/17 00:01	05/23/17 23:15
30219635002	RW01-MW-(I)	Water	05/23/17 08:54	05/23/17 23:15
30219635003	RW01-MW-(S)	Water	05/23/17 09:27	05/23/17 23:15
30219635004	RW02-MW-(I)	Water	05/23/17 10:06	05/23/17 23:15
30219635005	RW02-MW-(S)	Water	05/23/17 11:00	05/23/17 23:15
30219635006	RW03-MW-(I)	Water	05/23/17 12:05	05/23/17 23:15
30219635007	RW03-MW-(S)	Water	05/23/17 12:38	05/23/17 23:15
30219635008	RW06-MW-(I)	Water	05/23/17 13:27	05/23/17 23:15
30219635009	RW07-MW-(I)	Water	05/23/17 14:13	05/23/17 23:15
30219635010	RW07-MW-(S)	Water	05/23/17 14:54	05/23/17 23:15
30219635011	RW08-MW-(I)	Water	05/23/17 15:50	05/23/17 23:15

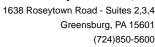


SAMPLE ANALYTE COUNT

Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30219635001	Trip Blank 1	EPA 8260B	JAS	55
30219635002	RW01-MW-(I)	EPA 6010C	PJD	2
30219635003	RW01-MW-(S)	EPA 6010C	PJD	2
30219635004	RW02-MW-(I)	EPA 6010C	PJD	2
30219635005	RW02-MW-(S)	EPA 6010C	PJD	2
30219635006	RW03-MW-(I)	EPA 6010C	PJD	2
30219635007	RW03-MW-(S)	EPA 6010C	PJD	2
30219635008	RW06-MW-(I)	EPA 6010C	PJD	2
30219635009	RW07-MW-(I)	EPA 6010C	PJD	2
30219635010	RW07-MW-(S)	EPA 6010C	PJD	2
30219635011	RW08-MW-(I)	EPA 6010C	PJD	2





Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 01, 2017

General Information:

10 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Zn failed for the PDS.
• QC Batch: 260280

Analyte Comments:

QC Batch: 260163

1c: Zn failed for the PDS.

- BLANK (Lab ID: 1281567)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1281569)
 - Cadmium
 - Zinc



Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 01, 2017

Analyte Comments:

QC Batch: 260163

1c: Zn failed for the PDS.

- LCS (Lab ID: 1281568)
 - Cadmium
 - Zinc
- MS (Lab ID: 1281570)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1281571)
 - Cadmium
 - Zinc
- RW01-MW-(I) (Lab ID: 30219635002)
 - Cadmium
 - Zinc
- RW01-MW-(S) (Lab ID: 30219635003)
 - Cadmium
 - Zinc
- RW02-MW-(I) (Lab ID: 30219635004)
 - Cadmium
 - Zinc
- RW02-MW-(S) (Lab ID: 30219635005)
 - Cadmium
 - Zinc
- RW03-MW-(I) (Lab ID: 30219635006)
 - Cadmium
 - Zinc
- RW03-MW-(S) (Lab ID: 30219635007)
 - Cadmium
 - Zinc
- RW06-MW-(I) (Lab ID: 30219635008)
 - Cadmium
 - Zinc
- RW07-MW-(I) (Lab ID: 30219635009)
 - Cadmium
 - Zinc
- RW07-MW-(S) (Lab ID: 30219635010)
 - Cadmium
 - Zinc
- RW08-MW-(I) (Lab ID: 30219635011)
 - Cadmium
 - Zinc

Greensburg, PA 15601 (724)850-5600



Pace Analytical www.pacelabs.com

PROJECT NARRATIVE

Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Method: EPA 8260B Description: 8260B MSV

Client: EnviroAnalytics Group, LLC

Date: June 01, 2017

General Information:

1 sample was analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Surrogates

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

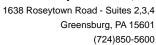
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 259645

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

Additional Comments:

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





Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: Trip Blank 1 Lab ID: 30219635001 Collected: 05/23/17 00:01 Received: 05/23/17 23:15 Matrix: Water

Comments: • Trip Blank not needed as no samples are being analyzed for VOC analysis.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical	Method: EP	A 8260B						
Acetone	29.9	ug/L	10.0	3.8	1		05/25/17 11:59	67-64-1	M5
Benzene	1.0 U	ug/L	1.0	0.35	1		05/25/17 11:59	71-43-2	M5
Bromodichloromethane	1.0 U	ug/L	1.0	0.43	1		05/25/17 11:59	75-27-4	M5
Bromoform	1.0 U	ug/L	1.0	0.40	1		05/25/17 11:59	75-25-2	M5
Bromomethane	1.0 U	ug/L	1.0	0.90	1		05/25/17 11:59	74-83-9	IH,M5
2-Butanone (MEK)	10.0 U	ug/L	10.0	5.5	1		05/25/17 11:59	78-93-3	IH,M5
Carbon disulfide	1.0 U	ug/L	1.0	0.25	1		05/25/17 11:59	75-15-0	M5
Carbon tetrachloride	1.0 U	ug/L	1.0	0.32	1		05/25/17 11:59	56-23-5	M5
Chlorobenzene	1.0 U	ug/L	1.0	0.19	1		05/25/17 11:59	108-90-7	M5
Chloroethane	1.0 U	ug/L	1.0	0.42	1		05/25/17 11:59	75-00-3	M5
Chloroform	1.0 U	ug/L	1.0	0.33	1		05/25/17 11:59	67-66-3	M5
Chloromethane	1.0 U	ug/L	1.0	0.32	1		05/25/17 11:59	74-87-3	M5
Cyclohexane	10.0 U	ug/L	10.0	1.6	1		05/25/17 11:59	110-82-7	M5
1,2-Dibromo-3-chloropropane	5.0 U	ug/L	5.0	0.43	1		05/25/17 11:59	96-12-8	M5
Dibromochloromethane	1.0 U	ug/L	1.0	0.35	1		05/25/17 11:59	124-48-1	M5
1,2-Dibromoethane (EDB)	1.0 U	ug/L	1.0	0.48	1		05/25/17 11:59	106-93-4	M5
1,2-Dichlorobenzene	1.0 U	ug/L	1.0	0.37	1		05/25/17 11:59	95-50-1	M5
1,3-Dichlorobenzene	1.0 U	ug/L	1.0	0.21	1		05/25/17 11:59	541-73-1	M5
1,4-Dichlorobenzene	1.0 U	ug/L	1.0	0.44	1		05/25/17 11:59	106-46-7	M5
Dichlorodifluoromethane	1.0 U	ug/L	1.0	0.31	1		05/25/17 11:59	75-71-8	M5
1,1-Dichloroethane	1.0 U	ug/L	1.0	0.34	1		05/25/17 11:59	75-34-3	M5
1,2-Dichloroethane	1.0 U	ug/L	1.0	0.36	1		05/25/17 11:59	107-06-2	M5
1,2-Dichloroethene (Total)	2.0 U	ug/L	2.0	0.80	1		05/25/17 11:59	540-59-0	M5
1,1-Dichloroethene	1.0 U	ug/L	1.0	0.20	1		05/25/17 11:59	75-35-4	M5
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.48	1		05/25/17 11:59	156-59-2	M5
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0	0.32	1		05/25/17 11:59	156-60-5	M5
1,2-Dichloropropane	1.0 U	ug/L	1.0	0.62	1		05/25/17 11:59	78-87-5	M5
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.37	1		05/25/17 11:59	10061-01-5	M5
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0	0.74	1		05/25/17 11:59	10061-02-6	M5
Ethylbenzene	1.0 U	ug/L	1.0	0.21	1		05/25/17 11:59	100-41-4	M5
2-Hexanone	10.0 U	ug/L	10.0	1.7	1		05/25/17 11:59	591-78-6	M5
Isopropylbenzene (Cumene)	1.0 U	ug/L	1.0	0.25	1		05/25/17 11:59	98-82-8	M5
Methyl acetate	5.0 U	ug/L	5.0	0.42	1		05/25/17 11:59	79-20-9	M5
Methylene Chloride	1.0 U	ug/L	1.0	0.59	1		05/25/17 11:59	75-09-2	M5
4-Methyl-2-pentanone (MIBK)	10.0 U	ug/L	10.0	1.7	1		05/25/17 11:59	108-10-1	M5
Methyl-tert-butyl ether	1.0 U	ug/L	1.0	0.27	1		05/25/17 11:59	1634-04-4	M5
Styrene	1.0 U	ug/L	1.0	0.18	1		05/25/17 11:59	100-42-5	M5
1,1,2,2-Tetrachloroethane	1.0 U	ug/L	1.0	0.19	1		05/25/17 11:59	79-34-5	M5
Tetrachloroethene	1.0 U	ug/L	1.0	0.33	1		05/25/17 11:59	127-18-4	M5
Toluene	1.0 U	ug/L	1.0	0.29	1		05/25/17 11:59	108-88-3	M5
1,2,3-Trichlorobenzene	2.0 U	ug/L	2.0	0.55	1		05/25/17 11:59	87-61-6	M5
1,2,4-Trichlorobenzene	1.0 U	ug/L	1.0	0.39	1		05/25/17 11:59	120-82-1	M5
1,1,1-Trichloroethane	1.0 U	ug/L	1.0	0.22	1		05/25/17 11:59	71-55-6	M5
1,1,2-Trichloroethane	1.0 U	ug/L	1.0	0.45	1		05/25/17 11:59	79-00-5	M5
Trichloroethene	1.0 U	ug/L	1.0	0.50	1		05/25/17 11:59	79-01-6	M5



Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: Trip Blank 1 Lab ID: 30219635001 Collected: 05/23/17 00:01 Received: 05/23/17 23:15 Matrix: Water

Comments: • Trip Blank not needed as no samples are being analyzed for VOC analysis.

	·	•	Report	•					
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical	Method: EP	A 8260B						
Trichlorofluoromethane	1.0 U	ug/L	1.0	0.32	1		05/25/17 11:59	75-69-4	M5
1,1,2-Trichlorotrifluoroethane	50.0 U	ug/L	50.0	1.4	1		05/25/17 11:59	76-13-1	M5
Vinyl chloride	1.0 U	ug/L	1.0	0.21	1		05/25/17 11:59	75-01-4	M5
Xylene (Total)	3.0 U	ug/L	3.0	1.1	1		05/25/17 11:59	1330-20-7	M5
m&p-Xylene	2.0 U	ug/L	2.0	0.70	1		05/25/17 11:59	179601-23-1	M5
o-Xylene	1.0 U	ug/L	1.0	0.37	1		05/25/17 11:59	95-47-6	M5
Surrogates									
4-Bromofluorobenzene (S)	101	%	78-117		1		05/25/17 11:59	460-00-4	M5
1,2-Dichloroethane-d4 (S)	97	%	70-128		1		05/25/17 11:59	17060-07-0	M5
Toluene-d8 (S)	100	%	59-140		1		05/25/17 11:59	2037-26-5	M5
Dibromofluoromethane (S)	97	%	66-132		1		05/25/17 11:59	1868-53-7	M5





Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: RW01-MW-(I)	Lab ID:	3021963500	2 Collecte	d: 05/23/17	7 08:54	Received: 05/	23/17 23:15 Ma	atrix: Water	: r	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Me	thod: E	PA 3005A				
Cadmium	526	ug/L	3.0	0.34	1	05/31/17 10:07	05/31/17 22:53	7440-43-9	1c	
Zinc	14900	ua/L	1000	108	100	05/31/17 10:07	05/31/17 23:34	7440-66-6	1c.MH	





Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: RW01-MW-(S)	Lab ID:	Lab ID: 30219635003			7 09:27	Received: 05/	23/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.2	ug/L	3.0	0.34	1	05/31/17 10:07	05/31/17 23:07	7440-43-9	1c
Zinc	6120	ug/L	1000	108	100	05/31/17 10:07	05/31/17 23:53	7440-66-6	1c





Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: RW02-MW-(I)	Lab ID:	Lab ID: 30219635004			7 10:06	Received: 05/	23/17 23:15 Ma	atrix: Water	er -	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A				
Cadmium	24.4	ug/L	3.0	0.34	1	05/31/17 10:07	05/31/17 23:10	7440-43-9	1c	
Zinc	2520	ua/L	10.0	1.1	1	05/31/17 10:07	05/31/17 23:10	7440-66-6	1c	





Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: RW02-MW-(S)	Lab ID:	30219635005	Collecte	d: 05/23/17	7 11:00	Received: 05/	23/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A			
Cadmium	11.2	ug/L	3.0	0.34	1	05/31/17 10:07	05/31/17 23:17	7440-43-9	1c
Zinc	47800	ua/L	1000	108	100	05/31/17 10:07	05/31/17 23:55	7440-66-6	1c





Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: RW03-MW-(I)	Lab ID:	Lab ID: 30219635006			12:05	Received: 05/	23/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	84.0	ug/L	3.0	0.34	1	05/31/17 10:07	05/31/17 23:19	7440-43-9	1c
Zinc	2960	ua/L	10.0	1.1	1	05/31/17 10:07	05/31/17 23:19	7440-66-6	1c





Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: RW03-MW-(S)	Lab ID:	Lab ID: 30219635007			7 12:38	Received: 05/	23/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.9	ug/L	3.0	0.34	1	05/31/17 10:07	05/31/17 23:22	7440-43-9	1c
Zinc	5380	ua/L	1000	108	100	05/31/17 10:07	05/31/17 23:58	7440-66-6	1c



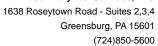


Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: RW06-MW-(I)	Lab ID:	Lab ID: 30219635008			13:27	Received: 05/	23/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	20.4	ug/L	3.0	0.34	1	05/31/17 10:07	05/31/17 23:24	7440-43-9	1c
Zinc	999	ua/L	10.0	1.1	1	05/31/17 10:07	05/31/17 23:24	7440-66-6	1c





Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: RW07-MW-(I)	Lab ID:	Lab ID: 30219635009			' 14:13	Received: 05/	23/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.1J	ug/L	3.0	0.34	1	05/31/17 10:07	05/31/17 23:26	7440-43-9	1c
Zinc	298	ug/L	10.0	1.1	1	05/31/17 10:07	05/31/17 23:26	7440-66-6	1c





Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: RW07-MW-(S)	Lab ID:	Lab ID: 30219635010			' 14:54	Received: 05/	Received: 05/23/17 23:15 Matrix:						
			Report										
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual				
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A													
Cadmium	1.9J	ug/L	3.0	0.34	1	05/31/17 10:07	05/31/17 23:29	7440-43-9	1c				
Zinc	102	102 ug/L		1.1 1		05/31/17 10:07	05/31/17 23:29	7440-66-6	1c				





Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Sample: RW08-MW-(I)	Lab ID:	Lab ID: 30219635011			15:50	Received: 05/	Received: 05/23/17 23:15 Matrix:						
			Report										
Parameters	Results	tesults Units		MDL	DF	Prepared	Analyzed	CAS No.	Qual				
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A													
Cadmium	1.5J	ug/L	3.0	0.34	1	05/31/17 10:07	05/31/17 23:31	7440-43-9	1c				
Zinc	188	ua/L	10.0	1.1	1	05/31/17 10:07	05/31/17 23:31	7440-66-6	1c				



Rod & Wire GW Sampling A3 Project:

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

QC Batch: 260163 Analysis Method: EPA 6010C QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

30219635002, 30219635003, 30219635004, 30219635005, 30219635006, 30219635007, 30219635008, Associated Lab Samples:

30219635009, 30219635010, 30219635011

METHOD BLANK: 1281567 Matrix: Water

Associated Lab Samples:

30219635009, 30219635010, 30219635011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	05/31/17 22:48	1c
Zinc	ug/L	10.0 U	10.0	1.1	05/31/17 22:48	1c

LABORATORY CONTROL SAMPLE:	1281568					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	509	102	80-120	1c
Zinc	ug/L	500	515	103	80-120	1c

MATRIX SPIKE & MATRIX SPIR	KE DUPLICA	ATE: 12815	70		1281571							
			MS	MSD								
	3	0219635002	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	526	500	500	1040	1070	103	109	75-125	3	20	1c
Zinc	ug/L	14900	500	500	15300	15800	78	180	75-125	3	20	1c,MH

SAMPLE DUPLICATE: 1281569						
		30219635002	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	526	520	1	20	1c
Zinc	ug/L	14900	14800	1	20	1c

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



Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

QC Batch: 259645 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV

Associated Lab Samples: 30219635001

METHOD BLANK: 1279045 Matrix: Water

Associated Lab Samples: 30219635001

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.22	05/25/17 11:05	M5
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.19	05/25/17 11:05	M5
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.45	05/25/17 11:05	M5
1,1,2-Trichlorotrifluoroethane	ug/L	50.0 U	50.0	1.4	05/25/17 11:05	M5
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.34	05/25/17 11:05	M5
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.20	05/25/17 11:05	M5
1,2,3-Trichlorobenzene	ug/L	2.0 U	2.0	0.55	05/25/17 11:05	M5
1,2,4-Trichlorobenzene	ug/L	1.0 U	1.0	0.39	05/25/17 11:05	M5
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.43	05/25/17 11:05	M5
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.48	05/25/17 11:05	M5
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.37	05/25/17 11:05	M5
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.36	05/25/17 11:05	M5
1,2-Dichloroethene (Total)	ug/L	2.0 U	2.0	0.80	05/25/17 11:05	M5
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.62	05/25/17 11:05	M5
1,3-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	05/25/17 11:05	M5
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.44	05/25/17 11:05	M5
2-Butanone (MEK)	ug/L	10.0 U	10.0	5.5	05/25/17 11:05	M5
2-Hexanone	ug/L	10.0 U	10.0	1.7	05/25/17 11:05	M5
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	1.7	05/25/17 11:05	M5
Acetone	ug/L	10.0 U	10.0	3.8	05/25/17 11:05	M5
Benzene	ug/L	1.0 U	1.0	0.35	05/25/17 11:05	M5
Bromodichloromethane	ug/L	1.0 U	1.0	0.43	05/25/17 11:05	M5
Bromoform	ug/L	1.0 U	1.0	0.40	05/25/17 11:05	M5
Bromomethane	ug/L	1.0 U	1.0	0.90	05/25/17 11:05	M5
Carbon disulfide	ug/L	1.0 U	1.0	0.25	05/25/17 11:05	M5
Carbon tetrachloride	ug/L	1.0 U	1.0	0.32	05/25/17 11:05	M5
Chlorobenzene	ug/L	1.0 U	1.0	0.19	05/25/17 11:05	M5
Chloroethane	ug/L	1.0 U	1.0	0.42	05/25/17 11:05	M5
Chloroform	ug/L	1.0 U	1.0	0.33	05/25/17 11:05	M5
Chloromethane	ug/L	1.0 U	1.0	0.32	05/25/17 11:05	M5
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.48	05/25/17 11:05	M5
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.37	05/25/17 11:05	M5
Cyclohexane	ug/L	10.0 U	10.0	1.6	05/25/17 11:05	M5
Dibromochloromethane	ug/L	1.0 U	1.0	0.35	05/25/17 11:05	M5
Dichlorodifluoromethane	ug/L	1.0 U	1.0	0.31	05/25/17 11:05	M5
Ethylbenzene	ug/L	1.0 U	1.0	0.21	05/25/17 11:05	M5
Isopropylbenzene (Cumene)	ug/L	1.0 U	1.0	0.25	05/25/17 11:05	M5
m&p-Xylene	ug/L	2.0 U	2.0	0.70	05/25/17 11:05	M5
Methyl acetate	ug/L	5.0 U	5.0	0.42	05/25/17 11:05	M5
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.27	05/25/17 11:05	M5
Methylene Chloride	ug/L	1.0 U	1.0	0.59	05/25/17 11:05	M5

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



Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

METHOD BLANK: 1279045 Matrix: Water

Associated Lab Samples: 30219635001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
o-Xylene	ug/L	1.0 U	1.0	0.37	05/25/17 11:05	M5
Styrene	ug/L	1.0 U	1.0	0.18	05/25/17 11:05	M5
Tetrachloroethene	ug/L	1.0 U	1.0	0.33	05/25/17 11:05	M5
Toluene	ug/L	1.0 U	1.0	0.29	05/25/17 11:05	M5
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.32	05/25/17 11:05	M5
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.74	05/25/17 11:05	M5
Trichloroethene	ug/L	1.0 U	1.0	0.50	05/25/17 11:05	M5
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.32	05/25/17 11:05	M5
Vinyl chloride	ug/L	1.0 U	1.0	0.21	05/25/17 11:05	M5
Xylene (Total)	ug/L	3.0 U	3.0	1.1	05/25/17 11:05	M5
1,2-Dichloroethane-d4 (S)	%	96	70-128		05/25/17 11:05	M5
4-Bromofluorobenzene (S)	%	106	78-117		05/25/17 11:05	M5
Dibromofluoromethane (S)	%	94	66-132		05/25/17 11:05	M5
Toluene-d8 (S)	%	100	59-140		05/25/17 11:05	M5

LABORATORY CONTROL SAMPLE:	1279046					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1-Trichloroethane	ug/L		17.6	88	79-125	M5
1,1,2,2-Tetrachloroethane	ug/L	20	21.2	106	64-130	M5
1,1,2-Trichloroethane	ug/L	20	20.0	100	78-118	M5
1,1,2-Trichlorotrifluoroethane	ug/L	20	24.4J	122	39-138	M5
1,1-Dichloroethane	ug/L	20	19.4	97	77-124	M5
1,1-Dichloroethene	ug/L	20	19.5	98	74-127	M5
1,2,3-Trichlorobenzene	ug/L	20	18.5	92	73-140	M5
1,2,4-Trichlorobenzene	ug/L	20	19.3	97	81-130	M5
1,2-Dibromo-3-chloropropane	ug/L	20	19.9	99	53-133	M5
1,2-Dibromoethane (EDB)	ug/L	20	20.6	103	69-126	M5
1,2-Dichlorobenzene	ug/L	20	19.1	96	83-117	M5
1,2-Dichloroethane	ug/L	20	17.1	86	73-118	M5
1,2-Dichloroethene (Total)	ug/L	40	36.6	92	70-130	M5
1,2-Dichloropropane	ug/L	20	18.0	90	77-126	M5
1,3-Dichlorobenzene	ug/L	20	19.5	97	83-119	M5
1,4-Dichlorobenzene	ug/L	20	19.5	98	83-119	M5
2-Butanone (MEK)	ug/L	20	25.5	127	55-134	M5
2-Hexanone	ug/L	20	22.0	110	78-156	M5
4-Methyl-2-pentanone (MIBK)	ug/L	20	20.3	102	63-121	M5
Acetone	ug/L	20	16.4	82	51-144	M5
Benzene	ug/L	20	19.0	95	80-113	M5
Bromodichloromethane	ug/L	20	18.9	94	78-121	M5
Bromoform	ug/L	20	20.8	104	71-130	M5
Bromomethane	ug/L	20	29.0	145	58-154	M5
Carbon disulfide	ug/L	20	21.4	107	66-152	M5
Carbon tetrachloride	ug/L	20	17.5	88	69-133	M5

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



Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

LABORATORY CONTROL SAMPLE:	1279046					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chlorobenzene	ug/L		19.6	98	85-116	M5
Chloroethane	ug/L	20	18.4	92	76-136	M5
Chloroform	ug/L	20	18.4	92	76-118	M5
Chloromethane	ug/L	20	14.1	71	67-148	M5
cis-1,2-Dichloroethene	ug/L	20	18.2	91	77-126	M5
cis-1,3-Dichloropropene	ug/L	20	18.8	94	75-119	M5
Cyclohexane	ug/L	20	25.6	128	65-146	M5
Dibromochloromethane	ug/L	20	20.2	101	66-131	M5
Dichlorodifluoromethane	ug/L	20	15.2	76	10-175	M5
Ethylbenzene	ug/L	20	19.4	97	80-115	M5
Isopropylbenzene (Cumene)	ug/L	20	21.1	105	78-114	M5
m&p-Xylene	ug/L	40	39.5	99	82-116	M5
Methyl acetate	ug/L	20	12.2	61	56-155	M5
Methyl-tert-butyl ether	ug/L	20	20.9	105	82-126	M5
Methylene Chloride	ug/L	20	18.2	91	61-142	M5
o-Xylene	ug/L	20	20.4	102	81-113	M5
Styrene	ug/L	20	19.8	99	84-120	M5
Tetrachloroethene	ug/L	20	18.9	95	82-120	M5
Toluene	ug/L	20	20.2	101	82-116	M5
trans-1,2-Dichloroethene	ug/L	20	18.4	92	76-125	M5
trans-1,3-Dichloropropene	ug/L	20	20.4	102	73-119	M5
Trichloroethene	ug/L	20	18.3	92	84-116	M5
Trichlorofluoromethane	ug/L	20	17.1	86	59-138	M5
Vinyl chloride	ug/L	20	19.3	97	63-133	M5
Xylene (Total)	ug/L	60	60.0	100	82-115	M5
1,2-Dichloroethane-d4 (S)	%			91	70-128	M5
4-Bromofluorobenzene (S)	%			104	78-117	M5
Dibromofluoromethane (S)	%			93	66-132	M5
Toluene-d8 (S)	%			106	59-140	M5

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 259645

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

Batch: 260280

[1] Zn failed for the PDS.

ANALYTE QUALIFIERS

Date: 06/01/2017 03:23 PM

1c Zn failed for the PDS.

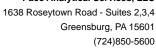
IH This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be

considered an estimated value.

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

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod & Wire GW Sampling A3

Pace Project No.: 30219635

Date: 06/01/2017 03:23 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30219635002	RW01-MW-(I)	EPA 3005A	260163	EPA 6010C	260280
30219635003	RW01-MW-(S)	EPA 3005A	260163	EPA 6010C	260280
30219635004	RW02-MW-(I)	EPA 3005A	260163	EPA 6010C	260280
30219635005	RW02-MW-(S)	EPA 3005A	260163	EPA 6010C	260280
30219635006	RW03-MW-(I)	EPA 3005A	260163	EPA 6010C	260280
30219635007	RW03-MW-(S)	EPA 3005A	260163	EPA 6010C	260280
30219635008	RW06-MW-(I)	EPA 3005A	260163	EPA 6010C	260280
30219635009	RW07-MW-(I)	EPA 3005A	260163	EPA 6010C	260280
30219635010	RW07-MW-(S)	EPA 3005A	260163	EPA 6010C	260280
30219635011	RW08-MW-(I)	EPA 3005A	260163	EPA 6010C	260280
30219635001	Trip Blank 1	EPA 8260B	259645		

WO#:30219635

Pace Analytical

CUSTODY / Analytical Request Document

by is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

DRINKING WATER I OTHER ö T NPDES T GROUND WATER Page: Ð REGULATORY AGENCY T RCRA Requested Analysis Filtered (Y/N) STATE: Site Location TSU T 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Company Name: EnviroAnalytics Group Samantha Bayura Laura Sargent Invoice Information: Pace Quote Reference: Pace Project Manager: Pace Profile #: Section C Attention: Address: Project Name: Qui so-du 2 AJ
Project Number
Project Number Report To: James Calenda PO Number: Sopy To: icalenda@enviroanalylicsgroup.com Sparrows Point, MD 21219 1430 Sparrows Point Blvd 500 EnviroAnalytics Group Fax: Section A Required Client Information: Requested Due Date/TAT: 314-620-3056 Company: Email To: ddress:

	S/6010C A07670 A17670A A17670A A17670A A2769012A A2769013A A27690A A27	Mercuryi Hexavalen Total Cy PCB/80 Oil and C Oil and G Residual	8	2 <i>8</i> 5	×	87		8				0 <u>0</u> 0	X		DATE TIME SAMPLE CONDITIONS	S 5 23 17 16 40	2 5/2/17 1945	5/2317 2315 3.8 4 0 4		no (i) belse (NV)	eived dy Se (Y/N Se (Y/N))	Sampa
COLLECTED Preservatives	lo Bobs 3270D 1897 3270D	Methand Nazer Naze	5740 143 K	0554 1 X 1	1 240	1 1000		1205	7 986	4	14g 1 K	× × ×	153 1530 c × 1		TION DATE TIME ACCEPTED BY / AFFILIATION	Shall 1550 Oct Waste	1930 (12312 1935 - 1930 W	the Stall 235 Stale will		SAMPLER NAME AND SIGNATURE	PRINT Name of SAMPLER: Rock Benta	DATE Signed (MM/DD/YY):
odes CODE (4ft)		XIRTAM THACE THACE	Trip Black 1 Wile 15	- 100 - (J)	Ruco - mas (5) ' (5)	RW62-mw/T) WTC	- me (S)	~ ms(T)	R mo3 - mw(s) M/6	- mar -	RUGT - MUID	RU07 - MW (3) UTG 15	12008 - MU(I) WITO		ADDITIONAL COMMENTS RELINQUISHED BY / AFFILIATION	Data Package Required? (Y/N)	Data Validation Required? (Y/N)	If data package is required, attach data package checklist.	1044.3	SAMPI	PRINT	SIGN
Sec	-,	# MƏTI	4-	7	3	4	5	°	7	8	6	20	7	12		Data Pac	Data Vali	if data pac checklist.		Pag	ge 2	6 of 27

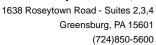
Sample Condition Upon Receipt Pittsburgh

B	U	
B	U	V

Face Analytical Client Name	į.	·	A	Duning of #	302196
Client Name:		<u>:NVIra</u>	o Anarytics	Project #	The second secon
Courier: Fed Ex UPS USPS (Client [] Comn	nercial Pace Ot	her	
Custody Seal on Cooler/Box Present: 🔲 y	es 🖊	no no	Seals intact: y	res 🗌 no	
Thermometer Used	Туре	e of Ice:	Wet) Blue None		
Cooler Temperature Observed Temp	3.8	°C	Correction Factor:	OU C Final T	emp: 3.8 °C
Temp should be above freezing to 6°C		_			
		7	1	Date and In contents:	itials of person examining
Comments:	Yes	No	N/A		- All All All All All All All All All Al
Chain of Custody Present:			1.		
Chain of Custody Filled Out:	-	 	2.		
Chain of Custody Relinquished:			3.	·····:	
Sampler Name & Signature on COC:	-		4.		
Sample Labels match COC:			5.		
-includes date/time/ID Matrix: W	<i>J</i>				
Samples Arrived within Hold Time:	_/_		6.		
Short Hold Time Analysis (<72hr remaining):			7.		
Rush Turn Around Time Requested:			[8.		
Sufficient Volume:			9.		
Correct Containers Used:	/		10.		
-Pace Containers Used:					
Containers Intact:	//		11.		
Orthophosphate field filtered			12.		
Organic Samples checked for dechlorination:			13.		
iltered volume received for Dissolved tests	· .		14.		
Il containers have been checked for preservation.			15.		
Il containers needing preservation are found to be in ompliance with EPA recommendation.			Militar		
	!		Initial when	Date/time of	
xceptions: (O), coliform, TOC, O&G, Phenolics			completed 9 4	preservation	
			Lot # of added preservative		
eadspace in VOA Vials (>6mm):		/	16.		
ip Blank Present:	/		17.		,
ip Blank Custody Seals Present	/		_		
nd Aqueous Samples Screened > 0.5 mrem/hr		1/	: Initial when completed:	Date:	
ent Notification/ Resolution:	<u> </u>			<u> </u>	
Person Contacted:		Date	e/Time:	Contacted B	y:
omments/ Resolution:					
10-1-10-10-10-10-10-10-10-10-10-10-10-10					·
			-		
A check in this box indicates that additi	onal info	ormatio	on has been stored	in ereports.	

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





May 30, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: R&W GW Samples Pace Project No.: 30219768

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on May 25, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

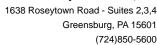
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: R&W GW Samples

Pace Project No.: 30219768

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133 Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086 Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



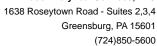


SAMPLE SUMMARY

Project: R&W GW Samples

Pace Project No.: 30219768

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
30219768002	RW08-MW(S)	Water	05/24/17 09:03	05/25/17 00:20	
30219768003	RW09-MW(I)	Water	05/24/17 09:13	05/25/17 00:20	
30219768004	RW09-MW(S)	Water	05/24/17 10:20	05/25/17 00:20	





SAMPLE ANALYTE COUNT

Project: R&W GW Samples

Pace Project No.: 30219768

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30219768002	RW08-MW(S)	EPA 6010C	PJD	2
30219768003	RW09-MW(I)	EPA 6010C	PJD	2
30219768004	RW09-MW(S)	EPA 6010C	PJD	2





Project: R&W GW Samples

Pace Project No.: 30219768

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 30, 2017

General Information:

3 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed for the PDS.

• QC Batch: 259895

Zn failed on the serial dilution

• QC Batch: 259895

Analyte Comments:

QC Batch: 259796

1c: Cd and Zn failed for the PDS.

- BLANK (Lab ID: 1279742)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1279744)
 - Cadmium



Project: R&W GW Samples

Pace Project No.: 30219768

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 30, 2017

Analyte Comments:

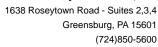
QC Batch: 259796

1c: Cd and Zn failed for the PDS.

- DUP (Lab ID: 1279744)
 - Zinc
- DUP (Lab ID: 1279747)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1279743)
 - Cadmium
 - Zinc
- MS (Lab ID: 1279745)
 - Cadmium
 - Zinc
- MS (Lab ID: 1279748)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1279746)
 - Cadmium
 - Zinc
- RW08-MW(S) (Lab ID: 30219768002)
 - Cadmium
 - Zinc
- RW09-MW(I) (Lab ID: 30219768003)
 - Cadmium
 - Zinc
- RW09-MW(S) (Lab ID: 30219768004)
 - Cadmium
 - Zinc

2c: Zn failed on the serial dilution

- BLANK (Lab ID: 1279742)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1279744)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1279747)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1279743)
 - Cadmium
 - Zinc
- MS (Lab ID: 1279745)
 - Cadmium
 - Zinc





Project: R&W GW Samples

Pace Project No.: 30219768

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: May 30, 2017

Analyte Comments:

QC Batch: 259796

2c: Zn failed on the serial dilution
• MS (Lab ID: 1279748)

• Cadmium • Zinc

• MSD (Lab ID: 1279746)

• Cadmium

• Zinc

• RW08-MW(S) (Lab ID: 30219768002)

• Cadmium • Zinc

• RW09-MW(I) (Lab ID: 30219768003)

• Cadmium

• Zinc

• RW09-MW(S) (Lab ID: 30219768004)

• Cadmium

• Zinc

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





Project: R&W GW Samples

Pace Project No.: 30219768

Date: 05/30/2017 04:17 PM

Sample: RW08-MW(S)	Lab ID:	Lab ID: 30219768002 Collected: 05/24/17 (Received: 05/	/25/17 00:20 Ma	Matrix: Water		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A				
Cadmium	3.2	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 02:21	7440-43-9	1c,2c	
Zinc	2680	ug/L	10.0	1.1	1	05/26/17 09:20	05/27/17 02:21	7440-66-6	1c,2c	





Project: R&W GW Samples

Pace Project No.: 30219768

Date: 05/30/2017 04:17 PM

Sample: RW09-MW(I)	RW09-MW(I) Lab ID: 30219768003 Collected: 05/24/17 09:13 Rec				Received: 05/	Received: 05/25/17 00:20 Matrix: Water					
			Report								
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A					
Cadmium	11.1	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 02:23	7440-43-9	1c,2c		
Zinc	57200	ua/L	1000	108	100	05/26/17 09:20	05/27/17 03:28	7440-66-6	1c.2c		





Project: R&W GW Samples

Pace Project No.: 30219768

Date: 05/30/2017 04:17 PM

Sample: RW09-MW(S)	Lab ID:	Lab ID: 30219768004 Collected: 05/24/17 10:20				Received: 05/25/17 00:20 Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	14.9	ug/L	3.0	0.34	1	05/26/17 09:20	05/27/17 02:26	7440-43-9	1c,2c	
Zinc	11900	ug/L	1000	108	100	05/26/17 09:20	05/27/17 03:30	7440-66-6	1c,2c	



Project: R&W GW Samples

LABORATORY CONTROL SAMPLE:

Date: 05/30/2017 04:17 PM

Pace Project No.: 30219768

QC Batch: 259796 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30219768002, 30219768003, 30219768004

METHOD BLANK: 1279742 Matrix: Water

12707/3

Associated Lab Samples: 30219768002, 30219768003, 30219768004

Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	05/27/17 01:12	1c,2c
Zinc	ug/L	10.0 U	10.0	1.1	05/27/17 01:12	1c,2c

Parameter Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	500	513	103	80-120	0 1c,2c
Zinc.	ua/l	500	526	105	80-120	0.1c.2c

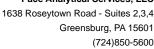
MATRIX SPIKE & MATRIX SF	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1279745 1279746											
			MS	MSD								
	3	0219509002	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	2770	500	500	3390	3310	123	108	75-125	2	20	1c,2c
Zinc	ug/L	5370000	500	500	5330000	5800000	-7000	86800	75-125	8	20	1c,2c, MI

MATRIX SPIKE SAMPLE:	1279748	30219509012	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	2.5J	500	516	103	75-125	1c,2c
Zinc	ug/L	1150	500	1640	97	75-125	1c,2c

SAMPLE DUPLICATE: 1279744						
		30219509002	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	2770	2770	0	20) 1c,2c
Zinc	ug/L	5370000	5730000	6	20	0 1c,2c

SAMPLE DUPLICATE: 1279747		30219509012	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	2.5J	2.8J		20 1c,2c	
Zinc	ug/L	1150	1180	3	2	0 1c,2c

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





QUALIFIERS

Project: R&W GW Samples

Pace Project No.: 30219768

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 259895

[1] Cd and Zn failed for the PDS.[2] Zn failed on the serial dilution

ANALYTE QUALIFIERS

Date: 05/30/2017 04:17 PM

1c Cd and Zn failed for the PDS.2c Zn failed on the serial dilution

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased

low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: R&W GW Samples

Pace Project No.: 30219768

Date: 05/30/2017 04:17 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30219768002	RW08-MW(S)	EPA 3005A	259796	EPA 6010C	259895
30219768003	RW09-MW(I)	EPA 3005A	259796	EPA 6010C	259895
30219768004	RW09-MW(S)	EPA 3005A	259796	EPA 6010C	259895

F-ALL-Q-020rev.06, 2-Feb-2007

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical

T DRINKING WATER T OTHER ğ I GROUND WATER Page: REGULATORY AGENCY ΔM RCRA STATE: Site Location NPDES TSU T 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Company Name: EnviroAnalytics Group Samantha Bayura Laura Sargent Invoice Information: Reference; Pace Project Manager; Pace Profile #: Section C Attention: Address: Pace Quote Report To: James Calenda Mest Vame. Samoto Section B Required Project Information: roject Number. O Number: Copy To: icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 1430 Sparrows Point Blvd EnviroAnalytics Group Requested Due Date/TAT: Fax: Section A Required Client Information: Phone: 314-620-3056 отрапу: Email To:

Sample Condition Upon Receipt Pittsburgh 30219768 Envivo Ana. Project #____ Client Name: Courier: Fed Ex UPS USPS Client Commercial Pace Other Custody Seal on Cooler/Box Present: yes Seals intact: yes no Type of Ice: (Wet) Thermometer Used Correction Factor: 10.0°C Final Temp:38 Observed Temp Cooler Temperature Temp should be above freezing to 6°C contents: No N/A Comments: Yes Chain of Custody Present: Chain of Custody Filled Out: 3, Chain of Custody Relinquished: Sampler Name & Signature on COC: 5, Sample Labels match COC: Matrix: -Includes date/time/ID Samples Arrived within Hold Time:

10.

11. 12.

13.

14.

All containers have been checked for preservation. 15. All containers needing preservation are found to be in compliance with EPA recommendation. Date/time of completed preservation exceptions:/VOA coliform, TOC, O&G, Phenolics Lot # of added preservative 16. Headspace in VOA Vials (>6mm): 17. Trip Blank Present: Trip Blank Custody Seals Present Initial when Rad Aqueous Samples Screened > 0.5 mrem/hr Date:

 \square A check in this box indicates that additional information has been stored in ereports.

Short Hold Time Analysis (<72hr remaining):

Organic Samples checked for dechlorination:

Filtered volume received for Dissolved tests

Rush Turn Around Time Requested:

Sufficient Volume:
Correct Containers Used:

Containers Intact:

-Pace Containers Used:

Orthophosphate field filtered

Client Notification/ Resolution:

Person Contacted: ___
Comments/ Resolution:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Contacted By:

Greensburg, PA 15601 (724)850-5600



June 12, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on June 05, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification

Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051

New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706

North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282
South Dakota Certification

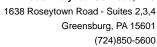
Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Iexas/TNI Certification #: 1104/04188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30220708001	RW01-MW(I)	Water	06/05/17 11:01	06/05/17 23:15
30220708002	RW01-MW(S)	Water	06/05/17 11:42	06/05/17 23:15
30220708003	RW02-MW(I)	Water	06/05/17 13:22	06/05/17 23:15
30220708004	RW02-MW(S)	Water	06/05/17 14:17	06/05/17 23:15
30220708005	RW03-MW(I)	Water	06/05/17 15:22	06/05/17 23:15
30220708006	RW03-MW(S)	Water	06/05/17 16:22	06/05/17 23:15



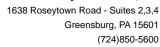


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30220708001	RW01-MW(I)	EPA 6010C	PJD	2
30220708002	RW01-MW(S)	EPA 6010C	PJD	2
30220708003	RW02-MW(I)	EPA 6010C	PJD	2
30220708004	RW02-MW(S)	EPA 6010C	PJD	2
30220708005	RW03-MW(I)	EPA 6010C	PJD	2
30220708006	RW03-MW(S)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 12, 2017

General Information:

6 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed in the PDS.
• QC Batch: 261433

Analyte Comments:

QC Batch: 261330

1c: Cd and Zn failed in the PDS.

- BLANK (Lab ID: 1286693)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1286695)
 - Cadmium
 - Zinc



PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 12, 2017

Analyte Comments:

QC Batch: 261330

1c: Cd and Zn failed in the PDS.

- DUP (Lab ID: 1286698)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1286694)
 - Cadmium
 - Zinc
- MS (Lab ID: 1286696)
 - Cadmium
 - Zinc
- MS (Lab ID: 1286699)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1286697)
 - Cadmium
 - Zinc
- RW01-MW(I) (Lab ID: 30220708001)
 - Cadmium
 - Zinc
- RW01-MW(S) (Lab ID: 30220708002)
 - Cadmium
 - Zinc
- RW02-MW(I) (Lab ID: 30220708003)
 - Cadmium
 - Zinc
- RW02-MW(S) (Lab ID: 30220708004)
 - Cadmium
 - Zinc
- RW03-MW(I) (Lab ID: 30220708005)
 - Cadmium
 - Zinc
- RW03-MW(S) (Lab ID: 30220708006)
 - Cadmium
 - Zinc

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Date: 06/12/2017 04:04 PM

Sample: RW01-MW(I)	Lab ID:	Lab ID: 30220708001			7 11:01	Received: 06/	05/17 23:15 Ma	atrix: Water			
			Report								
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP	T ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A										
Cadmium	666	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 22:38	7440-43-9	1c		
Zinc	16800	ua/L	1000	108	100	06/09/17 09:25	06/10/17 00:08	7440-66-6	1c.MH		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Date: 06/12/2017 04:04 PM

Sample: RW01-MW(S)	Lab ID:	Lab ID: 30220708002			7 11:42	Received: 06/	05/17 23:15 Ma	atrix: Water	trix: Water	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	2.7J	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 22:52	7440-43-9	1c	
Zinc	10600	ua/L	1000	108	100	06/09/17 09:25	06/10/17 00:23	7440-66-6	1c	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Date: 06/12/2017 04:04 PM

Sample: RW02-MW(I)	Lab ID:	Lab ID: 30220708003			7 13:22	Received: 06/	05/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	451	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 22:55	7440-43-9	1c
Zinc	15200	ua/L	1000	108	100	06/09/17 09:25	06/10/17 00:25	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Date: 06/12/2017 04:04 PM

Sample: RW02-MW(S)	Lab ID:	Lab ID: 30220708004			7 14:17	Received: 06/	05/17 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	11.9	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 23:03	7440-43-9	1c
Zinc	46900	ua/L	1000	108	100	06/09/17 09:25	06/10/17 00:27	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Date: 06/12/2017 04:04 PM

Sample: RW03-MW(I)	Lab ID:	30220708005	Collecte	d: 06/05/17	15:22	Received: 06/	05/17 23:15 Ma	atrix: Water	trix: Water	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A				
Cadmium	37.4	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 23:05	7440-43-9	1c	
Zinc	2440	ua/L	10.0	1.1	1	06/09/17 09:25	06/09/17 23:05	7440-66-6	1c	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Date: 06/12/2017 04:04 PM

Sample: RW03-MW(S)	Lab ID:	Lab ID: 30220708006			7 16:22	Received: 06/	05/17 23:15 Ma	atrix: Water			
			Report								
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A											
Cadmium	4.0	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 23:08	7440-43-9	1c		
Zinc	5500	ua/L	1000	108	100	06/09/17 09:25	06/10/17 00:30	7440-66-6	1c		



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Date: 06/12/2017 04:04 PM

QC Batch: 261330 Analysis Method: **EPA 6010C** QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

Associated Lab Samples: 30220708001, 30220708002, 30220708003, 30220708004, 30220708005, 30220708006

METHOD BLANK: 1286693 Matrix: Water

Associated Lab Samples:

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	06/09/17 22:33	1c
Zinc	ug/L	10.0 U	10.0	1.1	06/09/17 22:33	1c

LABORATORY CONTROL SAMPLE: 1286694 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers ug/L Cadmium 500 512 102 80-120 1c Zinc ug/L 500 510 102 80-120 1c

MATRIX SPIKE & MATRIX SPIR		1286697										
			MS	MSD								
	3	30220708001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	666	500	500	1190	1220	104	110	75-125	3	20	1c
Zinc	ug/L	16800	500	500	17600	18000	160	238	75-125	2	20	1c,MH

MATRIX SPIKE SAMPLE:	1286699						
		30220820004	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	0.48J	500	499	100	75-125	1c
Zinc	ug/L	71.9	500	554	96	75-125	1c

SAMPLE DUPLICATE: 1286695						
		30220708001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	666	688	3	20	1c
Zinc	ug/L	16800	16900	1	20	1c

SAMPLE DUPLICATE: 1286698						
		30220820004	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	0.48J	0.56J		20) 1c
Zinc	ug/L	71.9	73.2	2	20) 1c

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 261433

[1] Cd and Zn failed in the PDS.

ANALYTE QUALIFIERS

Date: 06/12/2017 04:04 PM

1c Cd and Zn failed in the PDS.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

hiah





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220708

Date: 06/12/2017 04:04 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30220708001	RW01-MW(I)	EPA 3005A	261330	EPA 6010C	261433
30220708002	RW01-MW(S)	EPA 3005A	261330	EPA 6010C	261433
30220708003	RW02-MW(I)	EPA 3005A	261330	EPA 6010C	261433
30220708004	RW02-MW(S)	EPA 3005A	261330	EPA 6010C	261433
30220708005	RW03-MW(I)	EPA 3005A	261330	EPA 6010C	261433
30220708006	RW03-MW(S)	EPA 3005A	261330	EPA 6010C	261433

Face Analytical

CHAIN-OF-CUSTODY / Analytical Request Docu $\mathbb{MOV} \subset \mathbb{C}20708$

Section Required	Section A . Required Client Information:	Section B Required Project Information:	ect Infc	ormation				ŏ≧	Section C Invoice Information:	mation:							ころのいか	11 11 11 11 11 11 11 11 11 11 11 11 11		5	Luc	
Company:	lytics Group	Report To: James Calenda	seus	Calen	da			A	Attention:	Lat	Laura Sargent	rgent				- Constitution						,
Address:	1600 Sparrows Point Blvd, Suite B2	Copy To: St	ewar	Stewart Kabis	,5			ರ	Company Name:	ame:	Envir	EnviroAnalytics Group	ics Gr	dno		-	ATORY	REGULATORY AGENCY				
	Sparrows Point, MD 21219							A	Address:	1650) Des Pe	res Road,	Suite 30	3 St. Lo	1650 Des Peres Road, Suite 303 St. Louis, MO 63131	L	NPDES	GROUI	GROUND WATER	i	DRINKING WATER	WATER
Email To:	calenda@enviroanalyticsgroup.com	Purchase Order No.:	Pr No.:					U. 17.	Pace Quote Reference:							T UST	<u></u>	RCRA		L	OTHER	
Phone:	314-620-3056 Fax:	Project Name:	1	od and W	fire Milt GV	Rod and Wire Mill GW Sampling		Pa	Pace Project Manager:	1	manth	Samantha Bayura	Ira			Site L	Site Location	Ç				
Request	Requested Due Date/TAT: 5 Day	Project Number:	76. 76.	A company of the comp	14000			G.	ce Profile	#.							STATE:	ואו				
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30220708

Sample Condition Upon Receipt Pittsburgh . Face Analytical Client Name: Space Pt. Project #_____ Courier: Fed Ex UPS USPS Client Commercial Pace Other Custody Seal on Cooler/Box Present: yes no Seals intact: yes no Type of Ice: (Wet) Blue None Thermometer Used 7.6 °C Correction Factor: O °C Final Temp: Cooler Temperature Observed Temp Temp should be above freezing to 6°C Date and Initials of person examining contents: Yes Νo N/A Comments: Chain of Custody Present: Chain of Custody Filled Out: Chain of Custody Relinquished: 3. Sampler Name & Signature on COC: Sample Labels match COC: -includes date/time/ID Matrix: 6. Samples Arrived within Hold Time: Short Hold Time Analysis (<72hr remaining): Rush Turn Around Time Requested: 8. 9. Sufficient Volume: 10. Correct Containers Used: -Pace Containers Used: 11. Containers Intact: Orthophosphate field filtered 13. Organic Samples checked for dechlorination: 14. Filtered volume received for Dissolved tests All containers have been checked for preservation. 15. All containers needing preservation are found to be in compliance with EPA recommendation. Date/time of Initial when exceptions: VOA, coliform, TOC, O&G, Phenolics completed preservation Lot # of added preservative Headspace in VOA Vials (>6mm): 17. Trip Blank Present: Trip Blank Custody Seals Present initial when Rad Aqueous Samples Screened > 0.5 mrem/hr 6/5/17 Client Notification/ Resolution: Person Contacted: Date/Time: Contacted By: Comments/ Resolution:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

A check in this box indicates that additional information has been stored in ereports.

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



June 12, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on June 06, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30220820001	RW06-MW (S)	Water	06/06/17 09:53	06/06/17 22:30
30220820002	RW06-MW (I)	Water	06/06/17 10:42	06/06/17 22:30
30220820003	RW06-MW (D)	Water	06/06/17 11:17	06/06/17 22:30
30220820004	RW08-MW (I)	Water	06/06/17 12:32	06/06/17 22:30
30220820005	RW08-MW (S)	Water	06/06/17 13:27	06/06/17 22:30
30220820006	RW07-MW (I)	Water	06/06/17 14:58	06/06/17 22:30
30220820007	RW07-MW (S)	Water	06/06/17 15:47	06/06/17 22:30





SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30220820001	RW06-MW (S)	EPA 6010C	PJD	2
30220820002	RW06-MW (I)	EPA 6010C	PJD	2
30220820003	RW06-MW (D)	EPA 6010C	PJD	2
30220820004	RW08-MW (I)	EPA 6010C	PJD	2
30220820005	RW08-MW (S)	EPA 6010C	PJD	2
30220820006	RW07-MW (I)	EPA 6010C	PJD	2
30220820007	RW07-MW (S)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 12, 2017

General Information:

7 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed in the PDS.
• QC Batch: 261433

Analyte Comments:

QC Batch: 261330

1c: Cd and Zn failed in the PDS.

- BLANK (Lab ID: 1286693)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1286695)
 - Cadmium
 - Zinc



PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 12, 2017

Analyte Comments:

QC Batch: 261330

1c: Cd and Zn failed in the PDS.

- DUP (Lab ID: 1286698)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1286694)
 - Cadmium
 - Zinc
- MS (Lab ID: 1286696)
 - Cadmium
 - Zinc
- MS (Lab ID: 1286699)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1286697)
 - Cadmium
 - Zinc
- RW06-MW (D) (Lab ID: 30220820003)
 - Cadmium
 - Zinc
- RW06-MW (I) (Lab ID: 30220820002)
 - Cadmium
 - Zinc
- RW06-MW (S) (Lab ID: 30220820001)
 - Cadmium
 - Zinc
- RW07-MW (I) (Lab ID: 30220820006)
 - Cadmium
 - Zinc
- RW07-MW (S) (Lab ID: 30220820007)
 - Cadmium
 - Zinc
- RW08-MW (I) (Lab ID: 30220820004)
 - Cadmium
 - Zinc
- RW08-MW (S) (Lab ID: 30220820005)
 - Cadmium
 - Zinc

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Date: 06/12/2017 04:05 PM

Sample: RW06-MW (S)	Lab ID:	30220820001	Collecte	d: 06/06/17	09:53	Received: 06/	06/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 23:10	7440-43-9	1c
Zinc	30.2	ug/L	10.0	1.1	1	06/09/17 09:25	06/09/17 23:10	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Date: 06/12/2017 04:05 PM

Sample: RW06-MW (I)	Lab ID:	30220820002	Collecte	d: 06/06/17	10:42	Received: 06/	06/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	14.3	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 23:12	7440-43-9	1c
Zinc	876	ug/L	10.0	1.1	1	06/09/17 09:25	06/09/17 23:12	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Date: 06/12/2017 04:05 PM

Sample: RW06-MW (D)	Lab ID:	30220820003	Collecte	d: 06/06/17	11:17	Received: 06/	06/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.1J	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 23:15	7440-43-9	1c
Zinc	58.0	ug/L	10.0	1.1	1	06/09/17 09:25	06/09/17 23:15	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Date: 06/12/2017 04:05 PM

Sample: RW08-MW (I)	Lab ID:	30220820004	Collecte	d: 06/06/17	7 12:32	Received: 06/	06/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	0.48J	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 23:20	7440-43-9	1c
Zinc	71.9	ua/L	10.0	1.1	1	06/09/17 09:25	06/09/17 23:20	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Date: 06/12/2017 04:05 PM

Sample: RW08-MW (S)	Lab ID:	30220820005	Collecte	d: 06/06/17	13:27	Received: 06/	06/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.7J	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 23:17	7440-43-9	1c
Zinc	1870	ug/L	10.0	1.1	1	06/09/17 09:25	06/09/17 23:17	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Date: 06/12/2017 04:05 PM

Sample: RW07-MW (I)	Lab ID:	30220820006	Collecte	Collected: 06/06/17 14:58			Received: 06/06/17 22:30 Matrix			
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	0.91J	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 23:38	7440-43-9	1c	
Zinc	432	ug/L	10.0	1.1	1	06/09/17 09:25	06/09/17 23:38	7440-66-6	1c	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Date: 06/12/2017 04:05 PM

Sample: RW07-MW (S)	Lab ID:	Lab ID: 30220820007		Collected: 06/06/17 15:47		Received: 06/	06/17 22:30 Ma	latrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	2.3J	ug/L	3.0	0.34	1	06/09/17 09:25	06/09/17 23:41	7440-43-9	1c
Zinc	107	ua/L	10.0	1.1	1	06/09/17 09:25	06/09/17 23:41	7440-66-6	1c



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Date: 06/12/2017 04:05 PM

QC Batch: 261330 Analysis Method: EPA 6010C QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

Associated Lab Samples: 30220820001, 30220820002, 30220820003, 30220820004, 30220820005, 30220820006, 30220820007

METHOD BLANK: 1286693 Matrix: Water

Associated Lab Samples:

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	06/09/17 22:33	1c
Zinc	ug/L	10.0 U	10.0	1.1	06/09/17 22:33	1c

LABORATORY CONTROL SAMPLE:	1286694					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	512	102	80-120	1c
Zinc	ug/L	500	510	102	80-120	1c

MATRIX SPIKE & MATRIX SPIK	E DUPLIC	ATE: 128669	96		1286697							
			MS	MSD								
		30220708001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	666	500	500	1190	1220	104	110	75-125	3	20	1c
Zinc	ug/L	16800	500	500	17600	18000	160	238	75-125	2	20	1c,MH

MATRIX SPIKE SAMPLE:	1286699						
		30220820004	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	0.48J	500	499	100	75-125	1c
Zinc	ug/L	71.9	500	554	96	75-125	1c

SAMPLE DUPLICATE: 1286695		30220708001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	666	688	3	20	1c
Zinc	ug/L	16800	16900	1	20) 1c

SAMPLE DUPLICATE: 1286698						
		30220820004	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	0.48J	0.56J		20) 1c
Zinc	ug/L	71.9	73.2	2	20) 1c

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 261433

[1] Cd and Zn failed in the PDS.

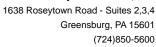
ANALYTE QUALIFIERS

Date: 06/12/2017 04:05 PM

1c Cd and Zn failed in the PDS.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

hiah





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220820

Date: 06/12/2017 04:05 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30220820001	RW06-MW (S)	EPA 3005A	261330	EPA 6010C	261433
30220820002	RW06-MW (I)	EPA 3005A	261330	EPA 6010C	261433
30220820003	RW06-MW (D)	EPA 3005A	261330	EPA 6010C	261433
30220820004	RW08-MW (I)	EPA 3005A	261330	EPA 6010C	261433
30220820005	RW08-MW (S)	EPA 3005A	261330	EPA 6010C	261433
30220820006	RW07-MW (I)	EPA 3005A	261330	EPA 6010C	261433
30220820007	RW07-MW (S)	EPA 3005A	261330	EPA 6010C	261433

Pace Analytical

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

DRINKING WATER OTHER F NPDES F GROUND WATER F REGULATORY AGENCY g RCRA Site Location STATE ∏ UST 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Company Name: EnviroAnalytics Group Samantha Bayura Laura Sargent Invoice information: Reference: Pace Project Manager: Pace Profile #: Section C Attention: Pace Quote Address: Project Name: Rod and Wire Mill GW Sampling Section B
Required Project Information:
Report To: James Calenda Copy To: Stewart Kabis Project Number: 1-1-1 Purchase Order No.: 1600 Sparrows Point Blvd, Suite B2 calenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 Section A
Required Client Information:
Company: EnviroAnalytics Group 5 Day Fax hone: 314-620-3056 Requested Due Date/TAT:

Email To:

ddress;

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	Section D Valid Matrix Codes Required Client Information MATRIX CO	odes CODE	 	(_rur-	ŭ	COLLECTED	ED				Prese	Preservatives	se,	10/0	ÎN/A											
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# W∃TI	SAMPLEID WIFE ARR (A-Z, 0-9',-) OTHER Sample IDs MUST BE UNIQUE TISSUE	ዋ			DATE TI	TIME	DATE	TA YMƏT E TEMP AT C	# OF CONTAINER	Unpreserved H ₂ SO₄	HCI HNO ³	ИаОН	Na ₂ S ₂ O ₃ Methanol	Ofher	¶Analysis Tes rotal Cadmium 6010	0 i 03 oni∑ lsto⊺	M. M. San Care			<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		Residual Chlorin	Ţ g	Pace Project No./ Lab I.D	t No./ La	ਰ ਹ.
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30220820 Sample Condition Upon Receipt Pittsburgh Face Analytical Spacrows Pt. Project # Client Name: Courier: Fed Ex UPS USPS Client Commercial Pace Other Tracking #: Custody Seal on Cooler/Box Present: yes no Seals intact: yes no Thermometer Used Type of Icer Wet Blue None / . / °C Correction Factor: C °C Final Temp: Cooler Temperature Temp should be above freezing to 6°C Date and Initials of person examining Comments: Yes No N/A Chain of Custody Present: 1. Chain of Custody Filled Out: Chain of Custody Relinquished: 3. Sampler Name & Signature on COC: Sample Labels match COC: 5. -Includes date/time/ID Matrix: Samples Arrived within Hold Time: 6 Short Hold Time Analysis (<72hr remaining): Rush Turn Around Time Requested: 8. Sufficient Volume: 9. Correct Containers Used: 10. -Pace Containers Used: Containers Intact: 11. Orthophosphate field filtered 12. Organic Samples checked for dechlorination: 13. Filtered volume received for Dissolved tests 14. All containers have been checked for preservation. 15. All containers needing preservation are found to be in compliance with EPA recommendation. Date/time of Initial when 6-6-17 exceptions: VOA, coliform, TOC, O&G, Phenolics completed preservation Lot # of added preservative Headspace in VOA Vials (>6mm): 16. Trip Blank Present: 17. Trip Blank Custody Seals Present Rad Aqueous Samples Screened > 0.5 mrem/hr nitial when 10-6-17 Date; completed: Client Notification/ Resolution;

Person Contacted: _____ Date/Time: ____ Contacted By: ______

Comments/ Resolution: ______

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



June 14, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on June 07, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification

Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30220937001	RW05-MW(I)	Water	06/07/17 08:57	06/07/17 22:50
30220937002	RW04-MW(S)	Water	06/07/17 09:57	06/07/17 22:50
30220937003	RW09-MW(I)	Water	06/07/17 10:50	06/07/17 22:50
30220937004	RW09-MW(S)	Water	06/07/17 11:27	06/07/17 22:50
30220937005	RW22-MW(I)	Water	06/07/17 13:04	06/07/17 22:50
30220937006	RW11-MW(S)	Water	06/07/17 14:17	06/07/17 22:50
30220937007	RW11-MW(I)	Water	06/07/17 15:07	06/07/17 22:50
30220937008	RW10-MW(I)	Water	06/07/17 16:35	06/07/17 22:50



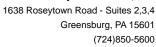


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30220937001	RW05-MW(I)	EPA 6010C	PJD	2
30220937002	RW04-MW(S)	EPA 6010C	PJD	2
30220937003	RW09-MW(I)	EPA 6010C	PJD	2
30220937004	RW09-MW(S)	EPA 6010C	PJD	2
30220937005	RW22-MW(I)	EPA 6010C	PJD	2
30220937006	RW11-MW(S)	EPA 6010C	PJD	2
30220937007	RW11-MW(I)	EPA 6010C	PJD	2
30220937008	RW10-MW(I)	EPA 6010C	PJD	2





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 14, 2017

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed on the Serial Dilution

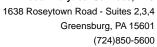
QC Batch: 261736Zn failed on the PDSQC Batch: 261736

Analyte Comments:

QC Batch: 261633

1c: Cd and Zn failed on the Serial Dilution

- BLANK (Lab ID: 1288443)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1288445)
 - Cadmium





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

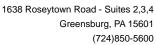
Date: June 14, 2017

Analyte Comments:

QC Batch: 261633

1c: Cd and Zn failed on the Serial Dilution

- DUP (Lab ID: 1288445)
 - Zinc
- DUP (Lab ID: 1288448)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1288444)
 - Cadmium
 - Zinc
- MS (Lab ID: 1288446)
 - Cadmium
 - Zinc
- MS (Lab ID: 1288449)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1288447)
 - Cadmium
 - Zinc
- RW04-MW(S) (Lab ID: 30220937002)
 - Cadmium
 - Zinc
- RW05-MW(I) (Lab ID: 30220937001)
 - Cadmium
 - Zinc
- RW09-MW(I) (Lab ID: 30220937003)
 - Cadmium
 - Zinc
- RW09-MW(S) (Lab ID: 30220937004)
 - Cadmium
 - Zinc
- RW10-MW(I) (Lab ID: 30220937008)
 - Cadmium
 - Zinc
- RW11-MW(I) (Lab ID: 30220937007)
 - Cadmium
 - Zinc
- RW11-MW(S) (Lab ID: 30220937006)
 - Cadmium
 - Zinc
- RW22-MW(I) (Lab ID: 30220937005)
 - Cadmium
 - Zinc





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

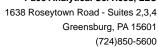
Date: June 14, 2017

Analyte Comments:

QC Batch: 261633

2c: Zn failed on the PDS

- BLANK (Lab ID: 1288443)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1288445)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1288448)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1288444)
 - Cadmium
 - Zinc
- MS (Lab ID: 1288446)
 - Cadmium
 - Zinc
- MS (Lab ID: 1288449)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1288447)
 - Cadmium
 - Zinc
- RW04-MW(S) (Lab ID: 30220937002)
 - Cadmium
 - Zinc
- RW05-MW(I) (Lab ID: 30220937001)
 - Cadmium
 - Zinc
- RW09-MW(I) (Lab ID: 30220937003)
 - Cadmium
 - Zinc
- RW09-MW(S) (Lab ID: 30220937004)
 - Cadmium
 - Zinc
- RW10-MW(I) (Lab ID: 30220937008)
 - Cadmium
 - Zinc
- RW11-MW(I) (Lab ID: 30220937007)
 - Cadmium
 - Zinc
- RW11-MW(S) (Lab ID: 30220937006)
 - Cadmium
 - Zinc





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 14, 2017

Analyte Comments: QC Batch: 261633

2c: Zn failed on the PDS

• RW22-MW(I) (Lab ID: 30220937005)

• Cadmium • Zinc

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Date: 06/14/2017 02:32 PM

Sample: RW05-MW(I)	Lab ID:	30220937001	Collecte	d: 06/07/17	7 08:57	Received: 06/	07/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium Zinc	577 40400	ug/L ug/L	3.0 1000	0.34 108	1 100				1c,2c 1c,2c, MH





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Date: 06/14/2017 02:32 PM

Sample: RW04-MW(S)	Lab ID:	30220937002	Collecte	d: 06/07/17	7 09:57	Received: 06/	07/17 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	0.70J	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 22:44	7440-43-9	1c,2c
Zinc	58.2	ug/L	10.0	1.1	1	06/13/17 08:19	06/13/17 22:44	7440-66-6	1c,2c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Date: 06/14/2017 02:32 PM

Sample: RW09-MW(I)	Lab ID:	30220937003	Collecte	d: 06/07/17	7 10:50	Received: 06/	07/17 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	8.1	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 22:47	7440-43-9	1c,2c
Zinc	51900	ug/L	1000	108	100	06/13/17 08:19	06/14/17 00:07	7440-66-6	1c,2c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Date: 06/14/2017 02:32 PM

Sample: RW09-MW(S)	Lab ID:	30220937004	Collecte	d: 06/07/17	7 11:27	Received: 06/	07/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	13.9	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 22:54	7440-43-9	1c,2c
Zinc	13000	ug/L	1000	108	100	06/13/17 08:19	06/14/17 00:10	7440-66-6	1c,2c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Date: 06/14/2017 02:32 PM

Sample: RW22-MW(I)	Lab ID:	3022093700	5 Collecte	d: 06/07/17	7 13:04	Received: 06/	07/17 22:50 Ma	atrix: Water	
	-		Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	1.9J	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 22:57	7440-43-9	1c,2c
Zinc	374	ug/L	10.0	1.1	1	06/13/17 08:19	06/13/17 22:57	7440-66-6	1c,2c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Date: 06/14/2017 02:32 PM

Sample: RW11-MW(S)	Lab ID:	30220937006	Collecte	d: 06/07/17	7 14:17	Received: 06/	07/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	0.94J	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 22:59	7440-43-9	1c,2c
Zinc	13500	ug/L	1000	108	100	06/13/17 08:19	06/14/17 00:12	7440-66-6	1c,2c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Date: 06/14/2017 02:32 PM

Sample: RW11-MW(I)	Lab ID:	30220937007	Collecte	d: 06/07/17	7 15:07	Received: 06/	07/17 22:50 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	218	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 23:01	7440-43-9	1c,2c
Zinc	201000	ug/L	1000	108	100	06/13/17 08:19	06/14/17 00:15	7440-66-6	1c,2c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Date: 06/14/2017 02:32 PM

Sample: RW10-MW(I)	Lab ID:	30220937008	Collecte	d: 06/07/17	7 16:35	Received: 06/	07/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	27.2	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 23:04	7440-43-9	1c,2c
Zinc	34600	ug/L	1000	108	100	06/13/17 08:19	06/14/17 00:22	7440-66-6	1c,2c



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Date: 06/14/2017 02:32 PM

QC Batch: 261633 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30220937001, 30220937002, 30220937003, 30220937004, 30220937005, 30220937006, 30220937007,

30220937008

METHOD BLANK: 1288443 Matrix: Water

Associated Lab Samples: 30220937001, 30220937002, 30220937003, 30220937004, 30220937005, 30220937006, 30220937007,

30220937008

	Blank	Reporting			
Units	Result	Limit	MDL	Analyzed	Qualifiers
ug/L	3.0 U	3.0	0.34	06/13/17 22:26	1c,2c
ug/L	10.0 U	10.0	1.1	06/13/17 22:26	1c,2c
	ug/L	$-\frac{\text{Units}}{\text{ug/L}} - \frac{\text{Result}}{3.0 \text{ U}}$	Units Result Limit 3.0 U 3.0 U	Units Result Limit MDL ug/L 3.0 U 3.0 0.34	Units Result Limit MDL Analyzed ug/L 3.0 U 3.0 0.34 06/13/17 22:26

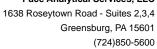
LABORATORY CONTROL SAMPLE:	1288444					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	510	102	80-120	1c,2c
Zinc	ug/L	500	522	104	80-120	1c,2c

MATRIX SPIKE & MATRIX SP	IKE DUPLICA	TE: 12884	46		1288447							
			MS	MSD								
	3	0220937001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	577	500	500	1070	1070	98	99	75-125	0	20	1c,2c
Zinc	ug/L	40400	500	500	42100	42000	336	314	75-125	0	20	1c,2c, MH

MATRIX SPIKE SAMPLE:	1288449						
		30221073003	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	1520	500	1990	95	75-125	1c,2c
Zinc	ug/L	12200	500	13000	166	75-125	1c,2c,MH

SAMPLE DUPLICATE: 1288445						
		30220937001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD Qu	alifiers
Cadmium	ug/L	577	581	1	20 1c,2c	
Zinc	ug/L	40400	41300	2	20 1c,2c	

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





QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Date: 06/14/2017 02:32 PM

SAMPLE DUPLICATE: 1288448						
		30221073003	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	1520	1520	0	2	0 1c,2c
Zinc	ug/L	12200	12400	2	2	0 1c,2c

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

(724)850-5600



QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 261736

[1] Cd and Zn failed on the Serial Dilution

Zn failed on the PDS [2]

ANALYTE QUALIFIERS

Date: 06/14/2017 02:32 PM

1c Cd and Zn failed on the Serial Dilution

2c Zn failed on the PDS

Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased МН

high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30220937

Date: 06/14/2017 02:32 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30220937001	RW05-MW(I)	EPA 3005A	261633	EPA 6010C	 261736
30220937002	RW04-MW(S)	EPA 3005A	261633	EPA 6010C	261736
30220937003	RW09-MW(I)	EPA 3005A	261633	EPA 6010C	261736
30220937004	RW09-MW(S)	EPA 3005A	261633	EPA 6010C	261736
30220937005	RW22-MW(I)	EPA 3005A	261633	EPA 6010C	261736
30220937006	RW11-MW(S)	EPA 3005A	261633	EPA 6010C	261736
30220937007	RW11-MW(I)	EPA 3005A	261633	EPA 6010C	261736
30220937008	RW10-MW(I)	EPA 3005A	261633	EPA 6010C	261736

WO#:30220937

Face Analytical

CUSTODY / Analytical Request Document

ly is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Project No./ Lab I.D. DRINKING WATER OTHER 88 e B ō 800 88 GROUND WATER Residual Chlorine (Y/N) Page: ۵ REGULATORY AGENCY RCRA Requested Analysis Filtered (Y/N) Site Location STATE: NPDES UST 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 之人 × メ otal Zinc 6010 ベッ 0108 muimbeO tato Company Name: EnviroAnalytics Group Analysis Test ₹N/A Jedic Samantha Bayura Methanol Laura Sargeni _EO_SS_SBN Preservatives HOSN HCI × × Invoice Information: HNO3 PSSO4 Pace Quote Reference: Pace Project Pace Profile # Section C Unpreserved Attention: Address: Vanager: # OF CONTAINERS SAMPLE TEMP AT COLLECTION 417 035 1127 1567 736 TIME 2020 6/1/17 0857 COMPOSITE END/GRAB COLLECTED DATE Project Name: Rod and Wire Mill GW Sampling TIME Project Number: 176384-1-1 COMPOSITE Report To: James Calenda Stewart Kabis 2 1m Mr. G. <u>رم</u> لام الم الم ৬ ৩ (G=GRAB C=COMP) SAMPLE TYPE Purchase Order No. ٦ 5 MATRIX CODE Copy To: Valid Matrix Codes MATRIX CODE T S S S S S S S S S S DRINKING WATER
WATER
WASTE WATER
PRODUCT
SOIL/SOLID 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com AIR OTHER TISSUE OIL WIPE Sparrows Point, MD 21219 . Bw (S) (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE EnviroAnalytics Group RWON- MU (S) T)mb RUDG- MU(T) BMC 325 5 Day - Mar (I) SAMPLED Fax: Required Client Information Rusos-Section A Required Client Information: hone: 314-620-3056 Requested Due Date/TAT: 850 S RU22 Ru I RUI Section D company: Email ⊺o: Address: ç١ w ω # M3T

DATE Signed (MM/DD/YY): Ob/07/17 Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to tate charges of 1.5% per month for any invoices not paid within 30 days. 30 PRINT Name of SAMPLER: Bob Bentz SIGNATURE of SAMPLER:

SAMPLER NAME AND SIGNATURE

Page 21 of 22

Samples Intact (M/Y)

Custody Sealed Coolet (Y/N)

Received on Ice (Y/N)

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7

2

W

2250

F13/1647

SAMPLE CONDITIONS

TIME

DATE

ACCEPTED BY / AFFILIATION

1639

TIME

DATE

RELINQUISHED BY / AFFICIATION

ADDITIONAL COMMENTS

Bob

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Sample Condition Upon Receipt Pittsburgh

KER

PaceAnalytical Client Nam	ne: <u>(</u>	En	viro	Anal	HICS		Proje	ect#_	30	22	0 !) ;
Courier: Fed Ex UPS USPS Tracking #:				ercial 💆	Pace Othe	er						
Custody Seal on Cooler/Box Present:] yes 』	Z i	וס ו	Seals intact	i: 🔲 ye:	s 🗌	no					
Thermometer Used	Ту	/ре о	fice:	WeD Blu	e None					•		
Cooler Temperature Observed Temp	3.4		°C (Correction	Factor: C	3.0	°C	Final T	emp.	<u> 3.9</u>		С
Temp should be above freezing to 6°C												
•	-						Dat	e and In ontents:	iiles of	person (examini 811	ng <u>1</u>
Comments:	Y	es	No	N/A		1		~~····································				
Chain of Custody Present:	/			1.								
Chain of Custody Filled Out:				2.								
Chain of Custody Relinquished:				3.				-				
Sampler Name & Signature on COC:				4,								
Sample Labels match COC:				5.								
-includes date/time/ID Matrix	: <u>W+</u>						_					
Samples Arrived within Hold Time:				6.				,				
Short Hold Time Analysis (<72hr remaining	g):			7.								
Rush Turn Around Time Requested:				8.								
Sufficient Volume:				9.								
Correct Containers Used:				10.								
-Pace Containers Used:												
Containers Intact:				11.								
Orthophosphate field filtered			1000	12.								
Organic Samples checked for dechlorinati	on:			13.			- 					
Filtered volume received for Dissolved tests	-	\int		14.								
All containers have been checked for preservation,				15.								
All containers needing preservation are found to be in compliance with EPA recommendation.												
exceptions: VOA, coliform, TOC, O&G, Pheno	lice			Initial whe	"dxy+	- 1	e/time o servatio					
xceptions, VOA, comotti, 100, 0x6, Friend	III-CS			Lot # of ac		1910	50141110					\exists
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ad Aqueous Samples Screened > 0.5 mrem	/hr	San San San San San San San San San San		Initial wher completed:		Date	£					
lient Notification/ Resolution:												_
Person Contacted:			_ Date	Time:			Conf	acted E	<u>y:</u>			_
Comments/ Resolution:										•		
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		-			<u></u>							_
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Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



June 14, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on June 08, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

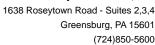
(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30221073001	RW12-MW(I)	Water	06/08/17 09:00	06/08/17 22:25
30221073002	RW12-MW(S)	Water	06/08/17 09:47	06/08/17 22:25
30221073003	RW14-MW(S)	Water	06/08/17 10:47	06/08/17 22:25
30221073004	RW15-MW(S)	Water	06/08/17 11:52	06/08/17 22:25
30221073005	RW18-MW(I)	Water	06/08/17 13:04	06/08/17 22:25
30221073006	RW18-MW(S)	Water	06/08/17 13:55	06/08/17 22:25
30221073007	RW19-MW(I)	Water	06/08/17 15:08	06/08/17 22:25
30221073008	RW19-MW(S)	Water	06/08/17 15:58	06/08/17 22:25



SAMPLE ANALYTE COUNT

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30221073001	RW12-MW(I)	EPA 6010C	PJD	2
30221073002	RW12-MW(S)	EPA 6010C	PJD	2
30221073003	RW14-MW(S)	EPA 6010C	PJD	2
30221073004	RW15-MW(S)	EPA 6010C	PJD	2
30221073005	RW18-MW(I)	EPA 6010C	PJD	2
30221073006	RW18-MW(S)	EPA 6010C	PJD	2
30221073007	RW19-MW(I)	EPA 6010C	PJD	2
30221073008	RW19-MW(S)	EPA 6010C	PJD	2





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 14, 2017

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed on the Serial Dilution

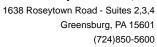
QC Batch: 261736Zn failed on the PDSQC Batch: 261736

Analyte Comments:

QC Batch: 261633

1c: Cd and Zn failed on the Serial Dilution

- BLANK (Lab ID: 1288443)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1288445)
 - Cadmium





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

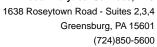
Date: June 14, 2017

Analyte Comments:

QC Batch: 261633

1c: Cd and Zn failed on the Serial Dilution

- DUP (Lab ID: 1288445)
 - Zinc
- DUP (Lab ID: 1288448)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1288444)
 - Cadmium
 - Zinc
- MS (Lab ID: 1288446)
 - Cadmium
 - Zinc
- MS (Lab ID: 1288449)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1288447)
 - Cadmium
 - Zinc
- RW12-MW(I) (Lab ID: 30221073001)
 - Cadmium
 - Zinc
- RW12-MW(S) (Lab ID: 30221073002)
 - Cadmium
 - Zinc
- RW14-MW(S) (Lab ID: 30221073003)
 - Cadmium
 - Zinc
- RW15-MW(S) (Lab ID: 30221073004)
 - Cadmium
 - Zinc
- RW18-MW(I) (Lab ID: 30221073005)
 - Cadmium
 - Zinc
- RW18-MW(S) (Lab ID: 30221073006)
 - Cadmium
 - Zinc
- RW19-MW(I) (Lab ID: 30221073007)
 - Cadmium
 - Zinc
- RW19-MW(S) (Lab ID: 30221073008)
 - Cadmium
 - Zinc





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

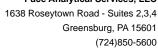
Date: June 14, 2017

Analyte Comments:

QC Batch: 261633

2c: Zn failed on the PDS

- BLANK (Lab ID: 1288443)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1288445)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1288448)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1288444)
 - Cadmium
 - Zinc
- MS (Lab ID: 1288446)
 - Cadmium
 - Zinc
- MS (Lab ID: 1288449)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1288447)
 - Cadmium
 - Zinc
- RW12-MW(I) (Lab ID: 30221073001)
 - Cadmium
 - Zinc
- RW12-MW(S) (Lab ID: 30221073002)
 - Cadmium
 - Zinc
- RW14-MW(S) (Lab ID: 30221073003)
 - Cadmium
 - Zinc
- RW15-MW(S) (Lab ID: 30221073004)
 - Cadmium
 - Zinc
- RW18-MW(I) (Lab ID: 30221073005)
 - Cadmium
 - Zinc
- RW18-MW(S) (Lab ID: 30221073006)
 - Cadmium
 - Zinc
- RW19-MW(I) (Lab ID: 30221073007)
 - Cadmium
 - Zinc





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 14, 2017

Analyte Comments: QC Batch: 261633

2c: Zn failed on the PDS

• RW19-MW(S) (Lab ID: 30221073008)

• Cadmium • Zinc

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





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Date: 06/14/2017 02:25 PM

Sample: RW12-MW(I)	Lab ID:	30221073001	Collecte	d: 06/08/17	7 09:00	Received: 06/	08/17 22:25 Ma	atrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A											
Cadmium	2260	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 23:06	7440-43-9	1c,2c		
Zinc	226000	ug/L	1000	108	100	06/13/17 08:19	06/14/17 00:24	7440-66-6	1c,2c		





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Date: 06/14/2017 02:25 PM

Sample: RW12-MW(S)	Lab ID:	30221073002	Collecte	d: 06/08/17	7 09:47	Received: 06/	08/17 22:25 Ma	atrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A											
Cadmium	29.7	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 23:09	7440-43-9	1c,2c		
Zinc	11400	ug/L	1000	108	100	06/13/17 08:19	06/14/17 00:27	7440-66-6	1c,2c		





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Date: 06/14/2017 02:25 PM

Sample: RW14-MW(S)	Lab ID: 30221073003		Collected: 06/08/17 10:47			Received: 06/08/17 22:25 M		latrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium Zinc	1520 12200	ug/L ug/L	3.0 1000	0.34 108	1 100	06/13/17 08:19 06/13/17 08:19		7440-43-9 7440-66-6	1c,2c 1c,2c,





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Date: 06/14/2017 02:25 PM

Sample: RW15-MW(S)	Lab ID:	30221073004	Collecte	d: 06/08/17	7 11:52	Received: 06/	08/17 22:25 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A			
Cadmium	69.4	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 23:23	7440-43-9	1c,2c
Zinc	6560	ug/L	1000	108	100	06/13/17 08:19	06/14/17 00:37	7440-66-6	1c.2c





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Date: 06/14/2017 02:25 PM

Sample: RW18-MW(I)	Lab ID:	30221073005	Collecte	d: 06/08/1	7 13:04	Received: 06/	08/17 22:25 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: Ef	PA 3005A			
Cadmium	65.1	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 23:25	7440-43-9	1c,2c
Zinc	694000	ua/L	10000	1080	1000	06/13/17 08:19	06/14/17 00:56	7440-66-6	1c.2c





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Date: 06/14/2017 02:25 PM

Sample: RW18-MW(S)	Lab ID:	30221073006	Collecte	d: 06/08/17	7 13:55	Received: 06/	08/17 22:25 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	356	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 23:28	7440-43-9	1c,2c
Zinc	25500	ug/L	1000	108	100	06/13/17 08:19	06/14/17 00:42	7440-66-6	1c,2c





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Date: 06/14/2017 02:25 PM

Sample: RW19-MW(I)	Lab ID:	30221073007	Collecte	d: 06/08/1	7 15:08	Received: 06/	08/17 22:25 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	2280	ug/L	30.0	3.4	10	06/13/17 08:19	06/14/17 00:44	7440-43-9	1c,2c
Zinc	6720000	ua/L	100000	10800	10000	06/13/17 08:19	06/14/17 02:06	7440-66-6	1c.2c





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Date: 06/14/2017 02:25 PM

Sample: RW19-MW(S)	Lab ID:	30221073008	Collecte	d: 06/08/17	7 15:58	Received: 06/	08/17 22:25 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	2.4J	ug/L	3.0	0.34	1	06/13/17 08:19	06/13/17 23:33	7440-43-9	1c,2c
Zinc	3720	ug/L	10.0	1.1	1	06/13/17 08:19	06/13/17 23:33	7440-66-6	1c,2c



QUALITY CONTROL DATA

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Date: 06/14/2017 02:25 PM

QC Batch: 261633 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30221073001, 30221073002, 30221073003, 30221073004, 30221073005, 30221073006, 30221073007,

30221073008

METHOD BLANK: 1288443 Matrix: Water

Associated Lab Samples: 30221073001, 30221073002, 30221073003, 30221073004, 30221073005, 30221073006, 30221073007,

30221073008

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	06/13/17 22:26	1c,2c
Zinc	ug/L	10.0 U	10.0	1.1	06/13/17 22:26	1c,2c

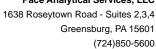
LABORATORY CONTROL SAMPLE:	1288444					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	510	102	80-120	1c,2c
Zinc	ug/L	500	522	104	80-120	1c,2c

MATRIX SPIKE & MATRIX SPI	KE DUPLIC	CATE: 12884	46		1288447							
			MS	MSD								
		30220937001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	577	500	500	1070	1070	98	99	75-125	0	20	1c,2c
Zinc	ug/L	40400	500	500	42100	42000	336	314	75-125	0	20	1c,2c, MH

MATRIX SPIKE SAMPLE:	1288449						
		30221073003	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	1520	500	1990	95	75-125	1c,2c
Zinc	ug/L	12200	500	13000	166	75-125	1c,2c,MH

SAMPLE DUPLICATE: 1288445						
		30220937001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L		581	1	20	1c,2c
Zinc	ug/L	40400	41300	2	20	1c,2c

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





QUALITY CONTROL DATA

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Date: 06/14/2017 02:25 PM

SAMPLE DUPLICATE: 1288448						
		30221073003	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	1520	1520	0	2	0 1c,2c
Zinc	ug/L	12200	12400	2	2	0 1c,2c

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 261736

[1] Cd and Zn failed on the Serial Dilution

[2] Zn failed on the PDS

ANALYTE QUALIFIERS

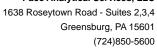
Date: 06/14/2017 02:25 PM

1c Cd and Zn failed on the Serial Dilution

2c Zn failed on the PDS

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30221073

Date: 06/14/2017 02:25 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30221073001	RW12-MW(I)	EPA 3005A	261633	EPA 6010C	261736
30221073002	RW12-MW(S)	EPA 3005A	261633	EPA 6010C	261736
30221073003	RW14-MW(S)	EPA 3005A	261633	EPA 6010C	261736
30221073004	RW15-MW(S)	EPA 3005A	261633	EPA 6010C	261736
30221073005	RW18-MW(I)	EPA 3005A	261633	EPA 6010C	261736
30221073006	RW18-MW(S)	EPA 3005A	261633	EPA 6010C	261736
30221073007	RW19-MW(I)	EPA 3005A	261633	EPA 6010C	261736
30221073008	RW19-MW(S)	EPA 3005A	261633	EPA 6010C	261736

Pace Analytical

DRINKING WATER OTHER ğ GROUND WATER Page: QM REGULATORY AGENCY RCRA Site Location STATE: t Document NPDES ompleted accurately. TSU T 1650 Des Peres Road, Suite 303 St. Louis, MO 6313 Sompany Name: EnviroAnalytics Group Samantha Bayura c WO#:30221073 Laura Sargent Pace Quote Reference: Pace Project Manager: Pace Profile #: ttention: Address; Project Name: Rod and Wire Mill GW Sampling Project Number: 170 3 84 -1-1 Report To: James Calenda Section B Required Project Information: Copy To: Stewart Kabis Purchase Order No.:

1600 Sparrows Point Blvd, Suite B2

EnviroAnalytics Group

сопрапу: Address:

Section A Required Client Information:

icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219

Email To:

Phone: 314-620-3056 Requested Due Date/TAT:

5 Day ñ X

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	Section D Required Client Information	ŏ	CODE		(awo	Ŏ	COLLECTED	TED				Pres	Preservatives	ives		ÎΝ/λ											
	L C C C	DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOLUSOLID SL, OIL	≥ - ≥	see Asjiq coqes	=6RAB C=CC	COMPOSITE	3.	COMPOSITE END/GRAB								拿 :							(N/Y) e				
# M3TI	Sample IDs MUST BE UNIQUE		l v – c			DATE	E MIL	DATE	E F SAMPLE TEMP AT C	# OF CONTAINER	Unpreserved	HOO3 H ^S SO ⁴	ASOH HCI	sO _s S _s V lonsriteM	19dJC	Analysis Test otal Cadmium 6010	0103 oni∑ leto	***************************************					Residual Chlorine		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	a a	- - -
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Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per morth for any invoices not bald within 30 days.

Sample Condition Upon Receipt Pittsburgh Pace Analytical Enviro Analytics Project # 30221073 Client Name: Courier: Fed Ex UPS USPS Client Commercial Pace Other Tracking #: Custody Seal on Cooler/Box Present: yes no Seals intact: yes no Type of ice: (Wel) Blue None Thermometer Used Correction Factor: O.O °C Final Temp: O.9 °C Observed Temp Cooler Temperature Temp should be above freezing to 6°C Date and Initials of person examining contents: N/A Yes No Comments: Chain of Custody Present: 2. Chain of Custody Filled Out: Chain of Custody Relinquished: 3. 4. Sampler Name & Signature on COC: 5. Sample Labels match COC: Matrix: W -Includes date/time/ID Samples Arrived within Hold Time: Short Hold Time Analysis (<72hr remaining): Rush Turn Around Time Requested: 9. Sufficient Volume: 10. Correct Containers Used: -Pace Containers Used: 11. Containers Intact: 12. Orthophosphate field filtered 13. Organic Samples checked for dechlorination: Filtered volume received for Dissolved tests 14. All containers have been checked for preservation. 15. All containers needing preservation are found to be in compliance with EPA recommendation.

Client Notification/ Resolution:

Headspace in VOA Vials (>6mm):

Trip Blank Custody Seals Present

Trip Blank Present:

exceptions: VOA, coliform, TOC, O&G, Phenolics

Rad Aqueous Samples Screened > 0.5 mrem/hr

Person Contacted:	 Date/Time:	_Contacted By:
Comments/ Resolution:		
·		·
- -		

Initial when completed

Lot # of added preservative

17.

Initial when

completed:

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen,

Date/time of

preservation

Date:

(724)850-5600



June 14, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30221240

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on June 09, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30221240

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification

Iowa Certification #: 391 Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

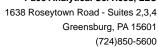
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30221240

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30221240001	RW21 - MW (D)	Water	06/09/17 08:38	06/09/17 22:25





SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30221240

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30221240001	RW21 - MW (D)	EPA 6010C	— ——— PJD	2





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30221240

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 14, 2017

General Information:

1 sample was analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed on the Serial Dilution

QC Batch: 261736Zn failed on the PDSQC Batch: 261736

Analyte Comments:

QC Batch: 261633

1c: Cd and Zn failed on the Serial Dilution

- BLANK (Lab ID: 1288443)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1288445)
 - Cadmium



Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30221240

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 14, 2017

Analyte Comments:

QC Batch: 261633

1c: Cd and Zn failed on the Serial Dilution

• DUP (Lab ID: 1288445)

• Zinc

• DUP (Lab ID: 1288448)

• Cadmium

• Zinc

• LCS (Lab ID: 1288444)

• Cadmium

• Zinc

• MS (Lab ID: 1288446)

• Cadmium

• Zinc

• MS (Lab ID: 1288449)

• Cadmium

• Zinc

• MSD (Lab ID: 1288447)

• Cadmium

Zinc

• RW21 - MW (D) (Lab ID: 30221240001)

Cadmium

• Zinc

2c: Zn failed on the PDS

• BLANK (Lab ID: 1288443)

• Cadmium

• Zinc

• DUP (Lab ID: 1288445)

Cadmium

Zinc

• DUP (Lab ID: 1288448)

• Cadmium

• Zinc

• LCS (Lab ID: 1288444)

• Cadmium

• Zinc

• MS (Lab ID: 1288446)

Cadmium

• Zinc

• MS (Lab ID: 1288449)

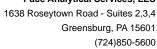
Cadmium

• Zinc

• MSD (Lab ID: 1288447)

• Cadmium

• Zinc





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30221240

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: June 14, 2017

Analyte Comments: QC Batch: 261633

2c: Zn failed on the PDS

• RW21 - MW (D) (Lab ID: 30221240001)

• Cadmium • Zinc

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30221240

Date: 06/14/2017 02:52 PM

Sample: RW21 - MW (D) Lab ID: 30221240001 Collected: 06/09/17 08:38 Received: 06/09/17 22:25 Matrix: Water

Comments: • 6/10/17 - Added 3ml HNO3 to Metals bottle prior to analysis. pH <2.

Report

Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium Zinc	0.35J 303	ug/L ug/L	3.0 10.0	0.34 1.1	1 1		06/13/17 23:36 06/13/17 23:36		1c,2c 1c,2c



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30221240

Date: 06/14/2017 02:52 PM

QC Batch: 261633 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30221240001

METHOD BLANK: 1288443 Matrix: Water

Associated Lab Samples: 30221240001

		Blank	Reporting				
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers	
Cadmium	ug/L	3.0 U	3.0	0.34	06/13/17 22:26	1c,2c	•
Zinc.	ua/l	10.0 U	10.0	1.1	06/13/17 22:26	1c.2c	

LABORATORY CONTROL SAMPLE:	1288444	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	510	102	80-120	1c,2c
Zinc.	ua/l	500	522	104	80-120	1c 2c

MATRIX SPIKE & MATRIX SP	IKE DUPLICA	NTE: 12884	46		1288447							
			MS	MSD								
	3	0220937001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	577	500	500	1070	1070	98	99	75-125	0	20	1c,2c
Zinc	ug/L	40400	500	500	42100	42000	336	314	75-125	0	20	1c,2c, MH

MATRIX SPIKE SAMPLE:	1288449						
		30221073003	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	1520	500	1990	95	75-125	1c,2c
Zinc	ug/L	12200	500	13000	166	75-125	1c,2c,MH

		30220937001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	577	581	1	20	1c,2c
Zinc	ug/L	40400	41300	2	20	1c,2c

SAMPLE DUPLICATE: 1288448						
		30221073003	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	1520	1520	0	2	0 1c,2c
Zinc	ua/L	12200	12400	2	2	0 1c.2c

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

REPORT OF LABORATORY ANALYSIS

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30221240

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 261736

[1] Cd and Zn failed on the Serial Dilution

[2] Zn failed on the PDS

ANALYTE QUALIFIERS

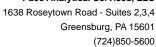
Date: 06/14/2017 02:52 PM

1c Cd and Zn failed on the Serial Dilution

2c Zn failed on the PDS

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30221240

Date: 06/14/2017 02:52 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30221240001	RW21 - MW (D)	EPA 3005A	261633	EPA 6010C	261736



company: Address:

Email To:

CHAIN-OF-CUSTODY / Analytical Request Document

DRINKING WATER OTHER ő NPDES GROUND WATER Page: REGULATORY AGENCY MD RCRA STATE: Site Location The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately, TSU T 4 () 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 C) Company Name: EnviroAnalytics Group e M Samantha Bayura Invoice Information: Attention: Laura Sargent Pace Quote Reference: Pacs Project Manager: Pace Profile #: Section C Address: Project Name: Rod and Wire Mill GW Sampling Report To: James Calenda Section B Required Project Information: Copy To: Stewart Kabis Purchase Order No.: Project Number; 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyficsgroup.com Sparrows Point, MD 21219 EnviroAnalytics Group 5 Day Fax Section A Required Client Information: hone: 314-620-3056 Requested Due Date/TAT:

WANTER WANTER	N) (() (() () () () () () () () () () ()		(N/A)	Sesidual Chlorine	La Pace Project No./ Lab I.D.	20 CONTRACTOR CONTRACT			070100					TIME SAMPLE CONDITIONS	XX	B	7 2 7 80920		no (N)	ni qr aived dy Seer (Y/N)	sece stori
Valid Matrix Codes WATER WATE	Requested Analysis Filtered (Y/			01:09 muimbs Olsto) X				70° #0m	70. #53				DATE	1/2/6/97	11 Show 16 1917 192		2 2 2 2 2		THE CHARLES CONTROL OF THE CONTROL O	DATE Signed
Valid Matrix Codes MATRIX WASTERN WA				Piper Vethanol 1825-03 HCI HO3 HO3 HO3) 										7 Marichall	to MY Lin					- 6 1 1
COMMENTS: Valid Matrix Codes MATER DENNING WATER WATER WATER WASTER WATER WATER		COLLECTED	COMPOSITE END/GRAB	F F F TA 9MPT EJ9MA	(6/4/17 0 836)			The same same same same same same same sam						DATE	04/1/0	21. 4.19/4/2/2014 1.15	MA Hackley 2	1/1	SAMPLER NAME AND SIGNATUR		SIGNATIBE OF SAMPIED.
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		ň	DRINKING WATER WASTER WASTE WATER PRODUCT SOIL/SOLID OIL	WITE AMR OTHER TISSUE	1 W M					The second development of the second				ADDITIONAL COMMENTS	The state of the s)				

Sample Condition Upon Receipt Pittsburgh

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Face Analytical Clie	ent Name:		(<u> Sp(</u>	<u>Bwows</u>		Project#	
Courier: Fed Ex UPS Tracking #:	<u> </u>		_	merci	al Pace	Other _		
Custody Seal on Cooler/Box P	resent: 🔲 yes	\square	ло	Sea	als intact:	☐ yes [no	
Thermometer Used	1			: (w	et) Blue N	one		
Cooler Temperature Obser	rved Temp 3 .	8	°C	Coi	rrection Fact	or <u>: †О, О</u>	C Final Temp: 3.8	° C
Temp should be above freezing to 6	°C		_				Date and Initials of personnents:	on examining
Comments:		Yes	No	N//	<u> </u>		ANY	- (2) (0) (
Chain of Custody Present:		/			1.			
Chain of Custody Filled Out:		/			2.			
Chain of Custody Relinquished:		1			3.			
Sampler Name & Signature on C	OC:	/			4.			
Sample Labels match COC:		/			5.			
-Includes date/time/ID	Matrix:	W	1					
Samples Arrived within Hold Time	e:				6.			
Short Hold Time Analysis (<72h			z.		7.			
Rush Turn Around Time Reque		/			8.			
Sufficient Volume:		/			9.			
Correct Containers Used:					10.			
-Pace Containers Used:		Lame 1			1			
Containers Intact:					11.			
Orthophosphate field filtered				1	12.			
Organic Samples checked for	dechlorination:				13.			
Filtered volume received for Disso		-		/	14.	(0 m	IL ARM WITCHIT	
All containers have been checked for	preservation.				15 CCC	d-am	+ HNOS to Me	tais
All containers needing preservation are compliance with EPA recommendation			7		7	. PHZ	2	
·					Initial when	trm	Date/time of 01011	
exceptions: VOA, coliform, TOC,	O&G, Phenolics				completed		- 0025	
			···		preservative	٠ ، سب سرو		<u>. </u>
Headspace in VOA Vials (>6mm):				-	16.			
Trip Blank Present:	ļ			/	17. 			
Trip Blank Custody Seals Present Rad Aqueous Samples Screened	1 > 0.5 mrem/hr		\dashv	/	Initial when			
me , rimana antipina an anti-				90-	completed:	A-474,	Date:	
Client Notification/ Resolution:							0 (1 10	
Person Contacted:					Гіте:		Contacted By:	
Comments/ Resolution:								
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☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



July 17, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on July 10, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Laura M. Pirilla for Samantha Bayura

Laura Piulla

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Pennsylvania/TNI Certification #: 65-00 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



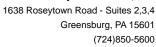


SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30223716001	Trip Blank 1	Water	07/10/17 00:01	07/10/17 22:30
30223716002	RW01-MWI	Water	07/10/17 09:37	07/10/17 22:30
30223716003	RW01-MW(S)	Water	07/10/17 10:44	07/10/17 22:30
30223716004	RW02-MW(I)	Water	07/10/17 11:35	07/10/17 22:30
30223716005	RW02-MW(S)	Water	07/10/17 12:17	07/10/17 22:30
30223716006	RW03-MW(I)	Water	07/10/17 13:12	07/10/17 22:30
30223716007	RW03-MW(S)	Water	07/10/17 14:05	07/10/17 22:30
30223716008	RW06-MW(I)	Water	07/10/17 15:07	07/10/17 22:30
30223716009	RW06-MW(D)	Water	07/10/17 15:55	07/10/17 22:30
30223716010	RW06-MW(S)	Water	07/10/17 16:45	07/10/17 22:30



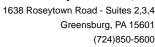


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30223716002	RW01-MWI	EPA 6010C	— ——— PJD	2
30223716003	RW01-MW(S)	EPA 6010C	PJD	2
30223716004	RW02-MW(I)	EPA 6010C	PJD	2
30223716005	RW02-MW(S)	EPA 6010C	PJD	2
30223716006	RW03-MW(I)	EPA 6010C	PJD	2
30223716007	RW03-MW(S)	EPA 6010C	PJD	2
30223716008	RW06-MW(I)	EPA 6010C	PJD	2
30223716009	RW06-MW(D)	EPA 6010C	PJD	2
30223716010	RW06-MW(S)	EPA 6010C	PJD	2





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: July 17, 2017

General Information:

9 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 264707

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30223716002

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 1303581)
 - Zinc

Duplicate Sample:

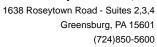
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Zn failed for the PDS.

• QC Batch: 264766





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

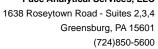
Date: July 17, 2017

Analyte Comments:

QC Batch: 264707

1c: Zn failed for the PDS.

- BLANK (Lab ID: 1303578)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1303580)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1303579)
 - Cadmium
 - Zinc
- MS (Lab ID: 1303581)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1303582)
 - Cadmium
 - Zinc
- RW01-MW(S) (Lab ID: 30223716003)
 - Cadmium
 - Zinc
- RW01-MWI (Lab ID: 30223716002)
 - Cadmium
 - Zinc
- RW02-MW(I) (Lab ID: 30223716004)
 - Cadmium
 - Zinc
- RW02-MW(S) (Lab ID: 30223716005)
 - Cadmium
 - Zinc
- RW03-MW(I) (Lab ID: 30223716006)
 - Cadmium
 - Zinc
- RW03-MW(S) (Lab ID: 30223716007)
 - Cadmium
 - Zinc
- RW06-MW(D) (Lab ID: 30223716009)
 - Cadmium
 - Zinc
- RW06-MW(I) (Lab ID: 30223716008)
 - Cadmium
 - Zinc
- RW06-MW(S) (Lab ID: 30223716010)
 - Cadmium
 - Zinc





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: July 17, 2017

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Date: 07/17/2017 06:26 PM

Sample: RW01-MWI	Lab ID:	30223716002	Collecte	d: 07/10/1	7 09:37	Received: 07/	10/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	530	ug/L	3.0	0.34	1	07/12/17 08:12	07/12/17 23:28	7440-43-9	1c
Zinc	16100	ua/L	1000	108	100	07/12/17 08:12	07/13/17 00:20	7440-66-6	1c.MH





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Date: 07/17/2017 06:26 PM

Sample: RW01-MW(S)	Lab ID:	30223716003	Collecte	d: 07/10/1	7 10:44	Received: 07/	10/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	2.3J	ug/L	3.0	0.34	1	07/12/17 08:12	07/12/17 23:42	7440-43-9	1c
Zinc	14800	ua/L	1000	108	100	07/12/17 08:12	07/13/17 00:35	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Date: 07/17/2017 06:26 PM

Sample: RW02-MW(I)	Lab ID:	30223716004	Collecte	d: 07/10/17	7 11:35	Received: 07/	10/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	421	ug/L	3.0	0.34	1	07/12/17 08:12	07/12/17 23:45	7440-43-9	1c
Zinc	15300	ua/L	1000	108	100	07/12/17 08:12	07/13/17 00:37	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Date: 07/17/2017 06:26 PM

Sample: RW02-MW(S)	Lab ID:	30223716005	Collecte	d: 07/10/17	7 12:17	Received: 07/	10/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	4.3	ug/L	3.0	0.34	1	07/12/17 08:12	07/12/17 23:52	7440-43-9	1c
Zinc	97100	ua/L	1000	108	100	07/12/17 08:12	07/13/17 00:40	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Date: 07/17/2017 06:26 PM

Sample: RW03-MW(I) Parameters	Lab ID:	30223716006	Collecte	Collected: 07/10/17 13:12			10/17 22:30 Ma	Natrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	138	ug/L	3.0	0.34	1	07/12/17 08:12	07/12/17 23:54	7440-43-9	1c
Zinc	8330	ug/L	1000	108	100	07/12/17 08:12	07/13/17 00:42	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Date: 07/17/2017 06:26 PM

Sample: RW03-MW(S)	Lab ID:	30223716007	Collecte	d: 07/10/17	7 14:05	Received: 07/	10/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Me	hod: El	PA 3005A			
Cadmium	4.6	ug/L	3.0	0.34	1	07/12/17 08:12	07/12/17 23:57	7440-43-9	1c
Zinc	8460	ua/L	1000	108	100	07/12/17 08:12	07/13/17 00:49	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Date: 07/17/2017 06:26 PM

Sample: RW06-MW(I)	Lab ID:	30223716008	Collecte	d: 07/10/17	7 15:07	Received: 07/	10/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	10.2	ug/L	3.0	0.34	1	07/12/17 08:12	07/12/17 23:59	7440-43-9	1c
Zinc	1690	ua/L	10.0	1.1	1	07/12/17 08:12	07/12/17 23:59	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Date: 07/17/2017 06:26 PM

Sample: RW06-MW(D)	Lab ID:	30223716009	Collecte	d: 07/10/17	7 15:55	Received: 07/	10/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	0.52J	ug/L	3.0	0.34	1	07/12/17 08:12	07/13/17 00:02	7440-43-9	1c
Zinc	9.8J	ua/L	10.0	1.1	1	07/12/17 08:12	07/13/17 00:02	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Date: 07/17/2017 06:26 PM

Sample: RW06-MW(S)	Lab ID:	30223716010	Collecte	d: 07/10/17	16:45	Received: 07/	10/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.6	ug/L	3.0	0.34	1	07/12/17 08:12	07/13/17 00:04	7440-43-9	1c
Zinc	152	ug/L	10.0	1.1	1	07/12/17 08:12	07/13/17 00:04	7440-66-6	1c



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Date: 07/17/2017 06:26 PM

QC Batch: 264707 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30223716002, 30223716003, 30223716004, 30223716005, 30223716006, 30223716007, 30223716008,

30223716009, 30223716010

METHOD BLANK: 1303578 Matrix: Water

Associated Lab Samples: 30223716002, 30223716003, 30223716004, 30223716005, 30223716006, 30223716007, 30223716008,

30223716009, 30223716010

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	07/12/17 23:24	1c
Zinc	ug/L	10.0 U	10.0	1.1	07/12/17 23:24	1c

LABORATORY CONTROL SAMPLE:	1303579					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	533	107	80-120	1c
Zinc	ug/L	500	532	106	80-120	1c

MATRIX SPIKE & MATRIX SPIK	(E DUPLICA	ATE: 130358	31		1303582							
			MS	MSD								
	3	0223716002	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	530	500	500	1050	1040	103	103	75-125	0	20	1c
Zinc	ug/L	16100	500	500	18000	16600	374	86	75-125	8	20	1c,MH

SAMPLE DUPLICATE: 1303580						
		30223716002	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	530	529	0	20 1	С
Zinc	ug/L	16100	16000	1	20 1	С

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 264766

[1] Zn failed for the PDS.

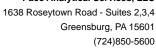
ANALYTE QUALIFIERS

Date: 07/17/2017 06:26 PM

1c Zn failed for the PDS.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

hiah





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223716

Date: 07/17/2017 06:26 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30223716002	RW01-MWI	EPA 3005A	264707	EPA 6010C	264766
30223716003	RW01-MW(S)	EPA 3005A	264707	EPA 6010C	264766
30223716004	RW02-MW(I)	EPA 3005A	264707	EPA 6010C	264766
30223716005	RW02-MW(S)	EPA 3005A	264707	EPA 6010C	264766
30223716006	RW03-MW(I)	EPA 3005A	264707	EPA 6010C	264766
30223716007	RW03-MW(S)	EPA 3005A	264707	EPA 6010C	264766
30223716008	RW06-MW(I)	EPA 3005A	264707	EPA 6010C	264766
30223716009	RW06-MW(D)	EPA 3005A	264707	EPA 6010C	264766
30223716010	RW06-MW(S)	EPA 3005A	264707	EPA 6010C	264766

CHAIN-OF-CUSTODY / Analytical Request Document

Face Analytical

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

Pace Project No./ Lab I.D. DRINKING WATER SAMPLE CONDITIONS OTHER 4 ł.... MO#:30223716 GROUND WATER кes Page: ΔÃ REGULATORY AGENCY RCRA TIME Requested Analysis Filtered (Y/N) Site Location STATE DATE ☐ NPDES ST 1650 Des Peres Road, Suite 303 St. Louis, MO 6313: ACCEPTED BY / AFFILIATION OLUB OUIS ISSO otal Cadmium 6010 Sompany Name: EnviroAnalytics Group JAnalysis Test 🌡 ŶN/A Other Samantha Bayura Methanol Laura Sargent Preservatives Va₂S₂O₃ HOsN HCI × ^bOS^zH Manager: Pace Profile #: Pace Quote Reference: Pace Project TIME Section C Unpreserved Attention: Address: # OF CONTAINERS SAMPLE TEMP AT COLLECTION DATE 1555 0937 7405 18 121 TIME 17.0 3 1312 COMPOSITE END/GRAB COLLECTED DATE Rod and Wire Mill GW Sampling RELINQUISHED BY / AFFILIATION 170384-1-TIME COMPOSITE DATE Report To: James Calenda Stewart Kabis Required Project Information: 5 S F3 S <u>भू</u> P 2 P 8 기 양 ٦ P <u>F</u> SAMPLE TYPE (₄woo=o я∀но=о) urchase Order No.: 3 Project Number: MATRIX CODE Project Name: Section B Copy To: Valid Matrix Codes DRINGING WATER WATER WASTE WATER PRODUCT SOIL/SOLID 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com OIL Sparrows Point, MD 21219 ADDITIONAL COMMENTS (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE EnviroAnalytics Group Multer - and I 1265 RWG6 - MW D Rul 03 - Mult 14/03 - MW/S 5 Day SAMPLED Fax: RW06 - MU(S) Trip Blank Section D Required Client Information Section A Required Client Information: -10 M 314-620-3056 Requested Due Date/TAT: 10/m/ 1050 2012 R 1106 company: Address: Email To: Phone: 2 Ŧ 2 8 ø # Mati m

071 DATE Signed (MM/DD/YY): Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per

Bob Bentz

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

Samples Intsct (WW)

Custody Sealed Cooler (Y/N)

Received on Ice (Y/N)

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Client Name:	Sample Condition Upon Rec	eipt l	⊃itts	burg	h	The fit was and
Tracking #: Custody Seal on Cooler/Box Present:	Pace Analytical Client Name:		E	ÌΩV	rofina.	30 2 2 3 7 Project #
Thermometer Used		ot [Domn _	nercial	Pace Other	Α
Thermometer Used Cooler Temperature Observed Temp Correction Factor: Temp should be above freezing to 6°C Correction Factor: Correction Factor: Date and initials of person examinificant contents: Chain of Custody Present: Chain of Custody Relinquished: Sampler Name & Signature on COC: Sample Labels match COC: Includes date/filme/filme Short Hold Time Analysis (<72hr remaining): Short Hold Time Analysis (<72hr remaining): Fundamental Used: Containers Used: Containers Inlact: Containers Inlact: Containers Dissolved tests III containers needing preservation are found to be in ompliance with EPA recommendation. Xxceptions: VOA, coliform, TOC, O&G, Phenolics In Blank Present: Ip Blank Present: Ip Blank Present: Ip Blank Present: Ip Blank Present: Ip Blank Present: Ip Blank Present: Ip Blank Present: Ip Blank Custody Seals Present and Aqueous Samples Screenéd > 0.5 mrem/hr In Illial when completed: Date: Intilial when completed	Custody Seal on Cooler/Box Present:		no	Sea	ls Intact:	no
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On any and all Descriptions				Date/1	inne:	Contacted By:
Comments/ Resolution:	Collitients/ Resolution:					A charlest desirable to the charlest and
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Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers)

 \square A check in this box indicates that additional information has been stored in ereports.

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Greensburg, PA 15601 (724)850-5600



July 17, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on July 11, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Trip Blank analysis not needed as no samples have VOC analysis.

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

Sincerely,

Samantha Bayura

Samontha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification

Idaho Certification Illinois Certification

Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133 Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198 Washington Certification #: C868

West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30223801001	Trip Blank 1	Water	07/11/17 00:01	07/11/17 23:30
30223801002	RW07-MW(I)	Water	07/11/17 07:37	07/11/17 23:30
30223801003	RW07-MW(S)	Water	07/11/17 08:25	07/11/17 23:30
30223801004	RW08-MW(I)	Water	07/11/17 09:25	07/11/17 23:30
30223801005	RW08-MW(S)	Water	07/11/17 10:15	07/11/17 23:30
30223801006	RW09-MW(I)	Water	07/11/17 11:13	07/11/17 23:30
30223801007	RW09-MW(S)	Water	07/11/17 11:57	07/11/17 23:30
30223801008	RW11-MW(I)	Water	07/11/17 12:57	07/11/17 23:30
30223801009	RW11-MW(S)	Water	07/11/17 13:45	07/11/17 23:30
30223801010	RW10-MW(I)	Water	07/11/17 14:45	07/11/17 23:30
30223801011	RW04-MW(S)	Water	07/11/17 15:55	07/11/17 23:30



SAMPLE ANALYTE COUNT

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30223801002	RW07-MW(I)	EPA 6010C	PJD	2	PASI-PA
30223801003	RW07-MW(S)	EPA 6010C	PJD	2	PASI-PA
30223801004	RW08-MW(I)	EPA 6010C	PJD	2	PASI-PA
30223801005	RW08-MW(S)	EPA 6010C	PJD	2	PASI-PA
30223801006	RW09-MW(I)	EPA 6010C	PJD	2	PASI-PA
30223801007	RW09-MW(S)	EPA 6010C	PJD	2	PASI-PA
30223801008	RW11-MW(I)	EPA 6010C	PJD	2	PASI-PA
30223801009	RW11-MW(S)	EPA 6010C	PJD	2	PASI-PA
30223801010	RW10-MW(I)	EPA 6010C	PJD	2	PASI-PA
30223801011	RW04-MW(S)	EPA 6010C	PJD	2	PASI-PA





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

Sample: RW07-MW(I)	Lab ID:	Lab ID: 30223801002			07:37	Received: 07/	11/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	1.2J	ug/L	3.0	0.34	1	07/13/17 10:47	07/13/17 21:57	7440-43-9	1c,2c
Zinc	45.7	ug/L	10.0	1.1	1	07/13/17 10:47	07/13/17 21:57	7440-66-6	1c,2c





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

Sample: RW07-MW(S)	Lab ID:	30223801003	Collecte	d: 07/11/17	08:25	Received: 07/	11/17 23:30 Ma	latrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	2.8J	ug/L	3.0	0.34	1	07/13/17 10:47	07/13/17 22:11	7440-43-9	1c,2c
Zinc	114	ug/L	10.0	1.1	1	07/13/17 10:47	07/13/17 22:11	7440-66-6	1c,2c





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

Sample: RW08-MW(I)	Lab ID:	30223801004	Collecte	d: 07/11/17	7 09:25	Received: 07/	11/17 23:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A			
Cadmium	1.3J	ug/L	3.0	0.34	1	07/13/17 10:47	07/13/17 22:14	7440-43-9	1c,2c
Zinc	153	ug/L	10.0	1.1	1	07/13/17 10:47	07/13/17 22:14	7440-66-6	1c,2c





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

Sample: RW08-MW(S)	Lab ID:	Lab ID: 30223801005		d: 07/11/17	7 10:15	Received: 07/	11/17 23:30 Ma	latrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	0.74J	ug/L	3.0	0.34	1	07/13/17 10:47	07/13/17 22:21	7440-43-9	1c,2c
Zinc	968	ug/L	10.0	1.1	1	07/13/17 10:47	07/13/17 22:21	7440-66-6	1c,2c



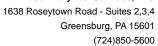


Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

Sample: RW09-MW(I)	Lab ID:	Lab ID: 30223801006			7 11:13	Received: 07/	11/17 23:30 Ma	Matrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: E	PA 3005A			
Cadmium	12.9	ug/L	3.0	0.34	1	07/13/17 10:47	07/13/17 22:24	7440-43-9	1c,2c
Zinc	65600	ua/L	1000	108	100	07/13/17 10:47	07/13/17 22:38	7440-66-6	1c.2c





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

Sample: RW09-MW(S)	Lab ID:	Lab ID: 30223801007			11:57	Received: 07/	11/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	13.4	ug/L	3.0	0.34	1	07/13/17 10:47	07/13/17 22:26	7440-43-9	1c,2c
Zinc	11500	ua/L	1000	108	100	07/13/17 10:47	07/13/17 22:41	7440-66-6	1c.2c





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

Sample: RW11-MW(I)	Lab ID:	Lab ID: 30223801008			12:57	Received: 07/	11/17 23:30 Ma	latrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	518	ug/L	3.0	0.34	1	07/13/17 10:47	07/13/17 22:28	7440-43-9	1c,2c
Zinc	192000	ug/L	1000	108	100	07/13/17 10:47	07/13/17 22:43	7440-66-6	1c,2c





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

Sample: RW11-MW(S)	mple: RW11-MW(S) Lab ID: 30			d: 07/11/17	7 13:45	Received: 07/	11/17 23:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	thod: El	PA 3005A			
Cadmium	0.84J	ug/L	3.0	0.34	1	07/13/17 10:47	07/13/17 22:31	7440-43-9	1c,2c
Zinc	10900	ug/L	1000	108	100	07/13/17 10:47	07/13/17 22:50	7440-66-6	1c,2c



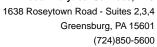


Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

Sample: RW10-MW(I)	Lab ID:	Lab ID: 30223801010 Collected: 07/11			7 14:45 Received: 07/11/17 23:30			Matrix: Water		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	16.3	ug/L	3.0	0.34	1	07/13/17 10:47	07/13/17 22:33	7440-43-9	1c,2c	
Zinc	25900	ug/L	1000	108	100	07/13/17 10:47	07/13/17 22:53	7440-66-6	1c,2c	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

Sample: RW04-MW(S)	Lab ID:	30223801011	Collecte	d: 07/11/17	7 15:55	Received: 07/	11/17 23:30 Ma	atrix: Water	
Parameters	Results	Results Units Limit MDL DF Prepared				Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.2J	ug/L	3.0	0.34	1	07/13/17 10:47	07/13/17 22:36	7440-43-9	1c,2c
Zinc	179	ug/L	10.0	1.1	1	07/13/17 10:47	07/13/17 22:36	7440-66-6	1c,2c



QUALITY CONTROL DATA

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

QC Batch: 264841 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30223801002, 30223801003, 30223801004, 30223801005, 30223801006, 30223801007, 30223801008,

30223801009, 30223801010, 30223801011

METHOD BLANK: 1304368 Matrix: Water

Associated Lab Samples: 30223801002, 30223801003, 30223801004, 30223801005, 30223801006, 30223801007, 30223801008,

30223801009, 30223801010, 30223801011

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	07/13/17 21:52	1c,2c
Zinc	ug/L	10.0 U	10.0	1.1	07/13/17 21:52	1c,2c

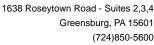
LABORATORY CONTROL SAMPLE:	1304369					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	538	108	80-120	1c,2c
Zinc	ug/L	500	526	105	80-120	1c,2c

MATRIX SPIKE & MATRIX SPIK	E DUPLICA	TE: 13043	71		1304372							
			MS	MSD								
	3	0223801002	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	1.2J	500	500	536	533	107	106	75-125	1	20	1c,2c
Zinc	ug/L	45.7	500	500	562	560	103	103	75-125	0	20	1c,2c

SAMPLE DUPLICATE: 1304370		30223801002	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	1.2J	1.1J		2	0 1c,2c
Zinc	ug/L	45.7	47.1	3	2	0 1c,2c

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







QUALIFIERS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: 264924

[1] Zn failed in the serial dilution.

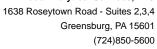
[2] Cd failed in the PDS

ANALYTE QUALIFIERS

Date: 07/17/2017 11:05 AM

1c Cd failed in the PDS

2c Zn failed in the serial dilution.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30223801

Date: 07/17/2017 11:05 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30223801002	RW07-MW(I)	EPA 3005A	264841	EPA 6010C	264924
30223801003	RW07-MW(S)	EPA 3005A	264841	EPA 6010C	264924
30223801004	RW08-MW(I)	EPA 3005A	264841	EPA 6010C	264924
30223801005	RW08-MW(S)	EPA 3005A	264841	EPA 6010C	264924
30223801006	RW09-MW(I)	EPA 3005A	264841	EPA 6010C	264924
30223801007	RW09-MW(S)	EPA 3005A	264841	EPA 6010C	264924
30223801008	RW11-MW(I)	EPA 3005A	264841	EPA 6010C	264924
30223801009	RW11-MW(S)	EPA 3005A	264841	EPA 6010C	264924
30223801010	RW10-MW(I)	EPA 3005A	264841	EPA 6010C	264924
30223801011	RW04-MW(S)	EPA 3005A	264841	EPA 6010C	264924

Pace Analytical "

CHAIN-OF-CUST WO#: 30223801

ö Page: Sectic Invoice In. Section B Required Project Information: Section A Required Client Information:

Reduired	Client Imormation:	Required Project Information:	Invoice In. 30223801	
Company:	EnviroAnalytics Group	Report To: James Calenda	Attention: Laura Sargent	// The state of th
Address:	1600 Sparrows Point Blvd, Suite B2	Copy To: Stewart Kabis	Company Name: Enviro Analytics Group	REGULATORY AGENCY
	Sparrows Point, MD 21219		Address: 1650 Des Peres Road, Suite 303 St. Louis, MC 63131	3131 NPDES GROUND WATER DRINKING WATER
Email To:	icalenda@enviroanalyticsgroup.com	Purchase Order No.:	Pace Quote Reference	T UST T RCRA OTHER
Phone:	314-620-3056 Fax:	Project Name: Rod and Wire Mill GW Sampling	Pace Project Samantha Bayura	Site Location
Requeste	Requested Due Date/TAT: 5 Day	Project Number:	Pace Profile #:	
	AMAZONIA PARA PARA PARA PARA PARA PARA PARA PA	COLUMN CO		Requested Analysis Filtered (YIN)
		odes CODE GE	Preservatives	
or and the second	DRINKING WATER WATER WASTE WATER PRODUCT SOILSOLID OIL	WW WWW WWW START ENDIGRAB START ENDIGRAB OL	5	(N/A)
# WE		# G P € A P € A P € A P E TYPE (G= C= C= C= C= C= C= C= C= C= C= C= C= C=	MPLE TEMP AT C PICSONTAINER: SO4 SO4 SO5 SO3 SO3 SO3 SO4 The coto	Sidual Chlorine
III		S DATE TIME DATE TIME	nU H ₂ 2H HH HC BN BBN BBN BBN BBN BBN BBN BBN BBN BBN	© Pace Project No./ Lab I.D.
\ \tag{\frac{1}{2}}	Trip Blank!	WTG- 7/1//7	××× 2	500
N	RWOT- MU(I)	ජ	X	30.2
က	RULOT- MU(S)	15c80	X	88
***	RUOB- MU(I)		\ \ \ \ \	7-700
49	RWOB-MUSS		 	500
9	RWOG-MU(T)	wt6-	·3	\sqrt{\sq}\}}}\sqrt{\sq}}}}}\sqrt{\sq}}}}}}\sqrt{\sq}}}}}}\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}
	K-509- MU(S)		<i>∀</i>	
8	Rull- prulto	.	× ×	XX
6	ME	WY 6	×	934
10	RUSIO - MW(I)	Ĵ	× ×	0:0
F	RWOU-MU(S)	WT G 155.5	x x	
12				
	ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION DATE	TIME ACCEPTED BY / AFFILIATION	NY DATE TIME SAMPLE CONDITIONS
		Rob Book 7/11/1	1 1607 Downer & Killedon	Jean 7/11/2 16 18
		Desit The Mon I'm Alle	11825 Je 1771 19160	e 17/1/7/1938
į	And a second second second second second second second second second second second second second second second	STONG HER TILL	> 1 632 K-AC / lare	- Thin 2330 [26] Y N Y
Page	minimization months and the second second second second second second second second second second second second)	
18		SAMPLER NAME AND SIGNATURE	SNATURE	on (I) (N/)
of 1		PRINT Name of SAMPLER:	Bob Beate	ni qr
9		SIGNATURE of SAMPLER:	Mark that	Receipted (Cool
	"Important Note: By signing this form you are acceptin	*important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5	of 1.5% per month for any invoices not paid within 30 days.	F-ALL-G-020rev.de, 2-Feb-2007

Sample Condition Upon	rtooopt	,,,,,	o cir y	•			Saff Saff (Ennis Knon Varl	OV
Pace Analytical Client Nar	ne: <u></u>	- ρa	(101	NS P	\	Project	#		
courler: Fed Ex UPS USPS	Client	Domm	ercial	Pace C	ther _		L LIMS L	.abel	RC
ustody Seal on Cooler/Box Present:	yes	no	Sea	s Intact:	Jyes	no	and the state of t	and the second second second second second second second second second second second second second second second	
hermometer Used				t Blue No	-	Lagard			
ooler Temperature Observed Tem						°C Fin	al Temp:	2.6	. C
emp should be above freezing to 6°C	·	_	0011	0011077 1 4011	71 45				
						Date ar conte	id Initials o	f person ex	amining
omments:	Ye	s No	N/A			00/(15	PC -	7-11-	17
hain of Custody Present:				1.					
hain of Custody Filled Out:		and an an an an an an an an an an an an an		2.					
hain of Custody Relinquished:				3,					
ampler Name & Signature on COC;				4.					
emple Labels match COC:		1		5.					
-Includes date/time/ID Mal	rix: 🗘		- .						
emples Arrived within Hold Time:		and and and		6,					
ort Hold Time Analysis (<72hr remaini	ng):			7.					
ish Turn Around Time Requested:				8,					
ifficient Volume:	- Approximately	1		9.					
orrect Containers Used;				10.					
-Pace Containers Used:									
ntainers intact:				11.					
hophosphate field fillered				12.					
ganic Samples checked for dechlorin	ation:			13.					
ered volume received for Dissolved tests				14.					
containers have been checked for preservatio				15,					
containers needing preservation are found to l	be in								
pliance with EPA recommendation.		<u> </u>		1 10 7 .		B-2 W :			
eptions: VOA, collform, TOC, O&G, Pho	enolics			lกilial when completed	PC	Date/time of preservation	7	-11-1-	7
				Lot # of added					
				preservative					
adspace in VOA Vials (>6mm):				16.					
Blank Present:	ART ARE			17.					
o Blank Custody Seals Present d Aqueous Samples Screened > 0,5 mi	em/hr	- April 100 and 100 an		Initial when	Δ.		,coma è	1 1 (925-	
A CINTAGO CHIMPIOS ONICCIEN S OF IM	27117311			completed;	PC	Date:	7 - [1-17	
ent Notification/ Resolution:									
Person Contacted:			Date/1	ime:		Conte	icled B <u>y:</u>		
omments/ Resolution;									
	***					<u></u>			

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



July 17, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on July 12, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Laura M. Pirilla for Samantha Bayura

Laura Piulla

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391 Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133 Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: LA140008

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888

North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282 South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

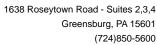


SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30223943001	RW05-MW(I)	Water	07/12/17 08:00	07/12/17 23:30
30223943002	RW12-MW(I)	Water	07/12/17 09:00	07/12/17 23:30
30223943003	RW12-MW(S)	Water	07/12/17 09:50	07/12/17 23:30
30223943004	RW15-MW(S)	Water	07/12/17 11:07	07/12/17 23:30
30223943005	RW18-MW(I)	Water	07/12/17 12:15	07/12/17 23:30
30223943006	RW18-MW(S)	Water	07/12/17 13:07	07/12/17 23:30
30223943007	RW19-MW(I)	Water	07/12/17 14:10	07/12/17 23:30
30223943008	RW19-MW(S)	Water	07/12/17 15:00	07/12/17 23:30
30223943009	RW21-MW(D)	Water	07/12/17 16:00	07/12/17 23:30



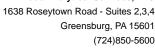


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30223943001	RW05-MW(I)	EPA 6010C		2
30223943002	RW12-MW(I)	EPA 6010C	PJD	2
30223943003	RW12-MW(S)	EPA 6010C	PJD	2
30223943004	RW15-MW(S)	EPA 6010C	PJD	2
30223943005	RW18-MW(I)	EPA 6010C	PJD	2
30223943006	RW18-MW(S)	EPA 6010C	PJD	2
30223943007	RW19-MW(I)	EPA 6010C	PJD	2
30223943008	RW19-MW(S)	EPA 6010C	PJD	2
30223943009	RW21-MW(D)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: July 17, 2017

General Information:

9 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 264987

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30223943001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

• MSD (Lab ID: 1305199)

Zinc

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1305198)
 - Zinc

Duplicate Sample:

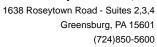
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed on the PDS.

• QC Batch: 265079





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

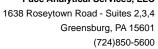
Date: July 17, 2017

Analyte Comments:

QC Batch: 264987

1c: Cd and Zn failed on the PDS.

- BLANK (Lab ID: 1305195)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1305197)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1305196)
 - Cadmium
 - Zinc
- MS (Lab ID: 1305198)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1305199)
 - Cadmium
 - Zinc
- RW05-MW(I) (Lab ID: 30223943001)
 - Cadmium
 - Zinc
- RW12-MW(I) (Lab ID: 30223943002)
 - Cadmium
 - Zinc
- RW12-MW(S) (Lab ID: 30223943003)
 - Cadmium
 - Zinc
- RW15-MW(S) (Lab ID: 30223943004)
 - Cadmium
 - Zinc
- RW18-MW(I) (Lab ID: 30223943005)
 - Cadmium
 - Zinc
- RW18-MW(S) (Lab ID: 30223943006)
 - Cadmium
 - Zinc
- RW19-MW(I) (Lab ID: 30223943007)
 - Cadmium
 - Zinc
- RW19-MW(S) (Lab ID: 30223943008)
 - Cadmium
 - Zinc
- RW21-MW(D) (Lab ID: 30223943009)
 - Cadmium
 - Zinc





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

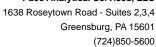
Pace Project No.: 30223943

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: July 17, 2017

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





Project: Rod and Wire Mill GW Sampling

30223943 Pace Project No.:

Date: 07/17/2017 06:26 PM

Sample: RW05-MW(I) Lab ID: 30223943001 Collected: 07/12/17 08:00 Received: 07/12/17 23:30 Matrix: Water

			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP	A 6010C Prep	aration Me	thod: E	PA 3005A			
Cadmium	11.9	ug/L	3.0	0.34	1	07/14/17 10:59	07/14/17 21:26	7440-43-9	1c
Zinc	39600	ug/L	1000	108	100	07/14/17 10:59	07/14/17 22:24	7440-66-6	1c,MH, MI





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Date: 07/17/2017 06:26 PM

Sample: RW12-MW(I) Lab ID: 30223943002 Collected: 07/12/17 09:00 Received: 07/12/17 23:30 Matrix: Water

			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	thod: El	PA 3005A			
Cadmium	2730	ug/L	3.0	0.34	1	07/14/17 10:59	07/14/17 21:40	7440-43-9	1c
Zinc	219000	ug/L	1000	108	100	07/14/17 10:59	07/14/17 22:39	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Date: 07/17/2017 06:26 PM

Sample: RW12-MW(S) Lab ID: 30223943003 Collected: 07/12/17 09:50 Received: 07/12/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP	A 6010C Prep	aration Me	thod: E	PA 3005A			
Cadmium	12.6	ug/L	3.0	0.34	1	07/14/17 10:59	07/14/17 21:43	7440-43-9	1c
Zinc	9090	ug/L	1000	108	100	07/14/17 10:59	07/14/17 22:41	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Date: 07/17/2017 06:26 PM

Sample: RW15-MW(S) Lab ID: 30223943004 Collected: 07/12/17 11:07 Received: 07/12/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP	A 6010C Prep	aration Me	thod: E	PA 3005A			
Cadmium	94.8	ug/L	3.0	0.34	1	07/14/17 10:59	07/14/17 21:50	7440-43-9	1c
Zinc	10200	ug/L	1000	108	100	07/14/17 10:59	07/14/17 22:43	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Date: 07/17/2017 06:26 PM

Sample: RW18-MW(I) Lab ID: 30223943005 Collected: 07/12/17 12:15 Received: 07/12/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prepa	aration Me	thod: Ef	PA 3005A		•	
Cadmium Zinc	61.7 575000	ug/L ug/L	3.0 10000	0.34 1080	1 1000		07/14/17 21:53 07/14/17 22:59		1c 1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Date: 07/17/2017 06:26 PM

Sample: RW18-MW(S) Lab ID: 30223943006 Collected: 07/12/17 13:07 Received: 07/12/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP	A 6010C Prep	aration Me	thod: E	PA 3005A			
Cadmium	240	ug/L	3.0	0.34	1	07/14/17 10:59	07/14/17 21:55	7440-43-9	1c
Zinc	13300	ug/L	1000	108	100	07/14/17 10:59	07/14/17 22:54	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Date: 07/17/2017 06:26 PM

Sample: RW19-MW(I) Lab ID: 30223943007 Collected: 07/12/17 14:10 Received: 07/12/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
- Tarameters						——————————————————————————————————————			
6010C MET ICP	Analytical	Method: EPA	6010C Prepa	aration Me	thod: EF	PA 3005A			
Cadmium	2550	ug/L	300	34.4	100	07/14/17 10:59	07/14/17 22:56	7440-43-9	1c
Zinc	5330000	ug/L	100000	10800	10000	07/14/17 10:59	07/14/17 23:01	7440-66-6	1c





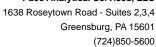
Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Date: 07/17/2017 06:26 PM

Sample: RW19-MW(S) Lab ID: 30223943008 Collected: 07/12/17 15:00 Received: 07/12/17 23:30 Matrix: Water

Report											
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	thod: E	PA 3005A					
Cadmium	9.7	ug/L	3.0	0.34	1	07/14/17 10:59	07/14/17 22:00	7440-43-9	1c		
Zinc	3700	ug/L	10.0	1.1	1	07/14/17 10:59	07/14/17 22:00	7440-66-6	1c		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Date: 07/17/2017 06:26 PM

Sample: RW21-MW(D) Lab ID: 30223943009 Collected: 07/12/17 16:00 Received: 07/12/17 23:30 Matrix: Water

Comments: • Sample is basic, acid was not added in receiving. Will be brought to correct pH in metals department.

			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.34	1	07/14/17 10:59	07/14/17 22:03	7440-43-9	1c
Zinc	103	ug/L	10.0	1.1	1	07/14/17 10:59	07/14/17 22:03	7440-66-6	1c



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Date: 07/17/2017 06:26 PM

QC Batch: 264987 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30223943001, 30223943002, 30223943003, 30223943004, 30223943005, 30223943006, 30223943007,

30223943008, 30223943009

METHOD BLANK: 1305195 Matrix: Water

Associated Lab Samples: 30223943001, 30223943002, 30223943003, 30223943004, 30223943005, 30223943006, 30223943007,

30223943008, 30223943009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	07/14/17 21:21	1c
Zinc	ug/L	10.0 U	10.0	1.1	07/14/17 21:21	1c

LABORATORY CONTROL SAMPLE:	1305196					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	535	107	80-120	1c
Zinc	ug/L	500	526	105	80-120	1c

MATRIX SPIKE & MATRIX SP	IKE DUPLICA	TE: 13051	98		1305199							
			MS	MSD								
	3	0223943001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	11.9	500	500	536	553	105	108	75-125	3	20	1c
Zinc	ug/L	39600	500	500	39800	40400	44	170	75-125	2	20	1c,MH, ML

SAMPLE DUPLICATE: 1305197		30223943001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD Qualifie	ers
Cadmium Zinc	ug/L ug/L	11.9 39600	12.2 40100	3 1	20 1c 20 1c	

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 265079

[1] Cd and Zn failed on the PDS.

ANALYTE QUALIFIERS

Date: 07/17/2017 06:26 PM

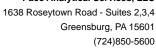
1c Cd and Zn failed on the PDS.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

high.

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased

low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30223943

Date: 07/17/2017 06:26 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30223943001	RW05-MW(I)	EPA 3005A	264987	EPA 6010C	265079
30223943002	RW12-MW(I)	EPA 3005A	264987	EPA 6010C	265079
30223943003	RW12-MW(S)	EPA 3005A	264987	EPA 6010C	265079
30223943004	RW15-MW(S)	EPA 3005A	264987	EPA 6010C	265079
30223943005	RW18-MW(I)	EPA 3005A	264987	EPA 6010C	265079
30223943006	RW18-MW(S)	EPA 3005A	264987	EPA 6010C	265079
30223943007	RW19-MW(I)	EPA 3005A	264987	EPA 6010C	265079
30223943008	RW19-MW(S)	EPA 3005A	264987	EPA 6010C	265079
30223943009	RW21-MW(D)	EPA 3005A	264987	EPA 6010C	265079



CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields mujst be completed accurately.

· · ·				
Required	Required Client Information:	Section B Required Project Information:	Section C invoice Information:	Page:
Company:	EnviroAnalytics Group	Report To: James Calenda	Attention: Laura Sargent	
Address:	1600 Sparrows Point Blvd, Suite B2	Copy To: Stewart Kabis	Company Name: EnviroAnalytics Group	REGULATORY AGENCY
	Sparrows Point, MD 21219		Address: 1650 Des Peres Road, Suite 303 St. Louis, MO 63131	T NPDES T GROUND WATER T DRINKING WATER
Email To;	icalenda@enviroanalyticsgroup.com	Purchase Order No.:	Pace Quote Reference:	T RCRA
Рћопе:	Fax:	Project Name: Rod and Wire Mill GW Sampling	Pace Project Samantha Bayura	
Request	Requested Due Date/TAT: 5 Day	Project Number:	Pace Profile #	STATE: WD WD
			Requested	Requested Analysis Filtered (YIN)
		iii (fiet ot	Preservatives S	
	WATER IN WASTE WATER IN WASTE WATER IN PRODUCT	Valid codes COMPOSITE END/GRAB GTART GTART		WO#:30223943
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Ŧ	RUZH MW (D)	(CD)/	XX	
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··	ADDITIONAL COMMENTS	RELINQUISHED BY JAFFILIATION DATE	TIME ACCEPTED BY / AFFILIATION	DATE TIME SAMPLE CONDITIONS
		Bob Bentz , Tieliz	1605 to 10 2 R. 11 col	2 7 1633
		Dayed & Lakery of STIPLIT	1835 6 7 7 1	22 7/2/1/ 1/2 US
		2 Cilled for Ilanda	2530 Warkefrey 100	ケーシカ 2330 4:1 ア ア ト
Pag				
e 20 of :		SAMPLER: NAME AND SIGNATURE PRINT Name of SAMPLER:	ob Bentz	np in °C eived on dy Sealed dy Sealed ler (Y/N)
21		SIGNATURE of SAMPLER: "Important Note: By signing this form you are accepting Paces" NET 30 day nayment forms and accepting change of 41 EQ. res	and the	Ten Ten Ten Ten Ten Ten Ten Ten Ten Ten
				8

Sample Condition Upon Receipt Pittsburgh

Pace Analytical Client Name:		E	- -[Λ]V	iro And	<u> </u>	Projec	ct #			
Courler: Fed Ex UPS USPS Clier	nt [bomm	ercial	Pace Oil	her		2 1111211	Label_	ANL	,
Tracking #:	A			J			LIN	IS Login	ANL	
Custody Seal on Cooler/Box Present:	Ф	no	Sea	als Intact:]yes []no	, months			
Thermometer Used	/ Туре	of Ice	: W	et) Blue Nor	1 0					
Cooler Temperature Observed Temp	t (, C	•	rrection Factor		() ° C F	Final Ten	np:4. (* C	
Temp should be above freezing to 6°C		_				***************************************				
						Date	e and initig stente:	ls of parson	examining	VA_
Comments:	Yes	No	N//	4					, , , , , , , , , , , , , , , , , , ,	ano-
Chain of Custody Present:	X	<u>. </u>		1.						
Chain of Custody Filled Out:	X			2.						
Chain of Custody Relinquished:	X			3.						_
Sampler Name & Signature on COC:	IX			4,						_
Sample Labels match COC:	X		<u> </u>	_s. Out ϵ	r po	leKaa	ling	of s	ample	es 001-3008 Delad
-Includes date/time/ID Matrix: \\^	I		_	label	ed,	<u>009</u>	150	He	is lab	relad
Samples Arrived within Hold Time:	1			6.						
Short Hold Time Analysis (<72hr remaining):		X		7.						
Rush Turn Around Time Requested:	X			8.						
Sufficient Volume:	X			9.						_
Correct Containers Used:	X			10.						
-Pace Containers Used:	X									-
Containers Intact:	X			11.						
Orthophosphate field filtered			X	12.						
Organic Samples checked for dechlorination:			X	13.						
Fillered volume received for Dissolved tests			X	14.						7
All containers have been checked for preservation,	X			15. Sam	De	009	, C.,	basic	did	
AM 7-13-17 All containers needing preservation are found to be in	1	K		not	tru	to o	ncsa		. 001	4
compliance with EPA recommendation,		_/_	<u></u>	,	1 7 7			. VC		-
exceptions: VOA, coliform, TOC, O&G, Phenolics				initial when	M	Date/time preservation				
				Lot # of added						
			7	preservative						
Headspace In VOA Vials (>6mm):		./	Х,	16.					<u> </u>	
Trip Blank Present:			· ·	17.						
Trip Blank Custody Seals Present Rad Aqueous Samples Screened > 0.6 mrem/hr			\leftarrow	Initial when						
				completed;		Date:				
Client Notification/ Resolution:										
Person Contacted:			Date/	Time:		Co.	ntacted B	<u>y:</u>		•
Comments/ Resolution:								N-MA		
										•
										1
A check in this box indicates that additi	ional i	nform	atio	n has been sf	ored in e	reports.		····		

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



July 17, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30224060

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on July 13, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Laura M. Pirilla for Samantha Bayura

Laura Piulla

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30224060

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888

North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282 South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C Wisconsin Certification

Wyoming Certification #: 8TMS-L



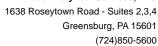


SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30224060

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30224060001	RW22-MW(I)	Water	07/13/17 07:45	07/13/17 23:00





SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30224060

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30224060001	RW22-MW(I)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30224060

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: July 17, 2017

General Information:

1 sample was analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 264987

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30223943001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 1305199)
 - Zinc

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1305198)
 - Zinc

Duplicate Sample:

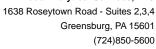
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cd and Zn failed on the PDS.

• QC Batch: 265079





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30224060

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: July 17, 2017

Analyte Comments:

QC Batch: 264987

1c: Cd and Zn failed on the PDS.

- BLANK (Lab ID: 1305195)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1305197)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1305196)
 - Cadmium
 - Zinc
- MS (Lab ID: 1305198)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1305199)
 - Cadmium
 - Zinc
- RW22-MW(I) (Lab ID: 30224060001)
 - Cadmium
 - Zinc

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30224060

Date: 07/17/2017 06:25 PM

Sample: RW22-MW(I)	Lab ID:	30224060001	Collecte	d: 07/13/17	7 07:45	Received: 07/	13/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	17.5	ug/L	3.0	0.34	1	07/14/17 10:59	07/14/17 22:05	7440-43-9	1c
Zinc	1730	ug/L	10.0	1.1	1	07/14/17 10:59	07/14/17 22:05	7440-66-6	1c



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30224060

QC Batch: 264987 QC Batch Method: **EPA 3005A** Analysis Method:

EPA 6010C

Analysis Description:

6010C MET

Associated Lab Samples: 30224060001

METHOD BLANK: 1305195

Matrix: Water

Associated Lab Samples:

Cadmium Zinc

30224060001

Blank Reporting

Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	07/14/17 21:21	1c
Zinc	ug/L	10.0 U	10.0	1.1	07/14/17 21:21	1c

LABORATORY CONTROL SAMPLE: 1305196

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1	ug/L	500	535	107	80-120	1c
	ug/L	500	526	105	80-120	1c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1305199 1305198

		30223943001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	11.9	500	500	536	553	105	108	75-125	3	20	1c
Zinc	ug/L	39600	500	500	39800	40400	44	170	75-125	2	20	1c,MH, ML

SAMPLE DUPLICATE: 1305197

Date: 07/17/2017 06:25 PM

		30223943001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	11.9	12.2	3	20	1c
Zinc	ug/L	39600	40100	1	20	1c

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30224060

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 265079

[1] Cd and Zn failed on the PDS.

ANALYTE QUALIFIERS

Date: 07/17/2017 06:25 PM

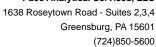
1c Cd and Zn failed on the PDS.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

high.

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased

low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30224060

Date: 07/17/2017 06:25 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30224060001	RW22-MW(I)	EPA 3005A	264987	EPA 6010C	265079

Face Analytical www.pacelebs.com

CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section	Section A Benined Client Information	Section B Required Project Information:	Section C Invaice Information:	Page: of
Company	rtics Group	Report To: James Calenda	Attention: Laura Sargent	Parameter and the second secon
Address:	1600 Sparrows Point Blvd, Suite B2	Copy To: Stewart Kabis	Company Name: EnviroAnalytics Group	REGULATORY AGENCY
	Sparrows Point, MD 21219		Address: 1650 Des Peres Road, Suite 303 St. Louis, MO 63131	T NPDES T GROUND WATER T DRINKING WATER
Email To:	icalenda@enviroanalyticsgroup.com	Purchase Order No.:	Pace Quote Reference:	F UST F RCRA F OTHER
Phone:	314-620-3056 Fax:	Project Name: Rod and Wire Mill GW Sampling	Pace Project Samantha Bayura	Site Location M
Request	Requested Due Date/TAT: 5 Day	Project Number:	Pace Profile #:	STATE:
				Requested Analysis Filtered (Y/N)
	Section D Valid Matrix Codes Required Client Information MATRIX CO	(fiel or	Preservatives	
	DRINKINO WATER WATER WASTE WASE PRODUCT SOIL/SOLID OIL	GRAB C=CO		WO#:30224060
	Sample IDs MUST BE UNIQUE TISSUE		ONTAINER yerved col lon lon lon lon lon lon lon lon lon l	
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2	ADDITIONAL COMMENTS	DE INCINEMENTAL AETHATION	DATE ACCEPTED BY AFFILIATION	DATE: SAMPLE CONDITIONS
		1	7.80 7.80	7/2/2
		21/1/0 1/20 m	7 1954	15 Misto 1995
		Service of the servic	3/1 2300 Mar Con Con	1 6-301230 4.1 Y NY
_				, <u> </u>
	The street control of the street stre	SAMPLER NAME AND SIGNATURE	SIGNATURE	t on ealed (NN)
		PRINT Name of SAMPLER:	Kob Kentz	ecelve(V/V)
	The many many loss to see the second state of	SIGNATURE of SAMPLER: SIGNATURE of SAMPLER:	PLER: M. L. E. (MM/DD/YY): (MM/DD/YY): (3% per month for any involces not gaid within 30 days.	6//5//7 FALL:0:020rev.06, 2-Feb-2007

30224060 Sample Condition Upon Receipt Pittsburgh Face Analytical EnvicoAoa Project # Client Name: Courler: Fed Ex UPS USPS Client Commercial Pace Other Label .IMS Login Seals Intact: yes no Wet Blue Type of Ice: Thermometer Used Correction Factor: 0.2 · c Cooler Temperature Temp should be above freezing to 6°C Comments: No N/A Chain of Custody Present: 2. Chain of Custody Filled Out: Chain of Custody Relinquished: Sampler Name & Signature on COC: Outter packaging labeled Sample Labels match COC: Matrix:_ -Includes date/lime/ID Samples Arrived within Hold Time: Short Hold Time Analysis (<72hr remaining): Rush Turn Around Time Requested: 8, 9, Sufficient Volume: 10. Correct Containers Used: -Pace Containers Used: Containers Intact: 12. Orthophosphate field fittered 13. Organic Samples checked for dechlorination: 14. Fillered volume received for Dissolved tests All containers have been checked for preservation, 15. All containers needing preservation are found to be in compliance with EPA recommendation. Date/fime of exceptions: VOA, coliform, TOC, O&G, Phenolics completed / preservation Lot # of added preservative 16. Headspace in VOA Vlals (>6mm): 17. Trip Blank Present: Trip Blank Custody Seals Present Rad Aqueous Samples Screened > 0.5 mrem/hr Initial when completed: Client Notification/ Resolution: Contacted By: Person Contacted:

Person Contacted: ______ Date/Time: _____ Contacted By: _______ Comments/ Resolution: _______

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workprder Edit Screen.

(724)850-5600



August 18, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on August 07, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Revision 1: This report replaces the August 11, 2017 report. This report was reissued on August 18, 2017 to correct the MS/MSD data for 6010 analysis.

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

Sincerely,

Samantha Bayura

Samantha Bayune

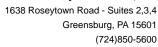
samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30226486001	RW03-MW(I)	Water	08/07/17 08:40	08/07/17 22:50
30226486002	RW03-MW(S)	Water	08/07/17 09:14	08/07/17 22:50
30226486003	RW04-MW(S)	Water	08/07/17 09:43	08/07/17 22:50
30226486004	RW06-MW(I)	Water	08/07/17 10:40	08/07/17 22:50
30226486005	RW06-MW(S)	Water	08/07/17 11:23	08/07/17 22:50
30226486006	RW06-MW(D)	Water	08/07/17 11:50	08/07/17 22:50
30226486007	RW20-MW(S)	Water	08/07/17 12:55	08/07/17 22:50
30226486008	RW20-MW(I)	Water	08/07/17 13:42	08/07/17 22:50
30226486009	RW15-MW(S)	Water	08/07/17 14:22	08/07/17 22:50
30226486010	RW15-MW(I)	Water	08/07/17 14:55	08/07/17 22:50
30226486011	Duplicate	Water	08/07/17 00:01	08/07/17 22:50

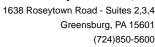


SAMPLE ANALYTE COUNT

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30226486001	RW03-MW(I)	EPA 6010C	PJD	2
30226486002	RW03-MW(S)	EPA 6010C	PJD	2
30226486003	RW04-MW(S)	EPA 6010C	PJD	2
30226486004	RW06-MW(I)	EPA 6010C	PJD	2
30226486005	RW06-MW(S)	EPA 6010C	PJD	2
30226486006	RW06-MW(D)	EPA 6010C	PJD	2
30226486007	RW20-MW(S)	EPA 6010C	PJD	2
30226486008	RW20-MW(I)	EPA 6010C	PJD	2
30226486009	RW15-MW(S)	EPA 6010C	PJD	2
30226486010	RW15-MW(I)	EPA 6010C	PJD	2
30226486011	Duplicate	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: August 18, 2017

General Information:

11 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 267762

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30226486009,30226486010

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 1317954)
 - Zinc
- MSD (Lab ID: 1317957)
 - Zinc

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1317956)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Sample: RW03-MW(I)	Lab ID:	Lab ID: 30226486001			7 08:40	Received: 08/	07/17 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	227	ug/L	3.0	0.34	1	08/09/17 08:17	08/10/17 00:12	7440-43-9	
Zinc	10900	ug/L	1000	108	100	08/09/17 08:17	08/10/17 01:13	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Sample: RW03-MW(S)	Lab ID:	Lab ID: 30226486002			7 09:14	Received: 08/	Received: 08/07/17 22:50 Matrix		
Parameters	Results	Lloito	Report Limit	MDL	DF	Dranarad	Analyzad	CAS No.	Ougl
Farameters		Units -		IVIDL	DF	Prepared	Analyzed		Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	5.1	ug/L	3.0	0.34	1	08/09/17 08:17	08/10/17 00:15	7440-43-9	
Zinc	7730	ug/L	1000	108	100	08/09/17 08:17	08/10/17 01:15	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Sample: RW04-MW(S)	Lab ID:	Lab ID: 30226486003			7 09:43	Received: 08/	07/17 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.34	1	08/09/17 08:17	08/10/17 00:29	7440-43-9	
Zinc	74.7	ug/L	10.0	1.1	1	08/09/17 08:17	08/10/17 00:29	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Date: 08/18/2017 03:25 PM

Sample: RW06-MW(I)	Lab ID:	Lab ID: 30226486004			10:40	Received: 08/07/17 22:50 Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual	
6010C MET ICP										
Cadmium	10.1	ug/L	3.0	0.34	1	08/09/17 08:17	08/10/17 00:32	7440-43-9		
Zinc	1340	ug/L	10.0	1.1	1	08/09/17 08:17	08/10/17 00:32	7440-66-6		





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Sample: RW06-MW(S)	Lab ID:	Lab ID: 30226486005			7 11:23	Received: 08/	Received: 08/07/17 22:50 Matrix		
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.34	1	08/09/17 08:17	08/10/17 00:34	7440-43-9	
Zinc	2.0J	ug/L	10.0	1.1	1	08/09/17 08:17	08/10/17 00:34	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Sample: RW06-MW(D)	Lab ID:	Lab ID: 30226486006			7 11:50	Received: 08/	07/17 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	0.36J	ug/L	3.0	0.34	1	08/09/17 08:17	08/10/17 00:37	7440-43-9	
Zinc	9.6J	ug/L	10.0	1.1	1	08/09/17 08:17	08/10/17 00:37	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Date: 08/18/2017 03:25 PM

Sample: RW20-MW(S)	ample: RW20-MW(S) Lab ID: 3022648600		Collecte	Collected: 08/07/17 12:55			07/17 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	12.2	ug/L	3.0	0.34	1	08/09/17 08:17	08/10/17 00:39	7440-43-9	
Zinc	276	ug/L	10.0	1.1	1	08/09/17 08:17	08/10/17 00:39	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Date: 08/18/2017 03:25 PM

Sample: RW20-MW(I)	Sample: RW20-MW(I) Lab ID: 302			30226486008 Collected: 08/07/17 13:42				atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	10.1	ug/L	3.0	0.34	1	08/09/17 08:17	08/10/17 00:41	7440-43-9	
Zinc	3210	ug/L	10.0	1.1	1	08/09/17 08:17	08/10/17 00:41	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Date: 08/18/2017 03:25 PM

Sample: RW15-MW(S)	e: RW15-MW(S) Lab ID: 30226486009			d: 08/07/17	7 14:22	Received: 08/	07/17 22:50 Ma	Matrix: Water		
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A				
Cadmium	54.5	ug/L	3.0	0.34	1	08/09/17 08:17	08/10/17 00:46	7440-43-9		
Zinc	4750	ug/L	1000	108	100	08/09/17 08:17	08/10/17 01:18	7440-66-6	MH	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Date: 08/18/2017 03:25 PM

Sample: RW15-MW(I)	mple: RW15-MW(I) Lab ID: 30226486010			d: 08/07/17	7 14:55	Received: 08/	atrix: Water		
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	17.7	ug/L	3.0	0.34	1	08/09/17 08:17	08/09/17 23:58	7440-43-9	
Zinc	43900	ug/L	1000	108	100	08/09/17 08:17	08/10/17 00:58	7440-66-6	MH.ML





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Date: 08/18/2017 03:25 PM

Sample: Duplicate	Lab ID:	Lab ID: 30226486011			7 00:01	Received: 08/	atrix: Water		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium Zinc	10.4 1330	ug/L ug/L	3.0 10.0	0.34 1.1	1 1	08/09/17 08:17 08/09/17 08:17	08/10/17 00:44 08/10/17 00:44		



QUALITY CONTROL DATA

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Date: 08/18/2017 03:25 PM

QC Batch: 267762 Analysis Method: EPA 6010C QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

30226486001, 30226486002, 30226486003, 30226486004, 30226486005, 30226486006, 30226486007, Associated Lab Samples:

30226486008, 30226486009, 30226486010, 30226486011

METHOD BLANK: 1317951 Matrix: Water

		01, 30226486002 08, 30226486009				3022648600	5, 302	26486006,	3022	6486007,			
_			Blank		Reporting					_			
Parameter		Units	Resul	lt 	Limit	MDL		Analyz	zed	Qua	alifiers		
Cadmium		ug/L		3.0 U	3.0		0.34	08/09/17					
Zinc		ug/L	1	0.0 U	10.0)	1.1	08/09/17	23:54				
LABORATORY CONTROL SAMPL	.E: 1	317952											
			Spike	LCS		LCS		% Rec					
Parameter		Units	Conc.	Res	ult ———	% Rec		Limits	Qu ——	alifiers	_		
Cadmium		ug/L	500)	510	102		80-120					
Zinc		ug/L	500)	513	103		80-120					
MATRIX SPIKE SAMPLE:	1	317954											
			302264		Spike	MS		MS		% Rec			
Parameter		Units	Res	ult ———— –	Conc.	Result		% Rec		Limits		Qual	ifiers
Cadmium		ug/L		54.5	500		74	10	04	75-	-		
Zinc		ug/L		4750	500	53	80	12	26	75-	125 N	IH	
MATRIX SPIKE & MATRIX SPIKE	DUPL	ICATE: 13179	56		1317957								
			MS	MSD									
Parameter	Units	30226486010 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % R			% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/L	17.7	500	500	516	555		100	107	75-125	7	20	
Zinc	ug/L	43900	500	500	44200	47600		54	728	75-125	7	20	MH,ML
SAMPLE DUPLICATE: 1317953													
			30226486		Dup			Max					
Parameter		Units	Resul	It 	Result	RPD 		RPD		Qualifie	ers ——		
Cadmium		ug/L		54.5	54.7		0		20				
Zinc		ug/L		4750	4760)	0		20				
SAMPLE DUPLICATE: 1317955													
D		11.2	30226486		Dup	555		Max		0			
Parameter		Units	Resul	<u> </u>	Result	RPD 		RPD		Qualifie	ers		
Cadmium		ug/L		17.7	18.0)	2		20				

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALITY CONTROL DATA

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Date: 08/18/2017 03:25 PM

SAMPLE DUPLICATE: 1317955

30226486010 Dup Max

ParameterUnitsResultResultRPDRPDQualifiersZincug/L4390044000020

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

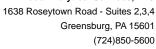
Date: 08/18/2017 03:25 PM

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

high.

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased

low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30226486

Date: 08/18/2017 03:25 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30226486001	RW03-MW(I)	EPA 3005A	267762	EPA 6010C	 267891
30226486002	RW03-MW(S)	EPA 3005A	267762	EPA 6010C	267891
30226486003	RW04-MW(S)	EPA 3005A	267762	EPA 6010C	267891
30226486004	RW06-MW(I)	EPA 3005A	267762	EPA 6010C	267891
30226486005	RW06-MW(S)	EPA 3005A	267762	EPA 6010C	267891
30226486006	RW06-MW(D)	EPA 3005A	267762	EPA 6010C	267891
30226486007	RW20-MW(S)	EPA 3005A	267762	EPA 6010C	267891
30226486008	RW20-MW(I)	EPA 3005A	267762	EPA 6010C	267891
30226486009	RW15-MW(S)	EPA 3005A	267762	EPA 6010C	267891
30226486010	RW15-MW(I)	EPA 3005A	267762	EPA 6010C	267891
30226486011	Duplicate	EPA 3005A	267762	EPA 6010C	267891

Pace Analytical

ocument

WO#:30226486

CHAI The Chai

ed accurately.

900 000 000 000 8 0 90 Pace Project No./ Lab I.D. DRINKING WATER (P) OTHER ö GROUND WATER Residual Chlorine (Y/V) Page: Š RCRA REGULATORY AGENCY Requested Analysis Filtered (Y/N) Site Location STATE NPDES UST 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 otal Zinc 6010 otal Cadmium 6010 Company Name: EnviroAnalytics Group | IsoT sisylsnA N A Other Samantha Bayura Methanol Laura Sargent Preservatives Na₂S₂O₃ HORN HCI HNO3 OS2H Reference: Pace Project Manager: Pace Profile #: Unpreserved ace Quote Address: # OF CONTAINERS SAMPLE TEMP AT COLLECTION TIME COMPOSITE END/GRAB COLLECTED DATE Rod and Wire Mill GW Sampling TIME COMPOSITE START DATE Report To: James Calenda Required Project Information: Copy To: Stewart Kabis (G=GRAB C=COMP) SAMPLE TYPE Purchase Order No. Project Number: (see valid codes to left) MATRIX CODE pject Name: Section B Valid Matrix Codes T 역 옥 볼 유 P E MATRIX
DRINKONO WATER
WASTER
WASTER
PRODUCT
SOULSOULD
CIL
WIPE
WIPE
AIR
COTHER
TISSUE 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE EnviroAnalytics Group 5 Day SAMPLE ID Fax: Section D Required Client Information Section A Required Cilent Information: 314-620-3056 Requested Due Date/TAT: Company: Email To: Address: 9 Ţ N 40 ø -8 6 #WELL

Custody Sealed (Y/N) Ice (Y/N) Received on O° ni qmaT DATE Signed (MM/DD/YY): パグ Important Note. By storing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1,5% per frictif for any involces not paid within 30 days. SIGNATURE of SAMPLER: Page 21 of 22

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

(MY) Samples Intact

SAMPLE CONDITIONS

TIME

DATE

ACCEPTED BY / AFFILIATION

\$ \$ \$ TIME

DATE

RELINQUISHED BY / AFFILIATION

ADDITIONAL COMMENTS

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Sample Condition Upon Rec	70,60	, ,,,,,	> CI1 &	j.,	
Pace Analytical Client Name:		G)	Vír	o Ana.	Project # 30 2 2 6 4 8
Courler: Fed Ex DUPS DUSPS Die	ent [Domr	nercial	ace Other	Label COC
Tracking #:					LIMS Login BUM
Custody Seal on Cooler/Box Present:		no	Sea	als Intact: yes	□no
Thermometer Used	ı Typ₁	e of lo	:e: W	el) Blue None	
Cooler Temperature Observed Temp		° C			<u>.C</u> °C Final Temp <u>: 3 √</u> °C
Temp should be above freezing to 6°C					
					Date and initials of person examining contents:
Comments:	Yes	i No) N//	٩	
Chain of Custody Present:	_(1	
Chain of Custody Filled Out:	12	_		2.	
Chain of Custody Relinquished:		`	4_	3,	
Sampler Name & Signature on COC:	LX.			4.	
Sample Labels match COC:	X		<u> </u>	5.	
-Includes date/tlme/ID Matrix:	W				
Samples Arrived within Hold Time:	<u> </u>			6.	
Short Hold Time Analysis (<72hr remaining):	J.,	X		7.	
Rush Turn Around Time Requested:	\perp			8.	
ufficient Volume:	\times			9.	
Correct Containers Used;	\geq			」 10.	
-Pace Containers Used:	X				
ontainers intact:	$\perp \!\!\!\! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! $	<u></u>]11.	
rthophosphate field filtered			X	12.	
organic Samples checked for dechlorination;			X	13.	
illered volume received for Dissolved tests				14.	
l containers have been checked for preservation.	X			15.	
l containers needing preservation are found to be in impliance with EPA recommendation,	X	j			
cceptions: VOA, coliform, TOC, O&G, Phenolics				Inilial when HMC	Date/time of preservation
adaphartar for a comonia y = = 1 = 1 = 5 · · · · · · · · · · · · · · · · · ·				Lot # of added	
				preservative	
adspace in VOA Vlats (>6mm):		· · · ·		16.	
p Blank Present:		1		17.	
ip Blank Custody Seals Present ad Aqueous Samples Screenéd > 0,5 mrem/hr				Initial when	
id Adneode Samples Screened > 1/2 menem				completed:	Date:
ent Notification/ Resolution:					
Person Contacled:	· .		Dale/T	ime;	Contacted By:
Comments/ Resolution:					

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



August 11, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on August 08, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888

North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282

Vermont Dept. of Health: ID# VI-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30226608001	RW05-MW(I)	Water	08/08/17 08:34	08/08/17 21:50
30226608002	RW07-MW(S)	Water	08/08/17 09:18	08/08/17 21:50
30226608003	RW07-MW(I)	Water	08/08/17 10:01	08/08/17 21:50
30226608004	RW09-MW(S)	Water	08/08/17 10:39	08/08/17 21:50
30226608005	RW09-MW(I)	Water	08/08/17 11:02	08/08/17 21:50
30226608006	RW08-MW(S)	Water	08/08/17 11:55	08/08/17 21:50
30226608007	RW08-MW(I)	Water	08/08/17 12:17	08/08/17 21:50
30226608008	RW11-MW(S)	Water	08/08/17 13:23	08/08/17 21:50
30226608009	RW11-MW(I)	Water	08/08/17 13:45	08/08/17 21:50
30226608010	Field Blank	Water	08/08/17 13:50	08/08/17 21:50
30226608011	RW12-MW(S)	Water	08/08/17 14:20	08/08/17 21:50
30226608012	RW12-MW(I)	Water	08/08/17 14:43	08/08/17 21:50

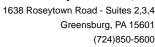


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30226608001	RW05-MW(I)	EPA 6010C	PJD	2
30226608002	RW07-MW(S)	EPA 6010C	PJD	2
30226608003	RW07-MW(I)	EPA 6010C	PJD	2
30226608004	RW09-MW(S)	EPA 6010C	PJD	2
30226608005	RW09-MW(I)	EPA 6010C	PJD	2
30226608006	RW08-MW(S)	EPA 6010C	PJD	2
30226608007	RW08-MW(I)	EPA 6010C	PJD	2
30226608008	RW11-MW(S)	EPA 6010C	PJD	2
30226608009	RW11-MW(I)	EPA 6010C	PJD	2
30226608010	Field Blank	EPA 6010C	PJD	2
30226608011	RW12-MW(S)	EPA 6010C	PJD	2
30226608012	RW12-MW(I)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: August 11, 2017

General Information:

12 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 267930

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30226608001,30226608011

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 1318559)
 - Zinc
- MSD (Lab ID: 1318560)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Date: 08/11/2017 11:34 AM

Sample: RW05-MW(I)	Lab ID:	Lab ID: 30226608001			7 08:34	Received: 08/	08/17 21:50 Ma	atrix: Water	Vater	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A				
Cadmium	11.5	ug/L	3.0	0.34	1	08/10/17 08:38	08/10/17 23:42	7440-43-9		
Zinc	35300	ua/L	1000	108	100	08/10/17 08:38	08/11/17 00:53	7440-66-6	MH	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Sample: RW07-MW(S)	Lab ID:	Lab ID: 30226608002			7 09:18	Received: 08/	Received: 08/08/17 21:50 Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP		Method: EPA 6					7 11101,7200			
Cadmium	3.1	ug/L	3.0	0.34	1		08/10/17 23:56	7440-43-9		
Zinc	127	ug/L	10.0	1.1	1	08/10/17 08:38	08/10/17 23:56	7440-66-6		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Date: 08/11/2017 11:34 AM

Sample: RW07-MW(I)	Lab ID:	30226608003	Collecte	d: 08/08/1	7 10:01	Received: 08/	08/17 21:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	1.0J	ug/L	3.0	0.34	1	08/10/17 08:38	08/10/17 23:58	7440-43-9	
Zinc	62.7	ug/L	10.0	1.1	1	08/10/17 08:38	08/10/17 23:58	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Sample: RW09-MW(S)	Lab ID:	30226608004	Collecte	d: 08/08/17	7 10:39	Received: 08/	08/17 21:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	12.5	ug/L	3.0	0.34	1	08/10/17 08:38	08/11/17 00:06	7440-43-9	
Zinc	9700	ug/L	1000	108	100	08/10/17 08:38	08/11/17 01:07	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Sample: RW09-MW(I)	Lab ID:	3022660800	5 Collecte	d: 08/08/17	7 11:02	Received: 08/	08/17 21:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	18.5	ug/L	3.0	0.34	1	08/10/17 08:38	08/11/17 00:08	7440-43-9	
Zinc	55500	ug/L	1000	108	100	08/10/17 08:38	08/11/17 01:10	7440-66-6	

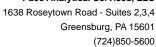




Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Sample: RW08-MW(S)	Lab ID:	30226608006	Collecte	d: 08/08/17	7 11:55	Received: 08/	08/17 21:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	2.7J	ug/L	3.0	0.34	1	08/10/17 08:38	08/11/17 00:11	7440-43-9	
Zinc	3190	ug/L	10.0	1.1	1	08/10/17 08:38	08/11/17 00:11	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Date: 08/11/2017 11:34 AM

Sample: RW08-MW(I) Lab ID: 30226608007 Collected: 08/08/17 12:17 Received: 08/08/17 21:50 Matrix: Water

Comments: • Sample ID on containers does not match COC.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP	A 6010C Prep	paration Me	thod: E	PA 3005A			
Cadmium Zinc	0.86J 49.8	ug/L ug/L	3.0 10.0	0.34 1.1	1 1		08/11/17 00:14 08/11/17 00:14		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Sample: RW11-MW(S)	Lab ID:	30226608008	Collected	d: 08/08/17	7 13:23	Received: 08/	08/17 21:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium Zinc	1.3J 10800	ug/L ug/L	3.0 1000	0.34 108	1 100		08/11/17 00:16 08/11/17 01:12		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Sample: RW11-MW(I)	Lab ID:	30226608009	Collecte	d: 08/08/17	7 13:45	Received: 08/	08/17 21:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	163	ug/L	3.0	0.34	1	08/10/17 08:38	08/11/17 00:19	7440-43-9	
Zinc	147000	ug/L	1000	108	100	08/10/17 08:38	08/11/17 01:14	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Sample: Field Blank	Lab ID:	30226608010	Collecte	d: 08/08/17	7 13:50	Received: 08/	08/17 21:50 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.34	1	08/10/17 08:38	08/11/17 00:21	7440-43-9	
Zinc	35.6	ug/L	10.0	1.1	1	08/10/17 08:38	08/11/17 00:21	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Date: 08/11/2017 11:34 AM

Sample: RW12-MW(S)	Lab ID:	30226608011	Collecte	d: 08/08/17	7 14:20	Received: 08/	08/17 21:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	7.0	ug/L	3.0	0.34	1	08/10/17 08:38	08/11/17 00:24	7440-43-9	
Zinc	5090	ug/L	1000	108	100	08/10/17 08:38	08/11/17 01:22	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Sample: RW12-MW(I)	Lab ID:	30226608012	Collecte	d: 08/08/17	7 14:43	Received: 08/	08/17 21:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	2220	ug/L	3.0	0.34	1	08/10/17 08:38	08/11/17 00:36	7440-43-9	
Zinc	156000	ug/L	1000	108	100	08/10/17 08:38	08/11/17 01:29	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Date: 08/11/2017 11:34 AM

QC Batch: 267930 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30226608001, 30226608002, 30226608003, 30226608004, 30226608005, 30226608006, 30226608007,

30226608008, 30226608009, 30226608010, 30226608011, 30226608012

METHOD BLANK: 1318556 Matrix: Water

Associated Lab Samples: 30226608001, 30226608002, 30226608003, 30226608004, 30226608005, 30226608006, 30226608007,

30226608008, 30226608009, 30226608010, 30226608011, 30226608012

Parameter		Units	Blank Result		Reporting Limit	MDL	_	Δna	lyzed	Ous	alifiers		
Cadmium		ug/L		 3.0 U	3.0		0.34		7 23:37		aiiiici 3	_	
Zinc		ug/L ug/L		0.0 U	10.0		1.1	08/10/1					
LABORATORY CONTROL SAME	PLE: 1;	318557											
_			Spike	LCS		LCS		Rec	_				
Parameter		Units	Conc.	Resi	ult 	% Rec	Li	imits	Qu	alifiers			
Cadmium Zinc		ug/L ug/L	500 500		510 500	102 100		80-12 80-12	-				
MATRIX SPIKE & MATRIX SPIK	E DUPLI	CATE: 13185	-	MCD	1318560								
Parameter	Units	30226608001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Re		MSD Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/L	11.5	500	500	515	527	,	101	103	75-125	2	20	
Zinc	ug/L	35300	500	500	37500	37600	•	438	454	75-125	0	20	MH
MATRIX SPIKE SAMPLE:	1;	318562											
Parameter		Units	3022660 Resu		Spike Conc.	MS Result		MS % Rec		% Rec Limits		Quali	fiers
Cadmium		ug/L		7.0	500	5	29		104	75-	125		
Zinc		ug/L		5090	500	56	30		107	75-′	125		
SAMPLE DUPLICATE: 131855	8												
Parameter		Units	30226608 Result		Dup Result	RPD		Ma: RPI		Qualifie	ers		
Cadmium		ug/L		11.5	11.7	,			20				
Zinc		ug/L	3	5300	37500	1	6		20				
SAMPLE DUPLICATE: 131856	1												
Parameter		Units	30226608 Result		Dup Result	RPD		Ma: RPI		Qualifie	ers		
Cadmium		ug/L		7.0	7.3		4		20				

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Date: 08/11/2017 11:34 AM

SAMPLE DUPLICATE: 1318561

30226608011 Dup Max

Parameter Units Result Result RPD RPD Qualifiers

Zinc ug/L 5090 5330 5 20

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 08/11/2017 11:34 AM

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226608

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30226608001	RW05-MW(I)	EPA 3005A	267930	EPA 6010C	268014
30226608002	RW07-MW(S)	EPA 3005A	267930	EPA 6010C	268014
30226608003	RW07-MW(I)	EPA 3005A	267930	EPA 6010C	268014
30226608004	RW09-MW(S)	EPA 3005A	267930	EPA 6010C	268014
30226608005	RW09-MW(I)	EPA 3005A	267930	EPA 6010C	268014
30226608006	RW08-MW(S)	EPA 3005A	267930	EPA 6010C	268014
30226608007	RW08-MW(I)	EPA 3005A	267930	EPA 6010C	268014
30226608008	RW11-MW(S)	EPA 3005A	267930	EPA 6010C	268014
30226608009	RW11-MW(I)	EPA 3005A	267930	EPA 6010C	268014
30226608010	Field Blank	EPA 3005A	267930	EPA 6010C	268014
30226608011	RW12-MW(S)	EPA 3005A	267930	EPA 6010C	268014
30226608012	RW12-MW(I)	EPA 3005A	267930	EPA 6010C	268014



CHAIN-UF-CUS I OUY / Analytical Kequest Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A	Section A Required Clear Information:	Section B	. a cite			Sec.	Section C						<u> </u>	Page:	ő		
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Sample Condition Upon Receipt Pittsburgh Environ Ana. Proje 3 0 2 2 6 6 0 8 -... Face Analytical Courler: Fed Ex UPS USPS Client Commercial Pace Other LIMS Login Tracking #: Seals Intact: yes Type of ice: (Wel) Blue Thermometer Used Correction Factor: T() () °C Final Temp: , C Cooler Temperature Temp should be above freezing to 6°C Date and initials of person examining contents: contents:__ No N/A Comments: Yes Chain of Custody Present: Chain of Custody Filled Oul: Chain of Custody Relinquished: Sampler Name & Signature on COC: Sample 007 ID on bottle 15 RWO9-MW(I) but dateltime match Sample Labels match COC: Matrix: W -Includes date/time/ID Samples Arrived within Hold Time: Short Hold Time Analysis (<72hr remaining): Rush Turn Around Time Requested: 9, Sufficient Volume: Correct Containers Used: 10. -Pace Containers Used: Containers Intact: 11. Orthophosphate field filtered 12. 13. Organic Samples checked for dechlorination: Fillered volume received for Dissolved tests All containers have been checked for preservation, 15. All containers needing preservation are found to be in compliance with EPA recommendation. Date/time of Initial when exceptions: VOA, coliform, TOC, O&G, Phenolics completed preservation Lot # of added preservative Headspace in VOA Vlais (>6mm): 16. Trlp Blank Present: 17. Trip Blank Custody Seals Present Rad Aqueous Samples Screened > 0.5 mrem/hr Initial when ompleted: Date: Client Notification/ Resolution: Person Contacted: Comments/ Resolution: \square A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compilance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workparder Edit Screen.

J:\QAQC\Master\Document Management\Sample Mgt\Sample Condition Upon Receipt Pittsburgh (C056-5 5July2017)

(724)850-5600



August 14, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on August 09, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

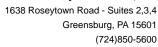
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133 Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30226710001	RW14-MW(S)	Water	08/09/17 09:45	08/09/17 22:30
30226710002	RW13-MW(I)	Water	08/09/17 10:23	08/09/17 22:30
30226710003	RW18-MW(S)	Water	08/09/17 11:04	08/09/17 22:30
30226710004	RW18-MW(I)	Water	08/09/17 11:40	08/09/17 22:30
30226710005	RW17-MW(S)	Water	08/09/17 12:25	08/09/17 22:30
30226710006	RW19-MW(S)	Water	08/09/17 13:50	08/09/17 22:30
30226710007	Duplicate	Water	08/09/17 00:01	08/09/17 22:30
30226710008	RW19-MW(I)	Water	08/09/17 14:11	08/09/17 22:30
30226710009	Field Blank	Water	08/09/17 14:20	08/09/17 22:30
30226710010	RW10-MW(I)	Water	08/09/17 14:45	08/09/17 22:30

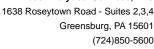


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30226710001	RW14-MW(S)	EPA 6010C	PJD	2
30226710002	RW13-MW(I)	EPA 6010C	PJD	2
30226710003	RW18-MW(S)	EPA 6010C	PJD	2
30226710004	RW18-MW(I)	EPA 6010C	PJD	2
30226710005	RW17-MW(S)	EPA 6010C	PJD	2
30226710006	RW19-MW(S)	EPA 6010C	PJD	2
30226710007	Duplicate	EPA 6010C	PJD	2
30226710008	RW19-MW(I)	EPA 6010C	PJD	2
30226710009	Field Blank	EPA 6010C	PJD	2
30226710010	RW10-MW(I)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: August 14, 2017

General Information:

10 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 268069

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30226710005

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 1319589)
 - Cadmium
 - Zinc

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 1319590)
 - Cadmium
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Sample: RW14-MW(S)	Lab ID:	Lab ID: 30226710001			7 09:45	Received: 08/	09/17 22:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A		_	
Cadmium	1780	ug/L	3.0	0.34	1	08/11/17 08:14	08/11/17 22:54	7440-43-9	
Zinc	42000	ug/L	1000	108	100	08/11/17 08:14	08/12/17 00:22	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Date: 08/14/2017 02:52 PM

Sample: RW13-MW(I)	Lab ID:	30226710002	Collecte	d: 08/09/1	7 10:23	Received: 08/	/09/17 22:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	31800	ug/L	300	34.4	100	08/11/17 08:14	08/12/17 00:24	7440-43-9	
Zinc	308000	ug/L	1000	108	100	08/11/17 08:14	08/12/17 00:24	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Sample: RW18-MW(S)	Lab ID:	Lab ID: 30226710003			7 11:04	Received: 08/	09/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	34.9	ug/L	3.0	0.34	1	08/11/17 08:14	08/11/17 23:22	7440-43-9	
Zinc	964	ug/L	10.0	1.1	1	08/11/17 08:14	08/11/17 23:22	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Date: 08/14/2017 02:52 PM

Sample: RW18-MW(I)	ample: RW18-MW(I) Lab ID: 30226710004		Collecte	d: 08/09/17	7 11:40	Received: 08/	09/17 22:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	74.4	ug/L	3.0	0.34	1	08/11/17 08:14	08/11/17 23:24		
Zinc	290000	ug/L	1000	108	100	08/11/17 08:14	08/12/17 00:27	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Date: 08/14/2017 02:52 PM

Sample: RW17-MW(S)	Lab ID:	Lab ID: 30226710005			7 12:25	Received: 08/	09/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: E	PA 3005A			
Cadmium	4760	ug/L	300	34.4	100	08/11/17 08:14	08/12/17 00:07	7440-43-9	MH,ML
Zinc	297000	ua/L	1000	108	100	08/11/17 08:14	08/12/17 00:07	7440-66-6	MH.ML





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Date: 08/14/2017 02:52 PM

Sample: RW19-MW(S)	Lab ID:	30226710006	Collecte	d: 08/09/17	7 13:50	Received: 08/	/09/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	7.2	ug/L	3.0	0.34	1	08/11/17 08:14	08/11/17 23:27	7440-43-9	
Zinc	3360	ug/L	10.0	1.1	1	08/11/17 08:14	08/11/17 23:27	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Sample: Duplicate	Lab ID:	Lab ID: 30226710007			7 00:01	Received: 08/	09/17 22:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1840	ug/L	3.0	0.34	1	08/11/17 08:14	08/11/17 23:30	7440-43-9	
Zinc	45500	ug/L	1000	108	100	08/11/17 08:14	08/12/17 00:29	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Sample: RW19-MW(I)	Lab ID:	Lab ID: 30226710008			7 14:11	Received: 08/	09/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	1670	ug/L	30.0	3.4	10	08/11/17 08:14	08/12/17 00:42	7440-43-9	
Zinc	3360000	ug/L	100000	10800	10000	08/11/17 08:14	08/12/17 00:53	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Sample: Field Blank	Lab ID:	Lab ID: 30226710009			7 14:20	Received: 08/	09/17 22:30 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	0.71J	ug/L	3.0	0.34	1	08/11/17 08:14	08/11/17 23:35	7440-43-9	
Zinc	10.0 U	ug/L	10.0	1.1	1	08/11/17 08:14	08/12/17 00:55	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Sample: RW10-MW(I)	Lab ID:	Lab ID: 30226710010			7 14:45	Received: 08/	/09/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.34	1	08/11/17 08:14	08/11/17 23:37	7440-43-9	
Zinc	79.7	ug/L	10.0	1.1	1	08/11/17 08:14	08/12/17 00:50	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

LABORATORY CONTROL SAMPLE:

Date: 08/14/2017 02:52 PM

QC Batch: 268069 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30226710001, 30226710002, 30226710003, 30226710004, 30226710005, 30226710006, 30226710007,

30226710008, 30226710009, 30226710010

METHOD BLANK: 1319583 Matrix: Water

1319584

Associated Lab Samples: 30226710001, 30226710002, 30226710003, 30226710004, 30226710005, 30226710006, 30226710007,

30226710008, 30226710009, 30226710010

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	08/11/17 22:34	
Zinc	ug/L	10.0 U	10.0	1.1	08/11/17 22:34	

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 534 107 80-120 ug/L 500 Zinc ug/L 500 527 105 80-120

MATRIX SPIKE & MATRIX SPIK	E DUPLIC	ATE: 131958	39		1319590							
			MS	MSD								
	;	30226710005	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	4760	500	500	5600	5050	166	57	75-125	10	20	MH,ML
Zinc	ug/L	297000	500	500	308000	275000	2180	-4400	75-125	11	20	MH,ML

SAMPLE DUPLICATE: 1319588 30226710005 Dup Max Qualifiers Parameter Units Result RPD RPD Result Cadmium 4760 20 ug/L 4600 4 297000 Zinc ug/L 284000 4 20

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

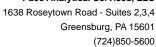
Date: 08/14/2017 02:52 PM

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

hiah.

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased

low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226710

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30226710001	RW14-MW(S)	EPA 3005A	268069	EPA 6010C	268166
30226710002	RW13-MW(I)	EPA 3005A	268069	EPA 6010C	268166
30226710003	RW18-MW(S)	EPA 3005A	268069	EPA 6010C	268166
30226710004	RW18-MW(I)	EPA 3005A	268069	EPA 6010C	268166
30226710005	RW17-MW(S)	EPA 3005A	268069	EPA 6010C	268166
30226710006	RW19-MW(S)	EPA 3005A	268069	EPA 6010C	268166
30226710007	Duplicate	EPA 3005A	268069	EPA 6010C	268166
30226710008	RW19-MW(I)	EPA 3005A	268069	EPA 6010C	268166
30226710009	Field Blank	EPA 3005A	268069	EPA 6010C	268166
30226710010	RW10-MW(I)	EPA 3005A	268069	EPA 6010C	268166

Pace Analytical "
www.paceabs.com

CHAIN- WO#: 30226710

Iment courately.

ection A	_	Section B		g.3
(equired	equired Client Information:	Required Project Information:	30005740	Page: of
:ompany:	EnviroAnalytics Group	Report To: James Calenda	Attention: Laura Sargent	
ddress;	1600 Sparrows Point Blvd, Suite B2 Copy To: Stewart Kabis	B2 Copy To: Stewart Kabis	Company.Name: EnviroAnalytics Group	REGULATORY AGENCY
	Sparrows Point, MD 21219		Address: 1650 Des Peres Road, Suite 303 St. Louis, MO 63131	NPDES GROUND WATER DRINKING WATER
mail To:	icalenda@enviroanalyticsgroup.com	Purchase Order No.:	Pace Quote Reference:	L UST L RCRA L OTHER
hone: 3	hone: 314-620-3056 Fax:	Project Name: Rod and Wire Mill GW Sampling	Pace Project Samantha Bayura Manager	Site Location
lequester	lequested Due Date/TAT: 5 Day	Project Number: 130384 M-1	Pace Profile #:	STATE: MID
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Samples Intact (M/Y)

Cooler (Y/V)

Received on Ice (Y/N)

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DATE Signed (MM/DD/YY): S\$/S\$/ | 3

Parara S

SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER:

Page 19 of 20

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

Sample Condition Upon Reco	elpt l	Pitts	bur	gh	
Pace Analytical Client Name:		E	ΩΜ	iro Ana	Project # 30 2 2 6 7 1 0
Courler: Fed Ex UPS USPS Clier		,	nercia	Pace Olher	Label PM Lims Login PANN
Custody Seal on Cooler/Box Present:	ф	no	Se	als Intact: yes	no
Thermometer Used	Type	of lc	e: (N	(et) Blue None	
Cooler Temperature Observed Temp	()	_ ° C	Co	rrection Factor: 10	O°C Final Temp: C
Temp should be above freezing to 6°C					Date and Julifor of various eventuing
÷	L				Date and Initials of person examining contents:
Comments:	Yes	No	N/	A	paragraphic to the state of the
Chain of Custody Present:	13>	<u> </u>		1.	
Chain of Custody Filled Oul:			<u> </u>	2.	
Chain of Custody Relinquished:	ļ×,	<u> </u>		3,	
Sampler Name & Signature on COC:	12	<u> </u>		4.	
Sample Labels match COC:	X		<u> </u>	5.	
-Includes date/Ilme/ID Matrix:	WI				
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	X			9.	
Correct Containers Used;	1			10.	
-Pace Containers Used:	X			1	
Containers Intact:	X			11.	
Orthophosphate field filtered				12.	
Organic Samples checked for dechlorination:			X	13.	
Fillered volume received for Dissolved tests		L	X.	14.	
All containers have been checked for preservation.	V		-	15.	
All containers needing preservation are found to be in compliance with EPA recommendation.	Ź	٠.		10.	
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exceptions: VOA, coliform, TOC, O&G, Phenolics				completed	pleservation
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Trip Blank Custody Seals Present			1		
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Comments/ Resolution:					
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A check in this box indicates that addition	onal ir	nform			

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



August 15, 2017

Mr. James Calenda EnviroAnalytics Group, LLC Sparrows Point Terminal 1430 Sparrows Point Blvd Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on August 10, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

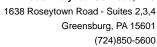
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30226816001	RW01-MW(S)	Water	08/10/17 11:41	08/10/17 23:05
30226816002	RW01-MW(I)	Water	08/10/17 12:15	08/10/17 23:05
30226816003	RW22-MW(S)	Water	08/10/17 13:12	08/10/17 23:05
30226816004	RW22-MW(I)	Water	08/10/17 13:55	08/10/17 23:05
30226816005	RW02-MW(S)	Water	08/10/17 14:30	08/10/17 23:05
30226816006	RW02-MW(I)	Water	08/10/17 15:02	08/10/17 23:05



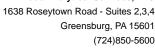


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30226816001	RW01-MW(S)	EPA 6010C	PJD	2
30226816002	RW01-MW(I)	EPA 6010C	PJD	2
30226816003	RW22-MW(S)	EPA 6010C	PJD	2
30226816004	RW22-MW(I)	EPA 6010C	PJD	2
30226816005	RW02-MW(S)	EPA 6010C	PJD	2
30226816006	RW02-MW(I)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: August 15, 2017

General Information:

6 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 268258

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30226816001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 1320658)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Date: 08/15/2017 04:20 PM

Sample: RW01-MW(S)	Lab ID:	30226816001	Collecte	d: 08/10/17	7 11:41	Received: 08/	10/17 23:05 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.6J	ug/L	3.0	0.34	1	08/14/17 10:50	08/14/17 21:27	7440-43-9	
Zinc	12200	ug/L	1000	108	100	08/14/17 10:50	08/14/17 21:59	7440-66-6	MH





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Date: 08/15/2017 04:20 PM

Sample: RW01-MW(I)	Lab ID:	30226816002	Collecte	d: 08/10/1	7 12:15	Received: 08/	10/17 23:05 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	paration Me	thod: El	PA 3005A			
Cadmium	194	ug/L	3.0	0.34	1	08/14/17 10:50	08/14/17 21:41	7440-43-9	
Zinc	11600	ug/L	1000	108	100	08/14/17 10:50	08/14/17 22:14	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Date: 08/15/2017 04:20 PM

Sample: RW22-MW(S)	Lab ID:	30226816003	Collecte	d: 08/10/17	7 13:12	Received: 08/	10/17 23:05 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	4.9	ug/L	3.0	0.34	1	08/14/17 10:50	08/14/17 21:43	7440-43-9	
Zinc	550	ug/L	10.0	1.1	1	08/14/17 10:50	08/14/17 21:43	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Date: 08/15/2017 04:20 PM

Sample: RW22-MW(I)	Lab ID:	30226816004	Collecte	d: 08/10/17	7 13:55	Received: 08/	10/17 23:05 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	19.3	ug/L	3.0	0.34	1	08/14/17 10:50	08/14/17 21:51	7440-43-9	
Zinc	1730	ug/L	10.0	1.1	1	08/14/17 10:50	08/14/17 21:51	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Date: 08/15/2017 04:20 PM

Sample: RW02-MW(S)	Lab ID: 30226816005		Collecte	Collected: 08/10/17 14:30			10/17 23:05 Ma	trix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	12.0	ug/L	3.0	0.34	1	08/14/17 10:50	08/14/17 21:53	7440-43-9	
Zinc	6290	ug/L	1000	108	100	08/14/17 10:50	08/14/17 22:26	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Date: 08/15/2017 04:20 PM

Sample: RW02-MW(I)	MW(I) Lab ID: 30226816006		Collecte	Collected: 08/10/17 15:02			Received: 08/10/17 23:05 Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A									
Cadmium Zinc	511 18200	ug/L ug/L	3.0 1000	0.34 108	1 100		08/14/17 21:56 08/14/17 22:28			



QUALITY CONTROL DATA

Rod and Wire Mill GW Sampling Project:

Pace Project No.: 30226816

Zinc

Zinc

Zinc

Date: 08/15/2017 04:20 PM

QC Batch: 268258 Analysis Method: **EPA 6010C** QC Batch Method: EPA 3005A Analysis Description: 6010C MET

ug/L

12200

ug/L

30226816001, 30226816002, 30226816003, 30226816004, 30226816005, 30226816006 Associated Lab Samples:

METHOD BLANK: 1320655 Matrix: Water

Associated Lab Samples: 30226816001, 30226816002, 30226816003, 30226816004, 30226816005, 30226816006

Blank Reporting Limit MDL Qualifiers Parameter Units Result Analyzed Cadmium 3.0 U 3.0 08/14/17 21:22 ug/L 0.34 ug/L 10.0 U 10.0 1.1 08/14/17 21:22

LABORATORY CONTROL SAMPLE: 1320656 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 500 503 101 80-120 ug/L

500

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1320659 1320658 MSD MS 30226816001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 1.6J 500 500 513 512 102 102 75-125 0 20

500

501

12900

100

12900

80-120

130

122

75-125

0

20 MH

SAMPLE DUPLICATE: 1320657 30226816001 Dup Max **RPD RPD** Qualifiers Parameter Units Result Result Cadmium 1.6J 1.3J 20 ug/L 12200 11600 6 Zinc 20 ug/L

500

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600



QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 08/15/2017 04:20 PM

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30226816

Date: 08/15/2017 04:20 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30226816001	RW01-MW(S)	EPA 3005A	268258	EPA 6010C	268316
30226816002	RW01-MW(I)	EPA 3005A	268258	EPA 6010C	268316
30226816003	RW22-MW(S)	EPA 3005A	268258	EPA 6010C	268316
30226816004	RW22-MW(I)	EPA 3005A	268258	EPA 6010C	268316
30226816005	RW02-MW(S)	EPA 3005A	268258	EPA 6010C	268316
30226816006	RW02-MW(I)	EPA 3005A	268258	EPA 6010C	268316



CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section	Section A Remined Client Information	Section B	Section C	Page: of
Сотрапу:	lytics Group	Report To: James Calenda	Invoice information: Attention: Laura Sargent	
Address:	1600 Sparrows Point Blvd, Suite B2	Copy To: Stewart Kabis	Company Name: EnviroAnalytics Group	REGILIATORY AGENCY
	Sparrows Point, MD 21219		Address: 1650 Des Peres Road, Suite 303 St. Louis, MO 63131	-
Email To:	icalenda@enviroanalyticsgroup.com	Purchase Order No.:	Pace Quote Reference:	T RCRA
Phone:	Fax	Project Name: Rod and Wire Mill GW Sampling	Pace Project Samantha Bayura	Site Location
Requesi	Requested Due Date/TAT: 5 Day	Project Number: 100 200 100 100 100 100 100 100 100 100	Pace Profile #:	STATE: MD
				Requested Analysis Filtered (YIN)
	Section D Valid Matrix Codes Required Client Information MATRIX CO	[] (fiel ot	Preservatives	
	DRINKING WATER WATER WASTE WATER PRODUCT SOIL/SOLID OIL	WW WIT COORES COMPOSITE CO	\$	WO#:30226816
# M3T	Sample IDs MUST BE UNIQUE TISSUE	MATRIX CODE (6-	AMPLE TEMP AT CONTAINER INC. OF CONTAINER INC. INC. INC. INC. INC. INC. INC. INC.	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
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	ge 15 of 16	SAMPLER: NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER:	WPLER: CALL NOTE NOTE Signed WPLER: (MMM/D)/VV:	Temp in °C Received on Cooler (Y/N) Cooler (Y/N) (Y/N)
	*Important Note: By signing this form you are accepting	*Important Note: By sloring this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges o	of 1.5% per month for any involces not paid within 30 days.	F-ALL-Q-020rev.bs, Z-Feb-2b07

Client Name:	,		•	1		_	•		0.04
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*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workprder Edit Screen.

(724)850-5600



December 08, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237587

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on December 04, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237587

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Montana Certification #: Cert 0082

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282 South Dakota Certification

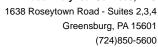
Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



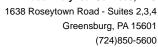


SAMPLE SUMMARY

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237587

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30237587001	RW12-MW(I)	Water	12/04/17 12:15	12/04/17 23:00
30237587002	RW12-MW(S)	Water	12/04/17 12:50	12/04/17 23:00
30237587003	RW18-MW(S)	Water	12/04/17 14:00	12/04/17 23:00
30237587004	RW18-MW(I)	Water	12/04/17 14:30	12/04/17 23:00



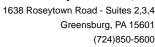


SAMPLE ANALYTE COUNT

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237587

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30237587001	RW12-MW(I)	EPA 6010C	KAS	2
30237587002	RW12-MW(S)	EPA 6010C	KAS	2
30237587003	RW18-MW(S)	EPA 6010C	KAS	2
30237587004	RW18-MW(I)	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237587

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: December 08, 2017

General Information:

4 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 281220

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30237587001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1380294)
 - Zinc
- MSD (Lab ID: 1380295)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237587

Date: 12/08/2017 01:42 PM

Sample: RW12-MW(I)	Lab ID:	30237587001	Collecte	d: 12/04/17	7 12:15	Received: 12/	04/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1450	ug/L	3.0	0.87	1	12/05/17 15:15	12/07/17 16:05	7440-43-9	
Zinc	157000	ug/L	1000	104	100	12/05/17 15:15	12/07/17 16:35	7440-66-6	ML





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237587

Date: 12/08/2017 01:42 PM

Sample: RW12-MW(S)	Lab ID:	30237587002	Collecte	d: 12/04/17	12:50	Received: 12/	04/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units -	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	4.2	ug/L	3.0	0.87	1	12/05/17 15:15	12/07/17 16:20	7440-43-9	
Zinc	2980	ug/L	10.0	1.0	1	12/05/17 15:15	12/07/17 16:20	7440-66-6	



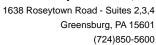


Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237587

Date: 12/08/2017 01:42 PM

Sample: RW18-MW(S)	Lab ID:	30237587003	Collecte	d: 12/04/17	14:00	Received: 12/	04/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Ougl
Farameters		——————————————————————————————————————		IVIDE .	DF	- — Frepareu	- Analyzeu	CAS NO.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	410	ug/L	3.0	0.87	1	12/05/17 15:15	12/07/17 16:22	7440-43-9	
Zinc	23400	ug/L	1000	104	100	12/05/17 15:15	12/07/17 16:49	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237587

Date: 12/08/2017 01:42 PM

Sample: RW18-MW(I)	Lab ID:	30237587004	Collecte	d: 12/04/17	7 14:30	Received: 12/	04/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	51.5	ug/L	3.0	0.87	1	12/05/17 15:15	12/07/17 16:30	7440-43-9	
Zinc	369000	ug/L	1000	104	100	12/05/17 15:15	12/07/17 16:52	7440-66-6	



QUALITY CONTROL DATA

Rod & Wire Mill GW Sampling Project:

Pace Project No.: 30237587

SAMPLE DUPLICATE: 1380293

Date: 12/08/2017 01:42 PM

Zinc

QC Batch: 281220 Analysis Method: **EPA 6010C** QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

30237587001, 30237587002, 30237587003, 30237587004 Associated Lab Samples:

METHOD BLANK: 1380291 Matrix: Water Associated Lab Samples: 30237587001, 30237587002, 30237587003, 30237587004

Blank Reporting

Limit MDL Qualifiers Parameter Units Result Analyzed Cadmium 3.0 U 3.0 12/07/17 16:00 ug/L 0.87 ug/L 10.0 U 10.0 1.0 12/07/17 16:00

LABORATORY CONTROL SAMPLE: 1380292 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers

Cadmium 500 504 101 80-120 ug/L Zinc 500 497 99 80-120 ug/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1380295 1380294

MSD MS 30237587001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 1450 500 500 1920 1920 95 94 75-125 0 20 Zinc ug/L 157000 500 500 154000 154000 -540 -660 75-125 0 20 ML

30237587001 Dup Max **RPD RPD** Qualifiers Parameter Units Result Result Cadmium 1450 1440 0 20 ug/L 157000 154000 2 Zinc 20 ug/L

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237587

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 12/08/2017 01:42 PM

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237587

Date: 12/08/2017 01:42 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30237587001	RW12-MW(I)	EPA 3005A	281220	EPA 6010C	281283
30237587002	RW12-MW(S)	EPA 3005A	281220	EPA 6010C	281283
30237587003	RW18-MW(S)	EPA 3005A	281220	EPA 6010C	281283
30237587004	RW18-MW(I)	EPA 3005A	281220	EPA 6010C	281283

F-ALL-Q-020rev.06, 2-Feb-2007

(N/A)

Samples Intact

Custody Sealed Cooler (Y/N)

(N/A)

Received on Ice

Jemp In °С

DATE Signed (MM/DD/YY):

SAMPLER NAME AND SIGNATURE

if data package is required, attach data package checkiist.

Page 13 of 14

SIGNATURE of SAMPLER: PRINT Name of SAMPLER:

7

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CHAIN-0 MO#: 30237587

Required Project Information:

Section B

Section A Required Client Information:

Pace Analytical

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Page:

Pace Project No./ Lab I.D. DRINKING WATER SAMPLE CONDITIONS 888 OTHER I GROUND WATER Residual Chlorine (Y/N) RCRA ₽ REGULATORY AGENCY TIME Requested Analysis Filtered (Y/N) STATE: Site Location DATE NPDES UST L 3 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION Parin 2. Company Name: EnviroAnalytics Group J iseT sisyisnA ₽N/A Olher lonstbeM Laura Sargent Na₂S₂O₃ Preservatives HOBN HCI [€]ONH invoice information: PSSO4 Pace Quote Reference: Pace Project Manager: Pace Profile #: (A) TIME Unpreserved Attention: 4ddress: # OF CONTAINERS SAMPLE TEMP AT COLLECTION DATE 8 0 51 21 TIME COMPOSITE END/GRAB ુ Macros Bee COLLECTED DATE RELINQUISHED BY / AFFILIATION 11.3 J 38 4 B D TIME COMPOSITE roject Name: Kakur Corre DATE Report To: James Calenda でもがばん b (G=GRAB C=COMP) SAMPLE TYPE 'n -(see valid codes to left) MATRIX CODE Project Number: PO Number: Copy To:
 Valid Matrix Codes

 MATRIX
 GODE

 DORANDRAMIER
 WW

 WASTE WATER
 P

 PRODUCT
 OL

 OLL
 OL

 OLL
 AR

 WIPE
 AR

 WIPE
 AR

 OTHER
 TS
 3 icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 ADDITIONAL COMMENTS 1430 Sparrows Point Blvd (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE Data Validation Required? (YM): Data Package Required? (Y/N): EnviroAnalytics Group SHE SAMPLE ID Section D Required Clent Information 314-620-3056 3 Requested Due Date/TAT: 868 Company: mail To: :oue: 2 £ 2 ð N φ æ m ų # MBTI

Pittsburgh La	ib Sample Condi	tion	Upo	n R	eceipt				
Pace Analytical	Client Name:		5Po	TR	SWS	Project #	30	237	58
Courier: Fed Ex Tracking #:	UPS□ USPS□ Clien	t 🚨	Comm	ercial	Pace Other _		Lai LIMS Log	oel <u>BL/</u> jin <i>RCA</i>	M
	/Box Present: yes		no	Seal	sintact: 🛭 yes 🖺	∃ no	-		
Thermometer Used	20,7,1000mm = 7,000			and also	t) Blue None				
Cooler Temperature	Observed Temp				rection Factor: 0,0	C Final	Temp <u>: ¿</u>	2.6	٠c
Temp should be above freez	ing to 6°C					Date and I	Initials of p	erson exami / / スーS	ning
Comments:		Yes	No	N/A		contents	: 13 <i>[]</i>	1 12-2	<u> </u>
Chain of Custody Present	:	/			1.				
Chain of Custody Filled O		1			2.	-m			
Chain of Custody Relingu		1			3.				
Sampler Name & Signatu		/			4.				
Sample Labels match CO			/		5. ID on Sar	npic ool	1 13	RW12-1	MWI
-Includes date/time/ID	Matrix:	W	T	_					
Samples Arrived within He	old Time:				6.				
Short Hold Time Analysi					7.				
Rush Turn Around Time					8.				
Sufficient Volume:			/		9.				
Correct Containers Used:			/		10.				
-Pace Containers Used	i:								
Containers Intact:					11.		-117		
Orthophosphate field filter	ed				12.				
Hex Cr Aqueous Compliance	/NPDES sample field filtered				13.				
Organic Samples check	ed for dechlorination:			//	14		-a		
Filtered volume received for				_	15.				
All containers have been che	ked for preservation.				16.				
All containers needing preser compliance with EPA recomm					gam.				
exceptions: VOA, coliforn	n, TOC, O&G, Phenolics				Initial when completed Lot # of added	Date/time of preservation			
			···		preservative				
Headspace in VOA Vials (>6mm):			4	17.		<u> </u>		——
Trip Blank Present:				4	18.				
Trip Blank Custody Seals I	Present			//	Initial when			· · ·	—
Rad Aqueous Samples S	creened > 0.5 mrem/nr			/	completed:	Date:	error and a second	construction of the second	
Client Notification/ Resol	ution:							•	
Person Contacted: _			[Date/	Гime:	Contact	ted B <u>y:</u>	<u></u>	
Comments/ Resolution: _									
									
						<u></u>			
									——

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



December 12, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on December 05, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30237714001	RW20-MWI RW15-MW(I)	Water	12/05/17 09:00	12/05/17 23:00
30237714002	RW15-MW(S	Water	12/05/17 09:20	12/05/17 23:00
30237714003	RW14-MWS	Water	12/05/17 09:50	12/05/17 23:00
30237714004	RW16-MWI	Water	12/05/17 10:17	12/05/17 23:00
30237714005	RW16-MWS	Water	12/05/17 10:46	12/05/17 23:00
30237714006	RW19-MWS	Water	12/05/17 11:17	12/05/17 23:00
30237714007	RW19-MWI	Water	12/05/17 11:42	12/05/17 23:00
30237714008	RW13-MWI	Water	12/05/17 12:21	12/05/17 23:00
30237714009	RW11-MWI	Water	12/05/17 13:36	12/05/17 23:00
30237714010	RW11-MWS	Water	12/05/17 14:00	12/05/17 23:00
30237714011	RW10-MWI	Water	12/05/17 14:50	12/05/17 23:00

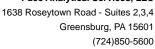


SAMPLE ANALYTE COUNT

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30237714001	RW20-MWI	EPA 6010C	KAS	2
30237714002	RW20-MWS	EPA 6010C	KAS	2
30237714003	RW14-MWS	EPA 6010C	KAS	2
30237714004	RW16-MWI	EPA 6010C	KAS	2
30237714005	RW16-MWS	EPA 6010C	KAS	2
30237714006	RW19-MWS	EPA 6010C	KAS	2
30237714007	RW19-MWI	EPA 6010C	KAS	2
30237714008	RW13-MWI	EPA 6010C	KAS	2
30237714009	RW11-MWI	EPA 6010C	KAS	2
30237714010	RW11-MWS	EPA 6010C	KAS	2
30237714011	RW10-MWI	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: December 12, 2017

General Information:

11 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Sample: RW20-MWI	Lab ID:	30237714001	Collecte	d: 12/05/17	7 09:00	Received: 12/	05/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	0.97J	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 14:36	7440-43-9	
Zinc	1070	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 14:36	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Sample: RW20-MWS	Lab ID:	30237714002	Collecte	d: 12/05/17	7 09:20	Received: 12/	05/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
6010C MET ICP		Method: EPA 6				-			
Cadmium	55.0	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 14:51	7440-43-9	
Zinc	7630	ug/L	1000	104	100	12/08/17 17:00	12/11/17 16:14	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Sample: RW14-MWS	Lab ID:	Lab ID: 30237714003			7 09:50	Received: 12/	05/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	2820	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 14:53	7440-43-9	
Zinc	49200	ug/L	1000	104	100	12/08/17 17:00	12/11/17 16:16	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Sample: RW16-MWI	Lab ID:	Lab ID: 30237714004			10:17	Received: 12/	05/17 23:00 Ma	atrix: Water	
			Report					0.10.11	
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.9J	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:01	7440-43-9	
Zinc	19200	ug/L	1000	104	100	12/08/17 17:00	12/11/17 16:19	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Date: 12/12/2017 04:47 PM

Sample: RW16-MWS	Lab ID:	Lab ID: 30237714005			10:46	Received: 12/	05/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:03	7440-43-9	
Zinc	27.7	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 15:03	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Sample: RW19-MWS	Lab ID:	Lab ID: 30237714006			11:17	Received: 12/	05/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	4.6	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:06	7440-43-9	
Zinc	3380	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 15:06	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Sample: RW19-MWI	Lab ID:	Lab ID: 30237714007			7 11:42	Received: 12/	05/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	1710	ug/L	300	87.0	100	12/08/17 17:00	12/11/17 16:21	7440-43-9	
Zinc	3970000	ua/L	10000	1040	1000	12/08/17 17:00	12/11/17 16:48	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Date: 12/12/2017 04:47 PM

Sample: RW13-MWI	Lab ID:	Lab ID: 30237714008			7 12:21	Received: 12/	05/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	44.2	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:52	7440-43-9	
Zinc	237	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 15:52	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Sample: RW11-MWI	Lab ID:	Lab ID: 30237714009		d: 12/05/17	7 13:36	Received: 12/	05/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	1380	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:13	7440-43-9	
Zinc	197000	ug/L	1000	104	100	12/08/17 17:00	12/11/17 16:50	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Sample: RW11-MWS	Lab ID:	Lab ID: 30237714010			14:00	Received: 12/	05/17 23:00 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	2.9J	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:16	7440-43-9	
Zinc	24000	ug/L	1000	104	100	12/08/17 17:00	12/11/17 16:26	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Sample: RW10-MWI	Lab ID:	Lab ID: 30237714011			7 14:50	Received: 12/	05/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:18	7440-43-9	
Zinc	158	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 15:18	7440-66-6	



QUALITY CONTROL DATA

Reporting

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Date: 12/12/2017 04:47 PM

QC Batch: 281745 Analysis Method: **EPA 6010C** QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

30237714001, 30237714002, 30237714003, 30237714004, 30237714005, 30237714006, 30237714007, Associated Lab Samples:

30237714008, 30237714009, 30237714010, 30237714011

METHOD BLANK: 1382890 Matrix: Water

30237714001, 30237714002, 30237714003, 30237714004, 30237714005, 30237714006, 30237714007, 30257714007, 30257714007, 30257714007, 30257714007, 30257714007, 30257714007, 30257714007, 30257714007, 30257714007, 30257714007, 30257714007, 30257714007, 30257714007, 302Associated Lab Samples: Blank

30237714008, 30237714009, 30237714010, 30237714011

			Dialik		eporting								
Parameter	ι	Jnits	Resul	t	Limit	MDL		Ana	yzed	Qua	alifiers		
Cadmium		ug/L		3.0 U	3.0)	0.87	12/11/1	7 14:31			_	
Zinc		ug/L		0.0 U	10.0		1.0	12/11/1					
LABORATORY CONTROL SAMPLE	: 138289	91											
			Spike	LCS	3	LCS	%	Rec					
Parameter	ι	Jnits	Conc.	Resu	ılt	% Rec	L	imits	Qι	ıalifiers			
Cadmium		ug/L	1000		966	97		80-12	0		•		
Zinc	ı	ug/L	1000		977	98		80-12	0				
MATRIX SPIKE & MATRIX SPIKE D	UPLICATE	: 13828			1382894								
			MS	MSD									
5 .		37714001	Spike	Spike	MS	MSD	MS		ISD	% Rec		Max	_
Parameter l	Jnits —————	Result	Conc.	Conc.	Result	Result	% Re	ec %	Rec	Limits	RPD	RPD	Qua
	ug/L	0.97J	1000	1000	991			99	100	75-125	1	20	
Zinc	ug/L	1070	1000	1000	2020	2050		95	98	75-125	1	20	
MATRIX SPIKE SAMPLE:	138289	96											
			302377		Spike	MS		MS		% Rec			
Parameter	ι	Jnits	Res	ult	Conc.	Result		% Rec		Limits		Qualif	iers
Cadmium		ug/L		3.0 U	1000	9	 81		98	75-	125		
Zinc	ı	ug/L		158	1000	11	40		98	75-1	125		
SAMPLE DUPLICATE: 1382892													
			30237714	1001	Dup			Max	(
Parameter	ι	Jnits	Resul	t	Result	RPD		RPI)	Qualifie	ers		
Cadmium		ug/L	(D.97J	0.89	J			20				
Zinc	ı	ug/L		1070	1070)	0		20				
SAMPLE DUPLICATE: 1382895													
			30237714		Dup			Max					
SAMPLE DUPLICATE: 1382895 Parameter	(Jnits	3023771 ² Resul		Dup Result	RPD		Max RPI		Qualifie	ers		

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALITY CONTROL DATA

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Date: 12/12/2017 04:47 PM

SAMPLE DUPLICATE: 1382895

30237714011 Dup Max

ParameterUnitsResultResultRPDRPDQualifiersZincug/L158145820

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

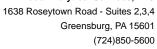
U - Indicates the compound was analyzed for, but not detected.

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

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

TNI - The NELAC Institute.

Date: 12/12/2017 04:47 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30237714

Date: 12/12/2017 04:47 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30237714001	RW20-MWI	EPA 3005A	281745	EPA 6010C	 281763
30237714002	RW20-MWS	EPA 3005A	281745	EPA 6010C	281763
30237714003	RW14-MWS	EPA 3005A	281745	EPA 6010C	281763
30237714004	RW16-MWI	EPA 3005A	281745	EPA 6010C	281763
30237714005	RW16-MWS	EPA 3005A	281745	EPA 6010C	281763
30237714006	RW19-MWS	EPA 3005A	281745	EPA 6010C	281763
30237714007	RW19-MWI	EPA 3005A	281745	EPA 6010C	281763
30237714008	RW13-MWI	EPA 3005A	281745	EPA 6010C	281763
30237714009	RW11-MWI	EPA 3005A	281745	EPA 6010C	281763
30237714010	RW11-MWS	EPA 3005A	281745	EPA 6010C	281763
30237714011	RW10-MWI	EPA 3005A	281745	EPA 6010C	281763

CHAIN-OI MO#: 30237714

The Chain-of-Cus

Face Analytical

Section B

Pace Project No./ Lab I.D. DRINKING WATER Samples Intact 38 SAMPLE CONDITIONS S S B OTHER Cooler (Y/N) Custody Sealed ö eceived on loa C GROUND WATER Residual Chlorine (Y/N) O' ni qmaT Page: RCRA 230 REGULATORY AGENCY Requested Analysis Filtered (Y/N) 76-17 STATE Site Location DATE T NPDES ST Ŋ 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION XXXXX 0100 Company Name: EnviroAnalytics Group Analysis Test ÎN/A огре lonsiteM Laura Sargent Na2S2O3 Preservatives NgOH HCI €ОМН *OS^zH 13/5/143300 Pace Quote Reference: Pace Project Manager: Pace Profile #: 18 TIME Опргеѕегуед Attention: Address: SAMPLER NAME AND SIGNATURE # OF CONTAINERS SAMPLE TEMP AT COLLECTION DATE CAN SOMY DE 200 <u>ي</u> POT 0 0 H D COMPOSITE END/GRAB Kalois COLLECTED DATE RELINQUISHED BY / AFFILIATION STOROLL STOROLL TIME COMPOSITE DATE きょうろう Report To: James Calenda Required Project Information: Project Name: ্ৰ Ć 39YT 3J9MA2 14 Ľ MATRIX CODE (see valid codes to left) roject Number: PO Number Capy ₹a: Valid Matrix Codes
MAIRIX CODE
DISARVANTE DIV WY
WATEN WASTE WASTE
SOLISOLID OL
OIL
WHE AR
AR
TISSUE data package is required, attach data package checklist. C. C. C. icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 ADDITIONAL COMMENTS 1430 Sparrows Point Blvd d. (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE Data Validation Required? (Y/N): AND THE HOUSE EnviroAnalytics Group Data Package Required? (Y/N): 1900 -F.ax SAMPLEID 37 Section D Required Clert Information Section A Required Client Information: hane: 314-620-3056 93 Requested Due Date/TAT: SC SK = 3 0037 5/2/ 232 этрапу: Email To: Ŧ 2 \$ 10 # M3TI

F-1 0000 ξ 5

(MW)

(N/A)

DATE Signed (MM/DD/YY):

PRINT Name of SAMPLER: SIGNATURE OF SAMPLER

Page 21 of 22

Pittsburgh Lab Sample Cond	ition	Upo	n R	eceipt		<i>18.</i>
Pace Analytical Client Name:	E	الانق	<u>0 A</u>	inalytics Gay	, Project#	302377
Courier: Fed Ex UPS USPS Clien						Label 84 LIMS Login W
Custody Seal on Cooler/Box Present: yes	X Q	no			□ no	
		of Ice:	(We	Blue None	O . o	Famo: 112 °C
Cooler Temperature Observed Temp	3_	.°C	Согг	rection Factor: O	<u> </u>	lemp: 1.5
Temp should be above freezing to 6°C					Date and le	nitials of person examining
	T Vac	No	N/A	7	contents	: MC 12-6-17
Comments:		7,40	107	11.		
Chain of Custody Present:	$ \langle \cdot \rangle $	<i>></i>)		2.		
Chain of Custody Filled Out:	\longleftrightarrow					
Chain of Custody Relinquished:		ļ <u>.</u>	<u> </u>	3.		
Sampler Name & Signature on COC:				4.	-	
Sample Labels match COC:			J	5.		
-Includes date/time/ID Matrix: W	\mathcal{L}	***	Ε			
Samples Arrived within Hold Time:	\times			6.		
Short Hold Time Analysis (<72hr remaining):		7		7.		
Rush Turn Around Time Requested:	\times	7		8.	*	
Sufficient Volume:				9.		
Correct Containers Used:	\geq			10.		
-Pace Containers Used:			<u></u>		- u-	
Containers Intact:	\geq			11.		
Orthophosphate field filtered	<u> </u>		\searrow	12.		
Hex Cr Aqueous Compliance/NPDES sample field filtered			\geq	13.	<u>.,,</u>	
Organic Samples checked for dechlorination:			\geq	14.		
Filtered volume received for Dissolved tests			\leq	15.		·····
All containers have been checked for preservation.	X			16.		
Alt containers needing preservation are found to be in compliance with EPA recommendation.	\times				<u> </u>	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed Lot # of added preservative	Date/time of preservation	
Headspace in VOA Vials (>6mm):			<u> </u>	17.		
Trip Blank Present:		7	-	18.		
Trip Blank Custody Seals Present		-	\checkmark			
Rad Aqueous Samples Screened > 0.5 mrem/hr		-		Initial when completed:	Date:	
Client Notification/ Resolution: Person Contacted: Comments/ Resolution:			Date/1	Fime:		ed By:

 $\ \square$ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



December 12, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on December 06, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Indiana Certification
Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Pennsylvania/TNI Certification #: 65-00: Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30237862001	RW09-MWI	Water	12/06/17 10:23	12/06/17 23:00
30237862002	RW09-MWS	Water	12/06/17 10:50	12/06/17 23:00
30237862003	RW07-MWS	Water	12/06/17 11:28	12/06/17 23:00
30237862004	RW07-MWI	Water	12/06/17 11:56	12/06/17 23:00
30237862005	RW08-MWI	Water	12/06/17 12:29	12/06/17 23:00
30237862006	RW08-MWS	Water	12/06/17 13:00	12/06/17 23:00
30237862007	RW06-MWD	Water	12/06/17 13:53	12/06/17 23:00
30237862008	RW06-MWS	Water	12/06/17 14:25	12/06/17 23:00
30237862009	RW06-MWI	Water	12/06/17 14:48	12/06/17 23:00

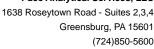


SAMPLE ANALYTE COUNT

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30237862001	RW09-MWI	EPA 6010C	KAS	2
30237862002	RW09-MWS	EPA 6010C	KAS	2
30237862003	RW07-MWS	EPA 6010C	KAS	2
30237862004	RW07-MWI	EPA 6010C	KAS	2
30237862005	RW08-MWI	EPA 6010C	KAS	2
30237862006	RW08-MWS	EPA 6010C	KAS	2
30237862007	RW06-MWD	EPA 6010C	KAS	2
30237862008	RW06-MWS	EPA 6010C	KAS	2
30237862009	RW06-MWI	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: December 12, 2017

General Information:

9 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Sample: RW09-MWI	Lab ID:	Lab ID: 30237862001			7 10:23	Received: 12/	06/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	7.7	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:31	7440-43-9	
Zinc	44500	ug/L	1000	104	100	12/08/17 17:00	12/11/17 16:29	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Sample: RW09-MWS	Lab ID:	Lab ID: 30237862002			7 10:50	Received: 12/	06/17 23:00 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	9.2	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:33	7440-43-9	
Zinc	8550	ug/L	1000	104	100	12/08/17 17:00	12/11/17 16:31	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Sample: RW07-MWS	Lab ID:	Lab ID: 30237862003			7 11:28	Received: 12/	06/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	6.0	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:36	7440-43-9	
Zinc	216	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 15:36	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Sample: RW07-MWI	Lab ID:	Lab ID: 30237862004			7 11:56	Received: 12/	06/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.7J	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:38	7440-43-9	
Zinc	39.8	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 15:38	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Sample: RW08-MWI	Lab ID:	Lab ID: 30237862005			7 12:29	Received: 12/	06/17 23:00 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.8J	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:40	7440-43-9	
Zinc	21.4	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 15:40	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Sample: RW08-MWS	Lab ID:	Lab ID: 30237862006			7 13:00	Received: 12/	06/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:43	7440-43-9	
Zinc	1770	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 15:43	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Sample: RW06-MWD	Lab ID:	Lab ID: 30237862007			7 13:53	Received: 12/	06/17 23:00 Ma	atrix: Water	
D	December	11-26-	Report	MDI	DE	Danasas	A b l	040 N	01
Parameters	Results	Units -	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.4J	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:45	7440-43-9	
Zinc	30.6	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 15:45	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Date: 12/12/2017 04:50 PM

Sample: RW06-MWS	Lab ID:	Lab ID: 30237862008			7 14:25	Received: 12/	06/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:48	7440-43-9	
Zinc	156	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 15:48	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Sample: RW06-MWI	Lab ID:	Lab ID: 30237862009			7 14:48	Received: 12/	06/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	7.1	ug/L	3.0	0.87	1	12/08/17 17:00	12/11/17 15:50	7440-43-9	
Zinc	1360	ug/L	10.0	1.0	1	12/08/17 17:00	12/11/17 15:50	7440-66-6	



QUALITY CONTROL DATA

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Date: 12/12/2017 04:50 PM

QC Batch: 281745 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30237862001, 30237862002, 30237862003, 30237862004, 30237862005, 30237862006, 30237862007,

30237862008, 30237862009

METHOD BLANK: 1382890 Matrix: Water

Associated Lab Samples: 30237862001, 30237862002, 30237862003, 30237862004, 30237862005, 30237862006, 30237862007,

		Blank	C R	eporting								
Parameter	Units	Resul	t	Limit	MDL		Analy	zed	Qua	alifiers		
Cadmium Zinc	ug/L ug/L		3.0 U 0.0 U	3.0 10.0		0.87 1.0	12/11/17 12/11/17					
LABORATORY CONTROL SAM	1PLE: 1382891											
Parameter	Units	Spike Conc.	LCS Resu		LCS % Rec		6 Rec ₋imits	Qu	alifiers			
Cadmium Zinc	 ug/L ug/L	1000		966 977	97 98		80-120 80-120			-		
MATRIX SPIKE & MATRIX SPIK		2893 MS	MSD	1382894								
Parameter	3023771400 Units Result	1 Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % R		SD Rec	% Rec Limits	RPD	Max RPD	Qua
Cadmium Zinc	ug/L 0.97 ug/L 107		1000 1000	991 2020			99 95	100 98	75-125 75-125	1	_	
MATRIX SPIKE SAMPLE:	1382896			• "								
Parameter	Units	302377 Res		Spike Conc.	MS Result		MS % Rec		% Rec Limits		Quali	fiers
Cadmium Zinc	ug/L ug/L		3.0 U 158	1000 1000		981 40		98 98	75- ⁻			
SAMPLE DUPLICATE: 13828	92	0000774	4004									
Parameter	Units	30237714 Resul		Dup Result	RPD		Max RPD		Qualifie	ers		
Cadmium Zinc	ug/L ug/L		0.97J 1070	0.89. 1070		0		20 20				
SAMPLE DUPLICATE: 13828	95											
Parameter	Units	30237714 Resul		Dup Result	RPD		Max RPD		Qualifie	ers		
Cadmium	ug/L		3.0 U	3.0 L	1			20				

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

REPORT OF LABORATORY ANALYSIS

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALITY CONTROL DATA

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Date: 12/12/2017 04:50 PM

SAMPLE DUPLICATE: 1382895

30237714011 Dup Max
Parameter Units Result Result RPD RPD

Parameter Units Result Result RPD RPD Qualifiers

Zinc ug/L 158 145 8 20

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

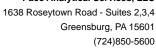
U - Indicates the compound was analyzed for, but not detected.

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

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

TNI - The NELAC Institute.

Date: 12/12/2017 04:50 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30237862

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30237862001	RW09-MWI	EPA 3005A	281745	EPA 6010C	281763
30237862002	RW09-MWS	EPA 3005A	281745	EPA 6010C	281763
30237862003	RW07-MWS	EPA 3005A	281745	EPA 6010C	281763
30237862004	RW07-MWI	EPA 3005A	281745	EPA 6010C	281763
30237862005	RW08-MWI	EPA 3005A	281745	EPA 6010C	281763
30237862006	RW08-MWS	EPA 3005A	281745	EPA 6010C	281763
30237862007	RW06-MWD	EPA 3005A	281745	EPA 6010C	281763
30237862008	RW06-MWS	EPA 3005A	281745	EPA 6010C	281763
30237862009	RW06-MWI	EPA 3005A	281745	EPA 6010C	281763

Face Analytical www.pacalebs.com

Section B

Jampsny:

mall To:

CHAIN-OF-C MOM: ACKS COOK The Chain-of-Custody is

DRINKING WATER OTHER THE ő ☐ GROUND WATER Page: RCRA REGULATORY AGENCY Site Location NPDES ⊤ UST 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 (30.0x 1/2) Company Name: EnviroAnalytics Group Attention: Laura Sargent Pace Quote Reference: Pace Project Manager: Address: Project Name Pool + wire will GW Sampling Required Project Information: Report To: James Calenda PO Number: Copy To: icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 1430 Sparrows Point Blvd EnviroAnalytics Group Fax Section A Regulned Client Information: hone: 314-620-3056 aquested Due Date/TAT:

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Samples Intact (Y/V)

Custody Sealed Cooler (Y/N)

(V/V)

Temp in °C

DATE Signed (MM/DD/YY):

Perceiv

SIGNATURE of SAMPLER: PRINT Name of SAMPLER:

Pittsburgh La	ab Sample Cond	ition	Upo	n R	eceipt				
Pace Analytical	Client Name:	1	- M	KE	Am	Project #	30	237	8 6
Courier: ☐ Fed Ex ☐	,						Labe		W
Custody Seal on Cooler	/Box Present: 🛚 yes	The second	no		·	□ no			
Thermometer Used		Туре	of Ice;	We	t Blue None		uffre-		
Cooler Temperature	Observed Temp	4	٠c	Corr	ection Factor	°C Final	Temp <u>: </u>		С
Temp should be above freez	ring to 6°C					Date and	nitials of pa	reon eyamini	ina
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Comments:		Yes	No	N/A			anyan musepialananan	war - less was a second	6×77.11.11
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Chain of Custody Relinqu	ished:	CONTRACTOR OF THE PARTY OF THE			3.		·		
Sampler Name & Signatu	ге ол СОС:	9/2/2			4.				
Sample Labels match CC	C:		-		5.				
-Includes date/time/ID	Matrix:	٧							
Samples Arrived within H	old Time:	Statement of the last of the l			6.				
Short Hold Time Analysi	s (<72hr remaining):				7.				
Rush Turn Around Time	Requested:	- Martin Control			8.				
Sufficient Volume:		- Section 1			9.				
Correct Containers Used:		STREET, STREET			10.				
-Pace Containers Used	i:	CHARLES THE SAME	E**						
Containers Intact:		-	_		11				
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Hex Cr Aqueous Compliance	/NPDES sample field filtered			CHILD CO.	13.				
Organic Samples check				end and and	14.				
Filtered volume received f				PROPERTY.	15.				
All containers have been che	cked for preservation.	The state of the s	-		16.				
All containers needing preser	vation are found to be in								
compliance with EPA recomn	nendation.	CARTERIA			Initial when	Date/time of			\dashv
exceptions: VOA, coliforn	n, TOC, O&G, Phenolics				Initial when completed	preservation			
					Lot # of added preservative				
Headspace in VOA Vials (>9mm).			-	17.				
Trip Blank Present:	- Onmiy.				18.				ĺ
Trip Blank Flesent. Trip Blank Custody Seals	Dracant								
Rad Aqueous Samples S	creened > 0.5 mrem/hr				Initial when	Date:			
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Client Notification/ Resol				D-4-7	Fim a:	Contact	ed Rv		
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 \square A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



December 12, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on December 07, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification

Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091
Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051

New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706

North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457

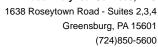
Rhode Island Certification #: 65-00282 South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C Wisconsin Certification

Wyoming Certification #: 8TMS-L



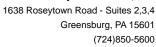


SAMPLE SUMMARY

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30238010001	RW04-MWS	Water	12/07/17 10:30	12/07/17 23:10
30238010002	RW03-MWS	Water	12/07/17 11:03	12/07/17 23:10
30238010003	RW03-MWI	Water	12/07/17 11:25	12/07/17 23:10
30238010004	RW21-MWI RW22-MWI	Water	12/07/17 11:58	12/07/17 23:10
30238010005	RW05-MWI	Water	12/07/17 12:58	12/07/17 23:10
30238010006	RW01-MWI	Water	12/07/17 14:22	12/07/17 23:10
30238010007	RW01-MWS	Water	12/07/17 14:45	12/07/17 23:10



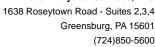


SAMPLE ANALYTE COUNT

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30238010001	RW04-MWS	EPA 6010C	CTS	2
30238010002	RW03-MWS	EPA 6010C	CTS	2
30238010003	RW03-MWI	EPA 6010C	CTS	2
30238010004	RW21-MWI	EPA 6010C	CTS	2
30238010005	RW22-MWI	EPA 6010C	CTS	2
30238010006	RW01-MWI	EPA 6010C	CTS	2
30238010007	RW01-MWS	EPA 6010C	CTS	2





PROJECT NARRATIVE

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: December 12, 2017

General Information:

7 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Sample: RW04-MWS	Lab ID:	30238010001	Collecte	d: 12/07/17	7 10:30	Received: 12/	07/17 23:10 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.1J	ug/L	3.0	0.87	1	12/08/17 17:02	12/11/17 12:40	7440-43-9	
Zinc	279	ug/L	10.0	1.0	1	12/08/17 17:02	12/11/17 12:40	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Sample: RW03-MWS	Lab ID:	30238010002	Collecte	d: 12/07/17	11:03	Received: 12/	07/17 23:10 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	11.4	ug/L	3.0	0.87	1	12/08/17 17:02	12/11/17 12:54	7440-43-9	
Zinc	46400	ug/L	1000	104	100	12/08/17 17:02	12/11/17 13:34	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Sample: RW03-MWI	Lab ID:	30238010003	Collecte	d: 12/07/17	11:25	Received: 12/	07/17 23:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	154	ug/L	3.0	0.87	1	12/08/17 17:02	12/11/17 12:56	7440-43-9	
Zinc	6270	ug/L	100	10.4	10	12/08/17 17:02	12/11/17 13:36	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Sample: RW21-MWI	Lab ID:	30238010004	Collecte	d: 12/07/17	7 11:58	Received: 12/	07/17 23:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	15.2	ug/L	3.0	0.87	1	12/08/17 17:02	12/11/17 13:03	7440-43-9	
Zinc	19500	ug/L	1000	104	100	12/08/17 17:02	12/11/17 13:39	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Sample: RW22-MWI	Lab ID:	30238010005	Collecte	d: 12/07/17	7 12:58	Received: 12/	07/17 23:10 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: EF	PA 3005A			
Cadmium Zinc	2.7J 205	ug/L ug/L	3.0 10.0	0.87 1.0	1 1		12/11/17 13:06 12/11/17 13:06		





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Sample: RW01-MWI	Lab ID:	30238010006	Collecte	d: 12/07/17	7 14:22	Received: 12/	07/17 23:10 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	37.5	ug/L	3.0	0.87	1	12/08/17 17:02	12/11/17 13:08	7440-43-9	
Zinc	41000	ug/L	1000	104	100	12/08/17 17:02	12/11/17 13:41	7440-66-6	





Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Date: 12/12/2017 04:53 PM

Sample: RW01-MWS	Lab ID:	30238010007	Collecte	d: 12/07/17	14:45	Received: 12/	07/17 23:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	98.0	ug/L	3.0	0.87	1	12/08/17 17:02	12/11/17 13:11	7440-43-9	
Zinc	7300	ug/L	100	10.4	10	12/08/17 17:02	12/11/17 13:44	7440-66-6	



QUALITY CONTROL DATA

Rod&Wire Mill GW Sampling Project:

Pace Project No.: 30238010

Date: 12/12/2017 04:53 PM

Zinc

QC Batch: 281746 Analysis Method: **EPA 6010C** QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

Associated Lab Samples: 30238010001, 30238010002, 30238010003, 30238010004, 30238010005, 30238010006, 30238010007

METHOD BLANK: 1382897 Matrix: Water

Associated Lab Samples: 30238010001, 30238010002, 30238010003, 30238010004, 30238010005, 30238010006, 30238010007

Blank Reporting Limit MDL Parameter Units Result Analyzed Qualifiers Cadmium 3.0 U 3.0 12/11/17 12:35 ug/L 0.87 ug/L 10.0 U 10.0 1.0 12/11/17 12:35

LABORATORY CONTROL SAMPLE: 1382898 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 1000 972 97 80-120 ug/L Zinc 1000 981 98 80-120 ug/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1382901 1382900 MSD MS 30238010001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 1.1J 1000 1000 1000 990 100 99 75-125 2 20 Zinc ug/L 279 1000 1000 1260 1250 98 97 75-125 20

SAMPLE DUPLICATE: 1382899 30238010001 Dup Max **RPD RPD** Qualifiers Parameter Units Result Result Cadmium 1.1J 0.89J 20 ug/L 279 Zinc 276 1 20 ug/L

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

Date: 12/12/2017 04:53 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod&Wire Mill GW Sampling

Pace Project No.: 30238010

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30238010001	RW04-MWS	EPA 3005A	281746	EPA 6010C	281764
30238010002	RW03-MWS	EPA 3005A	281746	EPA 6010C	281764
30238010003	RW03-MWI	EPA 3005A	281746	EPA 6010C	281764
30238010004	RW21-MWI	EPA 3005A	281746	EPA 6010C	281764
30238010005	RW22-MWI	EPA 3005A	281746	EPA 6010C	281764
30238010006	RW01-MWI	EPA 3005A	281746	EPA 6010C	281764
30238010007	RW01-MWS	EPA 3005A	281746	EPA 6010C	281764

CHAIN-OF-CUST WO#: 30238010

Client Information: EnviroAnalytics 1430 Sparrows Sparrows Point icalenda@enviro 314-620-3056 ad Due DatwTAT:	7	Required Project Information: Report To: James Catanda	: Informa				200													
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Address: 1430 Sparrows Point, N Email To: icalenda@enviroan Phone: 314-620-3056 Fe Requested Due Date/TAT:			es Cal	enda			Attention:	ijon:	Laura	Laura Sargent									~	
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Pittsburgh Lab Sample Condition Upon Receipt Pace Analytical SPATIONS Project # 30 2 3 8 0 1 0 Client Name: Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other LIMS Login Tracking #: Custody Seal on Cooler/Box Present: yes no Seals intact: ☐ yes ☐ no Type of Ice: (Wet) Blue None Thermometer Used · C Correction Factor: O(O · C Final Temp: O(4) Cooler Temperature Temp should be above freezing to 6°C Date and Initials of person examining contents: BLM 12-8-17 N/A Yes No Comments: Chain of Custody Present: Chain of Custody Filled Out: Chain of Custody Relinquished: 3. 4. Sampler Name & Signature on COC: 5. Sample Labels match COC: W -Includes date/time/ID Matrix: 6. Samples Arrived within Hold Time: 7. Short Hold Time Analysis (<72hr remaining): 8. Rush Turn Around Time Requested: 9. Sufficient Volume: 10. Correct Containers Used: -Pace Containers Used: 11. Containers Intact: 12. Orthophosphate field filtered 13. Hex Cr Aqueous Compliance/NPDES sample field filtered 14. Organic Samples checked for dechlorination: 15. Filtered volume received for Dissolved tests All containers have been checked for preservation. 16. All containers needing preservation are found to be in compliance with EPA recommendation. Initial when Date/time of exceptions: VOA, coliform, TOC, O&G, Phenolics preservation completed Lot # of added preservative Headspace in VOA Vials (>6mm): 17. 18. Trip Blank Present: Trip Blank Custody Seals Present Initial when Rad Aqueous Samples Screened > 0.5 mrem/hr Date: completed: Client Notification/ Resolution:

Comments/ Resolution:

Date/Time:

 $\ \square$ A check in this box indicates that additional information has been stored in ereports.

Person Contacted:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Contacted By:

(724)850-5600



December 15, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod + Wire Mill GW Sampling

Pace Project No.: 30238235

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on December 08, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod + Wire Mill GW Sampling

Pace Project No.: 30238235

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification

Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706

North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod + Wire Mill GW Sampling

Pace Project No.: 30238235

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30238235001	RW02-MWS	Water	12/08/17 10:12	12/08/17 23:00
30238235002	RW02-MWI	Water	12/08/17 10:37	12/08/17 23:00
30238235003	RW22-MWS	Water	12/08/17 11:35	12/08/17 23:00
	DIA/OF NAVAO			

RW05-MWS



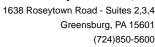


SAMPLE ANALYTE COUNT

Project: Rod + Wire Mill GW Sampling

Pace Project No.: 30238235

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30238235001	RW02-MWS	EPA 6010C	KAS	2
30238235002	RW02-MWI	EPA 6010C	KAS	2
30238235003	RW22-MWS	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod + Wire Mill GW Sampling

Pace Project No.: 30238235

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: December 15, 2017

General Information:

3 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod + Wire Mill GW Sampling

Pace Project No.: 30238235

Date: 12/15/2017 03:13 PM

Sample: RW02-MWS	Lab ID:	30238235001	Collecte	d: 12/08/17	7 10:12	Received: 12/	08/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	12/13/17 16:16	12/14/17 17:34	7440-43-9	
Zinc	79.3	ug/L	10.0	1.0	1	12/13/17 16:16	12/14/17 17:34	7440-66-6	





Project: Rod + Wire Mill GW Sampling

Pace Project No.: 30238235

Date: 12/15/2017 03:13 PM

Sample: RW02-MWI	Lab ID:	30238235002	Collecte	d: 12/08/17	7 10:37	Received: 12/	08/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium Zinc	2.3J 186	ug/L ug/L	3.0 10.0	0.87 1.0	1 1		12/14/17 17:48 12/14/17 17:48		





Project: Rod + Wire Mill GW Sampling

Pace Project No.: 30238235

Date: 12/15/2017 03:13 PM

Sample: RW22-MWS	Lab ID:	30238235003	Collecte	d: 12/08/17	' 11:35	Received: 12/	08/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	8.4	ug/L	3.0	0.87	1	12/13/17 16:16	12/14/17 17:51	7440-43-9	
Zinc	5440	ug/L	100	10.4	10	12/13/17 16:16	12/14/17 18:00	7440-66-6	



QUALITY CONTROL DATA

Project: Rod + Wire Mill GW Sampling

Pace Project No.: 30238235

Date: 12/15/2017 03:13 PM

QC Batch: 282274 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30238235001, 30238235002, 30238235003

METHOD BLANK: 1385464 Matrix: Water

Associated Lab Samples: 30238235001, 30238235002, 30238235003

Blank Reporting Limit MDL Qualifiers Parameter Units Result Analyzed Cadmium 3.0 U 3.0 0.87 12/14/17 17:29 ug/L Zinc ug/L 10.0 U 10.0 1.0 12/14/17 17:29

LABORATORY CONTROL SAMPLE: 1385465 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 500 507 101 80-120 ug/L ug/L Zinc 500 504 101 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1385468 1385467 MSD MS 30238235001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 3.0 U 500 500 511 503 102 101 75-125 20 Zinc ug/L 79.3 500 500 577 570 100 98 75-125 20

SAMPLE DUPLICATE: 1385466 30238235001 Dup Max **RPD RPD** Qualifiers Parameter Units Result Result Cadmium 3.0 U 3.0 U 20 ug/L 79.3 Zinc 78.4 1 20 ug/L

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod + Wire Mill GW Sampling

Pace Project No.: 30238235

Pace Analytica

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

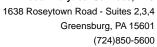
U - Indicates the compound was analyzed for, but not detected.

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

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

TNI - The NELAC Institute.

Date: 12/15/2017 03:13 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod + Wire Mill GW Sampling

Pace Project No.: 30238235

Date: 12/15/2017 03:13 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30238235001	RW02-MWS	EPA 3005A	282274	EPA 6010C	282312
30238235002	RW02-MWI	EPA 3005A	282274	EPA 6010C	282312
30238235003	RW22-MWS	EPA 3005A	282274	EPA 6010C	282312

CHAIN-OF-CUSTODY / Analytical Request Document

Face Analytical "

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CV

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

DRINKING WATER OHER ö T NPDES T GROUND WATER Page: RCRA 2 REGULATORY AGENCY Requested Analysis Filtered (Y/N) STATE Site Location ⊓ TSU 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 322E Company Name: EnviroAnalytics Group Samarthe Laura Sargent Invoice Information: Reference: Pace Project Manager: Pace Profile #: Section C Pace Quote ttention: Address: OW SERVE リーをいるののに mound mill Required Project information: Report To: James Calenda 35 Project Name: roject Number. Section B PO Number Capy Ta: \$ \$ \$ icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 1430 Sparrows Point Blvd EnviroAnalytics Group Fax: Section A Required Clent Information: Phone: 314-620-3056 Requested Due Date/TAT: Company: Email To:

SAMPLE ID		Section D Valid Matrix Code Required Clert Information MAIRIX SX	ies 2005		(aw	8	COLLECTED	0				Preservatives	vative	Ś	N/A	7 2.									
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Pittsburgh La	ab Sample Condi	tion	Upo	n Re	eceipt		3023823
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Tracking #:	UPS USPS Client						Label LIMS Login
					Blue None		
Thermometer Used	Observed Temp 1.1	i ype ,	° C	Corr	ection Factor: +0.	O ·c Final	Temp: 1.7 °C
Cooler Temperature Temp should be above free	zing to 6°C		•	Conv		Date and	Initials of person examining
Comments:		Yes	No	N/A]	Conten	
Chain of Custody Presen	ıt:	/			1.		
Chain of Custody Filled C		1			2.		<u> </u>
Chain of Custody Reling		/			3.		
Sampler Name & Signatu					4.		
Sample Labels match CO		A Parket			5.		
-Includes date/time/ID		L X	Ĭ_				
Samples Arrived within H					6.		
Short Hold Time Analys			De la Contraction de la Contra		7.		
Rush Turn Around Time		- Andrew			8.		
Sufficient Volume:					9.		
Correct Containers Used					10.		
-Pace Containers Use			_				
Containers Intact:					11.		
Orthophosphate field filte	red				12.		
	e/NPDES sample field filtered			/	13.		
Organic Samples chec					14.		
Filtered volume received					15.		
All containers have been ch		,			16.		
All containers needing prese compliance with EPA recom	ervation are found to be in mendation.	/					
exceptions: VOA, colifor		• • • • • • • • • • • • • • • • • • • •			Initial when completed Lot # of added preservative	Date/time of preservation	
	/ >6mm\):			7	17.		
Headspace in VOA Vials Trip Blank Present:	(comm).			1	18.		
'	Brocont			_/_			
Trip Blank Custody Seals Rad Aqueous Samples	Screened > 0.5 mrem/hr			Part of the same o	Initial when completed:	Date:	
Client Notification/ Reso		į					acted By:
				Date/	Time:	Conta	icied by.
Comments/ Resolution:							

 \square A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Greensburg, PA 15601 (724)850-5600



January 05, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: RWM Jam 2018 GW Pace Project No.: 30239965

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on January 02, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

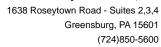
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086 Maine Certification #: PA00091

Maryland Certification #: 308
Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282 South Dakota Certification

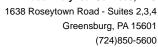
Tananana Cartification # TNO

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



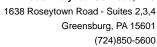


SAMPLE SUMMARY

Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30239965001	RW02-MWI	Water	01/02/18 10:30	01/02/18 22:50
30239965002	RW02-MWS	Water	01/02/18 11:10	01/02/18 22:50
30239965003	RW01-MWI	Water	01/02/18 11:52	01/02/18 22:50
30239965004	RW01-MWS	Water	01/02/18 12:28	01/02/18 22:50
30239965005	RW05-MW(I)	Water	01/02/18 13:32	01/02/18 22:50
30239965006	RW22-MWS RW05-MW(S)	Water	01/02/18 14:01	01/02/18 22:50
30239965007	RW21-MWI RW22-MW(I)	Water	01/02/18 14:41	01/02/18 22:50



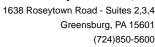


SAMPLE ANALYTE COUNT

Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30239965001	RW02-MWI	EPA 6010C	CTS	2
30239965002	RW02-MWS	EPA 6010C	CTS	2
30239965003	RW01-MWI	EPA 6010C	CTS	2
30239965004	RW01-MWS	EPA 6010C	CTS	2
30239965005	RW22-MWI	EPA 6010C	CTS	2
30239965006	RW22-MWS	EPA 6010C	CTS	2
30239965007	RW21-MWI	EPA 6010C	CTS	2





PROJECT NARRATIVE

Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: January 05, 2018

General Information:

7 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Date: 01/05/2018 02:26 PM

Sample: RW02-MWI	Lab ID:	30239965001	Collecte	d: 01/02/18	3 10:30	Received: 01/	02/18 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	14.5	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 10:42	7440-43-9	
Zinc	573	ug/L	10.0	1.0	1	01/04/18 15:21	01/05/18 10:42	7440-66-6	





Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Date: 01/05/2018 02:26 PM

Sample: RW02-MWS	Lab ID:	30239965002	Collecte	d: 01/02/18	3 11:10	Received: 01/	/02/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	13.1	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 10:57	7440-43-9	
Zinc	2210	ug/L	10.0	1.0	1	01/04/18 15:21	01/05/18 10:57	7440-66-6	





Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Date: 01/05/2018 02:26 PM

Sample: RW01-MWI	Lab ID:	30239965003	Collecte	d: 01/02/18	3 11:52	Received: 01/	02/18 22:50 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	2.4J	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 10:59	7440-43-9	
Zinc	104	ug/L	10.0	1.0	1	01/04/18 15:21	01/05/18 10:59	7440-66-6	





Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Date: 01/05/2018 02:26 PM

Sample: RW01-MWS	Lab ID:	30239965004	Collecte	d: 01/02/18	3 12:28	Received: 01/	/02/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	23.9	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 11:07	7440-43-9	
Zinc	35200	ug/L	1000	104	100	01/04/18 15:21	01/05/18 11:53	7440-66-6	





Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Date: 01/05/2018 02:26 PM

Sample: RW22-MWI	Lab ID:	30239965005	Collecte	d: 01/02/18	3 13:32	Received: 01/	02/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	2.2J	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 11:09	7440-43-9	
Zinc	173	ug/L	10.0	1.0	1	01/04/18 15:21	01/05/18 11:09	7440-66-6	





Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Date: 01/05/2018 02:26 PM

Sample: RW22-MWS	Lab ID:	30239965006	Collecte	d: 01/02/18	3 14:01	Received: 01/	02/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 11:12	7440-43-9	
Zinc	35.7	ug/L	10.0	1.0	1	01/04/18 15:21	01/05/18 11:12	7440-66-6	





Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Date: 01/05/2018 02:26 PM

Sample: RW21-MWI	Lab ID:	30239965007	Collecte	d: 01/02/18	3 14:41	Received: 01/	02/18 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A	·	-	
Cadmium	4.1	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 11:55	7440-43-9	
Zinc	27200	ug/L	1000	104	100	01/04/18 15:21	01/05/18 11:14	7440-66-6	



QUALITY CONTROL DATA

Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Date: 01/05/2018 02:26 PM

QC Batch: 284087 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30239965001, 30239965002, 30239965003, 30239965004, 30239965005, 30239965006, 30239965007

METHOD BLANK: 1394194 Matrix: Water

Associated Lab Samples: 30239965001, 30239965002, 30239965003, 30239965004, 30239965005, 30239965006, 30239965007

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.87	01/05/18 10:37	
Zinc	ug/L	10.0 U	10.0	1.0	01/05/18 10:37	

LABORATORY CONTROL SAMPLE: 1394195 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers ug/L Cadmium 500 511 102 80-120 ug/L Zinc 500 513 103 80-120

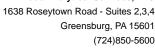
MATRIX SPIKE & MATRIX SP	KE DUPLIC	ATE: 13941	97		1394198							
			MS	MSD								
	;	30239965001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	14.5	500	500	540	538	105	105	75-125	0	20	
Zinc	ug/L	573	500	500	1050	1040	95	94	75-125	0	20	

MATRIX SPIKE SAMPLE:	1394200						
		30240053004	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	40.7	500	561	104	75-125	
Zinc	ug/L	5150	500	5700	111	75-125	

SAMPLE DUPLICATE: 1394196						
		30239965001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	14.5	13.8	5	20	
Zinc	ug/L	573	564	2	20	

SAMPLE DUPLICATE: 1394199						
		30240053004	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	40.7	43.2	6	20	
Zinc	ug/L	5150	5220	1	20	

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





QUALIFIERS

Project: RWM Jam 2018 GW

Pace Project No.: 30239965

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

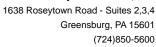
U - Indicates the compound was analyzed for, but not detected.

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

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

TNI - The NELAC Institute.

Date: 01/05/2018 02:26 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: RWM Jam 2018 GW

Pace Project No.: 30239965

Date: 01/05/2018 02:26 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30239965001	RW02-MWI	EPA 3005A	284087	EPA 6010C	284121
30239965002	RW02-MWS	EPA 3005A	284087	EPA 6010C	284121
30239965003	RW01-MWI	EPA 3005A	284087	EPA 6010C	284121
30239965004	RW01-MWS	EPA 3005A	284087	EPA 6010C	284121
30239965005	RW22-MWI	EPA 3005A	284087	EPA 6010C	284121
30239965006	RW22-MWS	EPA 3005A	284087	EPA 6010C	284121
30239965007	RW21-MWI	EPA 3005A	284087	EPA 6010C	284121

CHAIN-OF WO#: 30239965

The Chain-of-Custe

Pace Analytical

DRINKING WATER OTHER ö CROUND WATER Page: RCRA ₽ REGULATORY AGENCY STATE Site Location I NPDES □ UST Bayerra 1650 Des Peres Road, Sulte 303 St. Louis, MD 83131 Company Name: EnviroAnalytics Group Pace Quote
Reference:
Pace Project
Manager:
Pace Profile #: Laura Sargent Address: Attention: 30 Project Name: RUM Jam 2018 yes rabi 170384M Required Project Information: Report To: James Calenda roject Number: Number: Section B Copy To: 5-day icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 1430 Sparrows Point Blvd Required Client Information:
Company: EnviroAnalytics Group hone: 314-620-3056 Requested Due Date/TAT: Section A Email To: Address:

Sample S				1	-	-		-		١	-					(ALL) POIGHT LONGTON PORCHES				1	111			
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Pittsburgh Lab Sample Cond	lition	Upo	on F	Receipt	
Pace Analytical		(^ ^	302399
Client Name:			2	wiro Ana	Project #
Courier: Fed Ex UPS USPS Clie	nt 🗆	Comm	nercia	ıl Ӣ Pace Other	Label AM
Tracking #:	,				LIMS Login &
Custody Seal on Cooler/Box Present: yes	6	по	Sea	als intact:	□ no
Thermometer Used		of Ice	: (W	el) Blue None	
Cooler Temperature Observed Temp).7	° C	Cor	rection Factor: 10	°C Final Temp: 0-7 °C
Temp should be above freezing to 6°C	,	_		-,0	
					Date and Initials of person examining contents:
Comments:	Yes	No	N/A	4	
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	1			2.	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X			4.	=
Sample Labels match COC:	X			5.	
-Includes date/time/ID Matrix:	WI	-			
Samples Arrived within Hold Time:	1	,		6.	
Short Hold Time Analysis (<72hr remaining):		*		7.	
Rush Turn Around Time Requested:	1			8.	
Sufficient Volume:	X			9.	ž.
Correct Containers Used:	X			10.	
-Pace Containers Used:	X				
Containers Intact:	7			11.	
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.	
Organic Samples checked for dechlorination:			4	14.	
Filtered volume received for Dissolved tests			X	15.	
All containers have been checked for preservation.	V		,	16.	
All containers needing preservation are found to be in	5			10.	
compliance with EPA recommendation.	/				
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when AM completed AM	Date/time of preservation
exceptions. VOA, comonn, 100, 0x8, Friendics				Lot # of added	preservation
			_/	preservative	
Headspace in VOA Vials (>6mm):			X	17.	
Trip Blank Present:		1		18.	
Trip Blank Custody Seals Present			I,	Initial when	
Rad Aqueous Samples Screened > 0.5 mrem/hr		`	×	Initial when completed:	Date:
Client Notification/ Resolution:					
Person Contacted:			Date/□	Гіте:	Contacted By:
Comments/ Resolution:					
				-	

 $\ \square$ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Greensburg, PA 15601 (724)850-5600



January 05, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on January 03, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133 Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30240053001	RW12-MWI	Water	01/03/18 09:42	01/03/18 22:55
30240053002	RW12-MWS	Water	01/03/18 10:17	01/03/18 22:55
30240053003	RW15-MW(I)	Water	01/03/18 10:48	01/03/18 22:55
30240053004	RW15-MW(S)	Water	01/03/18 11:19	01/03/18 22:55
30240053005	RW16-MWI	Water	01/03/18 11:45	01/03/18 22:55
30240053006	RW16-MWS	Water	01/03/18 12:20	01/03/18 22:55
30240053007	RW18-MWI	Water	01/03/18 13:58	01/03/18 22:55
30240053008	RW18-MWS	Water	01/03/18 14:31	01/03/18 22:55
30240053009	RW14-MWS	Water	01/03/18 14:57	01/03/18 22:55

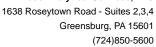


SAMPLE ANALYTE COUNT

Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30240053001	RW12-MWI	EPA 6010C	CTS	2
30240053002	RW12-MWS	EPA 6010C	CTS	2
30240053003	RW20-MWI	EPA 6010C	CTS	2
30240053004	RW20-MWS	EPA 6010C	CTS	2
30240053005	RW16-MWI	EPA 6010C	CTS	2
30240053006	RW16-MWS	EPA 6010C	CTS	2
30240053007	RW18-MWI	EPA 6010C	CTS	2
30240053008	RW18-MWS	EPA 6010C	CTS	2
30240053009	RW14-MWS	EPA 6010C	CTS	2





PROJECT NARRATIVE

Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: January 05, 2018

General Information:

9 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Date: 01/05/2018 02:26 PM

Sample: RW12-MWI	Lab ID:	Lab ID: 30240053001		Collected: 01/03/18 09:42		Received: 01/03/18 22:55 Ma		atrix: Water		
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium	1270	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 11:16	7440-43-9		
Zinc	117000	ug/L	1000	104	100	01/04/18 15:21	01/05/18 11:58	7440-66-6		





Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Date: 01/05/2018 02:26 PM

Sample: RW12-MWS Lab ID: 30240053002		Collected: 01/03/18 10:17			Received: 01/	/03/18 22:55 Ma	atrix: Water			
ъ.	5 "	11.5	Report	MO		5		0404	0 1	
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium	11.7	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 11:19	7440-43-9		
Zinc	10100	ug/L	1000	104	100	01/04/18 15:21	01/05/18 12:00	7440-66-6		





Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Sample: RW20-MWI	Lab ID:	30240053003	Collecte	Collected: 01/03/18 10:48			03/18 22:55 Ma	atrix: Water	c: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	 PA 3005A				
Cadmium	1.6J	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 11:21	7440-43-9		
Zinc	5540	ug/L	1000	104	100	01/04/18 15:21	01/05/18 12:03	7440-66-6		





Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Date: 01/05/2018 02:26 PM

Sample: RW20-MWS	Lab ID:	30240053004	Collecte	d: 01/03/18	3 11:19	Received: 01/	03/18 22:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	40.7	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 11:24	7440-43-9	
Zinc	5150	ug/L	1000	104	100	01/04/18 15:21	01/05/18 12:12	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Sample: RW16-MWI	Lab ID:	Lab ID: 30240053005			3 11:45	Received: 01/	03/18 22:55 Ma	atrix: Water	Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Fl	PA 3005A		-		
Cadmium	1.2J	ug/L	3.0	0.87	1		01/05/18 11:36	7440-43-9		
Zinc	16200	ug/L	1000	104	100	01/04/18 15:21	01/05/18 12:19	7440-66-6		





Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Sample: RW16-MWS	Lab ID:	Lab ID: 30240053006		Collected: 01/03/18 12:20			03/18 22:55 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 11:38	7440-43-9	
Zinc	31.2	ug/L	10.0	1.0	1	01/04/18 15:21	01/05/18 11:38	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Sample: RW18-MWI	Lab ID:	Lab ID: 30240053007			3 13:58	Received: 01/	03/18 22:55 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A		-	
Cadmium	63.5	ug/L	30.0	8.7	10		01/05/18 11:41	7440-43-9	
Zinc	370000	ug/L	1000	104	100	01/04/18 15:21	01/05/18 12:22	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Date: 01/05/2018 02:26 PM

Sample: RW18-MWS	Lab ID:	30240053008	Collecte	d: 01/03/18	3 14:31	Received: 01/	03/18 22:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	218	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 11:43	7440-43-9	
Zinc	11600	ug/L	1000	104	100	01/04/18 15:21	01/05/18 12:24	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Sample: RW14-MWS	Lab ID:	Lab ID: 30240053009		Collected: 01/03/18 14:57			03/18 22:55 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	2800	ug/L	3.0	0.87	1	01/04/18 15:21	01/05/18 11:45	7440-43-9	
Zinc	61800	ug/L	1000	104	100	01/04/18 15:21	01/05/18 12:27	7440-66-6	



QUALITY CONTROL DATA

Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Cadmium

Date: 01/05/2018 02:26 PM

QC Batch: 284087 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30240053001, 30240053002, 30240053003, 30240053004, 30240053005, 30240053006, 30240053007,

30240053008, 30240053009

METHOD BLANK: 1394194 Matrix: Water

Associated Lab Samples: 30240053001, 30240053002, 30240053003, 30240053004, 30240053005, 30240053006, 30240053007,

30240053008 30240053009

	30240	0053008, 3024005300	9										
	_		Blank		Reporting					_			
	Parameter	Units	Result		Limit	MDL		An	alyzed	Qua	alifiers		
Cadmium		ug/L		.0 U	3.0		0.87		/18 10:37				
Zinc		ug/L	10	.0 U	10.0		1.0	01/05	/18 10:37				
LABORATO	ORY CONTROL SAMPL	E: 1394195											
			Spike	LCS		LCS		6 Rec					
	Parameter	Units	Conc.	Resu	ult	% Rec		_imits	Qu	alifiers			
Cadmium		ug/L	500		511	102		80-1	20				
Zinc		ug/L	500		513	103		80-1	20				
MATRIX SF	PIKE & MATRIX SPIKE	DUPLICATE: 1394	197		1394198								
			MS	MSD									
		30239965001	Spike	Spike	MS	MSD	MS	S	MSD	% Rec		Max	
Р	arameter	Units Result	Conc.	Conc.	Result	Result	% R	ec '	% Rec	Limits	RPD	RPD	Qua
Cadmium		ug/L 14.5	500	500	540	538		105	105	75-125	0	20	
Zinc		ug/L 573	500	500	1050	1040		95	94	75-125	0	20	
MATRIX SF	PIKE SAMPLE:	1394200											
			3024005		Spike	MS		MS		% Rec			
	Parameter	Units	Resu	ılt	Conc.	Result		% Re	С	Limits		Qualif	iers
Cadmium		ug/L		40.7	500	5	61		104	75-	125		
Zinc		ug/L		5150	500	57	00		111	75-	125		
SAMPLE D	UPLICATE: 1394196												
			30239965	001	Dup			Ma					
	Parameter	Units	Result		Result	RPD		RF	PD	Qualifie	ers		
Cadmium		ug/L		14.5	13.8		5		20				
Zinc		ug/L		573	564		2		20				
SAMPLE D	UPLICATE: 1394199												
			30240053	004	Dup			Ma					
	Parameter	Units	Result		Result	RPD		RF	PD	Qualifie	ers		

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

43.2

6

20

40.7

ug/L

REPORT OF LABORATORY ANALYSIS

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

Max

QUALITY CONTROL DATA

Project: RWM Jan 2018 GW

Pace Project No.: 30240053

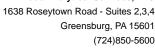
Date: 01/05/2018 02:26 PM

SAMPLE DUPLICATE: 1394199 30240053004 Dup

 Parameter
 Units
 Result
 Result
 RPD
 RPD
 Qualifiers

 Zinc
 ug/L
 5150
 5220
 1
 20

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





QUALIFIERS

Project: RWM Jan 2018 GW

Pace Project No.: 30240053

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

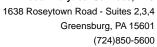
U - Indicates the compound was analyzed for, but not detected.

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

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

TNI - The NELAC Institute.

Date: 01/05/2018 02:26 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: RWM Jan 2018 GW

Pace Project No.: 30240053

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30240053001	RW12-MWI	EPA 3005A	284087	EPA 6010C	284121
30240053002	RW12-MWS	EPA 3005A	284087	EPA 6010C	284121
30240053003	RW20-MWI	EPA 3005A	284087	EPA 6010C	284121
30240053004	RW20-MWS	EPA 3005A	284087	EPA 6010C	284121
30240053005	RW16-MWI	EPA 3005A	284087	EPA 6010C	284121
30240053006	RW16-MWS	EPA 3005A	284087	EPA 6010C	284121
30240053007	RW18-MWI	EPA 3005A	284087	EPA 6010C	284121
30240053008	RW18-MWS	EPA 3005A	284087	EPA 6010C	284121
30240053009	RW14-MWS	EPA 3005A	284087	EPA 6010C	284121

CHAIN-OF-CUS WO#: 30240053

Face Analytical

Section B

Section A

Pace Project No./ Lab I.D. Samples Intact (V/N) DRINKING WATER SAMPLE CONDITIONS 100 C 002 000 800 00 000 OTHER 00 00 Cooler (Y/N) Custody Sealed ŏ Received on Ice (Y/N) GROUND WATER Residual Chlorine (Y/N) O° ni qmeT Page: RCRA B REGULATORY AGENCY 00 2550 TIME Requested Analysis Filtered (Y/N) Site Location STATE 3-8 T NPDES DATE TSU T 1650 Des Peres Road, Sulte 303 St. Louis, MD 63131 ACCEPTED BY / AFFILIATION マ Bummia 7 MZ 790040 Company Name: EnviroAnalytics Group Analysis Test 🌡 ÎN /A Other Pace Quote
Reference:
Race Project Somm awatter
Pace Profile #: Methanol Laura Sargent Na2S2O3 Preservatives Sectic 30240053 HOBN HCI €ОИН [†]OS²H TIME 184 Unpreserved T Address: SAMPLER NAME AND SIGNATURE # OF CONTAINERS PRINT Name of SAMPLER: 1-2-18 SAMPLE TEMP AT COLLECTION 13/14 -3/8 DATE 8401 220 145 18h 10 246 1017 TIME 35 3 COMPOSITE END/GRAB 3-18 race COLLECTED DATE Project Name: RIJUM Jan 2019 RELINQUISHED BY / AFFILIATION Stew Kalois 170384m TIME START DATE Report To: James Calenda Required Project Information: Daniel LA Mendy りす FT S (G=GRAB C=COMP) **34YT 3J4MA2** 9 P a 5 MATRIX CODE roject Number: PO Number: Copy To: CODE DW WY O.C. O.C. AR AR TS Walid Matrix Codes
MATRIX
CODE
DRAWNOWNER
WATER
WATER
WATER
WATER
PRODUCT
SL
SOLSOLID
OL
OL
AR
AR
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TISSUE
TISSUE if data package is required, attach data package checklist. -day RUDO - RUT S MW-- muss RIVIZ-MUI RWIG- MUI 53CI icalenda@enviroanalyticsgroup.com 12261 HSSI - mws Sparrows Point, MD 21219 ADDITIONAL COMMENTS 1430 Sparrows Point Blvd (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE Data Validation Required? (Y/N): Required Client Information: Company: EnviroAnalytics Group Data Package Required? (Y/N); RWDE RWID Fax: Rewle SAMPLE ID 3 4137 8131 Section D Required Clent Information none: 314-620-3056 Requested Due Date/TAT: Email To: Address: 12 9 7 Page 19 of 20 Ø 0 # MaTI 2

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DATE Signed (MIM/DD/YY):

35

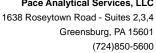
SIGNATURE of SAMPLER:

Pittsburgh La	ab Sample Cond	Ition	Up	on r	Receipt				
Pace Analytical	Client Name:	7 	E	Env	rivoAna	_ Proje	ect#_	30 2	2400
Courier: Fed Ex Tracking #:	UPS ☐ USPS ☐ Clier	nt 🗆	Comr	nercia	Pace Other		- [Labe	BIN
	r/Box Present: ☐ yes	ф	no	Sea	ıls intact:	□ no	L		
Thermometer Used	7	1		: W	-				*
	Observed Temp	7	° C		rection Factor: +C) 1 . c	Final T	emn.	1 · c
Cooler Temperature Temp should be above free:	Observed Temp		-	COI	rection ractor	7.1	i iliai i	Cirip.	
	,					Da	te and In	itials of pers	son examining
Comments:		Yes	No	N/A	F	C	ontents:	Пис	
Chain of Custody Presen	t:	X			1.				
Chain of Custody Filled C		X			2.				
Chain of Custody Relinqu	W 24	X			3.				
Sampler Name & Signatu		X			4.				
Sample Labels match CC		X			5.				
-Includes date/time/ID	Matrix:	WF							
Samples Arrived within H		X		T	6.				
Short Hold Time Analysi		/	V		7.				- X
Rush Turn Around Time		V	/		8.				
Sufficient Volume:	Nequesteu.	V		-	9.				
		(7)			10.				
Correct Containers Used:	ı.	V		\vdash	10.				
-Pace Containers Used	1;	X		-	11.				
Containers Intact:	61 			V					
Orthophosphate field filter				 	12.				
Hex Cr Aqueous Compliance	ACCURAGES MANY AND AND AND AND AND AND AND AND AND AND	-		1	13.				
Organic Samples check	5 75-50 W W W W				14.				
Filtered volume received for All containers have been checken				1	15.				
		X		-	16.				
All containers needing preser compliance with EPA recomm		X							
compliance with El 717ccomin	[Initial when A M	Date/tim	ne of		
exceptions: VOA, coliforn	n, TOC, O&G, Phenolics				completed	preserv	ation		
					Lot # of added preservative				
Headspace in VOA Vials (>6mm):			X	17.				
Trip Blank Present:			X		18.				
Trip Blank Custody Seals F	Present			X					
Rad Aqueous Samples S				V	Initial when completed:	Date:			
Olivet Netfeetien/ Decel					Completed.	Date.			
Client Notification/ Resol				Date	Time:	c	Contacted	d Bv	
Comments/ Resolution:				Daie/	Time:		. Jinaolol	<u>J.</u>	
Comments/ Nesolution.					<i>II</i>				
	***************************************				5.				

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





January 11, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on January 04, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

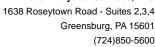
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

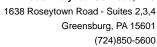
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



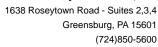


SAMPLE SUMMARY

Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30240127001	RW11-MWI	Water	01/04/18 10:41	01/04/18 22:45
30240127002	RW11-MWS	Water	01/04/18 11:05	01/04/18 22:45
30240127003	RW13-MWI	Water	01/04/18 11:44	01/04/18 22:45
30240127004	RW10-MWI	Water	01/04/18 12:20	01/04/18 22:45
30240127005	RW08-MWI	Water	01/04/18 13:30	01/04/18 22:45
30240127006	RW07-MWI	Water	01/04/18 14:19	01/04/18 22:45
30240127007	RW07-MWS	Water	01/04/18 15:02	01/04/18 22:45
30240127008	RW04-MWS	Water	01/04/18 15:30	01/04/18 22:45



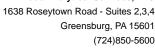


SAMPLE ANALYTE COUNT

Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30240127001	RW11-MWI	EPA 6010C	KAS	2
30240127002	RW11-MWS	EPA 6010C	KAS	2
30240127003	RW13-MWI	EPA 6010C	KAS	2
30240127004	RW10-MWI	EPA 6010C	KAS	2
30240127005	RW08-MWI	EPA 6010C	KAS	2
30240127006	RW07-MWI	EPA 6010C	KAS	2
30240127007	RW07-MWS	EPA 6010C	KAS	2
30240127008	RW04-MWS	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: January 11, 2018

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 284436

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30240127001,30240302003

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1395466)
 - Zinc
- MS (Lab ID: 1395469)
 - Zinc
- MSD (Lab ID: 1395467)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Date: 01/11/2018 12:59 PM

Sample: RW11-MWI	Lab ID:	30240127001	Collecte	d: 01/04/18	3 10:41	Received: 01/	04/18 22:45 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	1400	ug/L	3.0	0.87	1	01/09/18 14:48	01/10/18 15:36	7440-43-9	
Zinc	225000	ug/L	1000	104	100	01/09/18 14:48	01/10/18 16:59	7440-66-6	ML





Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Date: 01/11/2018 12:59 PM

Sample: RW11-MWS	Lab ID:	30240127002	Collecte	d: 01/04/18	3 11:05	Received: 01/	04/18 22:45 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	2.2J	ug/L	3.0	0.87	1	01/09/18 14:48	01/10/18 15:50	7440-43-9	
Zinc	27700	ug/L	1000	104	100	01/09/18 14:48	01/10/18 17:13	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Date: 01/11/2018 12:59 PM

Sample: RW13-MWI	Lab ID:	30240127003	Collecte	d: 01/04/18	3 11:44	Received: 01/	04/18 22:45 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1240	ug/L	3.0	0.87	1	01/09/18 14:48	01/10/18 15:53	7440-43-9	
Zinc	8600	ug/L	1000	104	100	01/09/18 14:48	01/10/18 17:16	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Date: 01/11/2018 12:59 PM

Sample: RW10-MWI	Lab ID:	30240127004	Collecte	d: 01/04/18	3 12:20	Received: 01/	04/18 22:45 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
6010C MET ICP		Method: EPA 6				-	7 11.01.7200		
Cadmium	3.0 U	ug/L	3.0	0.87	1		01/10/18 16:02	7440-43-9	
Zinc	26.5	ug/L	10.0	1.0	1	01/09/18 14:48	01/10/18 16:02	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Date: 01/11/2018 12:59 PM

Sample: RW08-MWI	Lab ID:	30240127005	Collecte	d: 01/04/18	3 13:30	Received: 01/	/04/18 22:45 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	01/09/18 14:48	01/10/18 16:04	7440-43-9	
Zinc	108	ug/L	10.0	1.0	1	01/09/18 14:48	01/10/18 16:04	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Date: 01/11/2018 12:59 PM

Sample: RW07-MWI	Lab ID:	30240127006	Collecte	d: 01/04/18	3 14:19	Received: 01/	/04/18 22:45 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	01/09/18 14:48	01/10/18 16:07	7440-43-9	
Zinc	70.6	ug/L	10.0	1.0	1	01/09/18 14:48	01/10/18 16:07	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Date: 01/11/2018 12:59 PM

Sample: RW07-MWS	Lab ID:	30240127007	Collecte	d: 01/04/18	3 15:02	Received: 01/	04/18 22:45 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prer	paration Met	hod: F	PA 3005A		-	
Cadmium	4.8	ug/L	3.0	0.87	1		01/10/18 16:09	7440-43-9	
Zinc	276	ug/L	10.0	1.0	1	01/09/18 14:48	01/10/18 16:09	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Date: 01/11/2018 12:59 PM

Sample: RW04-MWS	Lab ID:	30240127008	Collecte	d: 01/04/18	3 15:30	Received: 01/	04/18 22:45 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	01/09/18 14:48	01/10/18 16:11	7440-43-9	
Zinc	384	ug/L	10.0	1.0	1	01/09/18 14:48	01/10/18 16:11	7440-66-6	



QUALITY CONTROL DATA

Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Date: 01/11/2018 12:59 PM

QC Batch: 284436 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30240127001, 30240127002, 30240127003, 30240127004, 30240127005, 30240127006, 30240127007,

30240127008

METHOD BLANK: 1395463 Matrix: Water

WETHOD BLANK. 13	93403		IV	iallix. VVa	atei								
Associated Lab Sample	s: 302401270 302401270	001, 30240127002 008	2, 30240127	003, 3024	0127004, 3	30240127005	5, 302	40127	7006, 3024	0127007,			
			Blank	F	Reporting								
Paramete	<u>r </u>	Units	Resul	t	Limit	MDL		A	nalyzed	Qua	alifiers		
Cadmium		ug/L	- (3.0 U	3.0)	0.87	01/1	0/18 15:31				
Zinc		ug/L	10	0.0 U	10.0)	1.0	01/1	0/18 15:31				
LABORATORY CONTR	OL SAMPLE:	1395464			_								
5 .		11.5	Spike	LCS		LCS		% Rec	•				
Paramete	r 	Units	Conc.	Resi		% Rec		_imits		ıalifiers	_		
Cadmium		ug/L	500		498	100			120				
Zinc		ug/L	500		532	106		80-	120				
MATRIX SPIKE & MATR	RIX SPIKE DUPI	LICATE: 13954	.66		1395467								
			MS	MSD									
		30240127001	Spike	Spike	MS	MSD	MS	S	MSD	% Rec		Max	
Parameter	Unit	s Result	Conc.	Conc.	Result	Result	% R	lec	% Rec	Limits	RPD	RPD	Qua
Cadmium	ug/L	1400	500	500	1930	1880		105	96	75-125	2	20	
Zinc	ug/L		500	500	225000	220000		-40	-1060	75-125	2	20	ML
MATRIX SPIKE SAMPL	E:	1395469											
			302403		Spike	MS		MS		% Rec			
Paramete	r 	Units	Resi	ult ——— –	Conc.	Result		% R	.ec	Limits		Quali	tiers
Cadmium		ug/L		1880	500	24			120	75-			
Zinc		ug/L	3	3840000	500	36500	00		-37600	75-	125 M	L	
SAMPLE DUPLICATE:	1395465												
Or Will EL DOT LIOTTE.	1000 100		30240127	7001	Dup			N	Лах				
Paramete	r	Units	Resul		Result	RPD			RPD	Qualifie	ers		
Cadmium		ug/L		1400	1400)	0		20				
Zinc		ug/L		5000	226000		0		20				
		5					-		-				
SAMPLE DUPLICATE:	1395468												
			30240302		Dup				Иax				
Paramete	r	Units	Resul	t	Result	RPD		F	RPD	Qualifie	ers		
Cadmium		ug/L		1880	1870)	0		20				
		-											

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

Max

QUALITY CONTROL DATA

Project: RWM Jan 2018 GW

Pace Project No.: 30240127

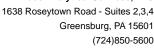
Date: 01/11/2018 12:59 PM

SAMPLE DUPLICATE: 1395468 30240302003 Dup

 Parameter
 Units
 Result
 Result
 RPD
 RPD
 Qualifiers

 Zinc
 ug/L
 3840000
 3740000
 3
 20

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





QUALIFIERS

Project: RWM Jan 2018 GW

Pace Project No.: 30240127

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

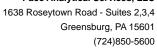
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 01/11/2018 12:59 PM

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: RWM Jan 2018 GW

Pace Project No.: 30240127

Date: 01/11/2018 12:59 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30240127001	RW11-MWI	EPA 3005A	284436	EPA 6010C	284470
30240127002	RW11-MWS	EPA 3005A	284436	EPA 6010C	284470
30240127003	RW13-MWI	EPA 3005A	284436	EPA 6010C	284470
30240127004	RW10-MWI	EPA 3005A	284436	EPA 6010C	284470
30240127005	RW08-MWI	EPA 3005A	284436	EPA 6010C	284470
30240127006	RW07-MWI	EPA 3005A	284436	EPA 6010C	284470
30240127007	RW07-MWS	EPA 3005A	284436	EPA 6010C	284470
30240127008	RW04-MWS	EPA 3005A	284436	EPA 6010C	284470

Section A Required Cli Company: Address: Email To: Phone: 31	ent Information: EnviroAnalytics Group 1430 Sparrows Point Blvd Sparrows Point, MD 21219 icalenda@enviroanalyticsgroup.com 4-620-3056 Fax:	Section B Required Project Information: Report To: Jarnes Calenda Copy To: Stcw kwois PO Number: Project Name: Call Tale Tale Stwo	Sectif 30240127 Invoice Attention. Laura Sargent Company Name: EnviroAnalytics Group Address: 1650 Des Peres Road, Suite 303 St. Louis, MD 63131 Pere Guxte Reference: Reference: Reference: Reference: Reference: Reference:	REGULATORY AGENCY T NPDES T GROUND WATER T UST T RCRA Site Location	MD WATER	of) T DRINKING WATER OTHER
Requested	Requested Due Date/TAT:	Project Number: 170384M-1-1	Pace Profile #:	STATE:	MD -	

	5			-								Dograde	ford Amely	Pomotod Analysis Ellipsed	A AVAIN					
	Section D Valid Matrix Codes Reputing Clert Information MARRIX COT	ų,	(4)	20	COLLECTED		-	ا ا	Drocontaine	oriji.	Ī	Z Z								
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7	RW07-2005				()	205	_					X						COO	7	
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Pittsburgh Lab Sample Cond	nomic	Up	on F	Receipt	
Pace Analytical Client Name:		E	nv	ivoAna.	Project # 30 2 4 0 1 2
Courier: Fed Ex UPS USPS Clie	ent 🗆	Comi	nercia	Pace Other	Label AM
Tracking #:		_			L. Mariana Mariana
Custody Seal on Cooler/Box Present: yes	- 1	no	-	lls intact:	□ no
Thermometer Used	Type	of Ice	e: (W	et) Blue None	
Cooler Temperature Observed Temp	. 6	- ° C	Cor	rection Factor:(°C Final Temp: 1.5 °C
Temp should be above freezing to 6°C			.50	No. V	Date and Initials of person examining.
	[\ \		-	T	Date and Initials of person examining contents:
Comments:	Yes	No	N/A	4	
Chain of Custody Present:	1	-	+-	1.	
Chain of Custody Filled Out:	1		+-	2.	2.200 cm - 2.200 cm -
Chain of Custody Relinquished:	X	ļ	-	3.	
Sampler Name & Signature on COC:	15			4.	
Sample Labels match COC:	1			5.	
-Includes date/time/ID Matrix:	M				
Samples Arrived within Hold Time:	7			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	X			9.	
Correct Containers Used:	X			10.	
-Pace Containers Used:	X				
Containers Intact:	X			11.	4
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtere	d	6)	X	13.	
Organic Samples checked for dechlorination:			X	14.	
Filtered volume received for Dissolved tests			X	15.	
All containers have been checked for preservation.	X	(16.	
All containers needing preservation are found to be in compliance with EPA recommendation.	7	-			
				Initial when	Date/time of preservation
exceptions: VOA, coliform, TOC, O&G, Phenolics				Lot # of added	preservation
8				preservative	
Headspace in VOA Vials (>6mm):			X	17.	
Trip Blank Present:		X		18.	
Trip Blank Custody Seals Present			X		:
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed:	Date:
Client Notification/ Resolution:	-				
Person Contacted: Date/T				Гime:	Contacted By:
Comments/ Resolution:					
NEC - CONTROL OF THE					
☐ A check in this box indicates that addi	tional	infor	matio	n has been stored	in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Greensburg, PA 15601 (724)850-5600



January 12, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on January 08, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

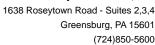
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



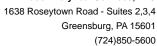


SAMPLE SUMMARY

Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
30240302001	RW09-MWI	Water	01/08/18 10:15	01/08/18 22:50	
30240302002	RW09-MWS	Water	01/08/18 10:45	01/08/18 22:50	
30240302003	RW19-MWI	Water	01/08/18 11:40	01/08/18 22:50	
30240302004	RW19-MWS	Water	01/08/18 12:25	01/08/18 22:50	
30240302005	RW03-MWI	Water	01/08/18 13:40	01/08/18 22:50	
30240302006	RW03-MWS	Water	01/08/18 14:30	01/08/18 22:50	





SAMPLE ANALYTE COUNT

Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30240302001	RW09-MWI	EPA 6010C	KAS	2
30240302002	RW09-MWS	EPA 6010C	KAS	2
30240302003	RW19-MWI	EPA 6010C	KAS	2
30240302004	RW19-MWS	EPA 6010C	KAS	2
30240302005	RW03-MWI	EPA 6010C	KAS	2
30240302006	RW03-MWS	EPA 6010C	KAS	2



PROJECT NARRATIVE

Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: January 12, 2018

General Information:

6 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 284436

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30240127001,30240302003

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1395466)
 - Zinc
- MS (Lab ID: 1395469)
 - Zinc
- MSD (Lab ID: 1395467)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Date: 01/12/2018 03:50 PM

Sample: RW09-MWI	Lab ID:	Lab ID: 30240302001		Collected: 01/08/18 10:15		Received: 01/	Received: 01/08/18 22:50 Matrix: Water		
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A			
Cadmium	2.1J	ug/L	3.0	0.87	1	01/09/18 14:48	01/10/18 16:14	7440-43-9	
Zinc	54700	ug/L	1000	104	100	01/09/18 14:48	01/10/18 17:18	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Date: 01/12/2018 03:50 PM

Sample: RW09-MWS	Lab ID:	30240302002	Collecte	d: 01/08/18	3 10:45	Received: 01/	08/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	9.9	ug/L	3.0	0.87	1	01/09/18 14:48	01/10/18 16:16	7440-43-9	
Zinc	9310	ug/L	1000	104	100	01/09/18 14:48	01/10/18 17:21	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Date: 01/12/2018 03:50 PM

Sample: RW19-MWI	Lab ID:	Lab ID: 30240302003			Collected: 01/08/18 11:40		08/18 22:50 Ma	Matrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF_	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	1880	ug/L	300	87.0	100	01/09/18 14:48	01/10/18 17:29	7440-43-9	
Zinc	3840000	ua/L	100000	10400	10000	01/09/18 14:48	01/10/18 17:44	7440-66-6	ML





Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Date: 01/12/2018 03:50 PM

Sample: RW19-MWS	Lab ID:	30240302004	Collecte	d: 01/08/18	3 12:25	Received: 01/	08/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	4.8	ug/L	3.0	0.87	1	01/09/18 14:48	01/10/18 16:35	7440-43-9	
Zinc	10200	ug/L	1000	104	100	01/09/18 14:48	01/10/18 17:36	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Date: 01/12/2018 03:50 PM

Sample: RW03-MWI Lab ID: 30240302005 Collected: 01/08/18 13:40 Received: 01/08/18 22:50 Matrix: Water

Comments: • Sample ID on container does not match COC. Time and date do match.

Parameters	Results	Units	Report Limit 	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Me	thod: E	PA 3005A			
Cadmium	259	ug/L	3.0	0.87	1	01/09/18 14:48	01/10/18 16:37	7440-43-9	
Zinc	12700	ug/L	1000	104	100	01/09/18 14:48	01/10/18 17:39	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Date: 01/12/2018 03:50 PM

Sample: RW03-MWS	Lab ID:	30240302006	Collecte	d: 01/08/18	3 14:30	Received: 01/	08/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	9.9	ug/L	3.0	0.87	1	01/09/18 14:48	01/10/18 16:40	7440-43-9	
Zinc	31500	ug/L	1000	104	100	01/09/18 14:48	01/10/18 17:41	7440-66-6	



QUALITY CONTROL DATA

Project: RWM Jan 2018 GW

Pace Project No.: 30240302

SAMPLE DUPLICATE: 1395468

Date: 01/12/2018 03:50 PM

Zinc

QC Batch: 284436 Analysis Method: **EPA 6010C** QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30240302001, 30240302002, 30240302003, 30240302004, 30240302005, 30240302006

METHOD BLANK: 1395463 Matrix: Water

Associated Lab Samples: 30240302001, 30240302002, 30240302003, 30240302004, 30240302005, 30240302006

Blank Reporting Limit MDL Qualifiers Parameter Units Result Analyzed Cadmium 3.0 U 3.0 01/10/18 15:31 ug/L 0.87 ug/L 10.0 U 10.0 1.0 01/10/18 15:31

LABORATORY CONTROL SAMPLE: 1395464 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers

Cadmium 500 498 100 80-120 ug/L 500 532 106 80-120 Zinc ug/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1395466 1395467

MS MSD 30240127001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 1400 500 500 1930 1880 105 96 75-125 2 20 Zinc ug/L 225000 500 500 225000 220000 -40 -1060 75-125 2 20 ML

MATRIX SPIKE SAMPLE: 1395469 MS MS 30240302003 % Rec Spike Parameter Units Result Conc. Result % Rec Limits Qualifiers

Max

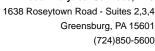
Cadmium 1880 2470 120 75-125 500 ug/L 3840000 75-125 ML 500 3650000 -37600 Zinc ug/L

SAMPLE DUPLICATE: 1395465 30240127001 Dup

Units Result Result RPD RPD Qualifiers Parameter Cadmium 1400 1400 0 20 ug/L Zinc ug/L 225000 226000 0 20

		30240302003	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	1880	1870	0	20	
Zinc	ua/L	3840000	3740000	3	20	

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





QUALIFIERS

Project: RWM Jan 2018 GW

Pace Project No.: 30240302

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

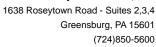
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 01/12/2018 03:50 PM

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: RWM Jan 2018 GW

Pace Project No.: 30240302

Date: 01/12/2018 03:50 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30240302001	RW09-MWI	EPA 3005A	284436	EPA 6010C	284470
30240302002	RW09-MWS	EPA 3005A	284436	EPA 6010C	284470
30240302003	RW19-MWI	EPA 3005A	284436	EPA 6010C	284470
30240302004	RW19-MWS	EPA 3005A	284436	EPA 6010C	284470
30240302005	RW03-MWI	EPA 3005A	284436	EPA 6010C	284470
30240302006	RW03-MWS	EPA 3005A	284436	EPA 6010C	284470

Courier: Fed Ex UPS USPS Client Commercial Pace Other Label LIMS Login LIMS Lo	Pittsburgh Lab Sample Condi	ition	Upo	on F	Receipt	
Courier: Fed Ex UPS USPS Client Commercial Pace Other Label Lims Login Project # Courier: Fed Ex UPS USPS Client Commercial Pace Other Lims Login Project # Custody Seal on Cooler/Box Present: yes no Type of Ice: Wet Blue None Cooler Temperature Observed Temp Society of Scottle Correction Factor: Correction Factor: Comments: Yes No N/A Chain of Custody Present: 1. Chain of Custody Relinquished: 3. Sampler Name & Signature on COC: 4.	To a Arab dest				30240302	
Custody Seal on Cooler/Box Present: yes no Seals intact: yes no Thermometer Used Type of Ice: Wet Blue None Cooler Temperature Observed Temp	Client Name:		Er	11/1	ro Ana. Project #	
Custody Seal on Cooler/Box Present: yes no Seals intact: yes no Thermometer Used Type of Ice: Wet Blue None Cooler Temperature Observed Temp	Couries: Fod Ev IDS IUSDS Clien	+ П	Comm	nercia	ial III Page Other	
Thermometer Used Type of Ice: Wet Blue None Cooler Temperature Observed Temp			- -	ІСІСІА		
Cooler Temperature Observed Temp 2 °C Correction Factor: °C Final Temp: 7 °C Temp should be above freezing to 6°C Date and Initials of person examining contents: 1. Chain of Custody Present: 1. Chain of Custody Filled Out: 2. Chain of Custody Relinquished: 3. Sampler Name & Signature on COC: 4.	Custody Seal on Cooler/Box Present:	ф	no	Sea	eals intact: yes no	
Temp should be above freezing to 6°C Comments: Yes No N/A Chain of Custody Present: Chain of Custody Filled Out: Chain of Custody Relinquished: Sampler Name & Signature on COC: Date and Initials of person examining contents: 1. 2. 4.	Thermometer Used	Туре	of Ice	: (We	Vet) Blue None	
Comments: Yes No N/A Chain of Custody Present: Chain of Custody Filled Out: Chain of Custody Relinquished: Sampler Name & Signature on COC: Date and Initials of person examining contents: 1. 2. 4.	Cooler Temperature Observed Temp	.5	°C	Cor	orrection Factor: O.L °C Final Temp: 7.4 °C	
Comments: Yes No N/A Chain of Custody Present: Chain of Custody Filled Out: Chain of Custody Relinquished: Sampler Name & Signature on COC: Yes No N/A 1. 2. 4.	Temp should be above freezing to 6°C				Date and Initials of suspen exemining	
Chain of Custody Present: Chain of Custody Filled Out: Chain of Custody Relinquished: Sampler Name & Signature on COC: 1. 2. 4.	18	F		T		
Chain of Custody Filled Out: Chain of Custody Relinquished: Sampler Name & Signature on COC: 2. 4.		Yes	No	N/A		
Chain of Custody Relinquished: Sampler Name & Signature on COC: 3. 4.	PAGENT STATE OF STATE OF STATE OF STATE OF STATE OF	Q				
Sampler Name & Signature on COC: 4.		5	-			
	Chain of Custody Relinquished:	8		-	3.	
		_	1	-		
Sample assets made to the second seco	Sample Labels match COC:			-	_5. LD on bothe for sample cos	
72 01.2		-/	1	T	2 0. 2 0	10
Samples Arrived within Hold Time: 6. TO CO R WO3 - MWL			X			
Short Hold Time Analysis (<72hr remaining): 7.		. /	/			
Rush Turn Around Time Requested: 8.	Rush Turn Around Time Requested:	7				
Sufficient Volume: 9.	Sufficient Volume:	4		_		
Correct Containers Used:	Correct Containers Used:	1			10.	
-Pace Containers Used:	-Pace Containers Used:	2				
Containers Intact: 11.	Containers Intact:					
Orthophosphate field filtered 12.	Orthophosphate field filtered			X	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtered 13.				X		
Organic Samples checked for dechlorination: 14.	Organic Samples checked for dechlorination:			Ş	14.	
Filtered volume received for Dissolved tests 15. All containers have been checked for preservation.						
All containers have been checked for preservation.	All containers have been checked for preservation.	X				
All containers needing preservation are found to be in compliance with EPA recommendation.		\times	_			
exceptions: VOA, coliform, TOC, O&G, Phenolics Initial when Date/time of preservation	exceptions: VOA, coliform, TOC, O&G, Phenolics					
Lot # of added preservative	985089					
Headspace in VOA Vials (>6mm): 17.	Headspace in VOA Vials (>6mm):			*	17.	
Trip Blank Present: 18.	Trip Blank Present:		1		18.	
Trip Blank Custody Seals Present				+		
Rad Aqueous Samples Screened > 0.5 mrem/hr	Rad Aqueous Samples Screened > 0.5 mrem/hr			7	-1	
Client Notification/ Resolution:	Client Notification/ Resolution:					
Person Contacted: Date/Time: Contacted By:	Person Contacted:			Date/T	/Time:Contacted By:	
Comments/ Resolution:						
	· · · · · · · · · · · · · · · · · · ·					

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Greensburg, PA 15601 (724)850-5600



January 16, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: RWM Jan 2018 GW

Pace Project No.: 30240369

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on January 09, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: RWM Jan 2018 GW

Pace Project No.: 30240369

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888

North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282 South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



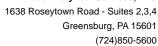


SAMPLE SUMMARY

Project: RWM Jan 2018 GW

Pace Project No.: 30240369

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30240369001	RW06-MWI	Water	01/09/18 09:58	01/09/18 22:35
30240369002	RW06-MWD	Water	01/09/18 11:24	01/09/18 22:35
30240369003	RW06-MWS	Water	01/09/18 11:55	01/09/18 22:35
30240369004	RW08-MWS	Water	01/09/18 13:05	01/09/18 22:35



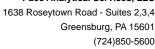


SAMPLE ANALYTE COUNT

Project: RWM Jan 2018 GW

Pace Project No.: 30240369

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30240369001	RW06-MWI	EPA 6010C	KAS	2
30240369002	RW06-MWD	EPA 6010C	KAS	2
30240369003	RW06-MWS	EPA 6010C	KAS	2
30240369004	RW08-MWS	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: RWM Jan 2018 GW

Pace Project No.: 30240369

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: January 16, 2018

General Information:

4 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: RWM Jan 2018 GW

Pace Project No.: 30240369

Date: 01/16/2018 04:08 PM

Sample: RW06-MWI	Lab ID:	30240369001	Collecte	d: 01/09/18	3 09:58	Received: 01/	09/18 22:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	8.4	ug/L	3.0	0.87	1	01/12/18 16:48	01/15/18 20:01	7440-43-9	
Zinc	1950	ug/L	10.0	1.0	1	01/12/18 16:48	01/15/18 20:01	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240369

Date: 01/16/2018 04:08 PM

Sample: RW06-MWD	Lab ID:	30240369002	Collecte	d: 01/09/18	3 11:24	Received: 01/	/09/18 22:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	2.6J	ug/L	3.0	0.87	1	01/12/18 16:48	01/15/18 20:15	7440-43-9	
Zinc	212	ug/L	10.0	1.0	1	01/12/18 16:48	01/15/18 20:15	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240369

Date: 01/16/2018 04:08 PM

Sample: RW06-MWS	Lab ID:	30240369003	Collecte	d: 01/09/18	3 11:55	Received: 01/	09/18 22:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.3	ug/L	3.0	0.87	1	01/12/18 16:48	01/15/18 20:17	7440-43-9	
Zinc	648	ug/L	10.0	1.0	1	01/12/18 16:48	01/15/18 20:17	7440-66-6	





Project: RWM Jan 2018 GW

Pace Project No.: 30240369

Date: 01/16/2018 04:08 PM

Sample: RW08-MWS	Lab ID:	30240369004	Collecte	d: 01/09/18	3 13:05	Received: 01/	09/18 22:35 Ma	atrix: Water	
D	December	11-26-	Report	MDI	D E	Dunnand	A b l	040 N	01
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	01/12/18 16:48	01/15/18 20:25	7440-43-9	
Zinc	2600	ug/L	10.0	1.0	1	01/12/18 16:48	01/15/18 20:25	7440-66-6	

Qualifiers



QUALITY CONTROL DATA

Project: RWM Jan 2018 GW

Pace Project No.: 30240369

QC Batch: 284761 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30240369001, 30240369002, 30240369003, 30240369004

METHOD BLANK: 1397030 Matrix: Water

Associated Lab Samples: 30240369001, 30240369002, 30240369003, 30240369004

Blank Reporting
Parameter Units Result Limit MDL Analyzed

 Cadmium
 ug/L
 3.0 U
 3.0
 0.87
 01/15/18 19:56

 Zinc
 ug/L
 10.0 U
 10.0
 1.0
 01/15/18 19:56

LABORATORY CONTROL SAMPLE: 1397031

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 500 493 99 80-120 ug/L Zinc 500 495 99 80-120 ug/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1397033 1397034

MSD MS 30240369001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 8.4 500 500 502 507 99 100 75-125 20 Zinc ug/L 1950 500 500 2400 2430 91 97 75-125 20

SAMPLE DUPLICATE: 1397032

Date: 01/16/2018 04:08 PM

		30240369001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	8.4	8.2	3	20	
Zinc	ug/L	1950	1950	0	20	

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





QUALIFIERS

Project: RWM Jan 2018 GW

Pace Project No.: 30240369

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

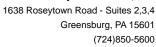
U - Indicates the compound was analyzed for, but not detected.

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

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

TNI - The NELAC Institute.

Date: 01/16/2018 04:08 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: RWM Jan 2018 GW

Pace Project No.: 30240369

Date: 01/16/2018 04:08 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30240369001	RW06-MWI	EPA 3005A	284761	EPA 6010C	284788
30240369002	RW06-MWD	EPA 3005A	284761	EPA 6010C	284788
30240369003	RW06-MWS	EPA 3005A	284761	EPA 6010C	284788
30240369004	RW08-MWS	EPA 3005A	284761	EPA 6010C	284788

MO#: 30240369 CROUND WATER RCRA 2 1518 REGULATORY AGENCY 188 225 TIME Requested Analysis Filtered (Y/N) **る**-1の STATE Site Location 30240369 119/19 DATE NPDES LS U 1650 Des Peres Road, Sulte 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION total cadmium Bayuna Z JUIZ POTOI Company Name: EnviroAnalytics Group Analysis Test ÎN/A Other Methanol Pace Project Sonnoundly Pace Profile #: Laura Sargent Preservatives Na2S2O3 HOBN HCI Invoice Information: HNO3 *OSZH 426 119758 1906 Section C TIME Unpreserved Pace Quote Reference: Attention: Address: # OF CONTAINERS 1-9-18 1-0-18 SAMPLE TEMP AT COLLECTION DATE 1156 TIME 12 L

9-18

2

Smw-SBW.

Rw 06 RW08

1361

3

M3TI

361

Swob 0

5

DATE

TIME

DATE

34YT 3J9MA2

MATRIX CODE

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

SAMPLE ID

Pace Project No./ Lab I.D.

Residual

DRINKING WATER

ö

OTHER

170384211

Project Number:

day

Section D Required Clent Information

Project Name: RWM Sam 2018

PO Number:

icalenda@enviroanalyticsgroup.com

mail To:

Fax

hone: 314-620-3056

equested Due Date/TAT:

Sparrows Point, MD 21219

1430 Sparrows Point Blvd

EnviroAnalytics Group

Company:

Section A Required Client Information:

Report To: James Calenda Required Project Information:

Section B

STEW

Copy To:

COMPOSITE END/GRAB

COMPOSITE

(G=GRAB C=COMP)

 Valid Metrix Codes

 MATRIX
 CÓDE

 PRAMER
 WW

 WASTE
 WW

 WASTE
 WW

 PROLUCT
 SL

 SOLSOLIO
 OL

 OIL
 WP

 WPE
 WR

 WR
 OT

 MR
 OT

 OTHER
 TS

 TSSUE
 TS

(see valid codes to left)

COLLECTED

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page 13 of 14

Samples Intact (V/V)

Cooler (Y/N)

Received on Ice (Y/N)

O' ni qmaT

DATE Signed (MM/DD/YY):

SAMPLER NAME AND SIGNATURE

30

MMIN

If data package is required, attach data package checklist.

Data Validation Required? (Y/N); Data Package Required? (Y/N):

RELINQUISHED BY / AFFILIATION

ADDITIONAL COMMENTS

5 F Ş

60 60

~

SIGNATURE of SAMPLER: PRINT Name of SAMPLER:

SAMPLE CONDITIONS

AA A P.4. AAA

...

Pittsburgh Lab Sample Cond	lition	Upo	on R	Receipt	
Pace Analytical Client Name:	T.	E	- N	ivoAna.	Project # 30 2 4 0 3 6
Courier: Fed Ex UPS USPS Clie	nt 🗆	Comm	ercial	Pace Other	Label PNV
Tracking #:					LIMS Login
Custody Seal on Cooler/Box Present: yes	Ь	no	Seal	ls intact: ☐ yes ☐	
Thermometer Used	1		We	Blue None	
Cooler Temperature Observed Temp	-1	° C	Cori	rection Factor: 10.	C Final Temp: . C
Temp should be above freezing to 6°C		-			
				_	Date and Initials of person examining contents:
Comments:	Yes	No	N/A		
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X			4.	
Sample Labels match COC:	X			5.	
-Includes date/time/ID Matrix:	VVI				
Samples Arrived within Hold Time:	7	. /		6.	х
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	75			9.	
Correct Containers Used:	1			10.	
-Pace Containers Used:	X				
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.	
Organic Samples checked for dechlorination:			X	14.	
Filtered volume received for Dissolved tests			X	15.	
All containers have been checked for preservation.	X			16.	l l
All containers needing preservation are found to be in compliance with EPA recommendation.	X				,
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when AM	Date/time of preservation
			1	Lot # of added preservative	
Headspace in VOA Vials (>6mm):			X	17.	
Trip Blank Present:		1		18.	
Frip Blank Custody Seals Present		,	X		
Rad Aqueous Samples Screened > 0.5 mrem/hr				Initial when completed:	Date:
Client Notification/ Resolution:					
Person Contacted:		D	ate/T	ime:	Contacted By:
Comments/ Resolution:					
	1				

 $\hfill \Box$ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600





November 08, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on November 03, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

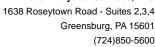
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Indiana Certification
Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30235076001	RW12-MW(S)	Water	11/03/17 08:53	11/03/17 22:30
30235076002	RW12-MW(I)	Water	11/03/17 09:19	11/03/17 22:30
30235076003	RW14-MW(S)	Water	11/03/17 09:51	11/03/17 22:30
30235076004	RW20-MW(S) Changed to RW1	5-MW(S)	11/03/17 10:35	11/03/17 22:30
30235076005	RW20-MW(I) Changed to RW1	5-MW(I)	11/03/17 11:14	11/03/17 22:30
30235076006	RW18-MW(S)	Water	11/03/17 12:05	11/03/17 22:30
30235076007	RW18-MW(I)	Water	11/03/17 12:41	11/03/17 22:30
30235076008	RW13-MW(I)	Water	11/03/17 14:09	11/03/17 22:30
30235076009	RW10-MW(I)	Water	11/03/17 14:45	11/03/17 22:30

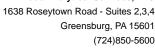


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30235076001	RW12-MW(S)	EPA 6010C	PJD	2
30235076002	RW12-MW(I)	EPA 6010C	PJD	2
30235076003	RW14-MW(S)	EPA 6010C	PJD	2
30235076004	RW20-MW(S) Changed to RW15-MW(S	EPA 6010C	PJD	2
30235076005	RW20-MW(I) Changed to RW15-MW(I)	EPA 6010C	PJD	2
30235076006	RW18-MW(S)	EPA 6010C	PJD	2
30235076007	RW18-MW(I)	EPA 6010C	PJD	2
30235076008	RW13-MW(I)	EPA 6010C	PJD	2
30235076009	RW10-MW(I)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: November 08, 2017

General Information:

9 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 278180

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30235076001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1366600)
 - Zinc
- MSD (Lab ID: 1366601)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Date: 11/08/2017 03:55 PM

Sample: RW12-MW(S)	Lab ID:	30235076001	Collecte	d: 11/03/17	7 08:53	Received: 11/	03/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	193	ug/L	3.0	0.87	1	11/07/17 09:32	11/07/17 21:52	7440-43-9	
Zinc	235000	ua/L	1000	104	100	11/07/17 09:32	11/07/17 22:32	7440-66-6	ML





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Date: 11/08/2017 03:55 PM

Sample: RW12-MW(I)	Lab ID:	30235076002	2 Collecte	d: 11/03/17	7 09:19	Received: 11/	03/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	1380	ug/L	3.0	0.87	1	11/07/17 09:32	11/07/17 22:07	7440-43-9	
Zinc	140000	ug/L	1000	104	100	11/07/17 09:32	11/07/17 22:57	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Date: 11/08/2017 03:55 PM

Sample: RW14-MW(S)	Lab ID:	Lab ID: 30235076003			7 09:51	Received: 11/03/17 22:30 Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium	2390	ug/L	3.0	0.87	1	11/07/17 09:32	11/07/17 22:10	7440-43-9	
Zinc	28100	ug/L	1000	104	100	11/07/17 09:32	11/07/17 22:59	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 302350

Date: 11/08/2017 03:55 PM

Sample: RW20-MW(S) Changed to RW15-MW(S) Collected: 11/03/17 10:35 Received: 11/03/17 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium Zinc	63.0 8800	ug/L ug/L	3.0 1000	0.87 104	1 100		11/07/17 22:17 11/07/17 23:02		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Date: 11/08/2017 03:55 PM

Sample: RW20-MW(I) Char	5 Collected: 11/03/17 11:14			Received: 11/03/17 22:30 Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A									
Cadmium	3.0 U	ug/L	3.0	0.87	1	11/07/17 09:32	11/07/17 22:20		
Zinc	825	ug/L	10.0	1.0	1	11/07/17 09:32	11/07/17 22:20	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Sample: RW18-MW(S)	Lab ID:	30235076006	Collecte	d: 11/03/17	7 12:05	Received: 11/	03/17 22:30 Ma	atrix: Water	
D	December	11-2-	Report	MDI	DE	Danasasas	A b d	040 N	0
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	208	ug/L	3.0	0.87	1	11/07/17 09:32	11/07/17 22:22	7440-43-9	
Zinc	10700	ug/L	1000	104	100	11/07/17 09:32	11/07/17 23:04	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Sample: RW18-MW(I)	Lab ID:	30235076007	Collecte	d: 11/03/17	7 12:41	Received: 11/	03/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	66.6	ug/L	3.0	0.87	1	11/07/17 09:32	11/07/17 22:25	7440-43-9	
Zinc	323000	ug/L	1000	104	100	11/07/17 09:32	11/07/17 23:07	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Sample: RW13-MW(I)	Lab ID:	30235076008	Collecte	d: 11/03/17	7 14:09	Received: 11/	03/17 22:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	24500	ug/L	300	87.0	100	11/07/17 09:32	11/07/17 23:09	7440-43-9	
Zinc	172000	ug/L	1000	104	100	11/07/17 09:32	11/07/17 23:09	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Sample: RW10-MW(I)	Lab ID:	30235076009	Collecte	d: 11/03/17	14:45	Received: 11/	03/17 22:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6			hod: El				
Cadmium	63.7	ug/L	3.0	0.87	1	11/07/17 09:32	11/07/17 22:30	7440-43-9	
Zinc	39000	ug/L	1000	104	100	11/07/17 09:32	11/07/17 23:12	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

SAMPLE DUDLICATE: 1266500

Date: 11/08/2017 03:55 PM

QC Batch: 278180 Analysis Method: EPA 6010C
QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30235076001, 30235076002, 30235076003, 30235076004, 30235076005, 30235076006, 30235076007,

30235076008, 30235076009

METHOD BLANK: 1366597 Matrix: Water

Associated Lab Samples: 30235076001, 30235076002, 30235076003, 30235076004, 30235076005, 30235076006, 30235076007,

30235076008, 30235076009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.87	11/07/17 21:47	
Zinc	ug/L	10.0 U	10.0	1.0	11/07/17 21:47	

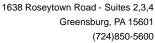
LABORATORY CONTROL SAMPLE:	1366598					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	512	102	80-120	
Zinc	ug/L	500	541	108	80-120	

MATRIX SPIKE & MATRIX SPIK	(E DUPLICA	ATE: 136660	00		1366601							
			MS	MSD								
	3	30235076001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	193	500	500	694	697	100	101	75-125	1	20	
Zinc	ug/L	235000	500	500	232000	230000	-580	-960	75-125	1	20	ML

SAMELE DOFLICATE. 1300399		30235076001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	193	198	2	20	
Zinc	ug/L	235000	238000	1	20	

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







QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

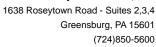
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 11/08/2017 03:55 PM

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235076

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30235076001	RW12-MW(S)	EPA 3005A	278180	EPA 6010C	278273
30235076002	RW12-MW(I)	EPA 3005A	278180	EPA 6010C	278273
30235076003	RW14-MW(S) Change	LU DIAME NAVAMON	278180	EPA 6010C	278273
30235076004	RW20-MW(S) Change	a to RVV15-IVIVV(S)	278180	EPA 6010C	278273
30235076005	RW20-MW(I) Change	d to P\\/15_M\\//(I)	278180	EPA 6010C	278273
30235076006	RW18-MW(S)	a to 10 10 10 10 10 10 10 10 10 10 10 10 10	278180	EPA 6010C	278273
30235076007	RW18-MW(I)	EPA 3005A	278180	EPA 6010C	278273
30235076008	RW13-MW(I)	EPA 3005A	278180	EPA 6010C	278273
30235076009	RW10-MW(I)	EPA 3005A	278180	EPA 6010C	278273

Pace Analytical"

CHAIN-OF-CUSTODY / Analytical Request Document

16)

(Care

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

Pace Project No./ Lab I.D. Samples Intact (MN) DRINKING WATER SAMPLE CONDITIONS 7 OTHER Custody Sealed Cooler (Y/N) ŏ 30235076 3588 38 Ice (Y/N) Received on GROUND WATER ubiseA O° ni gmaT Page: ΔM 6 REGULATORY AGENCY RCRA Requested Analysis Filtered (Y/N) TIME GIUMCC DATE Signed 1/03/19 30235076 Site Location STATE NPDES DATE UST 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION ofal Zinc 6010 0100 mulmbeO isto EnviroAnalytics Group ¶ je9T eieylenA[育N/A Important Note: By slianing this form you are accepting Pace's NET 30 day payment terms and agreeing to late changes of 1.5% per month for any invoices het gala within 30 taps. TediC Samantha Bayura Methanol Laura Sargent Vanne Preservatives Va₂S₂O₃ HOBN HCI ^EONH Company Name: OS2H 1545 Manager: Pace Profile #: Pace Quote Reference: Pace Project Section C Unpreserved TIME 6 Attention: Address: SAMPLER NAME AND SIGNATURE # OF CONTAINERS PRINT Name of SAMPLER: SIGNATURE of SAMPLER 150 H SAMPLE TEMP AT COLLECTION DATE 14/1 853 205 34 8/3 S'D' 35 1 1409 TIME COMPOSITE END/GRAB COLLECTED DATE <u>(7</u> Project Name: Rod and Wire Mill GW Sampling RELINQUISHED BY / AFFILIATION MAIL COMPOSITE Project Number: DATE Report To: James Calenda Stewart Kabis Required Project Information: SAMPLE TYPE (G=GRAB C=COMP) S Purchase Order No.: MATRIX CODE and Section B Copy To: Valid Matrix Codes § ¥ § 유민 DRINKING WATER WATER WASTE WATER PRODUCT SOIL/SOLID 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroaralyticsgroup.com OIL Sparrows Point, MD 21219 ADDITIONAL COMMENTS PW13- M12(I) RUSSO - MWA RWIO-RWA (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE BUB-RUG プライトを必 EnviroAnalytics Group 202 M WS RWI4-MWK 20 19 - MWG) RS18-18 5 Day Fax: SAMPLEID Section D Required Olient Information Section A Required Client Information: 314-620-3056 Requested Due Date/TAT: Сотрапу: Address: Email To: Phone: Page 18 of 19 9 ¥ 2 N w ø o # MBTI ∞

Pittsburgh La	ab Sample Collui	HOH	ope	шк	eceipi		302330/
Pace Analytical	Client Name:		5	PON	VWD	Project	#
Courier: Fed Ex Tracking #:	UPS USPS Clien		Comm	ercial	Pace Other		Label MM LIMS Login JPM
Custody Seal on Coole	r/Box Present: 🔲 yes		no	Seals	s intact: 🔲 yes	□ no	
Thermometer Used	4100	Туре	of Ice	Wel	t Blue None		
Cooler Temperature		Ű	·c		ection Factor: H).()•c _{Fin}	al Temp: / () °C
Temp should be above free			•				
•						Date ar conte	nd Initials of person examining
Comments:		Yes	No	N/A			
Chain of Custody Preser	it:		<u> </u>		1.		
Chain of Custody Filled (Out;	S			2.		
Chain of Custody Reling	uished:	/			3.		
Sampler Name & Signatu	ure on COC:				4.		
Sample Labels match CO		A CONTRACTOR OF THE PARTY OF TH			5.		
-Includes date/time/ID		N	77_	_			
Samples Arrived within H					6.		
Short Hold Time Analys			/		7.	21147	
Rush Turn Around Time		- Andrew			8.		
Sufficient Volume:		- James J			9.		
Correct Containers Used		1			10.		
-Pace Containers Use		No.					
Containers Intact:					11.		
Orthophosphate field filte	red			/	12.		
	e/NPDES sample field filtered				13.		
Organic Samples chec				1	14.		
Filtered volume received					15.		
All containers have been ch	ecked for preservation.	/			16.		
All containers needing press compliance with EPA recom	(()	/					
exceptions: VOA, colifor					Initial when completed	Date/time of preservation	
					Lot # of added preservative		
Headspace in VOA Vials	(>6mm):				17.		
Trip Blank Present:	(Zohin).				18.		
•	Brocent						
Trip Blank Custody Seals Rad Aqueous Samples				/Seement	Initial when	Date:	
<u></u>					completed:	Date:	
Client Notification/ Reso				Deto	Time:	Cont	facted By:
				Da(e/	Time:		
Comments/ Resolution:							
<u>-</u>						#1 1	

 $\ \square$ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



November 10, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on November 06, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

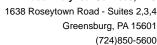
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Indiana Certification
Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

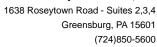
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30235212001	RW16-MW(I)	Water	11/06/17 09:14	11/06/17 22:05
30235212002	RW16-MW(S)	Water	11/06/17 10:03	11/06/17 22:05
30235212003	RW11-MW(S)	Water	11/06/17 11:22	11/06/17 22:05
30235212004	RW11-MW(I)	Water	11/06/17 11:57	11/06/17 22:05
30235212005	RW09-MW(S)	Water	11/06/17 12:36	11/06/17 22:05
30235212006	RW09-MW(I)	Water	11/06/17 13:13	11/06/17 22:05

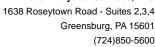


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30235212001	RW16-MW(I)	EPA 6010C	PJD	2
30235212002	RW16-MW(S)	EPA 6010C	PJD	2
30235212003	RW11-MW(S)	EPA 6010C	PJD	2
30235212004	RW11-MW(I)	EPA 6010C	PJD	2
30235212005	RW09-MW(S)	EPA 6010C	PJD	2
30235212006	RW09-MW(I)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: November 10, 2017

General Information:

6 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 278387

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

• DUP (Lab ID: 1367407)

Zinc

Additional Comments:

Batch Comments:

Cadminum failed on the PDS.

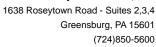
• QC Batch: 278453

Analyte Comments:

QC Batch: 278387

1c: Cadminum failed on the PDS.BLANK (Lab ID: 1367402)

• Cadmium





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: November 10, 2017

Analyte Comments:

QC Batch: 278387

1c: Cadminum failed on the PDS.

- BLANK (Lab ID: 1367402)
 - Zinc
- DUP (Lab ID: 1367404)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1367407)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1367403)
 - Cadmium
 - Zinc
- MS (Lab ID: 1367405)
 - Cadmium
 - Zinc
- MS (Lab ID: 1367408)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1367406)
 - Cadmium
 - Zinc
- RW09-MW(I) (Lab ID: 30235212006)
 - Cadmium
 - Zinc
- RW09-MW(S) (Lab ID: 30235212005)
 - Cadmium
 - Zinc
- RW11-MW(I) (Lab ID: 30235212004)
 - Cadmium
 - Zinc
- RW11-MW(S) (Lab ID: 30235212003)
 - Cadmium
 - Zinc
- RW16-MW(I) (Lab ID: 30235212001)
 - Cadmium
 - Zinc
- RW16-MW(S) (Lab ID: 30235212002)
 - Cadmium
 - Zinc

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Date: 11/10/2017 02:21 PM

Sample: RW16-MW(I)	Lab ID:	30235212001	Collecte	d: 11/06/17	09:14	Received: 11/	Received: 11/06/17 22:05 Matrix: Water				
			Report								
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A					
Cadmium	3.0 U	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 21:39	7440-43-9	1c		
Zinc	441	ug/L	10.0	1.0	1	11/08/17 13:11	11/09/17 21:39	7440-66-6	1c		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Date: 11/10/2017 02:21 PM

Sample: RW16-MW(S)	Lab ID:	30235212002	2 Collected: 11/06/17 10:03 Received: 11/06/17 22:05 Matrix: Water					atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 21:53	7440-43-9	1c
Zinc	48.6	ug/L	10.0	1.0	1	11/08/17 13:11	11/09/17 21:53	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Date: 11/10/2017 02:21 PM

Sample: RW11-MW(S)	Lab ID:	3023521200	3 Collecte	d: 11/06/17	7 11:22	Received: 11/	/06/17 22:05 Ma	/17 22:05 Matrix: Water			
			Report								
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Me	thod: El	PA 3005A					
Cadmium	2.1J	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 21:56	7440-43-9	1c		
Zinc	18300	ua/L	1000	104	100	11/08/17 13:11	11/09/17 22:37	7440-66-6	1c		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Date: 11/10/2017 02:21 PM

Sample: RW11-MW(I)	Lab ID:	30235212004	Collecte	d: 11/06/17	7 11:57	Received: 11/	ved: 11/06/17 22:05 Matrix: Water			
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	thod: El	PA 3005A				
Cadmium	1460	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 22:03	7440-43-9	1c	
Zinc	207000	ug/L	1000	104	100	11/08/17 13:11	11/09/17 22:40	7440-66-6	1c	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Date: 11/10/2017 02:21 PM

Sample: RW09-MW(S)	Lab ID:	30235212005	Collecte	d: 11/06/17	12:36	Received: 11/	06/17 22:05 Ma	atrix: Water	
			Report					0.0	
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	10.5	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 22:06	7440-43-9	1c
Zinc	9290	ug/L	1000	104	100	11/08/17 13:11	11/09/17 22:42	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Date: 11/10/2017 02:21 PM

Sample: RW09-MW(I)	Lab ID:	30235212006	Collecte	d: 11/06/17	7 13:13	Received: 11/	11/06/17 22:05 Matrix: Water			
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	8.8	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 22:08	7440-43-9	1c	
Zinc	67900	ug/L	1000	104	100	11/08/17 13:11	11/09/17 22:45	7440-66-6	1c	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Date: 11/10/2017 02:21 PM

QC Batch: 278387 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30235212001, 30235212002, 30235212003, 30235212004, 30235212005, 30235212006

METHOD BLANK: 1367402 Matrix: Water

Associated Lab Samples: 30235212001, 30235212002, 30235212003, 30235212004, 30235212005, 30235212006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.87	11/09/17 21:34	1c
Zinc	ug/L	10.0 U	10.0	1.0	11/09/17 21:34	1c

LABORATORY CONTROL SAMPLE:	1367403					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	500	100	80-120	1c
Zinc	ug/L	500	506	101	80-120	1c

MATRIX SPIKE & MATRIX SPIK		1367406										
			MS	MSD								
	3	30235212001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	3.0 U	500	500	512	484	102	97	75-125	6	20	1c
Zinc	ug/L	441	500	500	931	912	98	94	75-125	2	20	1c

MATRIX SPIKE SAMPLE:	1367408						
		30235330005	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	3.0 U	500	512	102	75-125	1c
Zinc	ug/L	38.7	500	553	103	75-125	1c

SAMPLE DUPLICATE: 1367404						
		30235212001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	3.0 U	3.0 U		20	0 1c
Zinc	ug/L	441	442	0	20	0 1c

SAMPLE DUPLICATE: 1367407						
		30235330005	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	3.0 U	0.90J		2	0 1c
Zinc	ug/L	38.7	49.4	24	2	0 1c,D6

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 278453

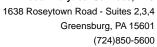
[1] Cadminum failed on the PDS.

ANALYTE QUALIFIERS

Date: 11/10/2017 02:21 PM

1c Cadminum failed on the PDS.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235212

Date: 11/10/2017 02:21 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30235212001	RW16-MW(I)	EPA 3005A	278387	EPA 6010C	278453
30235212002	RW16-MW(S)	EPA 3005A	278387	EPA 6010C	278453
30235212003	RW11-MW(S)	EPA 3005A	278387	EPA 6010C	278453
30235212004	RW11-MW(I)	EPA 3005A	278387	EPA 6010C	278453
30235212005	RW09-MW(S)	EPA 3005A	278387	EPA 6010C	278453
30235212006	RW09-MW(I)	EPA 3005A	278387	EPA 6010C	278453

Pace Analytical

Section B

Section A

CHAIN-OF WO#: 30235212

Pace Project No./ Lab f.D. DRINKING WATER SAMPLE CONDITIONS 00 700 8 OTHER ö GROUND WATER Residual Chlorine (YM) Page: REGULATORY AGENCY M M RCRA TIME Requested Analysis Filtered (Y/N) STATE: Site Location NPDES DATE UST 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION <u>メ</u> 又 又 ofal Zinc 6010 otal Cadmium 6010 Sompany Name: EnviroAnalytics Group Jasi zievisnA ÎN/λ Other Samantha Bayura Methanol Laura Sargent Preservatives Na₂S₂O₃ HOeN HCI HNO3 888 OS^zH Reference: Pace Project Manager: Pace Profile #: 220 TIME Unpreserved Attention: Pace Quote Address: # OF CONTAINERS SAMPLE TEMP AT COLLECTION DATE 1003 1123 153 333 1236 <u>ক</u> TIME COMPOSITE END/GRAB DATE COLLECTED Project Name: Rod and Wire Mill GW Sampling ARR RELINQUISHED BY / AFFILIATION TIME COMPOSITE 176384M Report To: James Calenda Copy To: Stewart Kabis Required Project Information: O (G=GRAB C=COMP) 39YT 3J9MA2 Purenase Order No.: ١-٦ Project Number: **HATRIX CODE** Valid Matrix Codes
MATRIX CODE DRINKING WATER
WATER
WASTE WATER
WASTE WATER
SOLVSOLID
OIL
WIPE
AMR
ATTISSUE 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 ADDITIONAL COMMENTS 01509- TV RVII-MUT RWO9 - MW/S) 8 WIG- MW(S) (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE EnviroAnalytics Group 2 M 11- M W(S) 1516-FIX 5 Day SAMPLED Fax Required Olient Information Required Client Information: Phone: 314-620-3056 Requested Due Date/TAT: Section D Сопрапу: Email To: Address; 9 Ξ 7 Page 16 of 17 00 'n 9 # MBTI N m 0

(N/A)

Samples Intact

Cooler (Y/N) Custody Sealed

Received on fce (Y/N)

O" ni qmaT

DATE Signed (MM/DD/YY): 11/Olo /13

M Calumbo

PRINT Name of SAMPLER: JEANORD

SIGNATURE of SAMPLER

SAMPLER NAME AND SIGNATURE

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.594/er-month for any involces not paid within 50 days

Pittsburgh Lab Sample Cond	dition	Upo	on F	Receipt	
Pace Analytical Client Name:	_		En	vicoAra.	Project # 30 2 3 5 2 1
Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Clie	ent 🗆	Comn	nercia	Pace Other	Label AM LIMS Login PAM
Custody Seal on Cooler/Box Present: yes	ф	no	Sea	ls intact:	По
Thermometer Used	<i>i</i> Type	of Ice	: We	et Blue None	
Cooler Temperature Observed Temp		۰ C	•		O°C Final Temp: 3.0 °C
Temp should be above freezing to 6°C		_			
					Date and Initials of person examining contents:
Comments:	Yes	No	N/A		and the second s
Chain of Custody Present:		<u> </u>		1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X		<u> </u>	4.	
Sample Labels match COC:	X			5.	
-Includes date/time/ID Matrix: V	<u>VÍ</u>		_		
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):	ľ	X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	X			9.	
Correct Containers Used:	X			10.	
-Pace Containers Used:	X				
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtere	d		X	13.	
Organic Samples checked for dechlorination:			Z	14.	
Filtered volume received for Dissolved tests			X	15.	
All containers have been checked for preservation.	X			16.	
All containers needing preservation are found to be in compliance with EPA recommendation.	X	Mayor o			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed Lot # of added preservative	Date/time of preservation
Headspace in VOA Vials (>6mm):			X	17.	
Trip Blank Present:		X	No.	18.	
Trip Blank Custody Seals Present			X		
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed:	Date:
Client Notification/ Resolution: Person Contacted: Comments/ Resolution:			Date/	Fime:	Contacted By:

 $\hfill \Box$ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



November 10, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on November 07, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091
Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30235330001	RW08-MW(S)	Water	11/07/17 09:20	11/07/17 23:31
30235330002	RW08-MW(I)	Water	11/07/17 09:48	11/07/17 23:31
30235330003	RW07-MW(S)	Water	11/07/17 10:42	11/07/17 23:31
30235330004	RW07-MW(I)	Water	11/07/17 11:27	11/07/17 23:31
30235330005	RW06-MW(D)	Water	11/07/17 12:31	11/07/17 23:31
30235330006	RW06-MW(I)	Water	11/07/17 13:03	11/07/17 23:31
30235330007	RW06-MW(S)	Water	11/07/17 14:04	11/07/17 23:31



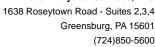


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30235330001	RW08-MW(S)	EPA 6010C	PJD	2
30235330002	RW08-MW(I)	EPA 6010C	PJD	2
30235330003	RW07-MW(S)	EPA 6010C	PJD	2
30235330004	RW07-MW(I)	EPA 6010C	PJD	2
30235330005	RW06-MW(D)	EPA 6010C	PJD	2
30235330006	RW06-MW(I)	EPA 6010C	PJD	2
30235330007	RW06-MW(S)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: November 10, 2017

General Information:

7 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 278387

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

• DUP (Lab ID: 1367407)

• Zinc

Additional Comments:

Batch Comments:

Cadminum failed on the PDS.

• QC Batch: 278453

Analyte Comments:

QC Batch: 278387

1c: Cadminum failed on the PDS.BLANK (Lab ID: 1367402)

• Cadmium



PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: November 10, 2017

Analyte Comments:

QC Batch: 278387

1c: Cadminum failed on the PDS.

- BLANK (Lab ID: 1367402)
 - Zinc
- DUP (Lab ID: 1367404)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1367407)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1367403)
 - Cadmium
 - Zinc
- MS (Lab ID: 1367405)
 - Cadmium
 - Zinc
- MS (Lab ID: 1367408)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1367406)
 - Cadmium
 - Zinc
- RW06-MW(D) (Lab ID: 30235330005)
 - Cadmium
 - Zinc
- RW06-MW(I) (Lab ID: 30235330006)
 - Cadmium
 - Zinc
- RW06-MW(S) (Lab ID: 30235330007)
 - Cadmium
 - Zinc
- RW07-MW(I) (Lab ID: 30235330004)
 - Cadmium
 - Zinc
- RW07-MW(S) (Lab ID: 30235330003)
 - Cadmium
 - Zinc
- RW08-MW(I) (Lab ID: 30235330002)
 - Cadmium
 - Zinc
- RW08-MW(S) (Lab ID: 30235330001)
 - Cadmium
 - Zinc

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Date: 11/10/2017 02:24 PM

Sample: RW08-MW(S)	Lab ID:	30235330001	Collecte	d: 11/07/17	09:20	Received: 11/	07/17 23:31 M		
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 22:11	7440-43-9	1c
Zinc	1600	ug/L	10.0	1.0	1	11/08/17 13:11	11/09/17 22:11	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Date: 11/10/2017 02:24 PM

Sample: RW08-MW(I)	Lab ID:	30235330002	Collecte	d: 11/07/17	09:48	Received: 11/	1/07/17 23:31 Matrix: Water			
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A				
Cadmium	0.88J	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 22:13	7440-43-9	1c	
Zinc	21.5	ug/L	10.0	1.0	1	11/08/17 13:11	11/09/17 22:13	7440-66-6	1c	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Date: 11/10/2017 02:24 PM

Sample: RW07-MW(S)	Lab ID:	30235330003	Collecte	d: 11/07/17	10:42	Received: 11/	ved: 11/07/17 23:31 Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A				
Cadmium	5.8	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 22:15	7440-43-9	1c	
Zinc	227	ug/L	10.0	1.0	1	11/08/17 13:11	11/09/17 22:15	7440-66-6	1c	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Date: 11/10/2017 02:24 PM

Sample: RW07-MW(I)	Lab ID:	30235330004	Collecte	d: 11/07/17	11:27	Received: 11/	1/07/17 23:31 Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A										
Cadmium	5.1	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 22:18	7440-43-9	1c		
Zinc	1650	ug/L	10.0	1.0	1	11/08/17 13:11	11/09/17 22:18	7440-66-6	1c		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Date: 11/10/2017 02:24 PM

Sample: RW06-MW(D)	Lab ID:	30235330005	Collecte	d: 11/07/17	7 12:31	Received: 11/	07/17 23:31 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 22:20	7440-43-9	1c
Zinc	38.7	ug/L	10.0	1.0	1	11/08/17 13:11	11/09/17 22:20	7440-66-6	1c,D6





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Date: 11/10/2017 02:24 PM

Sample: RW06-MW(I)	Lab ID:	30235330006	Collecte	d: 11/07/17	13:03	Received: 11/	07/17 23:31 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	5.4	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 22:32	7440-43-9	1c
Zinc	909	ug/L	10.0	1.0	1	11/08/17 13:11	11/09/17 22:32	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Date: 11/10/2017 02:24 PM

Sample: RW06-MW(S)	Lab ID:	30235330007	Collecte	d: 11/07/17	14:04	Received: 11/	07/17 23:31 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	11/08/17 13:11	11/09/17 22:35	7440-43-9	1c
Zinc	2.3J	ug/L	10.0	1.0	1	11/08/17 13:11	11/09/17 22:35	7440-66-6	1c



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Date: 11/10/2017 02:24 PM

Zinc

QC Batch: 278387 Analysis Method: EPA 6010C QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

Associated Lab Samples: 30235330001, 30235330002, 30235330003, 30235330004, 30235330005, 30235330006, 30235330007

METHOD BLANK: 1367402 Matrix: Water

Associated Lab Samples: 30235330001, 30235330002, 30235330003, 30235330004, 30235330005, 30235330006, 30235330007

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.87	11/09/17 21:34	1c
Zinc .	ua/l	10.0 U	10.0	1.0	11/09/17 21:34	1c

LABORATORY CONTROL SAMPLE:	1367403					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	500	100	80-120	1c
Zinc	ug/L	500	506	101	80-120	1c

MATRIX SPIKE & MATRIX SPIK	KE DUPLICA	ATE: 136740	05		1367406							
			MS	MSD								
	3	30235212001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	3.0 U	500	500	512	484	102	97	75-125	6	20	1c
Zinc	ug/L	441	500	500	931	912	98	94	75-125	2	20	1c

MATRIX SPIKE SAMPLE:	1367408						
		30235330005	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	3.0 U	500	512	102	75-125	1c
Zinc	ug/L	38.7	500	553	103	75-125	1c

SAMPLE DUPLICATE: 1367404		30235212001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	3.0 U	3.0 U		2	0 1c
Zinc	ug/L	441	442	0	2	0 1c

SAMPLE DUPLICATE: 1367407						
		30235330005	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	3.0 U	0.90J		20) 1c
Zinc	ug/L	38.7	49.4	24	20	1c,D6

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 278453

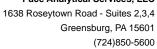
[1] Cadminum failed on the PDS.

ANALYTE QUALIFIERS

Date: 11/10/2017 02:24 PM

1c Cadminum failed on the PDS.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235330

Date: 11/10/2017 02:24 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30235330001	RW08-MW(S)	EPA 3005A	278387	EPA 6010C	278453
30235330002	RW08-MW(I)	EPA 3005A	278387	EPA 6010C	278453
30235330003	RW07-MW(S)	EPA 3005A	278387	EPA 6010C	278453
30235330004	RW07-MW(I)	EPA 3005A	278387	EPA 6010C	278453
30235330005	RW06-MW(D)	EPA 3005A	278387	EPA 6010C	278453
30235330006	RW06-MW(I)	EPA 3005A	278387	EPA 6010C	278453
30235330007	RW06-MW(S)	EPA 3005A	278387	EPA 6010C	278453

CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately

Section A	Section A	Section B		,				Se	Section C											Page:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,) Jo		
Kequired	rient information:	Required Project	I III	rmation:				Ē	Invoice Information:	mation						-					1		liar-		
Company:	EnviroAnalytics Group	Report To: James Calenda	es C	Calenda				¥	Attention:	ğ	Laura Sargent	ırgent									•				
Address:	1600 Sparrows Point Blvd, Suite B2	Copy To: Stew	wart	Stewart Kabis				රී	Company Name:	lame:	Envir	EnviroAnalytics Group	dics G	roup			REGULATORY AGENCY	ATOR	YAGE	NCY	: V			1 4 A 1 A 1 A A	
	Sparrows Point, MD 21219							₹	Address:	1650	Des Pe	1650 Des Peres Road, Suite 303 St. Louis, MO 63131	, Suite	303 St. L	ouis, M	5 63131	l k	NPDES	J.O	ROUNE	GROUND WATER	ار ار	DRIN	DRINKING WATER	4TER
Email To:	icalenda@enviroanalyticsgroup.com	Purchase Order No.:	No.:					P.a.	Pace Quote Reference:								T UST	Ľ	œ L	RCRA		L.	OTHER	ا مد	
Phone: 3	314-620-3056 Fax:	Project Name:	Rod	Rod and Wire Mill GW Sampling	ARI GW &	Sampling		e M	Pace Project Manager		mant	Samantha Bayura	ura				Site L	Site Location		1	7777				
Requested	Requested Due Date/TAT: 5 Day	Project Number:	1	170284K	1 × 4 ×	-		E.	Pace Profile #:	#								STATE		ZE	777777				
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		ee valid codes i	OD=D 8ARB		COMPOSITE	COMPOSITE END/GRAB	AB B	OLLECTION		1				Î					: 3023533 	X E	ķ e	M M			
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Samples intact (V/Y)

Custody Sealed Coolet (Y/N)

Received on Ice (Y/N)

O° ni qmaT

山の K DATE Signed (MM/DDVY): // / 3子/

POJDE

SAMPLER NAME AND SIGNATURE

Page 17 of 18

Important Note: By staning this form you are accepting Pace's NET 30 day payment terms and agreeing to tate charges of 1.5% per rhoriti for any involces norbald within 30 days.

SIGNATURE of SAMPLER PRINT Name of SAMPLER:

Pittsburgh Lab Sample Col	IGILION	Ope	и г	receibi		2007	16 OT 25 II
Pace Analytical Client Name:			ŽiC	oAna	Project #	10235	3 3 0
Courier: Fed Ex UPS USPS C	lient 🛭	Comm	ercial	Pace Other		Label	
Tracking #:				I		LIMS Login	
Custody Seal on Cooler/Box Present:	es b	no	Seal	ls intact: ☐ yes	□ no		
Thermometer Used	,	of Ice:	We) Blue None			
Cooler Temperature Observed Temp		٠C		rection Factor: 10	() °C Fina	1 Temp: 2-5	· c
Temp should be above freezing to 6°C		-					
					Date and content	Initials of person	examining
Comments:	Yes	No	N/A	<u> </u>			
Chain of Custody Present:				1.	·		
Chain of Custody Filled Out:	X		<u> </u>	2.			
Chain of Custody Relinquished:				3.			
Sampler Name & Signature on COC:	IX.			4.			
Sample Labels match COC:				5.			
-Includes date/time/ID Matrix:	M						
Samples Arrived within Hold Time:	X			6.			
Short Hold Time Analysis (<72hr remaining):	<u> </u>	X		7.			
Rush Turn Around Time Requested:	X			8.			
Sufficient Volume:	X			9.		****	
Correct Containers Used:	\times			10.			
-Pace Containers Used:	X						
Containers Intact:	\times			11.			
Orthophosphate field filtered			X	12.			
Hex Cr Aqueous Compliance/NPDES sample field filte	red		×	13.			
Organic Samples checked for dechlorination	n:		X	14.		<u>-</u> .	·
Filtered volume received for Dissolved tests			<u>X</u>	15.			
All containers have been checked for preservation.	X			16.		•	
All containers needing preservation are found to be in	V						
compliance with EPA recommendation.		- 1		Initial when \(\int \)	Date/time of		
exceptions: VOA, coliform, TOC, O&G, Phenolic	cs			completed TIV	preservation		
				Lot # of added preservative			
Headspace in VOA Vials (>6mm):	Ţ		X	17.			
Trip Blank Present:		V	./	18.			
Trip Blank Custody Seals Present		-/ }	X				
Rad Aqueous Samples Screened > 0.5 mrem/h	ır		$\overline{\mathbf{x}}$	Initial when completed:	Date:		
OU. A N. AKI AKI AKI AND D. A. H. Milana			/	completed.	Dure.		<u></u>
Client Notification/ Resolution:		ı	Date/	Time:	Contac	cted By:	
Person Contacted: Comments/ Resolution:			_4.01				
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☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



November 13, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on November 09, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification

Illinois Certification
Indiana Certification

Iowa Certification #: 391 Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

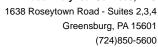
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



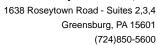


SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30235591001	RW02-MW(I)	Water	11/09/17 09:17	11/09/17 23:20
30235591002	RW02-MW(S)	Water	11/09/17 09:57	11/09/17 23:20
30235591003	RW01-MW(S)	Water	11/09/17 10:51	11/09/17 23:20
30235591004	RW01-MW(I)	Water	11/09/17 11:19	11/09/17 23:20
30235591005	RW03-MW(S)	Water	11/09/17 12:28	11/09/17 23:20
30235591006	RW03-MW(I)	Water	11/09/17 13:11	11/09/17 23:20
30235591007	RW04-MW(S)	Water	11/09/17 13:52	11/09/17 23:20
30235591008	RW21-MW(I) Changed to RW2	2-MW(I)	11/09/17 14:39	11/09/17 23:20



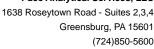


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30235591001	RW02-MW(I)	EPA 6010C	PJD	2
30235591002	RW02-MW(S)	EPA 6010C	PJD	2
30235591003	RW01-MW(S)	EPA 6010C	PJD	2
30235591004	RW01-MW(I)	EPA 6010C	PJD	2
30235591005	RW03-MW(S)	EPA 6010C	PJD	2
30235591006	RW03-MW(I)	EPA 6010C	PJD	2
30235591007	RW04-MW(S)	EPA 6010C	PJD	2
30235591008	RW21-MW(I) Changed to RW22-MW(I)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: November 13, 2017

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Sample: RW02-MW(I)	Lab ID:	30235591001	Collecte	d: 11/09/17	09:17	Received: 11/	09/17 23:20 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	11/10/17 11:55	11/10/17 20:27	7440-43-9	
Zinc	38.6	ug/L	10.0	1.0	1	11/10/17 11:55	11/10/17 20:27	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Sample: RW02-MW(S)	Lab ID:	30235591002	Collecte	d: 11/09/17	09:57	Received: 11/	09/17 23:20 Ma	atrix: Water	
Devenuetore	Daguita	Llaita	Report	MDI	D E	Duamanad	A l	CACNI	Overl
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	7.7	ug/L	3.0	0.87	1	11/10/17 11:55	11/10/17 20:42	7440-43-9	
Zinc	1460	ug/L	10.0	1.0	1	11/10/17 11:55	11/10/17 20:42	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Date: 11/13/2017 04:19 PM

Sample: RW01-MW(S)	Lab ID:	30235591003	Collecte	d: 11/09/17	10:51	Received: 11/	09/17 23:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	21.7	ug/L	3.0	0.87	1	11/10/17 11:55	11/10/17 20:44	7440-43-9	
Zinc	25200	ug/L	1000	104	100	11/10/17 11:55	11/10/17 21:06	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Sample: RW01-MW(I)	Lab ID:	Lab ID: 30235591004		d: 11/09/17	11:19	Received: 11/	Received: 11/09/17 23:20 Matrix: Water		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Cadmium Zinc	3.0 U 29.0	ug/L ug/L	3.0 10.0	0.87 1.0	1 1	11/10/17 11:55 11/10/17 11:55	11/10/17 20:52 11/10/17 20:52		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Sample: RW03-MW(S)	Lab ID:	30235591005	Collecte	d: 11/09/17	12:28	Received: 11/	09/17 23:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	8.5	ug/L	3.0	0.87	1	11/10/17 11:55	11/10/17 20:55	7440-43-9	
Zinc	14100	ug/L	1000	104	100	11/10/17 11:55	11/10/17 21:09	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Sample: RW03-MW(I)	Lab ID:	30235591006	Collecte	d: 11/09/17	' 13:11	Received: 11/	09/17 23:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	25.2	ug/L	3.0	0.87	1	11/10/17 11:55	11/10/17 20:57	7440-43-9	
Zinc	1750	ug/L	10.0	1.0	1	11/10/17 11:55	11/10/17 20:57	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Sample: RW04-MW(S)	Lab ID:	30235591007	Collecte	d: 11/09/17	13:52	Received: 11/	09/17 23:20 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A		_	
Cadmium	1.1J	ug/L	3.0	0.87	1	11/10/17 11:55	11/10/17 21:00	7440-43-9	
Zinc	123	ug/L	10.0	1.0	1	11/10/17 11:55	11/10/17 21:00	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Date: 11/13/2017 04:19 PM

Sample: RW21-MW(I) Changed to RW22-MW(I) 08 Collected: 11/09/17 14:39 Received: 11/09/17 23:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EP	A 6010C Prep	aration Me	thod: E	PA 3005A			
Cadmium Zinc	3.8 3700	ug/L ug/L	3.0 10.0	0.87 1.0	1 1	11/10/17 11:55 11/10/17 11:55	11/10/17 21:02 11/10/17 21:02		



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

SAMDLE DUDLICATE: 1269725

Date: 11/13/2017 04:19 PM

QC Batch: 278700 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30235591001, 30235591002, 30235591003, 30235591004, 30235591005, 30235591006, 30235591007,

30235591008

METHOD BLANK: 1368723 Matrix: Water

Associated Lab Samples: 30235591001, 30235591002, 30235591003, 30235591004, 30235591005, 30235591006, 30235591007,

30235591008

Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.87	11/10/17 20:22	
Zinc	ug/L	10.0 U	10.0	1.0	11/10/17 20:22	

LABORATORY CONTROL SAMPLE:	1368724					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	505	101	80-120	
Zinc	ug/L	500	508	102	80-120	

MATRIX SPIKE & MATRIX SPIK	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1368726											
			MS	MSD								
	3	30235591001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	3.0 U	500	500	507	506	101	101	75-125	0	20	
Zinc	ug/L	38.6	500	500	534	532	99	99	75-125	0	20	

SAMPLE DUFLICATE. 1300723		30235591001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	3.0 U	3.0 U		20	
Zinc	ug/L	38.6	39.1	1	20	

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Pace Analytica

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

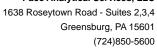
U - Indicates the compound was analyzed for, but not detected.

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

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

TNI - The NELAC Institute.

Date: 11/13/2017 04:19 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235591

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30235591001	RW02-MW(I)	EPA 3005A	278700	EPA 6010C	278756
30235591002	RW02-MW(S)	EPA 3005A	278700	EPA 6010C	278756
30235591003	RW01-MW(S)	EPA 3005A	278700	EPA 6010C	278756
30235591004	RW01-MW(I)	EPA 3005A	278700	EPA 6010C	278756
30235591005	RW03-MW(S)	EPA 3005A	278700	EPA 6010C	278756
30235591006	RW03-MW(I)	EPA 3005A	278700	EPA 6010C	278756
30235591007	RW04-MW(S)	EPA 3005A	278700	EPA 6010C	278756
30235591008	RW21-MW(I) Changed	I to RW22-MW(I)	278700	EPA 6010C	278756

Pace Analytical"

>ument

₽ Page. Invoice information: Section B Required Project Information: Section A Required Client Information:

	ı			
Company:	EnviroAnalytics Group	Report To: James Calenda	Attention: Laura Sargent	
Address:	1600 Sparrows Point Blvd, Suite B2	Copy To: Stewart Kabis	Company Name: EnviroAnalytics Group	REGULATORYAGENCY
			Address: 1650 Des Peres Road, Suite 303 St. Louis, MO 6313	I NPDES I GROUND WATER I DRINKING WATER
Email To:	o: icalenda@enviroanalyticsgroup.com	Purchase Order No.:	Pace Quote Reference:	F UST F RCRA F OTHER
Phone:	314-620-3056 Fax:	Project Name: Rod and Wire Mill GW Sampling	Pece Project Samantha Bayura	Site Location
Rednes	Requested Due Date/TAT: 5 Day	Project Number: 170384 M	Pace Profile #:	STATE: MID
			Requested	Requested Analysis Filtered (YIN)
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~	RWOI - MW(S)	102-1	 	503
4	EWOI-MWA)	6//	2 2	
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φ	RWO3-MW(I)	1311	<u>Q</u> X	9,00
^	RW04-MW5(S)	100 P	<u>R</u> 2	7 20 7
8	ROY-ROT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- - - - - - - - - - - - - -	200 d
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	ADDITIONAL COMMENTS	RELINQUISHED BY / AFRICIATION DATE	TIME ACCEPTED BY JAFFICIATION	DATE SAMPLE CONDITIONS
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Page		I Care Court		
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of 18		PRINT Name of SAMPLER: SIGNATURE of SAMPLER:	John Warpost	DATE Signed Temp in Received (Y/N)
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	Sample Cond					
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Courier: Fed Ex UPS			Comm	ercial	Pace Other _	Label AM LIMS Login BLM
Custody Seal on Cooler/Box	Present: Dyes		no	~] no
Thermometer Used	8		of Ice:		t) Blue None	and another and
Cooler Temperature Obs	served Temp 2.	2	٠c	Corr	ection Factor: () - (C Final Temp:
Temp should be above freezing to	o 6°C					Date and Initials,of person examining
			r		7	contents: 1-10
Comments:		Yes	No	N/A		
Chain of Custody Present:		>			1.	
Chain of Custody Filled Out:		 		<u> </u>	2.	
Chain of Custody Relinquished	d:	X			3.	
Sampler Name & Signature or	COC:	KX.	_		4	
Sample Labels match COC:					5.	
-Includes date/time/ID	Matrix:	\mathcal{M}				
Samples Arrived within Hold T	ime:	1			6.	
Short Hold Time Analysis (<7	72hr remaining):		X		7.	
Rush Turn Around Time Req		X	,		8.	
Sufficient Volume:		头			9.	
Correct Containers Used:		X			10.	
-Pace Containers Used:		X				
Containers Intact:		X			11.	
Orthophosphate field filtered			-	X	12.	
Hex Cr Aqueous Compliance/NPD	ES sample field filtered			X	13.	
Organic Samples checked f			-	X	14.	
Filtered volume received for Di				\nearrow	15.	
All containers have been checked					16. 0\47	
All containers needing preservation compliance with EPA recommendations		Ź	-		PALC	
	O COC Dhamailea				Initial when AMC	Date/time of preservation
exceptions: VOA, coliform, TC	OC, O&G, Phenoics				Lot # of added	probo, rabon
				\	preservative	
Headspace in VOA Vials (>6m	ım):			<u> </u>	17.	
Trip Blank Present:			X		18.	
Trip Blank Custody Seals Prese	ent			<u>X</u>		
Rad Aqueous Samples Scree	ned > 0.5 mrem/hr		ľ	Y	Initial when completed:	Date:
Client Notification/ Resolution	n:	<u>_</u>		ــــــــــــــــــــــــــــــــــــــ		
Person Contacted:			1	Date/	Гіте:	Contacted B <u>y</u> :
Comments/ Resolution:						
		·····				

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



November 16, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on November 13, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification

Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086 Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888

North Carolina Certification #: 42706 North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



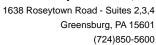


SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30235926001	RW22-MW(S) Changed to I	RW05-MW(S)	:20	11/13/17 22:50
30235926002	RW22-MW(I) Changed to	RW05-MW(I)	48	11/13/17 22:50
30235926003	RW19-MW(S)	Water	11/13/17 09:55	11/13/17 22:50
30235926004	RW19-MW(I)	Water	11/13/17 10:15	11/13/17 22:50



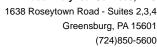


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30235926001	RW22-MW(S) Changed to RW05-MW(S)	21700100	CTS	2
30235926002	RW22-MW(I) Changed to RW05-MW(I)		CTS	2
30235926003	RW19-MW(S)	EPA 6010C	CTS	2
30235926004	RW19-MW(I)	EPA 6010C	CTS	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: November 16, 2017

General Information:

4 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

SD for 30235926-001 failed for Zn.

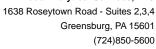
• QC Batch: 279206

Analyte Comments:

QC Batch: 279112

1c: SD for 30235926-001 failed for Zn.

- BLANK (Lab ID: 1370679)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1370681)
 - Cadmium
 - Zinc





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: November 16, 2017

Analyte Comments:

QC Batch: 279112

1c: SD for 30235926-001 failed for Zn.

- LCS (Lab ID: 1370680)
 - Cadmium
 - Zinc
- MS (Lab ID: 1370682)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1370683)
 - Cadmium
 - Zinc
- RW19-MW(I) (Lab ID: 30235926004)
 - Cadmium
 - Zinc
- RW19-MW(S) (Lab ID: 30235926003)
 - Cadmium
 - Zinc
- RW22-MW(I) (Lab ID: 30235926002)
 - Cadmium
 - Zinc
- RW22-MW(S) (Lab ID: 30235926001)
 - Cadmium
 - Zinc

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Date: 11/16/2017 04:04 PM

Sample: RW22-MW(S) Char	naed to RW0	5-MW(S)	3/17	10:20	Received: 11/	13/17 22:50 Ma	atrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A											
Cadmium Zinc	3.0 U 503	ug/L ug/L	3.0 10.0	0.87 1.0	1 1	11/15/17 07:47 11/15/17 07:47	11/16/17 12:52 11/16/17 12:52		1c 1c		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Date: 11/16/2017 04:04 PM

Sample: RW22-MW(I) Chang	ed to RW05	5-MW(I)		13/17	10:48	atrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A											
Cadmium Zinc	4.9 502	ug/L ug/L	3.0 10.0	0.87 1.0	1 1	11/15/17 07:47 11/15/17 07:47	11/16/17 13:06 11/16/17 13:06		1c 1c		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Date: 11/16/2017 04:04 PM

Sample: RW19-MW(S)	Lab ID:	30235926003	Collecte	d: 11/13/17	7 09:55	Received: 11/	13/17 22:50 Ma	atrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A											
Cadmium	4.4	ug/L	3.0	0.87	1	11/15/17 07:47	11/16/17 13:08	7440-43-9	1c		
Zinc	2730	ug/L	10.0	1.0	1	11/15/17 07:47	11/16/17 13:08	7440-66-6	1c		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Date: 11/16/2017 04:04 PM

Sample: RW19-MW(I)	Lab ID:	30235926004	Collecte	d: 11/13/1	7 10:15	Received: 11/	13/17 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	1770	ug/L	300	87.0	100	11/15/17 07:47	11/16/17 13:22	7440-43-9	1c
Zinc	3400000	ua/L	100000	10400	10000	11/15/17 07:47	11/16/17 13:27	7440-66-6	1c



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Zinc

QC Batch: 279112 Analysis Method: **EPA 6010C** QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

Associated Lab Samples: 30235926001, 30235926002, 30235926003, 30235926004

METHOD BLANK: 1370679 Matrix: Water Associated Lab Samples:

30235926001, 30235926002, 30235926003, 30235926004 Reporting Blank

MDL Parameter Limit Qualifiers Units Result Analyzed Cadmium 3.0 U 3.0 0.87 11/16/17 12:47 1c ug/L ug/L 10.0 U 10.0 1.0 11/16/17 12:47 1c

LABORATORY CONTROL SAMPLE: 1370680

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers ug/L Cadmium 500 495 99 80-120 1c ug/L Zinc 500 495 99 80-120 1c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1370682 1370683

		30235926001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	3.0 U	500	500	501	503	100	100	75-125	0	20	1c
Zinc	ug/L	503	500	500	978	989	95	97	75-125	1	20	1c

SAMPLE DUPLICATE: 1370681

Date: 11/16/2017 04:04 PM

		30235926001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	3.0 U	3.0 U		2	0 1c
Zinc	ug/L	503	491	2	2	0 1c

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Pace Analytica

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 279206

[1] SD for 30235926-001 failed for Zn.

ANALYTE QUALIFIERS

Date: 11/16/2017 04:04 PM

1c SD for 30235926-001 failed for Zn.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30235926

Date: 11/16/2017 04:04 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30235926001	RW22-MW(S)	Changed to RW05-MW(S)	12	EPA 6010C	279206
30235926002	RW22-MW(I)	Changed to RW05-MW(I)	12	EPA 6010C	279206
30235926003	RW19-MW(S)	EPA 3005A	279112	EPA 6010C	279206
30235926004	RW19-MW(I)	EPA 3005A	279112	EPA 6010C	279206

CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

~:5~

3

Section A	Track lateracellans	Section B Denuised Prised Information:	Section C	Page: of
Company	Mérce Groun	Report To: James Calenda	Attention: Laura Sargent	
	Eliviloral kalyace Croup		- 1	
Address:	1600 Sparrows Point Blvd, Suite B2	Copy To: Stewart Kabis	Company Name: EnviroAnalytics Group	REGULATORY AGENCY
	Sparrows Point, MD 21219		Address: 1650 Des Peres Road, Suite 303 St. Louis, MO 63131	F NPDES F GROUND WATER F DRINKING WATER
Email To:	icalenda@enviroanal/ticsgroup.com	Purchase Order No.:	Pace Quote Reference:	F UST F RCRA F OTHER
Phone:	314-620-3056 Fax:	Project Name: Rod and Wire Mill GW Sampling	Page Project Samantha Bayura	Site Location MID MID
Request	Requested Due Date/TAT: 5 Day	Project Number: 170384W	Pace Profile #:	STATE:
				Requested Analysis Filtered (YIN)
	Section D Valid Matrix Codes Required Client Information MATRIX CO	[Hel ot	Preservatives	
		WY WW WW WW WW START ENDIGRAB		(N/X) e
	Sample IDs Wipe AR (A-Z, 0-91, -) OTHER Sample IDs MUST BE UNIQUE TISSUE	LAbE (G=	PATAINERS S S S S S S S S S S S S	al Chlorine
ITEM#		XIRTAM TELETE DATE TIME	Typer Methan HNO ³ HCI HNO ³ HCI HNO ³ HCI Machese Hor HO HCI Machese HCI HCI Machese HCI HCI Machese HCI HCI HCI HCI HCI HCI HCI HCI HCI HCI	글 중 요 요 Pace Project No./ Lab I.D.
*	(2/C)M-500		NX IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	3
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!	ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION DATE	E A TIME / ACCEPTED BY AFFILIATION	DATE TIME SAMPLE CONDITIONS
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14 of		SAMPLERNAME AND SIGNATURE	IGNATURE	d on Sealed YAN)
15		PRINT Name of SAMPLER:	Leandra M Gill	emp ir ooler (Y/N)
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Pittsburgh Lab Sample Condi	ion I	Jpoi	n Re	eceipt
Pace Analytical Client Name:		er.		3023592
Courier: Fed Ex UPS USPS Client		Comme	ercial	Pace Other Label 11110
Tracking #:				LIMS Login /\(\mathbb{I}\)
Custody Seal on Cooler/Box Present: ☐ yes	d	10	Seals	s intact:
Thermometer Used	Type	of Ice:	Wet	Blue None
Cooler Temperature Observed Temp 3.5	17.0	j, c	Corre	ection Factor: 100 °C Final Temp: 3.5/2.9 °C
Temp should be above freezing to 6°C		`		
				Date and Initials of person examining contents:
Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:	7			3.
Sampler Name & Signature on COC:	1			4.
Sample Labels match COC:	<u>Z</u>			5.
-Includes date/time/ID Matrix:	M			
Samples Arrived within Hold Time:	7			6.
Short Hold Time Analysis (<72hr remaining):		<u> </u>		7.
Rush Turn Around Time Requested:	1			8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	K			11.
Orthophosphate field filtered	/		X	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.
Organic Samples checked for dechlorination:			\searrow	14.
Filtered volume received for Dissolved tests			7	15.
All containers have been checked for preservation.	X			16.
All containers needing preservation are found to be in compliance with EPA recommendation.	X	=		
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when Date/time of preservation Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	17.
Trip Blank Present:		X		<u>18.</u>
Trip Blank Custody Seals Present			\succeq	
Rad Aqueous Samples Screened > 0.5 mrem/hr			\nearrow	Initial when completed: Date:
Client Notification/ Resolution:	in the second	<u></u>		
Person Contacted:			Date/	/Time:Contacted By:
Comments/ Resolution:				

 \square A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



October 09, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on October 02, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification

Idaho Certification

Illinois Certification
Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: PA00091

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706

North Dakota Certification #: 42706

Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198

Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30231695001	RW06-MW(D)	Water	10/02/17 10:59	10/02/17 23:00
30231695002	RW06-MW(I)	Water	10/02/17 11:22	10/02/17 23:00
30231695003	RW06-MW(S)	Water	10/02/17 11:52	10/02/17 23:00
30231695004	RW03-MW(S)	Water	10/02/17 12:48	10/02/17 23:00
30231695005	RW03-MW(I)	Water	10/02/17 13:09	10/02/17 23:00
30231695006	RW04-MW(S)	Water	10/02/17 14:00	10/02/17 23:00
30231695007	RW16-MW(I)	Water	10/02/17 14:47	10/02/17 23:00



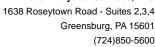


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30231695001	RW06-MW(D)	EPA 6010C	KAS	2
30231695002	RW06-MW(I)	EPA 6010C	KAS	2
30231695003	RW06-MW(S)	EPA 6010C	KAS	2
30231695004	RW03-MW(S)	EPA 6010C	KAS	2
30231695005	RW03-MW(I)	EPA 6010C	KAS	2
30231695006	RW04-MW(S)	EPA 6010C	KAS	2
30231695007	RW16-MW(I)	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: October 09, 2017

General Information:

7 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 274448

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30231695001,30231822004

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1349864)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Sample: RW06-MW(D)	Lab ID:	30231695001	Collecte	d: 10/02/17	7 10:59	Received: 10/	02/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A	-		
Cadmium	3.0 U	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 19:21	7440-43-9	
Zinc	29.0	ug/L	10.0	1.0	1	10/06/17 08:42	10/06/17 19:21	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Sample: RW06-MW(I)	Lab ID:	30231695002	Collecte	d: 10/02/17	7 11:22	Received: 10/	02/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	4.2	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 19:36	7440-43-9	
Zinc	615	ug/L	10.0	1.0	1	10/06/17 08:42	10/06/17 19:36	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Sample: RW06-MW(S)	Lab ID:	30231695003	Collecte	d: 10/02/17	7 11:52	Received: 10/	02/17 23:00 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 19:38	7440-43-9	
Zinc	2.4J	ug/L	10.0	1.0	1	10/06/17 08:42	10/06/17 19:38	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Sample: RW03-MW(S)	Lab ID:	30231695004	Collecte	d: 10/02/17	7 12:48	Received: 10/	02/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	11.0	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 19:46	7440-43-9	
Zinc	32100	ug/L	1000	104	100	10/06/17 08:42	10/06/17 20:25	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Sample: RW03-MW(I)	Lab ID:	30231695005	Collecte	d: 10/02/17	7 13:09	Received: 10/	02/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	20.2	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 19:48	7440-43-9	
Zinc	1810	ug/L	10.0	1.0	1	10/06/17 08:42	10/06/17 19:48	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Sample: RW04-MW(S)	Lab ID:	30231695006	Collected: 10/02/17 14:00 Re		Received: 10/02/17 23:00 Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Cadmium	3.0 U	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 19:51	7440-43-9	
Zinc	137	ug/L	10.0	1.0	1	10/06/17 08:42	10/06/17 19:51	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Sample: RW16-MW(I)	Lab ID:	30231695007	Collected: 10/02/17 14:47 Re		Received: 10/02/17 23:00 Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A	·		
Cadmium	3.0 U	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 19:53	7440-43-9	
Zinc	2000	ug/L	10.0	1.0	1	10/06/17 08:42	10/06/17 19:53	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Date: 10/09/2017 04:16 PM

QC Batch: 274448 Analysis Method: EPA 6010C QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

Associated Lab Samples: 30231695001, 30231695002, 30231695003, 30231695004, 30231695005, 30231695006, 30231695007

METHOD BLANK: 1349858 Matrix: Water

Associated Lab Samples: 30231695001, 30231695002, 30231695003, 30231695004, 30231695005, 30231695006, 30231695007

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.87	10/06/17 19:17	
Zinc	ua/L	10.0 U	10.0	1.0	10/06/17 19:17	

LABORATORY CONTROL SAMPLE:	1349859	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	469	94	80-120	
Zinc	ug/L	500	483	97	80-120	

MATRIX SPIKE & MATRIX SPIR	KE DUPLICA	TE: 13498	61		1349862							
			MS	MSD								
	3	0231695001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	3.0 U	500	500	480	474	96	95	75-125	1	20	
Zinc	ug/L	29.0	500	500	511	505	96	95	75-125	1	20	

MATRIX SPIKE SAMPLE:	1349864						
		30231822004	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	10.6	500	475	93	75-125	
Zinc	ug/L	8310	500	8470	32	75-125 N	ΛL

SAMPLE DUPLICATE: 1349860						
		30231695001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	3.0 U	3.0 U		20	
Zinc	ug/L	29.0	29.1	0	20	

SAMPLE DUPLICATE: 1349863		30231822004	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	10.6	10.4	2	20	
Zinc	ug/L	8310	8350	0	20	

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

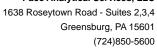
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 10/09/2017 04:16 PM

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231695

Date: 10/09/2017 04:16 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30231695001	RW06-MW(D)	EPA 3005A	274448	EPA 6010C	274531
30231695002	RW06-MW(I)	EPA 3005A	274448	EPA 6010C	274531
30231695003	RW06-MW(S)	EPA 3005A	274448	EPA 6010C	274531
30231695004	RW03-MW(S)	EPA 3005A	274448	EPA 6010C	274531
30231695005	RW03-MW(I)	EPA 3005A	274448	EPA 6010C	274531
30231695006	RW04-MW(S)	EPA 3005A	274448	EPA 6010C	274531
30231695007	RW16-MW(I)	EPA 3005A	274448	EPA 6010C	274531

Page: tely. Section B Pace Analytical Section A

Section /	Section A	Section B		
Required		Required Project Information:	invoice information;	
Company:	EnviroAnalytics Group	Report To: James Calenda	Attention: Laura Sargent	
Address:	1600 Sparrows Point Blvd, Suite B2	Copy To: Stewart Kabis	Company Name: EnviroAnalytics Group	REGULATORY AGENCY
	Sparrows Point, MD 21219		Address: 1650 Des Peres Road, Suite 303 St. Louis, MO 63131	NPDES GROUND WATER DRINKING WATER
Email To:	icalenda@enviroanalViicsqroup.com	Purchase Order No.:	Pace Quote Peferance	T UST F RCRA F OTHER
Phone:	3.14-620-3056 Fax:	Project Name: Rod and Wire Mill GW Sampling	Pace Project Samantha Bayura	Site Location
Requester	Requested Due Date/TAT: 5 Day	Project Number, PC 28 4 C	Pace Profile #:	STATE: WID
				Requested Analysis Filtered (Y/N)
		odes CODE E	Preservatives S	
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7	"Important Note: By signing this form you are accepti	SIGNATURE of SAMPLER: **Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices hot paid within 30 days.	SAMPLER: (MM/DD/YY): ges of 1.5% Fef month for any invoices hot paid within 30 days.	10/004/3 Feb-2007

Pittsburgh Lab Sample Cond	dition	Upo	n F	Receipt	Marine di
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Pace Analytical Client Name:		60	Vic	offica.	Project #
		- 1		· r	MANA.
Courier: Fed Ex UPS USPS Clie	ent 🗆	Comm	егсіа	I Dace Other _	Label
Tracking #:					LIMS Login Chill
Custody Seal on Cooler/Box Present:	Þ	no	Sea	ls intact: ☐ yes ☐	□ no
Thermometer Used	Туре	of Ice:	١.	Blue None	
Cooler Temperature Observed Temp	7.7	٠c	Cor	rection Factor: 10. (C Final Temp: 3.7 °C
Temp should be above freezing to 6°C					Pote and laitible of person examining
					Date and Initials of person examining contents:
Comments:	Yes	No	N/A	\ <u> </u>	
Chain of Custody Present:	 			1.	
Chain of Custody Filled Out:	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			2.	
Chain of Custody Relinquished:	<u> </u>			3.	
Sampler Name & Signature on COC:	<u> </u>			4.	
Sample Labels match COC:	X,			5.	
-Includes date/time/ID Matrix:	W			ļ	
Samples Arrived within Hold Time:	12			6.	
Short Hold Time Analysis (<72hr remaining):	.	X		7	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	X			9.	
Correct Containers Used:	X			10.	
-Pace Containers Used:	X				
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtere	d		X	13.	
Organic Samples checked for dechlorination:			X	14.	
Filtered volume received for Dissolved tests			X	15.	
All containers have been checked for preservation.	X		<i>,</i> 	16.	1
All containers needing preservation are found to be in	4				THE PARTY OF THE P
compliance with EPA recommendation.		!		Initial when A A	Date/time of
exceptions: VOA, coliform, TOC, O&G, Phenolics			•	completed A	preservation
				Lot # of added	
Headspace in VOA Vials (>6mm):			\checkmark	17.	
Trip Blank Present:	 	XI.	/>	18.	
ттр Біалк Present. Trip Blank Custody Seals Present		/	X		
Rad Aqueous Samples Screened > 0.5 mrem/hr			eq	Initial when	Date:
Client Matification/ Decelution				completed:	
Client Notification/ Resolution:		Г)ate/	Гіте:	Contacted By:
Person Contacted: Comments/ Resolution:					
Common to Constitution					

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



October 09, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on October 03, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30231822001	RW11-MW(S)	Water	10/03/17 10:23	10/03/17 23:30
30231822002	RW11-MW(I)	Water	10/03/17 10:50	10/03/17 23:30
30231822003	RW09-MW(I)	Water	10/03/17 11:22	10/03/17 23:30
30231822004	RW09-MW(S)	Water	10/03/17 11:49	10/03/17 23:30
30231822005	RW08-MW(S)	Water	10/03/17 12:56	10/03/17 23:30
30231822006	RW08-MW(I)	Water	10/03/17 13:24	10/03/17 23:30
30231822007	RW07-MW(I)	Water	10/03/17 14:10	10/03/17 23:30
30231822008	RW07-MW(S)	Water	10/03/17 14:55	10/03/17 23:30

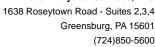


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30231822001	RW11-MW(S)	EPA 6010C	KAS	2
30231822002	RW11-MW(I)	EPA 6010C	KAS	2
30231822003	RW09-MW(I)	EPA 6010C	KAS	2
30231822004	RW09-MW(S)	EPA 6010C	KAS	2
30231822005	RW08-MW(S)	EPA 6010C	KAS	2
30231822006	RW08-MW(I)	EPA 6010C	KAS	2
30231822007	RW07-MW(I)	EPA 6010C	KAS	2
30231822008	RW07-MW(S)	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: October 09, 2017

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 274448

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30231695001,30231822004

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1349864)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Sample: RW11-MW(S)	Lab ID:	30231822001	Collecte	d: 10/03/17	7 10:23	Received: 10/	03/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 19:56	7440-43-9	
Zinc	9270	ug/L	1000	104	100	10/06/17 08:42	10/06/17 20:27	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Date: 10/09/2017 04:18 PM

Sample: RW11-MW(I)	Lab ID:	30231822002	Collecte	d: 10/03/17	7 10:50	Received: 10/	03/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	125	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 19:58	7440-43-9	
Zinc	111000	ug/L	1000	104	100	10/06/17 08:42	10/06/17 20:30	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Sample: RW09-MW(I)	Lab ID:	30231822003	Collected	d: 10/03/17	7 11:22	Received: 10/	03/17 23:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: EF	PA 3005A	<u> </u>		
Cadmium Zinc	12.0 49700	ug/L ug/L	3.0 1000	0.87 104	1 100	10/06/17 08:42 10/06/17 08:42			





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Date: 10/09/2017 04:18 PM

Sample: RW09-MW(S)	Lab ID:	30231822004	Collecte	d: 10/03/17	7 11:49	Received: 10/	03/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	10.6	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 20:03	7440-43-9	
Zinc	8310	ug/L	1000	104	100	10/06/17 08:42	10/06/17 20:35	7440-66-6	ML





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Sample: RW08-MW(S)	Lab ID:	30231822005	Collecte	d: 10/03/17	12:56	Received: 10/	03/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	0.96J	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 20:15	7440-43-9	
Zinc	1950	ug/L	10.0	1.0	1	10/06/17 08:42	10/06/17 20:15	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Sample: RW08-MW(I)	Lab ID:	30231822006	Collecte	d: 10/03/17	' 13:24	Received: 10/	03/17 23:30 Ma	atrix: Water	
D	Danuta	11-26-	Report	MDI	D.E.	Dunnand	A b l	040 N	01
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 20:17	7440-43-9	
Zinc	16.9	ug/L	10.0	1.0	1	10/06/17 08:42	10/06/17 20:17	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Sample: RW07-MW(I)	Lab ID:	30231822007	Collecte	d: 10/03/17	7 14:10	Received: 10/	03/17 23:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 20:20	7440-43-9	
Zinc	23.4	ug/L	10.0	1.0	1	10/06/17 08:42	10/06/17 20:20	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Sample: RW07-MW(S)	Lab ID:	30231822008	Collecte	d: 10/03/17	7 14:55	Received: 10/	03/17 23:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.2	ug/L	3.0	0.87	1	10/06/17 08:42	10/06/17 20:22	7440-43-9	
Zinc	144	ug/L	10.0	1.0	1	10/06/17 08:42	10/06/17 20:22	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Cadmium

Date: 10/09/2017 04:18 PM

QC Batch: 274448 Analysis Method: EPA 6010C
QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30231822001, 30231822002, 30231822003, 30231822004, 30231822005, 30231822006, 30231822007,

30231822008

METHOD BLANK: 1349858 Matrix: Water

Associated Lab Samples: 30231822001, 30231822002, 30231822003, 30231822004, 30231822005, 30231822006, 30231822007,

Associated	•	31822001, 31822008	30231822002	, 30231822	2003, 3023	31822004, 3	3023182200	5, 302	31822	006, 3023	1822007,			
	Parameter		Units	Blani Resu		Reporting Limit	MDL		۸.	nalyzed	Our	alifiers		
Cadmium	Parameter				3.0 U	3.0		0.07				aiiieis	_	
Zinc			ug/L ug/L		0.0 U	10.0		0.87 1.0		6/17 19:17 6/17 19:17				
LABORATO	RY CONTROL SAM	PLE: 134	9859											
	Parameter		Units	Spike Conc.	LC: Res		LCS % Rec		6 Rec ∟imits	Qı	ıalifiers			
Cadmium Zinc			ug/L ug/L	500 500		469 483	94 97		80- ⁻			-		
MATRIX SP	IKE & MATRIX SPIK	E DUPLICA	ATE: 13498	61 MS	MSD	1349862								
Р	arameter	3 Units	0231695001 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	М\$ % R		MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	-	ug/L	3.0 U	500	500	480	474		96	95	75-125	1	20	
Zinc		ug/L	29.0	500	500	511	505		96	95	75-125	1	20	
MATRIX SP	IKE SAMPLE:	134	9864											
	Parameter		Units	302318 Res		Spike Conc.	MS Result		MS % R		% Rec Limits		Qualit	fiers
Cadmium Zinc			ug/L ug/L		10.6 8310	500 500		75 70		93 32	75- <i>′</i>	125 125 M	L	
SAMPLE DI	UPLICATE: 134986	60												
	Parameter		Units	30231699 Resu		Dup Result	RPD			1ax .PD	Qualifie	ers		
Cadmium			ug/L		3.0 U	3.0 U				20				
Zinc			ug/L		29.0	29.1		0		20				
SAMPLE DI	UPLICATE: 134986	3												
	Parameter		Units	30231822 Resu		Dup Result	RPD			1ax .PD	Qualifie	ers		

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

10.4

2

20

10.6

ug/L



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

Qualifiers



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Date: 10/09/2017 04:18 PM

SAMPLE DUPLICATE: 1349863

30231822004 Dup Max
Parameter Units Result Result RPD RPD

Zinc ug/L 8310 8350 0 20

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

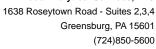
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 10/09/2017 04:18 PM

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231822

Date: 10/09/2017 04:18 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30231822001	RW11-MW(S)	EPA 3005A	274448	EPA 6010C	274531
30231822002	RW11-MW(I)	EPA 3005A	274448	EPA 6010C	274531
30231822003	RW09-MW(I)	EPA 3005A	274448	EPA 6010C	274531
30231822004	RW09-MW(S)	EPA 3005A	274448	EPA 6010C	274531
30231822005	RW08-MW(S)	EPA 3005A	274448	EPA 6010C	274531
30231822006	RW08-MW(I)	EPA 3005A	274448	EPA 6010C	274531
30231822007	RW07-MW(I)	EPA 3005A	274448	EPA 6010C	274531
30231822008	RW07-MW(S)	EPA 3005A	274448	EPA 6010C	274531

CHAIN-OF-CUSTODY / Analytical Request Document

Pace Analytical

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

DRINKING WATER OTHER οŧ GROUND WATER Page: Ð REGULATORY AGENCY RCRA Requested Analysis Filtered (Y/N) STATE Site Location NPDES T UST 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Company Name: EnviroAnalytics Group Samantha Bayura Laura Sargent Invoice Information: Pace Quote Reference: Pace Project Manager: Pace Profile #; Section C Attention: Address: Project Name: Rod and Wire Mill GW Sampling Project Number: 170384 M Report To: James Calenda Section B Required Project Information: Copy To: Stewart Kabis Purchase Order No.: 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 EnviroAnalytics Group 5 Day Fax Section A Required Client Information: Phone: 314-620-3056 Requested Due Date/TAT: Company: Email To: Address:

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s and the second second second	PRINCING WATER WASTE WASTER PRODUCT SOIL/SOLID OIL	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	see valid codes		COMPOSITE	7	COMPOSITE END/GRAB							1	Α.							(N/Y) €				
# W3.	SAMPLE ID WIPE ARR (A-Z, 0-9 / r.) OTHER Sample IDS MUST BE UNIQUE TISSUE			WPLE TYPE (G=					MPLE TEMP AT C	npreserved	[€] ON [†] OS ^z	gOH CI	s _S S _s o lonsrite	ther Analysis Test	0109 mulmbs O lo	al Zinc 6010		-				esidual Chlorine				
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Pittsburgh Lab Sample	e Conditi	on U	pon I	Receipt		30231
Pace Analytical Client Na	me: _		En	ivoAna	Project #_	
Courier: ☐ Fed Ex ☐ UPS ☐ USPS	Client	☐ Cor	mmerci	al Pace Othe	r	Label (XX)
Custody Seal on Cooler/Box Present:	□ ves l	no l	Se:	als intact: 🔲 yes	s 🗆 no	
Thermometer Used			ce: W	(et) Blue None		
	_ 01	4 .(· ·	rrection Factor:	か./)・c Final T	emp: 7.4 ·c
Cooler Temperature Observed Tem Temp should be above freezing to 6°C	_ن ب	<u> </u>	00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
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Comments:		es N	o N/	Ā]	contents.	
Chain of Custody Present:		Z L		1.		
Chain of Custody Filled Out:	. >	Z T		2.		
Chain of Custody Relinquished:	5	<		3.		
Sampler Name & Signature on COC:		Z		4.		
Sample Labels match COC:	×			5.		
1	ıtrix: W	T	_	7		
Samples Arrived within Hold Time:				6.		
Short Hold Time Analysis (<72hr remain	ning).	X		7.		
Rush Turn Around Time Requested:	g/.	Z (* _		8.	 	
Sufficient Volume:			+	9.		
		21	 	10.	<u> </u>	
Correct Containers Used:	K	} -	+	10.		
-Pace Containers Used:	-	7		11.		
Containers Intact:		\vdash	1	12.	· · · · · · · · · · · · · · · · · · ·	
Orthophosphate field filtered		-	 			
Hex Cr Aqueous Compliance/NPDES sample fi			1	13.		
Organic Samples checked for dechlori			1	14.		
Filtered volume received for Dissolved test All containers have been checked for preservati		/	1/	15.		
•	<u> </u>			16.		
All containers needing preservation are found to compliance with EPA recommendation.	bein	X		1		
'	<u> </u>		1	Initial when	Date/time of	
exceptions: VOA, coliform, TOC, O&G, Ph		٨		completed	preservation	
	· 191	W04	-17	preservative	1	
Headspace in VOA Vials (>6mm):		7	X	17.		
Trip Blank Present:		X		18.		
Trip Blank Custody Seals Present		7	X			
Rad Aqueous Samples Screened > 0.5 m	rem/hr		X	Initial when completed:	Date:	
		<u> </u>		completed.	pate.	
Client Notification/ Resolution:			Detan	Time:	Contacted	В <u>у:</u>
Person Contacted:			-			- <u>y-</u>
Comments/ Resolution:		<u>-</u>				
						
						-· —

 $\ \square$ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LiMS. When the Project Manager closes the SRF Review schedule in LiMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



October 11, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on October 04, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

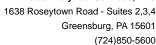
(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091
Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30231962001	RW19-MW(S)	Water	10/04/17 09:32	10/04/17 23:30
30231962002	RW19-MW(I)	Water	10/04/17 09:56	10/04/17 23:30
30231962003	RW21-MW(I)	Water	10/04/17 10:33	10/04/17 23:30
30231962004	RW02-MW(I)	Water	10/04/17 11:29	10/04/17 23:30
30231962005	RW02-MW(S)	Water	10/04/17 12:12	10/04/17 23:30
30231962006	RW01-MW(S)	Water	10/04/17 13:06	10/04/17 23:30
30231962007	RW01-MW(I)	Water	10/04/17 13:48	10/04/17 23:30
30231962008	RW22-MW(S)	Water	10/04/17 14:33	10/04/17 23:30
30231962009	RW22-MW(I)	Water	10/04/17 15:09	10/04/17 23:30

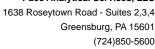


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30231962001	RW19-MW(S)	EPA 6010C	KAS	2
30231962002	RW19-MW(I)	EPA 6010C	KAS	2
30231962003	RW21-MW(I)	EPA 6010C	KAS	2
30231962004	RW02-MW(I)	EPA 6010C	KAS	2
30231962005	RW02-MW(S)	EPA 6010C	KAS	2
30231962006	RW01-MW(S)	EPA 6010C	KAS	2
30231962007	RW01-MW(I)	EPA 6010C	KAS	2
30231962008	RW22-MW(S)	EPA 6010C	KAS	2
30231962009	RW22-MW(I)	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: October 11, 2017

General Information:

9 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 274811

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30231962001,30232321002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1351542)
 - Zinc
- MSD (Lab ID: 1351540)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Date: 10/11/2017 05:28 PM

Sample: RW19-MW(S)	Lab ID:	30231962001	Collecte	d: 10/04/17	7 09:32	Received: 10/	04/17 23:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	5.2	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 18:37	7440-43-9	
Zinc	18700	ug/L	1000	104	100	10/10/17 09:46	10/10/17 20:00	7440-66-6	ML





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Sample: RW19-MW(I)	Lab ID:	30231962002	Collecte	d: 10/04/17	7 09:56	Received: 10/	04/17 23:30 Ma	atrix: Water	
			Report					0.0.1	
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	1710	ug/L	300	87.0	100	10/10/17 09:46	10/10/17 20:15	7440-43-9	
Zinc	3670000	ug/L	10000	1040	1000	10/10/17 09:46	10/10/17 21:00	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Sample: RW21-MW(I)	Lab ID:	30231962003	Collecte	d: 10/04/17	7 10:33	Received: 10/	04/17 23:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 18:54	7440-43-9	
Zinc	16100	ug/L	1000	104	100	10/10/17 09:46	10/10/17 20:17	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Sample: RW02-MW(I)	Lab ID:	30231962004	Collecte	d: 10/04/17	7 11:29	Received: 10/	04/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	2.4J	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:04	7440-43-9	
Zinc	290	ug/L	10.0	1.0	1	10/10/17 09:46	10/10/17 19:04	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Date: 10/11/2017 05:28 PM

Sample: RW02-MW(S)	Lab ID:	30231962005	Collecte	d: 10/04/17	7 12:12	Received: 10/	04/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Me	thod: Ef	PA 3005A			
Cadmium	9.1	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:06	7440-43-9	
Zinc	5490	ug/L	1000	104	100	10/10/17 09:46	10/10/17 20:20	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Sample: RW01-MW(S)	Lab ID:	30231962006	Collecte	d: 10/04/17	7 13:06	Received: 10/	04/17 23:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A		-	
Cadmium	1.7J	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:08	7440-43-9	
Zinc	7730	ug/L	1000	104	100	10/10/17 09:46	10/10/17 20:22	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Date: 10/11/2017 05:28 PM

Sample: RW01-MW(I)	Lab ID:	30231962007	Collecte	d: 10/04/17	7 13:48	Received: 10/	04/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	145	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:11	7440-43-9	
Zinc	13700	ug/L	1000	104	100	10/10/17 09:46	10/10/17 20:30	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Sample: RW22-MW(S)	Lab ID:	30231962008	Collecte	d: 10/04/17	7 14:33	Received: 10/	04/17 23:30 Ma	atrix: Water	
			Report					0.0.1	
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.2J	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:13	7440-43-9	
Zinc	1410	ug/L	10.0	1.0	1	10/10/17 09:46	10/10/17 19:13	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Sample: RW22-MW(I)	Lab ID:	30231962009	Collecte	d: 10/04/17	7 15:09	Received: 10/	04/17 23:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	4.2	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:16	7440-43-9	
Zinc	349	ug/L	10.0	1.0	1	10/10/17 09:46	10/10/17 19:16	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Date: 10/11/2017 05:28 PM

QC Batch: 274811 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

30231962001, 30231962002, 30231962003, 30231962004, 30231962005, 30231962006, 30231962007, Associated Lab Samples:

30231962008, 30231962009

METHOD BLANK: 1351536 Matrix: Water

Associated Lab Samples:		001, 30231962002 008, 30231962009		003, 3023	31962004, 3	3023196200	5, 302	3196200	6, 3023	31962007,			
	00201002	000, 00201002000	Blank	F	Reporting								
Parameter		Units	Result		Limit	MDL		Ana	lyzed	Qua	alifiers		
Cadmium		ug/L	3	3.0 U	3.0)	0.87	10/10/1	17 18:33			_	
Zinc		ug/L	10	0.0 U	10.0)	1.0	10/10/1	17 18:33	3			
LABORATORY CONTRO	L SAMPLE:	1351537											
Parameter		Units	Spike Conc.	LCS Resi		LCS % Rec		% Rec ∟imits	Qı	ualifiers			
Cadmium		ug/L	500		521	104		80-12	_		-		
Zinc		ug/L	500		516	103		80-12					
MATRIX SPIKE & MATRIX	X SPIKE DUP	PLICATE: 13515			1351540								
		20224002004	MS	MSD	МС	MCD	N 44		400	0/ Daa		Man	
Parameter	Uni	30231962001 ts Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % R		MSD Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/	L 5.2	500	500	536	540		106	107	75-125	1	20	
Zinc	ug/	L 18700	500	500	19200	19100		88	70	75-125	0	20	ML
MATRIX SPIKE SAMPLE	:	1351542											
_			3023232		Spike	MS		MS		% Rec			
Parameter		Units	Resu		Conc.	Result		% Rec	: 	Limits		Quali	fiers
Cadmium		ug/L		1510	500		20		83	75-	-		
Zinc		ug/L		150000	500	1430	000	-1	1500	75-	125 M	L	
SAMPLE DUPLICATE:	1351538												
Parameter		Units	30231962 Result		Dup Result	RPD		Ma: RPI		Qualifie	ers		
Cadmium		ug/L	-	5.2	5.8	3	11		20				
Zinc		ug/L	18	3700	19000)	2		20				
SAMPLE DUPLICATE:	1351541												
Parameter		Units	30232321 Result		Dup Result	RPD		Ma: RPI		Qualifie	ers		
Cadmium		ug/L	-	1510	1480)	2		20				

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



Max



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Date: 10/11/2017 05:28 PM

SAMPLE DUPLICATE: 1351541 30232321002 Dup

RPD Parameter Units Result Result **RPD** Qualifiers Zinc 150000 ug/L 147000 2 20

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



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

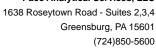
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 10/11/2017 05:28 PM

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30231962

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30231962001	RW19-MW(S)	EPA 3005A	274811	EPA 6010C	274905
30231962002	RW19-MW(I)	EPA 3005A	274811	EPA 6010C	274905
30231962003	RW21-MW(I)	EPA 3005A	274811	EPA 6010C	274905
30231962004	RW02-MW(I)	EPA 3005A	274811	EPA 6010C	274905
30231962005	RW02-MW(S)	EPA 3005A	274811	EPA 6010C	274905
30231962006	RW01-MW(S)	EPA 3005A	274811	EPA 6010C	274905
30231962007	RW01-MW(I)	EPA 3005A	274811	EPA 6010C	274905
30231962008	RW22-MW(S)	EPA 3005A	274811	EPA 6010C	274905
30231962009	RW22-MW(I)	EPA 3005A	274811	EPA 6010C	274905

Pace Analytical

ment surately.

300			WATER T DRINKING WATER	OTHER					(V/V) ər	al Chlorir	idus esi OP Pace Project No./ Lab I.D.	8	8	\sim	T.	\$80	9 00 00) (0)			SAMPLE CONDITIONS	3- Z 3-		> Z > Z.		(N/A) eajec (N)	Temp in Temp in Custody S (V/)	FALL-G-VZOIGV.VO, Z-1 GO-ZOO!
Page		REGULATORY AGENCY	F NPDES GROUND WATER	T UST F RCRA	Site Location MD	STATE:	Requested Analysis Filtered (Y/N)																DATE	1059/14/100pg	104 A 250	10-4-112336 B			F1/40/61	
1962	Attention: Laura Sargent	Company Name: EnviroAnalytics Group	Address: 1650 Des Peres Road, Suite 303 St. Louis, MO 63131		Pace Project Samantha Bayura Manager.			Preservatives		3 lo Sels Tes	Unpressive H ₂ SO ₄ HUO ₃ HOI HOI HOI HOI HOI HOI HOR HOR	X X X		X		2	\ \ \ \ \ \	× × ×	2	X			TIME ACCEPTED BY / AFFILIATION	The Mand of Alliforning	SOPS ASSOCIATION	The Man loop him Buch	1-6-0) WH	ATURE	of SAMPLER: LEGORING M. GILLIMIK DATE Signed of SAMPLER: ALL MILLIAM (MINISDRY):	বিদ্যালয়ে for any lifvoices not/baid within 30 days.
Section B Required Project Information:	Ø	Copy To: Stewart Kabis		Purchase Order No.:	Project Name: Rod and Wire Mill GW Sampling	Project Number: 723541	mana a mana a mana a mana a mana a mana a mana a mana a mana a mana a mana a mana a mana a mana a mana a mana a	Fig.	WYT COMPOSITE COMPOSITE END/GRAB ETART END/GRAB (See veild codes)	CODE	MATRIX DATE:	10/14/21		EtO	6011	(2/2)	781	8,881	1733	600			RELINQUISHED BY / AFFILIATION DATE	Janda Ma-1620 1014173	Dr. 24 Win 1810 10/24/17		9	SAMPLER NAME AND SIGNATURE	PRINT Name of SAMPLER: SIGNATURE of SAMPLER:	*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5984
Section A Rentified Client Information	llytics Group	1600 Sparrows Point Blvd, Suite B2	Sparrows Point, MD 21219	icalenda@enviroanalylicsgroup.com	314-620-3056 Fax: P	Requested Due Date/TAT: 5 Day	TRANSPORTER TO THE PROPERTY OF	Section D Required Client Information MATRIX CO	DRINKING WATER WATER WASTE WATER PRODUCT SOLLSOLID OIL		· ·	RUSIG-NUS(S)	(H)(N) - 61010	-100	1	1 RWOD-MIDK)	RWOI-MINS	ZN-RIST	RW22 - MW60	BWB3-MWB			ADDITIONAL COMMENTS		A TOTAL AND AND AND AND AND AND AND AND AND AND	TANA MANAGEMENT TO THE PARTY OF				*Important Note: By signing this form you are acceptin
Section	Company:	Address:		Email To:	Phone:	Requeste					# M∃11	•	N	e?	4	2	9	7	&	6	ę ;	12				***************************************	Page	19	of 20	

Pittsburgh Lab Sample Condition Upon Receipt Enviro Ama. Project # 30 Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____ LIMS Login Tracking #: Custody Seal on Cooler/Box Present: 📋 yes Seals intact: ☐ yes ☐ no Type of Ice: (Wet) Blue None Thermometer Used G .c Correction Factor: (C) (C) Final Temp: Cooler Temperature Temp should be above freezing to 6°C Date and Initials of person examining contents: N/A No Comments: Yes Chain of Custody Present: Chain of Custody Filled Out: 3. Chain of Custody Relinquished: Sampler Name & Signature on COC: Sample Labels match COC: ['] Matrix: -Includes date/time/ID Samples Arrived within Hold Time: Short Hold Time Analysis (<72hr remaining): 8. Rush Turn Around Time Requested: Sufficient Volume: 10. Correct Containers Used: -Pace Containers Used: 11. Containers Intact: 12. Orthophosphate field filtered 13. Hex Cr Aqueous Compliance/NPDES sample field filtered 14. Organic Samples checked for dechlorination: 15. Filtered volume received for Dissolved tests All containers have been checked for preservation. 16. All containers needing preservation are found to be in compliance with EPA recommendation. Initial when A Date/time of exceptions: VOA, coliform, TOC, O&G, Phenolics completed preservation Lot # of added preservative Headspace in VOA Vials (>6mm): 18. Trip Blank Present: Trip Blank Custody Seals Present Initial when Rad Aqueous Samples Screened > 0.5 mrem/hr Date: completed: Client Notification/ Resolution: Date/Time: Person Contacted: Comments/ Resolution:

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



October 11, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on October 06, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

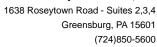


SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30232321001	RW12-MW(S)	Water	10/06/17 09:28	10/06/17 23:00
30232321002	RW12-MW(I)	Water	10/06/17 10:05	10/06/17 23:00
30232321003	RW18-MW(S)	Water	10/06/17 10:58	10/06/17 23:00
30232321004	RW18-MW(I)	Water	10/06/17 11:30	10/06/17 23:00
30232321005	RW16-MW(S)	Water	10/06/17 12:05	10/06/17 23:00
30232321006	RW10-MW(I)	Water	10/06/17 13:22	10/06/17 23:00
30232321007	RW13-MW(I)	Water	10/06/17 14:12	10/06/17 23:00
30232321008	RW14-MW(S)	Water	10/06/17 14:58	10/06/17 23:00





SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30232321001	RW12-MW(S)	EPA 6010C	KAS	2
30232321002	RW12-MW(I)	EPA 6010C	KAS	2
30232321003	RW18-MW(S)	EPA 6010C	KAS	2
30232321004	RW18-MW(I)	EPA 6010C	KAS	2
30232321005	RW16-MW(S)	EPA 6010C	KAS	2
30232321006	RW10-MW(I)	EPA 6010C	KAS	2
30232321007	RW13-MW(I)	EPA 6010C	KAS	2
30232321008	RW14-MW(S)	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: October 11, 2017

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 274811

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30231962001,30232321002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1351542)
 - Zinc
- MSD (Lab ID: 1351540)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Sample: RW12-MW(S)	Lab ID:	30232321001	Collecte	d: 10/06/17	7 09:28	Received: 10/	06/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A		-	
Cadmium	11.3	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:18	7440-43-9	
Zinc	3790	ug/L	10.0	1.0	1	10/10/17 09:46	10/10/17 19:18	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Date: 10/11/2017 05:35 PM

Sample: RW12-MW(I)	Lab ID:	30232321002	Collecte	d: 10/06/17	7 10:05	Received: 10/	06/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A		•	
Cadmium	1510	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:21	7440-43-9	
Zinc	150000	ug/L	1000	104	100	10/10/17 09:46	10/10/17 20:32	7440-66-6	ML





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Sample: RW18-MW(S)	Lab ID:	30232321003	Collecte	d: 10/06/17	7 10:58	Received: 10/	06/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	306	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:36	7440-43-9	
Zinc	14500	ug/L	1000	104	100	10/10/17 09:46	10/10/17 20:40	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Date: 10/11/2017 05:35 PM

Sample: RW18-MW(I)	Lab ID:	30232321004	Collecte	d: 10/06/1	7 11:30	Received: 10/	06/17 23:00 Ma	atrix: Water	
Doromotoro	Dogulto	Linita	Report	MDI	DE	Droporod	Analyzad	CACNO	Ougl
Parameters	Results	Units -	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	43.7	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:38	7440-43-9	
Zinc	393000	ug/L	10000	1040	1000	10/10/17 09:46	10/10/17 21:02	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Date: 10/11/2017 05:35 PM

Sample: RW16-MW(S)	Lab ID:	30232321005	Collecte	d: 10/06/17	7 12:05	Received: 10/	06/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 20:53	7440-43-9	
Zinc	26.2	ug/L	10.0	1.0	1	10/10/17 09:46	10/10/17 20:53	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Sample: RW10-MW(I)	Lab ID: 30232321006		Collected: 10/06/17 13:22		Received: 10/06/17 23:00 M		atrix: Water		
5	5 "	11.26	Report	MDI	55			0404	0 1
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium	24.6	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:43	7440-43-9	
Zinc	31000	ug/L	1000	104	100	10/10/17 09:46	10/10/17 20:44	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Date: 10/11/2017 05:35 PM

Sample: RW13-MW(I)	Lab ID:	30232321007	Collecte	d: 10/06/17	7 14:12	Received: 10/	06/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	28700	ug/L	300	87.0	100	10/10/17 09:46	10/10/17 20:47	7440-43-9	
Zinc	204000	ug/L	1000	104	100	10/10/17 09:46	10/10/17 20:47	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Date: 10/11/2017 05:35 PM

Sample: RW14-MW(S)	Lab ID:	30232321008	Collecte	d: 10/06/17	7 14:58	Received: 10/	06/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	1750	ug/L	3.0	0.87	1	10/10/17 09:46	10/10/17 19:48	7440-43-9	
Zinc	28900	ug/L	1000	104	100	10/10/17 09:46	10/10/17 20:49	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Date: 10/11/2017 05:35 PM

QC Batch: 274811 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30232321001, 30232321002, 30232321003, 30232321004, 30232321005, 30232321006, 30232321007,

30232321008

METHOD BLANK: 1351536 Matrix: Water

Associated Lab Samples: 30232321001, 30232321002, 30232321003, 30232321004, 30232321005, 30232321006, 30232321007,

•	30232321001, 30232321008	30232321002	, 302323210	003, 30232	2321004, 3	3023232100	5, 302	32321006,	3023	2321007,			
Danasatan		11-20-	Blank		eporting	MDI		A b		0			
Parameter		Units	Result		Limit	MDL		Analy		_	alifiers		
Cadmium		ug/L		3.0 U	3.0		0.87	10/10/17					
Zinc		ug/L	10	0.0 U	10.0)	1.0	10/10/17	18:33	•			
LABORATORY CONTROL SA	MPLE: 135	51537											
Parameter		Units	Spike Conc.	LCS Resu		LCS % Rec		% Rec ∟imits	Qu	alifiers			
Cadmium		ug/L	500	-	521	104		80-120			-		
Zinc		ug/L	500		516	103		80-120					
MATRIX SPIKE & MATRIX SF	PIKE DUPLICA	ATE: 13515	39		1351540								
			MS	MSD									
		30231962001	Spike	Spike	MS	MSD	MS			% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% R	ec % F	Rec	Limits	RPD	RPD	Qua
Cadmium	ug/L	5.2	500	500	536	540		106	107	75-125	1	20	
Zinc	ug/L	18700	500	500	19200	19100		88	70	75-125	0	20	ML
MATRIX SPIKE SAMPLE:	135	51542											
_			3023232		Spike	MS		MS		% Rec			
Parameter		Units	Resu	ult 	Conc.	Result		% Rec		Limits		Quali	fiers
Cadmium		ug/L		1510	500	19	20		83	75-			
Zinc		ug/L		150000	500	1430	000	-15	00	75-	125 M	L	
SAMPLE DUPLICATE: 1351	538												
			30231962	2001	Dup			Max					
Parameter		Units	Result	t	Result	RPD		RPD		Qualifie	ers		
Cadmium		ug/L		5.2	5.8	3	11		20				
Zinc		ug/L	1	8700	19000)	2		20				
SAMPLE DUPLICATE: 1351	541												
			30232321	002	Dup			Max					
Parameter		Units	Result	t	Result	RPD		RPD		Qualifie	ers		
Cadmium		ug/L		1510	1480)	2		20				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



Qualifiers



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Date: 10/11/2017 05:35 PM

SAMPLE DUPLICATE: 1351541

30232321002 Dup Max RPD RPD Parameter Units Result Result

Zinc 150000 ug/L 147000 2 20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

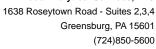
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 10/11/2017 05:35 PM

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232321

Date: 10/11/2017 05:35 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30232321001	RW12-MW(S)	EPA 3005A	274811	EPA 6010C	274905
30232321002	RW12-MW(I)	EPA 3005A	274811	EPA 6010C	274905
30232321003	RW18-MW(S)	EPA 3005A	274811	EPA 6010C	274905
30232321004	RW18-MW(I)	EPA 3005A	274811	EPA 6010C	274905
30232321005	RW16-MW(S)	EPA 3005A	274811	EPA 6010C	274905
30232321006	RW10-MW(I)	EPA 3005A	274811	EPA 6010C	274905
30232321007	RW13-MW(I)	EPA 3005A	274811	EPA 6010C	274905
30232321008	RW14-MW(S)	EPA 3005A	274811	EPA 6010C	274905



ddress:

DRINKING WATER OTHER ō GROUND WATER Page: QΜ REGULATORY AGENCY RCRA <u>__</u> STATE Site Location CHAIN-OF-CUSTODY / Analytical Request Document NPDES The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately. TSU T 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Sompany Name: EnviroAnalytics Group Samantha Bayura Laura Sargent Invoice Information: Attention: Laur Pace Quote Reference: Pace Project Section C ace Profile # Address: Project Name: Rod and Wire Mill GW Sampling Report To: James Calenda Section B Required Project Information: Copy To: Stewart Kabis Purchase Order No.: Project Number: 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalvircsgroup.com Sparrows Point, MD 21219 EnviroAnalytics Group Pace Analytical 5 Day Fax: Section A Required Client Information: Phone: 314-620-3056 Requested Due Date/TAT: Sompany: Email To:

Requested

	Section D Required Client Information	ŏ		(awc		COLLI	COLLECTED			ą	Preservatives	œ.	A\N									11113	
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Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any involces not paid within 30 day.

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All containers needing prese	ervation are found to be in	/		:			
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 $\ \square$ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



October 16, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232421

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on October 09, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

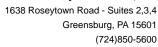
(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232421

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232421

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30232421001	RW20-MW(S)	Water	10/09/17 09:56	10/09/17 23:25
30232421002	RW20-MW(I)	Water	10/09/17 10:44	10/09/17 23:25





SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232421

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30232421001	RW20-MW(S)	EPA 6010C	PJD	2
30232421002	RW20-MW(I)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232421

Method: **EPA 6010C** Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: October 16, 2017

General Information:

2 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232421

Date: 10/16/2017 01:08 PM

Sample: RW20-MW(S)	Lab ID:	30232421001	Collecte	d: 10/09/17	7 09:56	Received: 10/	09/17 23:25 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	paration Met	hod: El	PA 3005A			
Cadmium	25.3	ug/L	3.0	0.87	1	10/12/17 09:53	10/12/17 21:35	7440-43-9	
Zinc	900	ug/L	10.0	1.0	1	10/12/17 09:53	10/12/17 21:35	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232421

Date: 10/16/2017 01:08 PM

Sample: RW20-MW(I)	Lab ID:	30232421002	Collecte	d: 10/09/17	7 10:44	Received: 10/	09/17 23:25 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	10/12/17 09:53	10/12/17 21:49	7440-43-9	
Zinc	295	ug/L	10.0	1.0	1	10/12/17 09:53	10/12/17 21:49	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232421

Date: 10/16/2017 01:08 PM

QC Batch: 275157 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30232421001, 30232421002

METHOD BLANK: 1352935 Matrix: Water

Associated Lab Samples: 30232421001, 30232421002

Blank Reporting Result Limit MDL Qualifiers Parameter Units Analyzed Cadmium 3.0 U 3.0 0.87 10/12/17 21:30 ug/L Zinc ug/L 10.0 U 10.0 1.0 10/12/17 21:30

LABORATORY CONTROL SAMPLE: 1352936 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 500 488 98 80-120 ug/L ug/L Zinc 500 488 98 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1352939 1352938 MSD MS 30232421001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 25.3 500 500 531 533 101 101 75-125 0 20 Zinc ug/L 900 500 500 1380 1390 96 99 75-125 20

SAMPLE DUPLICATE: 1352937 30232421001 Dup Max **RPD RPD** Qualifiers Parameter Units Result Result Cadmium 25.3 24.8 2 20 ug/L 900 888 Zinc 20 ug/L 1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232421

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

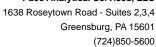
U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Date: 10/16/2017 01:08 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30232421

Date: 10/16/2017 01:08 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30232421001	RW20-MW(S)	EPA 3005A	275157	EPA 6010C	275267
30232421002	RW20-MW(I)	EPA 3005A	275157	EPA 6010C	275267

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be compteted accurately.

Pace Project No./ Lab I.D. DRINKING WATER SAMPLE CONDITIONS OTHER ō MO#: 3023242 GROUND WATER Residual Page: S REGULATORY AGENCY RCRA TIME 14 17 ES Requested Analysis Filtered (Y/N) Site Location STATE DATE NPDES 3023242 TSU □ 1650 Des Peres Road, Suite 303 St. Louis, MO 6313 ACCEPTED BY / AFFILIATION 01:09 oniX listo Otoa muimbaO lato company Name: EnviroAnalytics Group JaseT sisylenA TN/A JediC Samantha Bayura Methanol Laura Sargent Preservatives _EO_SS_SBN HOSN HCI Invoice Information: HNO3 [⊅]OS^ZH Reference: Pace Project Manager: Pace Profile #: Section C TIME Unpreserved Attention: Pace Quote 4ddress; # OF CONTAINERS 400 10/6/PJ SAMPLE TEMP AT COLLECTION DATE JON-1-105C 15 TIME COMPOSITE END/GRAB Hom fac COLLECTED DATE Rod and Wire Mill GW Sampling RELINQUISHED BY / AFFILIATION TIME Project Number: 1703847M COMPOSITE START DATE Report To: James Calenda Required Project Information; Stewart Kabis A CONT (G=GRAB C=COMP) SAMPLE TYPE 2 Jurchase Order No.: እ MATRIX CODE Project Name: Section B Copy To: 8 Valid Matrix Codes 8 ¥ § DRINKING WATER IN WATER WASTE WATER PRODUCT SOILSOLID 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 ADDITIONAL COMMENTS (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE EnviroAnalytics Group 200 - MW 5 Day SAMPLED Fax: 2 WISONW Section D Required Client Information Required Client Information: thone: 314-620-3056 Requested Due Date/TAT: Section A страпу Address: Email To: ٣ ဖ 2 -00 ø 2 m w #WEL

Samples Intact (MY)

Cooler (Y/N)

ice (Y/N)

Received on

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DATE Signed (MM/DD/YY): 10/06/15

PRINT Name of SAMPLER: LE DUNCIO M. CALUMAS

SAMPLER NAME AND SIGNATURE

Page 11 of 12

SIGNATURE of SAMPLER.

"Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not Taid within 30 day.

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☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



September 08, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on September 01, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

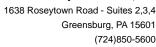
(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

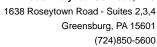
South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



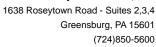


SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30229013001	RW06-MW (D)	Water	09/01/17 11:28	09/01/17 22:15
30229013002	RW06-MW (I)	Water	09/01/17 11:50	09/01/17 22:15
30229013003	RW06-MW (S)	Water	09/01/17 12:33	09/01/17 22:15
30229013004	RW03-MW (S)	Water	09/01/17 13:27	09/01/17 22:15
30229013005	RW03-MW (I)	Water	09/01/17 14:00	09/01/17 22:15
30229013006	RW04-MW (S)	Water	09/01/17 14:55	09/01/17 22:15



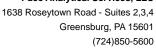


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30229013001	RW06-MW (D)	EPA 6010C	PJD	2
30229013002	RW06-MW (I)	EPA 6010C	PJD	2
30229013003	RW06-MW (S)	EPA 6010C	PJD	2
30229013004	RW03-MW (S)	EPA 6010C	PJD	2
30229013005	RW03-MW (I)	EPA 6010C	PJD	2
30229013006	RW04-MW (S)	EPA 6010C	PJD	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: September 08, 2017

General Information:

6 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Date: 09/08/2017 02:20 PM

Sample: RW06-MW (D)	Lab ID:	30229013001	Collecte	ed: 09/01/17 11:28 Received: 09/01/17 22:15 Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	0.85J	ug/L	3.0	0.34	1	09/06/17 08:24	09/07/17 18:44	7440-43-9	
Zinc	20.3	ug/L	10.0	1.1	1	09/06/17 08:24	09/07/17 18:44	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Sample: RW06-MW (I)	Lab ID:	30229013002	Collecte	d: 09/01/17	7 11:50	:50 Received: 09/01/17 22:15 Matrix: Water				
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	4.5	ug/L	3.0	0.34	1	09/06/17 08:24	09/07/17 18:58	7440-43-9		
Zinc	508	ug/L	10.0	1.1	1	09/06/17 08:24	09/07/17 18:58	7440-66-6		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Date: 09/08/2017 02:20 PM

Sample: RW06-MW (S)	Lab ID:	30229013003	Collecte	d: 09/01/17	12:33	2:33 Received: 09/01/17 22:15 Matrix: Water			
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.34	1	09/06/17 08:24	09/07/17 19:00	7440-43-9	
Zinc	10.0 U	ug/L	10.0	1.1	1	09/06/17 08:24	09/07/17 19:00	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Sample: RW03-MW (S)	Lab ID:	30229013004	Collecte	d: 09/01/17	09/01/17 13:27 Received: 09/01/17 22:15 Matrix: Water				
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	8.4	ug/L	3.0	0.34	1	09/06/17 08:24	09/07/17 19:08	7440-43-9	
Zinc	16300	ug/L	1000	108	100	09/06/17 08:24	09/07/17 19:21	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Sample: RW03-MW (I)	Lab ID:	30229013005	Collected	d: 09/01/17	14:00	Received: 09/	01/17 22:15 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	OC MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium Zinc	214 9340	ug/L ug/L	3.0 100	0.34 10.8	1 10		09/07/17 19:10 09/07/17 19:23		

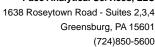




Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Sample: RW04-MW (S)	Lab ID:	30229013006	Collecte	d: 09/01/17	7 14:55	:55 Received: 09/01/17 22:15 Matrix: Water				
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	0.71J	ug/L	3.0	0.34	1	09/06/17 08:24	09/07/17 19:12	7440-43-9		
Zinc	163	ug/L	10.0	1.1	1	09/06/17 08:24	09/07/17 19:12	7440-66-6		





QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Zinc

QC Batch: 270606 Analysis Method: EPA 6010C QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

Associated Lab Samples: 30229013001, 30229013002, 30229013003, 30229013004, 30229013005, 30229013006

METHOD BLANK: 1331586 Matrix: Water

Associated Lab Samples: 30229013001, 30229013002, 30229013003, 30229013004, 30229013005, 30229013006

Blank Reporting Parameter Result Limit MDL Qualifiers Units Analyzed Cadmium 3.0 U 3.0 09/07/17 18:39 ug/L 0.34 ug/L 10.0 U 10.0 09/07/17 18:39 1.1

LABORATORY CONTROL SAMPLE: 1331587

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	524	105	80-120	
Zinc	ug/L	500	520	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1331589 1331590

			MS	MSD								
	3	30229013001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	0.85J	500	500	532	525	106	105	75-125	1	20	
Zinc	ug/L	20.3	500	500	535	530	103	102	75-125	1	20	

SAMPLE DUPLICATE: 1331588

Date: 09/08/2017 02:20 PM

		30229013001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	0.85J	0.96J		20	
Zinc	ug/L	20.3	19.2	6	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

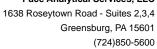
U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Date: 09/08/2017 02:20 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229013

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30229013001	RW06-MW (D)	EPA 3005A	270606	EPA 6010C	270721
30229013002	RW06-MW (I)	EPA 3005A	270606	EPA 6010C	270721
30229013003	RW06-MW (S)	EPA 3005A	270606	EPA 6010C	270721
30229013004	RW03-MW (S)	EPA 3005A	270606	EPA 6010C	270721
30229013005	RW03-MW (I)	EPA 3005A	270606	EPA 6010C	270721
30229013006	RW04-MW (S)	EPA 3005A	270606	EPA 6010C	270721



JODY / Analytical Request Document

J-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

j

Pace Project No./ Lab I.D. (MY) DRINKING WATER Samples Intact Ĭ SAMPLE CONDITIONS OTHER Cooler (Y/N) 2 Custody Sealed ŏ 200 3888 WO#:30229013 g (V/V) eat ን Received on GROUND WATER ر. ل Resid O° ni qmeT Page: REGULATORY AGENCY β RCRA 522 TIME Requested Analysis Filtered (Y/N) 911/12 Site Location Ç STATE NPDES 3022901 DATE UST DATE Signed (MM/DD/YY): っす/こ ; 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION Of 05 oniX listo otal Cadmium 6010 Company Name: EnviroAnalytics Group LiseT sisylsinA TN /A Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not baid within 30 days Other Samantha Bayura Methanol Laura Sargent Preservatives _EO_SS₂BN HOSN HCI Invoice Information: ^EONH *OS^zH Reference:
Pace Project
Manager:
Pace Profile #: Section C 뿔 Unpreserved Attention: Pace Quote Address: SAMPLER NAME AND SIGNATURE # OF CONTAINERS PRINT Name of SAMPLER: SIGNATURE of SAMPLER: 41116 SAMPLE TEMP AT COLLECTION DATE TIME COMPOSITE END/GRAB DATE COLLECTED Rod and Wire Mill GW Sampling RELINQUISHED BY / AFFILIATION TIME COMPOSITE DATE Report To: James Calenda Section B Required Project Information: Copy To: Stewart Kabis SAMPLE TYPE (G=GRAB C=COMP) Purchase Order No. (see valid codes to left) MATRIX CODE Project Name: nject Number Valid Matrix Codes MATRIX CODE WW W1 로 어떤 사람 13 이 사람 DRINKING WATER
WATER
WASTE WATER
PRODUCT
SOLUCID
OIL
WIPE
AIR
AIR
TISSUE 1600 Sparrows Point Blvd, Suite B2 Sparrows Point, MD 21219 ADDITIONAL COMMENTS (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE EnviroAnalytics Group 5 Day SAMPLE ID Fax: Required Client Information Section A Required Client Information: 314-620-3056 Requested Due Date/TAT: Section D Company: Page 15 of 16 Email To: Address: Рволе: 7 ë ÷ ø # M3TI

Pittsburgh Lab Sample Cond	lition	Upo	n R	Receipt		3022901
Pace Analytical Client Name:	En	الاردة	5 A1	nalytics	Project #	
Courier: Fed Ex UPS USPS Clie	nt 🗆	Comm	erciai	i 🗹 Pace Other _		Label 74.
Custody Seal on Cooler/Box Present: ☐ yes	\square	no	Sea	ls intact: ☐ yes ☐] no	
Thermometer Used	Туре	of Ice:	We	et) Blue None		
Cooler Temperature Observed Temp Temp should be above freezing to 6°C	, _~ t	, C	Cor	rection Factor <u>: రాఫ</u>		
				_	Date and contents	Initials of person examining
Comments:	Yes	No	N/A	\ \	Andrew De Control of the Control of	
Chain of Custody Present:	PRALLEMENT			1.		
Chain of Custody Filled Out:				2.		
Chain of Custody Relinquished:				3.		
Sampler Name & Signature on COC:			<u> </u>	4.		
Sample Labels match COC:				5.		
-Includes date/time/ID Matrix:	V-T					
Samples Arrived within Hold Time:				6.		
Short Hold Time Analysis (<72hr remaining):				7.		-
Rush Turn Around Time Requested:	/			8.		
Sufficient Volume:				9.		
Correct Containers Used:				10.		
-Pace Containers Used:	_				<u>.</u>	
Containers Intact:				11.		
Orthophosphate field filtered				12.		
Hex Cr Aqueous Compliance/NPDES sample field filtered	i		_	13.		
Organic Samples checked for dechlorination:				14.		·
Filtered volume received for Dissolved tests				15.		
All containers have been checked for preservation.				16. PHLZ		
All containers needing preservation are found to be in compliance with EPA recommendation.					T	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed Cut Lot # of added preservative	Date/time of preservation	
Headspace in VOA Vials (>6mm):				17.		
Trip Blank Present:				18.		
Trip Blank Custody Seals Present			,			
Rad Aqueous Samples Screened > 0.5 mrem/hr				Initial when completed:	Date:	
Client Notification/ Resolution: Person Contacted: Comments/ Resolution:			Date/	Time:	Contact	ed B <u>y</u> :

 $\ \square$ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



September 11, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on September 05, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

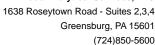
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Indiana Certification
Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

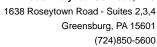


SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30229127001	RW05-MW(I)	Water	09/05/17 09:27	09/05/17 23:30
30229127002	RW13-MW(I)	Water	09/05/17 10:25	09/05/17 23:30
30229127003	RW12-MW(S)	Water	09/05/17 11:10	09/05/17 23:30
30229127004	RW12-MW(I)	Water	09/05/17 11:47	09/05/17 23:30
30229127005	RW17-MW(S)	Water	09/05/17 12:23	09/05/17 23:30
30229127006	RW16-MW(I)	Water	09/05/17 13:37	09/05/17 23:30
30229127007	RW14-MW(S)	Water	09/05/17 14:09	09/05/17 23:30
30229127008	RW16-MW(S)	Water	09/05/17 15:10	09/05/17 23:30



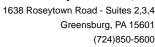


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30229127001	RW05-MW(I)	EPA 6010C	PJD	2
30229127002	RW13-MW(I)	EPA 6010C	PJD	2
30229127003	RW12-MW(S)	EPA 6010C	PJD	2
30229127004	RW12-MW(I)	EPA 6010C	PJD	2
30229127005	RW17-MW(S)	EPA 6010C	PJD	2
30229127006	RW16-MW(I)	EPA 6010C	PJD	2
30229127007	RW14-MW(S)	EPA 6010C	PJD	2
30229127008	RW16-MW(S)	EPA 6010C	PJD	2





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: September 11, 2017

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 270942

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30229127001,30229225003

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

• MSD (Lab ID: 1333391)

Zinc

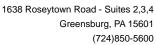
Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

PDS failed for Zinc.
• QC Batch: 271062





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

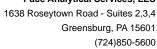
Date: September 11, 2017

Analyte Comments:

QC Batch: 270942

1c: PDS failed for Zinc.

- BLANK (Lab ID: 1333387)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1333389)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1333392)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1333388)
 - Cadmium
 - Zinc
- MS (Lab ID: 1333390)
 - Cadmium
 - Zinc
- MS (Lab ID: 1333393)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1333391)
 - Cadmium
 - Zinc
- RW05-MW(I) (Lab ID: 30229127001)
 - Cadmium
 - Zinc
- RW12-MW(I) (Lab ID: 30229127004)
 - Cadmium
 - Zinc
- RW12-MW(S) (Lab ID: 30229127003)
 - Cadmium
 - Zinc
- RW13-MW(I) (Lab ID: 30229127002)
 - Cadmium
 - Zinc
- RW14-MW(S) (Lab ID: 30229127007)
 - Cadmium
 - Zinc
- RW16-MW(I) (Lab ID: 30229127006)
 - Cadmium
 - Zinc
- RW16-MW(S) (Lab ID: 30229127008)
 - Cadmium
 - Zinc





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: September 11, 2017

Analyte Comments:

QC Batch: 270942

1c: PDS failed for Zinc.

• RW17-MW(S) (Lab ID: 30229127005)

• Cadmium • Zinc

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Date: 09/11/2017 03:28 PM

Sample: RW05-MW(I)	Lab ID:	30229127001	Collecte	d: 09/05/17	7 09:27	Received: 09/	05/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1400	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 21:44	7440-43-9	1c
Zinc	30900	ua/L	1000	108	100	09/08/17 08:50	09/09/17 01:03	7440-66-6	1c.MH





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Sample: RW13-MW(I)	Lab ID:	3022912700	2 Collecte	d: 09/05/17	7 10:25	Received: 09/	05/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	66.0	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 21:58	7440-43-9	1c
Zinc	1160	ug/L	10.0	1.1	1	09/08/17 08:50	09/08/17 21:58	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Date: 09/11/2017 03:28 PM

Sample: RW12-MW(S)	Lab ID:	30229127003	Collecte	d: 09/05/17	' 11:10	Received: 09/	05/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	5.1	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:01	7440-43-9	1c
Zinc	3980	ug/L	10.0	1.1	1	09/08/17 08:50	09/08/17 22:01	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Sample: RW12-MW(I)	Lab ID:	30229127004	Collecte	d: 09/05/17	7 11:47	Received: 09/	05/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1820	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:13	7440-43-9	1c
Zinc	156000	ua/L	1000	108	100	09/08/17 08:50	09/09/17 01:18	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Sample: RW17-MW(S)	Lab ID:	30229127005	Collecte	d: 09/05/17	7 12:23	Received: 09/	05/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	5870	ug/L	300	34.4	100	09/08/17 08:50	09/09/17 01:21	7440-43-9	1c
Zinc	330000	ua/L	1000	108	100	09/08/17 08:50	09/09/17 01:21	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Sample: RW16-MW(I)	Lab ID:	30229127006	Collecte	d: 09/05/17	7 13:37	Received: 09/	05/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.7J	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:18	7440-43-9	1c
Zinc	20200	ua/L	1000	108	100	09/08/17 08:50	09/09/17 01:23	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Date: 09/11/2017 03:28 PM

Sample: RW14-MW(S)	Lab ID:	30229127007	Collecte	d: 09/05/17	7 14:09	Received: 09/	05/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1700	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:21	7440-43-9	1c
Zinc	43500	ua/L	1000	108	100	09/08/17 08:50	09/09/17 01:25	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Date: 09/11/2017 03:28 PM

Sample: RW16-MW(S)	Lab ID:	30229127008	Collecte	d: 09/05/17	15:10	Received: 09/	05/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:23	7440-43-9	1c
Zinc	25.6	ua/L	10.0	1.1	1	09/08/17 08:50	09/08/17 22:23	7440-66-6	1c



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Date: 09/11/2017 03:28 PM

QC Batch: 270942 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30229127001, 30229127002, 30229127003, 30229127004, 30229127005, 30229127006, 30229127007,

30229127008

METHOD BLANK: 1333387 Matrix: Water

Associated Lab	Samples:	302291270 302291270	001, 30229127002 008	2, 30229127	003, 3022	9127004, 3	3022912700	5, 302	291270	06, 3022	9127007,			
		00220121		Blank	: F	Reporting								
Р	arameter		Units	Resul	t	Limit	MDL		An	alyzed	Qua	alifiers		
Cadmium			ug/L		3.0 U	3.0		0.34		/17 21:39				
Zinc			ug/L	10	0.0 U	10.0)	1.1	09/08	/17 21:39) 1c			
LABORATORY	CONTROLS	SAMPLE:	1333388											
				Spike	LCS		LCS		% Rec					
P	arameter		Units	Conc.	Resi	ult 	% Rec		Limits	Qι 	ualifiers	_		
Cadmium			ug/L	500		511	102			20 1c				
Zinc			ug/L	500		502	100		80-1	20 1c				
MATRIX SPIKE	& MATRIX S	SPIKE DUP	LICATE: 13333	390		1333391								
				MS	MSD				_		a. 5			
Parar	meter	Unit	30229127001 s Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	M: % F		MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium		ug/l	L 1400	500	500	1900	1820		101	84	75-125	4	20	1c
Zinc		ug/l	L 30900	500	500	31500	31600		112	146	75-125	1	20	1c,MH
MATRIX SPIKE	SAMPLE:		1333393											
				302292	25003	Spike	MS		MS		% Rec			
Р	arameter		Units	Resi	ult	Conc.	Result		% Re	ec	Limits		Qual	ifiers
Cadmium			ug/L		0.81J	500	5	521		104	75-	125 10	С	
Zinc			ug/L		10600	500	110	000		92	75-	125 10	C	
SAMPLE DUPL	LICATE: 13	33389												
				30229127		Dup				ax				
P	arameter		Units	Resul	t 	Result	RPD		RF	PD	Qualifie	ers		
Cadmium			ug/L		1400	1390		1		20				
Zinc			ug/L	3	0900	30400)	2		20	1c			
SAMPLE DUPL	LICATE: 13	33392												
				30229225		Dup				ax				
P	arameter		Units	Resul	t 	Result	RPD		RF	PD .	Qualifie	ers		
Cadmium			ug/L	().81J	0.88.	J			20	1c			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Date: 09/11/2017 03:28 PM

SAMPLE DUPLICATE: 1333392

30229225003 Dup Max

RPD Parameter Units Result Result **RPD** Qualifiers Zinc 10600 10500 0 ug/L 20 1c

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

(724)850-5600





QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 271062

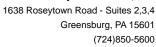
PDS failed for Zinc. [1]

ANALYTE QUALIFIERS

Date: 09/11/2017 03:28 PM

1c PDS failed for Zinc.

Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased МН





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229127

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30229127001	RW05-MW(I)	EPA 3005A	270942	EPA 6010C	271062
30229127002	RW13-MW(I)	EPA 3005A	270942	EPA 6010C	271062
30229127003	RW12-MW(S)	EPA 3005A	270942	EPA 6010C	271062
30229127004	RW12-MW(I)	EPA 3005A	270942	EPA 6010C	271062
30229127005	RW17-MW(S)	EPA 3005A	270942	EPA 6010C	271062
30229127006	RW16-MW(I)	EPA 3005A	270942	EPA 6010C	271062
30229127007	RW14-MW(S)	EPA 3005A	270942	EPA 6010C	271062
30229127008	RW16-MW(S)	EPA 3005A	270942	EPA 6010C	271062



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT, All relevant fields must be completed accurately.

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 $\mathcal{D}_{\mathcal{O}}$

ö Page: Company Name: EnviroAnalytics Group Section C invoice Information: Attention: Laura Sargent Address: Section B
Required Project Information:
Report To: James Calenda Copy To: Stewart Kabis 1600 Sparrows Point Blvd, Suite B2 Sparrows Point, MD 21219 EnviroAnalytics Group Section A
Required Client Information:
Company: EnviroAnalyt Address:

	Sparrows Point, MD 21219				Address:		1650 Des Peres Road, Suite 303 St. Louis, MO 63131	uite 303 St.	ouis, MO 63131	F NPDES	F GROUN	GROUND WATER	DRI	DRINKING WATER	YTER
Email To:	icalenda@enviroanalyticsgroup.com	Purchase Order No.:			Pace Quo	te .				TSU □	RCRA		TO □	OTHER	
Phone:	314-620-3056 Fax:	Project Name: Rod and	Rod and Wire Mill GW Sampling	guild	Pace Project		Samantha Bayura	-		Site Location	torinine.				
Request	Requested Due Date/TAT: 5 Day	Project Number:			Pace Profile #	ie #:				STATE	Q				
									Requested	Requested Analysis Filtered (Y/N)	red (Y/N)				
	Section D Valid Matrix Codes Required Client Information MATRIX CO	(1) et o	COLLECTED	TED		Prese	Preservatives	ÎN/A							
	DRINKING WATER WASTE WASTE WASTE SOLUT SOLUSOLID OII	ee valid codes i	COMPOSITE	OSITE	J			1		#0M	WO#:30229127	915	7		
LEM #		e) BURIC CODE (s.			OF CONTAINERS	10³ °20†	HO _f S _{Os} S _s é Ionsrite	her Analysis Test al Cadmium 6010	9) Zinc 6010	2020		enbiza			
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	ADDITIONAL COMMENTS	RELINQUISHED	RELINQUISHED BY / AFFILIATION	U DATE	TIME		ACCEP	TED BY / A	ACCEPTED BY / AFFILIATION	DATE	TIME		SAMPLEC	SAMPLE CONDITIONS	
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ge 2			SAMPLE	SAMPLER NAME AND SIGNATURE	IATURE		-						(1	(N/	lost
0 of 21			PRINT	PRINT Name of SAMPLER: SIGNATURE of SAMPLER:					DATE Signed	*//5/00		ni qməT	1/Y) eɔl	Sustady Se Y) TeleoO	ıl zəlqms2 (MY)
	*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges	g Pace's NET 30 day payment	terms and agreeing t	o late charges of 1,5% per	month	for any invoice	es not paid within 30 days	١,	(minoral in)			F-ALL-0-02	ozorev.de, z	Feb-zbo7	8

Pittsburgh Lab Sample Con	dition	Upo	n R	eceipt		"7 R. J.
Pace Analytical Client Name:			Δv	iroAna.	Project #	302291
Courier: Fed Ex UPS USPS Cli				,		Label AND LIMS Login AM
Custody Seal on Cooler/Box Present:					110	
Thermometer Used				Blue None	<i>6</i> °C = 1-	Formul () °C
Cooler Temperature Observed Temp	1.0	°C	Con	rection Factor: 104	Final	emp:v///
Temp should be above freezing to 6°C					Date and li	nitials of person examining
Carrama autor	Yes	No	N/A	a a	contents	1111 4-0-1
Comments:	163	140	19//			
Chain of Custody Present:	$+\langle \cdot \rangle$	\		1.		
Chain of Custody Filled Out:	+3	<u> </u>		2.		<u>'</u>
Chain of Custody Relinquished:	1	<u> </u>		3.		
Sampler Name & Signature on COC:	4	-		4.		
Sample Labels match COC:		<u></u>		5.		
-Includes date/time/ID Matrix:	VV					
Samples Arrived within Hold Time:		\ \		6.		
Short Hold Time Analysis (<72hr remaining):		<u> </u>		7.		
Rush Turn Around Time Requested:	<u> </u>			8.		
Sufficient Volume:	_X_			9.		
Correct Containers Used:				10.		
-Pace Containers Used:	<u> </u>					
Containers Intact:	X			11.		
Orthophosphate field filtered			X	12.		
Hex Cr Aqueous Compliance/NPDES sample field filter	red		X	13.		
Organic Samples checked for dechlorination	1		X	14.		
Filtered volume received for Dissolved tests			X	15.		
All containers have been checked for preservation.	X			16.		
All containers needing preservation are found to be in	V					
compliance with EPA recommendation.					<u> </u>	
exceptions: VOA, coliform, TOC, O&G, Phenolic	:S			Initial when Completed	Date/time of preservation	_[
exceptions. VOA, comonn, 100, cao, 1 nonono	-			Lot # of added		
	 		./-	preservative		
Headspace in VOA Vials (>6mm):			<u>X</u>	17.	<u> </u>	
Trip Blank Present:				18.		
Trip Blank Custody Seals Present				Initial when		
Rad Aqueous Samples Screened > 0.5 mrem/h	r		7	completed:	Date:	
Client Notification/ Resolution:	ا سورای					
Person Contacted:			Date/	Time:	Contact	ed B <u>y:</u>
Comments/ Resolution:						
					- · · ·	

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



September 11, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on September 06, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Rod and Wire Mill GW Sampling Project:

Pace Project No.: 30229225

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8 Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

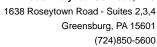


SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30229225001	RW07-MW(S)	Water	09/06/17 08:53	09/06/17 23:55
30229225002	RW07-MW(I)	Water	09/06/17 09:20	09/06/17 23:55
30229225003	RW11-MW(S)	Water	09/06/17 10:01	09/06/17 23:55
30229225004	RW11-MW(I)	Water	09/06/17 10:25	09/06/17 23:55
30229225005	RW15-MW(S)	Water	09/06/17 11:31	09/06/17 23:55
30229225006	RW15-MW(I)	Water	09/06/17 12:15	09/06/17 23:55
30229225007	RW20-MW(S)	Water	09/06/17 13:03	09/06/17 23:55
30229225008	RW20-MW(I)	Water	09/06/17 14:15	09/06/17 23:55



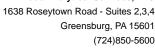


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30229225001	RW07-MW(S)	EPA 6010C	PJD	2
30229225002	RW07-MW(I)	EPA 6010C	PJD	2
30229225003	RW11-MW(S)	EPA 6010C	PJD	2
30229225004	RW11-MW(I)	EPA 6010C	PJD	2
30229225005	RW15-MW(S)	EPA 6010C	PJD	2
30229225006	RW15-MW(I)	EPA 6010C	PJD	2
30229225007	RW20-MW(S)	EPA 6010C	PJD	2
30229225008	RW20-MW(I)	EPA 6010C	PJD	2





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: September 11, 2017

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 270942

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30229127001,30229225003

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

• MSD (Lab ID: 1333391)

• Zinc

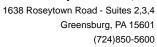
Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

PDS failed for Zinc.
• QC Batch: 271062





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

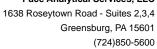
Date: September 11, 2017

Analyte Comments:

QC Batch: 270942

1c: PDS failed for Zinc.

- BLANK (Lab ID: 1333387)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1333389)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1333392)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1333388)
 - Cadmium
 - Zinc
- MS (Lab ID: 1333390)
 - Cadmium
 - Zinc
- MS (Lab ID: 1333393)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1333391)
 - Cadmium
 - Zinc
- RW07-MW(I) (Lab ID: 30229225002)
 - Cadmium
 - Zinc
- RW07-MW(S) (Lab ID: 30229225001)
 - Cadmium
 - Zinc
- RW11-MW(I) (Lab ID: 30229225004)
 - Cadmium
 - Zinc
- RW11-MW(S) (Lab ID: 30229225003)
 - Cadmium
 - Zinc
- RW15-MW(I) (Lab ID: 30229225006)
 - Cadmium
 - Zinc
- RW15-MW(S) (Lab ID: 30229225005)
 - Cadmium
 - Zinc
- RW20-MW(I) (Lab ID: 30229225008)
 - Cadmium
 - Zinc





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: September 11, 2017

Analyte Comments:

QC Batch: 270942

1c: PDS failed for Zinc.

• RW20-MW(S) (Lab ID: 30229225007)

• Cadmium • Zinc

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Date: 09/11/2017 03:27 PM

Sample: RW07-MW(S)	Lab ID:	30229225001	Collecte	d: 09/06/17	08:53	Received: 09/	06/17 23:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.6	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:26	7440-43-9	1c
Zinc	165	ua/L	10.0	1.1	1	09/08/17 08:50	09/08/17 22:26	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Sample: RW07-MW(I)	Lab ID:	30229225002	2 Collecte	d: 09/06/17	7 09:20	Received: 09/	06/17 23:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	11.0	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:28	7440-43-9	1c
Zinc	2840	ua/L	10.0	1.1	1	09/08/17 08:50	09/08/17 22:28	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Date: 09/11/2017 03:27 PM

Sample: RW11-MW(S)	Lab ID:	30229225003	Collecte	d: 09/06/17	7 10:01	Received: 09/	06/17 23:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	0.81J	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:30	7440-43-9	1c
Zinc	10600	ua/L	1000	108	100	09/08/17 08:50	09/09/17 01:42	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Date: 09/11/2017 03:27 PM

Sample: RW11-MW(I)	Lab ID:	30229225004	Collecte	d: 09/06/17	7 10:25	Received: 09/	06/17 23:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A			
Cadmium	274	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:43	7440-43-9	1c
Zinc	134000	ua/L	1000	108	100	09/08/17 08:50	09/09/17 01:49	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Date: 09/11/2017 03:27 PM

Sample: RW15-MW(S)	Lab ID:	3022922500	5 Collecte	d: 09/06/17	' 11:31	Received: 09/	06/17 23:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	11.7	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:45	7440-43-9	1c
Zinc	444	ua/L	10.0	1.1	1	09/08/17 08:50	09/08/17 22:45	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Sample: RW15-MW(I)	Lab ID:	30229225006	Collecte	d: 09/06/17	7 12:15	Received: 09/	06/17 23:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	21.3	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:48	7440-43-9	1c
Zinc	43000	ua/L	1000	108	100	09/08/17 08:50	09/09/17 01:51	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Date: 09/11/2017 03:27 PM

Sample: RW20-MW(S)	Lab ID:	30229225007	Collecte	d: 09/06/17	13:03	Received: 09/	06/17 23:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	29.9	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:50	7440-43-9	1c
Zinc	1080	ug/L	10.0	1.1	1	09/08/17 08:50	09/08/17 22:50	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Sample: RW20-MW(I)	Lab ID:	30229225008	3 Collecte	d: 09/06/17	' 14:15	Received: 09/	06/17 23:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.34	1	09/08/17 08:50	09/08/17 22:52	7440-43-9	1c
Zinc	71.1	ua/L	10.0	1.1	1	09/08/17 08:50	09/08/17 22:52	7440-66-6	1c



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Date: 09/11/2017 03:27 PM

QC Batch: 270942 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30229225001, 30229225002, 30229225003, 30229225004, 30229225005, 30229225006, 30229225007,

30229225008

METHOD BLANK: 1333387 Matrix: Water

Associated Lab Samples: 30229225001, 30229225002, 30229225003, 30229225004, 30229225005, 30229225006, 30229225007,

	3022922500 3022922500	1, 30229225002 8	, 30229225	003, 30229	9225004, 3	8022922500	5, 302	292250	006, 3022	9225007,			
ъ.		11.5	Blank		eporting	.45				•			
Parameter		Units	Resul		Limit	MDL			alyzed		alifiers		
Cadmium		ug/L		3.0 U	3.0		0.34		/17 21:39				
Zinc		ug/L	10	0.0 U	10.0		1.1	09/08	/17 21:39) 1c			
LABORATORY CONTROL SA	AMPLE: 1	333388											
Parameter		Units	Spike Conc.	LCS Resu		LCS % Rec		% Rec Limits	Qu	ıalifiers			
Cadmium		ug/L	500		511	102		80-1	20 1c		-		
Zinc		ug/L	500		502	100		80-1	20 1c				
MATRIX SPIKE & MATRIX SF	PIKE DUPLIC	CATE: 13333	90		1333391								
			MS	MSD									
		30229127001	Spike	Spike	MS	MSD	MS		MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% R	lec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	1400	500	500	1900	1820		101	84	75-125	4	20	1c
Zinc	ug/L	30900	500	500	31500	31600		112	146	75-125	1	20	1c,MH
MATRIX SPIKE SAMPLE:	1;	333393											
			302292		Spike	MS		MS		% Rec			
Parameter		Units	Resi	ult 	Conc.	Result		% Re	ec	Limits		Qual	itiers
Cadmium		ug/L		0.81J	500		521		104		125 10		
Zinc		ug/L		10600	500	110	000		92	75-1	125 10	0	
SAMPLE DUPLICATE: 1333	3389												
			30229127		Dup				ax				
Parameter		Units	Resul	t 	Result	RPD		RI	PD	Qualifie	ers		
Cadmium		ug/L		1400	1390)	1		20	1c			
Zinc		ug/L	3	0900	30400)	2		20	1c			
SAMPLE DUPLICATE: 133	3392												
			30229225		Dup				ax				
Parameter		Units	Resul	t 	Result	RPD		RI	PD	Qualifie	ers		
Cadmium		ug/L	().81J	0.88J	l			20	1c			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Max



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Date: 09/11/2017 03:27 PM

SAMPLE DUPLICATE: 1333392 30229225003 Dup

RPD RPD Parameter Units Result Result Qualifiers Zinc ug/L 10600 10500 0 20 1c

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 271062

[1] PDS failed for Zinc.

ANALYTE QUALIFIERS

Date: 09/11/2017 03:27 PM

1c PDS failed for Zinc.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

hiah





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229225

Date: 09/11/2017 03:27 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30229225001	RW07-MW(S)	EPA 3005A	270942	EPA 6010C	271062
30229225002	RW07-MW(I)	EPA 3005A	270942	EPA 6010C	271062
30229225003	RW11-MW(S)	EPA 3005A	270942	EPA 6010C	271062
30229225004	RW11-MW(I)	EPA 3005A	270942	EPA 6010C	271062
30229225005	RW15-MW(S)	EPA 3005A	270942	EPA 6010C	271062
30229225006	RW15-MW(I)	EPA 3005A	270942	EPA 6010C	271062
30229225007	RW20-MW(S)	EPA 3005A	270942	EPA 6010C	271062
30229225008	RW20-MW(I)	EPA 3005A	270942	EPA 6010C	271062



CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section	lient Information:	Section B Required Project Information:		Section C	;			Page:	~*******	Jo	
Company:	EnviroAnalytics Group	Report To: James Calenda		Attention:	Laura Sargent				hody.		
Address:	1600 Sparrows Point Blvd, Suite B2	Copy To: Stewart Kabis		Company Name:	me: EnviroAnalytics Group	tics Group	SOUTH A THOUSAND	707704			
	Sparrows Point, MD 21219			Address:	1650 Des Peres Rozo	1650 Des Peres Road, Suite 303 St. Louis, MO 63131	يسبقيب	AGENCY			
Email To:	jcalenda@enviro	Purchase Order No.;		Pace Quote			NPDES 1	GROUND WAIER	Α.Ε.Κ - Γ	DRINKING WATER	WATER
Phone:	314-620-3056	Project Name: Rod and Wire Mill GW Sampling	Buildu	Pace Project	Samantha Bayura	ura	Cife Location	500		OIREK	
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Pittsburgh Lab	Sample Cond	lition	Upo	n F	Receipt				
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Chain of Custody Filled Out:		X			2.				
Chain of Custody Relinquish	ed:	X			3.				
Sampler Name & Signature	on COC:	X			4.				
Sample Labels match COC:	,	X			5.				
-Includes date/time/ID	Matrix:	M		_					
Samples Arrived within Hold	Time:	X			6.				
Short Hold Time Analysis (<72hr remaining):		X		7.				
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All containers have been checked	i for preservation.	X			16.				
All containers needing preservation		X	İ						
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 $\hfill \Box$ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

(724)850-5600



September 14, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on September 07, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Rod and Wire Mill GW Sampling Project:

Pace Project No.: 30229376

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282 South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5 USDA Soil Permit #: P330-14-00213 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L



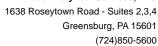


SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30229376001	RW18-MWI	Water	09/07/17 10:25	09/07/17 23:00
30229376002	RW18-MWS	Water	09/07/17 11:00	09/07/17 23:00
30229376003	RW09-MWS	Water	09/07/17 11:42	09/07/17 23:00
30229376004	RW09-MWI	Water	09/07/17 12:05	09/07/17 23:00
30229376005	RW10-MWI	Water	09/07/17 13:03	09/07/17 23:00
30229376006	RW08-MWI	Water	09/07/17 14:15	09/07/17 23:00
30229376007	RW08-MWS	Water	09/07/17 15:00	09/07/17 23:00



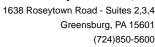


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30229376001	RW18-MWI	EPA 6010C	PJD	2
30229376002	RW18-MWS	EPA 6010C	PJD	2
30229376003	RW09-MWS	EPA 6010C	PJD	2
30229376004	RW09-MWI	EPA 6010C	PJD	2
30229376005	RW10-MWI	EPA 6010C	PJD	2
30229376006	RW08-MWI	EPA 6010C	PJD	2
30229376007	RW08-MWS	EPA 6010C	PJD	2





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: September 14, 2017

General Information:

7 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 271239

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30229376001,30229570004

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 1334722)
 - Zinc

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 1334723)
 - Zinc

Duplicate Sample:

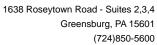
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cadmium failed on the PDS.

QC Batch: 271286





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: September 14, 2017

Analyte Comments:

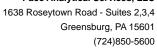
QC Batch: 271239

1c: Cadmium failed on the PDS.

- BLANK (Lab ID: 1334719)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1334721)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1334724)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1334720)
 - Cadmium
 - Zinc
- MS (Lab ID: 1334722)
 - Cadmium
 - Zinc
- MS (Lab ID: 1334725)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1334723)
 - Cadmium
 - Zinc
- RW08-MWI (Lab ID: 30229376006)
 - Cadmium
 - Zinc
- RW08-MWS (Lab ID: 30229376007)
 - Cadmium
 - Zinc
- RW09-MWI (Lab ID: 30229376004)
 - Cadmium
 - Zinc
- RW09-MWS (Lab ID: 30229376003)
 - Cadmium
 - Zinc
- RW10-MWI (Lab ID: 30229376005)
 - Cadmium
 - Zinc
- RW18-MWI (Lab ID: 30229376001)
 - Cadmium
 - Zinc
- RW18-MWS (Lab ID: 30229376002)
 - Cadmium
 - Zinc

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: September 14, 2017

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Date: 09/14/2017 02:49 PM

Sample: RW18-MWI	Lab ID:	30229376001	Collected	d: 09/07/1	7 10:25	Received: 09/	/07/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: Ef	PA 3005A	-	•	_
Cadmium	72.2	ug/L	3.0	0.34	1	09/11/17 14:14	09/13/17 22:22	7440-43-9	1c
Zinc	382000	ug/L	10000	1080	1000	09/11/17 14:14	09/14/17 01:57	7440-66-6	1c,MH, ML





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Date: 09/14/2017 02:49 PM

Sample: RW18-MWS	Lab ID:	30229376002	Collecte	d: 09/07/17	7 11:00	Received: 09/	07/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	thod: El	PA 3005A			
Cadmium	156	ug/L	3.0	0.34	1	09/11/17 14:14	09/13/17 22:38	7440-43-9	1c
Zinc	6160	ua/L	1000	108	100	09/11/17 14:14	09/14/17 01:00	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Date: 09/14/2017 02:49 PM

Sample: RW09-MWS	Lab ID:	30229376003	Collecte	d: 09/07/17	7 11:42	Received: 09/	07/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	12.3	ug/L	3.0	0.34	1	09/11/17 14:14	09/13/17 22:40	7440-43-9	1c
Zinc	8750	ua/L	1000	108	100	09/11/17 14:14	09/14/17 01:02	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Date: 09/14/2017 02:49 PM

Sample: RW09-MWI	Lab ID:	30229376004	Collecte	d: 09/07/17	7 12:05	Received: 09/	07/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	thod: E	PA 3005A			
Cadmium	9.1	ug/L	3.0	0.34	1	09/11/17 14:14	09/13/17 22:47	7440-43-9	1c
Zinc	39400	ug/L	1000	108	100	09/11/17 14:14	09/14/17 01:10	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Date: 09/14/2017 02:49 PM

Sample: RW10-MWI	Lab ID:	30229376005	Collecte	d: 09/07/17	7 13:03	Received: 09/	/07/17 23:00 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	17.7	ug/L	3.0	0.34	1	09/11/17 14:14	09/13/17 22:50	7440-43-9	1c
Zinc	8220	ug/L	1000	108	100	09/11/17 14:14	09/14/17 01:13	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Date: 09/14/2017 02:49 PM

Sample: RW08-MWI	Lab ID:	30229376006	Collecte	d: 09/07/17	' 14:15	Received: 09/	/07/17 23:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	0.77J	ug/L	3.0	0.34	1	09/11/17 14:14	09/14/17 01:15	7440-43-9	1c
Zinc	69.4	ua/L	10.0	1.1	1	09/11/17 14:14	09/14/17 01:15	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Date: 09/14/2017 02:49 PM

Sample: RW08-MWS	Lab ID:	30229376007	Collecte	d: 09/07/17	7 15:00	Received: 09/	atrix: Water		
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Me	hod: E	PA 3005A			
Cadmium	2.5J	ug/L	3.0	0.34	1	09/11/17 14:14	09/13/17 22:55	7440-43-9	1c
Zinc	4460	ua/L	1000	108	100	09/11/17 14:14	09/14/17 01:17	7440-66-6	1c



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Date: 09/14/2017 02:49 PM

QC Batch: 271239 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30229376001, 30229376002, 30229376003, 30229376004, 30229376005, 30229376006, 30229376007

METHOD BLANK: 1334719 Matrix: Water

Associated Lab Samples:

Parameter	Units	Blank Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.34	09/14/17 00:41	1c
Zinc	ug/L	10.0 U	10.0	1.1	09/14/17 00:41	1c

LABORATORY CONTROL SAMPLE:	1334720					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	499	100	80-120	1c
Zinc	ug/L	500	498	100	80-120	1c

MATRIX SPIKE & MATRIX SP	IKE DUPLICA	ATE: 13347	22		1334723							
			MS	MSD								
	3	0229376001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	72.2	500	500	608	569	107	99	75-125	7	20	1c
Zinc	ug/L	382000	500	500	399000	368000	3400	-2680	75-125	8	20	1c,MH, ML

MATRIX SPIKE SAMPLE:	1334725					o. 5	
		30229570004	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	0.37J	500	497	99	75-125	1c
Zinc	ug/L	184	500	677	99	75-125 °	1c

		30229376001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	72.2	74.4	3	20	1c
Zinc	ug/L	382000	397000	4	20	1c

SAMPLE DUPLICATE: 1334724		00000570004	Divis		Maria	
		30229570004	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	0.37J	0.48J		20) 1c
Zinc	ug/L	184	189	3	20) 1c

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 271286

[1] Cadmium failed on the PDS.

ANALYTE QUALIFIERS

Date: 09/14/2017 02:49 PM

1c Cadmium failed on the PDS.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

high.

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased

low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229376

Date: 09/14/2017 02:49 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30229376001	RW18-MWI	EPA 3005A	271239	EPA 6010C	271286
30229376002	RW18-MWS	EPA 3005A	271239	EPA 6010C	271286
30229376003	RW09-MWS	EPA 3005A	271239	EPA 6010C	271286
30229376004	RW09-MWI	EPA 3005A	271239	EPA 6010C	271286
30229376005	RW10-MWI	EPA 3005A	271239	EPA 6010C	271286
30229376006	RW08-MWI	EPA 3005A	271239	EPA 6010C	271286
30229376007	RW08-MWS	EPA 3005A	271239	EPA 6010C	271286



CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section	Section A	Section B	Section C	
Require	Hent Information:	Required Project Information:	оппа	Page:
Company:	EnviroAnalytics Group	Report To: James Calenda	Attention: Laura Sargent	WORKSTONE TO THE TAXABLE TO THE TAXA
Address:	1600 Sparrows Point Blvd, Suite B2	Copy To: Stewart Kabis	Company Name: EnviroAnalytics Group	REGULATORY AGENCY
			Address: 1650 Des Peres Road, Suite 303 St. Louis, MO 63131	NPDES GROUND WATER DRINKING WATER
Email To:	o: <u> calenda@envimanalylicsgroup.com</u>	<u>ا</u> تِ	Pace Quote Reference	F RCRA
Рћопе:	314-620-3056 Fax:	Project Name: Rod and Wire Mill GW Sampling	Page Project Samantha Bayura	
Request	Requested Due Date/TAT: 5 Day	Project Number:	1	STATE: MD
		The state of the s		Requested Analysis Filtered (YIN)
·		odes CODE elett	Preservatives 元	
- The state of the	DRINKING WATER WATER WASTE WATER PRODUCT SOIL/SOLID OIL		S	WO#:30229376
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Page	The state of the s	SAMPLER NAME AND SIGNATURE	IGNATURE	
18 of 20		PRINT Name of SAMPLER. SIGNATURE of SAMPLER.	LER: C DATE Signed	Temp in °C Received on ice (Y/N) Cooler (Y/N)
Total and the second se	*Important Note: By signing this form you are accepting	Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days		-zpa2-

Pittsburgh Lab Sample Con-	ditior	ո Up	on F	Receipt	
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i			_	et) Blue None	
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Cooler Temperature Observed Temp	10		CO	rection ractor. (())	J - I mai Temp. (20)
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-Includes date/time/ID Matrix: \(\)	*				
Samples Arrived within Hold Time:	 	 	 	6.	
Short Hold Time Analysis (<72hr remaining):	1	12		7.	
Rush Turn Around Time Requested:	X	 	ļ	8.	
Sufficient Volume:	<u> </u>	-	ļ	9.	
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Orthophosphate field filtered	<u> </u>	ļ	X	12.	
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Organic Samples checked for dechlorination:				14.	
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All containers have been checked for preservation.	X			16.	
All containers needing preservation are found to be in	X				
compliance with EPA recommendation.				Initial when A A	Date/time of
exceptions: VOA, coliform, TOC, O&G, Phenolics				completed ATT	preservation
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leadspace in VOA Vials (>6mm):		$\neg \exists$	Δ	17.	
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rip Blank Custody Seals Present			$\langle \rangle$	Initial when	
ad Aqueous Samples Screened > 0.5 mrem/hr				completed;	Date:
lient Notification/ Resolution:					
Person Contacted:			Date/T	ime:	Contacted By:
Comments/ Resolution:					
				, page 1	
				·	

☐ A check in this box indicates that additional information has been stored in ereports. Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR

Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers) *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status

section of the Workorder Edit Screen.

REVISED REC'D 9/8/17 VIA EMAIL CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page 20 of 20

Section A
Required Client Information:
Company: EnviroAnaly SMB 9/8/17 Section B
Required Project Information:
[Report To: ...larmes Calenda Section C
Invoice information:
Attention: Laura Sargent 9

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		If data package is required, attach data package checklist.	Data Validation Required? (Y)N)	Data Package Required? (Y(N))							R	P	F	Re	RE		0	000	SAMPLE (A-Z, 0-9 / Sample IDs MUST B	Section D		Requested Due Date/TAT:	314-620-3056		Sparr	-	
		required, a	Required	equired?	ADDITIONAL COMMENTS						800	208	5	091	100	3	0	Q	SAMPLE ID (A-Z, 0.9 /) Sample IDs MUST BE UNIQUE		7	TAT:		icalenda@enviroanalyticsgroup.com	Sparrows Point, MD 21219	1430 Sparrows Point Blvd	EnviroAnalytics Group
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Temp in	°C				Γ	F	+	F	-	-	Ŧ		+		-				Residual Chlorine (Y/N)			l			GROUND WATER		
Received (Y/N)					SAI							İ							Pa					_	я П		
Custody S	halca	-	+	\dagger			I					I							29 Pro					9	ᄝ		
Cooler ()		-	\perp		SAMPLE CONDITIONS														Pace Project No./ Lab I.D.					OTHER	DRINKING WATER		
Samples i (Y/N)					8														Lab I.D.						ATER		

(724)850-5600



September 14, 2017

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on September 08, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14 Nevada Certification #: PA014572015-1 New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30229570001	RW19-MW(I)	Water	09/08/17 09:10	09/08/17 23:30
30229570002	RW19-MW(S)	Water	09/08/17 08:45	09/08/17 23:30
30229570003	RW22-MW(I)	Water	09/08/17 13:16	09/08/17 23:30
30229570004	RW22-MW(S)	Water	09/08/17 12:44	09/08/17 23:30
30229570005	RW02-MW(S)	Water	09/08/17 12:12	09/08/17 23:30
30229570006	RW02-MW(I)	Water	09/08/17 11:34	09/08/17 23:30
30229570007	RW21-MW(D)	Water	09/08/17 10:25	09/08/17 23:30
30229570008	RW01-MW(S)	Water	09/08/17 14:54	09/08/17 23:30
30229570009	RW01-MW(I)	Water	09/08/17 14:17	09/08/17 23:30

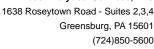


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Lab ID	Sample ID	Method	Analysts	Analytes Reported	
30229570001	RW19-MW(I)	EPA 6010C	PJD	2	
30229570002	RW19-MW(S)	EPA 6010C	PJD	2	
30229570003	RW22-MW(I)	EPA 6010C	PJD	2	
		SM4500H+B-00	SEF	1	
30229570004	RW22-MW(S)	EPA 6010C	PJD	2	
		SM4500H+B-00	SEF	1	
30229570005	RW02-MW(S)	EPA 6010C	PJD	2	
		SM4500H+B-00	SEF	1	
30229570006	RW02-MW(I)	EPA 6010C	PJD	2	
		SM4500H+B-00	SEF	1	
30229570007	RW21-MW(D)	EPA 6010C	PJD	2	
		SM4500H+B-00	SEF	1	
30229570008	RW01-MW(S)	EPA 6010C	PJD	2	
		SM4500H+B-00	SEF	1	
30229570009	RW01-MW(I)	EPA 6010C	PJD	2	
		SM4500H+B-00	SEF	1	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: September 14, 2017

General Information:

9 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 271239

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30229376001,30229570004

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 1334722)
 - Zinc

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 1334723)
 - Zinc

Duplicate Sample:

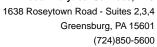
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Cadmium failed on the PDS.

QC Batch: 271286





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

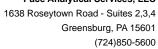
Date: September 14, 2017

Analyte Comments:

QC Batch: 271239

1c: Cadmium failed on the PDS.

- BLANK (Lab ID: 1334719)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1334721)
 - Cadmium
 - Zinc
- DUP (Lab ID: 1334724)
 - Cadmium
 - Zinc
- LCS (Lab ID: 1334720)
 - Cadmium
 - Zinc
- MS (Lab ID: 1334722)
 - Cadmium
 - Zinc
- MS (Lab ID: 1334725)
 - Cadmium
 - Zinc
- MSD (Lab ID: 1334723)
 - Cadmium
 - Zinc
- RW01-MW(I) (Lab ID: 30229570009)
 - Cadmium
 - Zinc
- RW01-MW(S) (Lab ID: 30229570008)
 - Cadmium
 - Zinc
- RW02-MW(I) (Lab ID: 30229570006)
 - Cadmium
 - Zinc
- RW02-MW(S) (Lab ID: 30229570005)
 - Cadmium
 - Zinc
- RW19-MW(I) (Lab ID: 30229570001)
 - Cadmium
 - Zinc
- RW19-MW(S) (Lab ID: 30229570002)
 - Cadmium
 - Zinc
- RW21-MW(D) (Lab ID: 30229570007)
 - Cadmium
 - Zinc





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: September 14, 2017

Analyte Comments:

QC Batch: 271239

1c: Cadmium failed on the PDS.

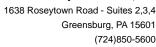
• RW22-MW(I) (Lab ID: 30229570003)

• Cadmium • Zinc

• RW22-MW(S) (Lab ID: 30229570004)

• Cadmium

Zinc





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Method: SM4500H+B-00

Description:4500H+ pH, ElectrometricClient:EnviroAnalytics Group, LLCDate:September 14, 2017

General Information:

7 samples were analyzed for SM4500H+B-00. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.

RW01-MW(I) (Lab ID: 30229570009)
RW01-MW(S) (Lab ID: 30229570008)
RW02-MW(I) (Lab ID: 30229570006)
RW02-MW(S) (Lab ID: 30229570005)
RW21-MW(D) (Lab ID: 30229570007)

RW21-MW(D) (Lab ID: 30229570007)
 RW22-MW(I) (Lab ID: 30229570003)

• RW22-MW(S) (Lab ID: 30229570004)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Date: 09/14/2017 02:47 PM

Sample: RW19-MW(I)	Lab ID:	30229570001	Collecte	d: 09/08/1	7 09:10	Received: 09/	08/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	1320	ug/L	15.0	1.7	5	09/11/17 14:14	09/14/17 01:20	7440-43-9	1c
Zinc	2500000	ua/L	100000	10800	10000	09/11/17 14:14	09/14/17 02:17	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Date: 09/14/2017 02:47 PM

Sample: RW19-MW(S)	Lab ID:	30229570002	Collecte	d: 09/08/17	08:45	Received: 09/	08/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	2.6J	ug/L	3.0	0.34	1	09/11/17 14:14	09/14/17 01:25	7440-43-9	1c
Zinc	2990	ug/L	10.0	1.1	1	09/11/17 14:14	09/14/17 01:25	7440-66-6	1c





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Date: 09/14/2017 02:47 PM

Sample: RW22-MW(I)	Lab ID:	30229570003	Collecte	d: 09/08/17	7 13:16	Received: 09/	08/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytica	l Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium	3.7	ug/L	3.0	0.34	1	09/11/17 14:14	09/14/17 01:27	7440-43-9	1c
Zinc	328	ug/L	10.0	1.1	1	09/11/17 14:14	09/14/17 01:27	7440-66-6	1c
4500H+ pH, Electrometric	Analytica	l Method: SM45	00H+B-00						
pH at 25 Degrees C	7.2	Std. Units	2.0	2.0	1		09/11/17 22:21		H6





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Date: 09/14/2017 02:47 PM

Sample: RW22-MW(S)	Lab ID:	30229570004	Collecte	d: 09/08/17	12:44	Received: 09/	08/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	0.37J	ug/L	3.0	0.34	1	09/11/17 14:14	09/14/17 01:30	7440-43-9	1c
Zinc	184	ug/L	10.0	1.1	1	09/11/17 14:14	09/14/17 01:30	7440-66-6	1c
4500H+ pH, Electrometric	Analytical	Method: SM45	00H+B-00						
pH at 25 Degrees C	10.1	Std. Units	2.0	2.0	1		09/11/17 22:21		H6





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Date: 09/14/2017 02:47 PM

Sample: RW02-MW(S)	Lab ID:	30229570005	Collecte	d: 09/08/17	7 12:12	Received: 09/	08/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytica	l Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	11.8	ug/L	3.0	0.34	1	09/11/17 14:14	09/14/17 01:42	7440-43-9	1c
Zinc	3220	ug/L	10.0	1.1	1	09/11/17 14:14	09/14/17 01:42	7440-66-6	1c
4500H+ pH, Electrometric	Analytica	l Method: SM45	00H+B-00						
pH at 25 Degrees C	6.1	Std. Units	2.0	2.0	1		09/11/17 22:23		H6





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Date: 09/14/2017 02:47 PM

Sample: RW02-MW(I)	Lab ID:	30229570006	Collecte	d: 09/08/17	7 11:34	Received: 09/	08/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytica	l Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0J	ug/L	3.0	0.34	1	09/11/17 14:14	09/14/17 01:44	7440-43-9	1c
Zinc	203	ug/L	10.0	1.1	1	09/11/17 14:14	09/14/17 01:44	7440-66-6	1c
4500H+ pH, Electrometric	Analytica	l Method: SM45	00H+B-00						
pH at 25 Degrees C	12.2	Std. Units	2.0	2.0	1		09/11/17 22:25		H6





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Date: 09/14/2017 02:47 PM

Sample: RW21-MW(D)	Lab ID:	30229570007	Collecte	d: 09/08/1	7 10:25	Received: 09/	08/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytica	l Method: EPA 6	010C Prep	aration Me	thod: E	PA 3005A			
Cadmium	2.3J	ug/L	3.0	0.34	1	09/11/17 14:14	09/14/17 01:47	7440-43-9	1c
Zinc	43000	ug/L	1000	108	100	09/11/17 14:14	09/14/17 01:50	7440-66-6	1c
4500H+ pH, Electrometric	Analytica	l Method: SM45	00H+B-00						
pH at 25 Degrees C	5.4	Std. Units	2.0	2.0	1		09/11/17 22:26		H6





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Date: 09/14/2017 02:47 PM

Sample: RW01-MW(S)	Lab ID:	30229570008	Collected	d: 09/08/17	7 14:54	Received: 09/	/08/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	1.2J	ug/L	3.0	0.34	1	09/11/17 14:14	09/14/17 01:52	7440-43-9	1c
Zinc	5730	ug/L	1000	108	100	09/11/17 14:14	09/14/17 02:19	7440-66-6	1c
4500H+ pH, Electrometric	Analytical	Method: SM45	00H+B-00						
pH at 25 Degrees C	5.3	Std. Units	2.0	2.0	1		09/11/17 22:27		H6





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Date: 09/14/2017 02:47 PM

Sample: RW01-MW(I)	Lab ID:	30229570009	Collecte	d: 09/08/17	14:17	Received: 09/	/08/17 23:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytica	l Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	0.51J	ug/L	3.0	0.34	1	09/11/17 14:14	09/14/17 01:54	7440-43-9	1c
Zinc	90.0	ug/L	10.0	1.1	1	09/11/17 14:14	09/14/17 01:54	7440-66-6	1c
4500H+ pH, Electrometric	Analytica	l Method: SM45	00H+B-00						
pH at 25 Degrees C	12.3	Std. Units	2.0	2.0	1		09/11/17 22:28		H6



Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

QC Batch: 271239 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30229570001, 30229570002, 30229570003, 30229570004, 30229570005, 30229570006, 30229570007,

30229570008, 30229570009

METHOD BLANK: 1334719 Matrix: Water

Associated Lab Samples: 30229570001, 30229570002, 30229570003, 30229570004, 30229570005, 30229570006, 30229570007,

30229570008 30229570009

30	022957000	08, 30229570009											
Parameter		Units	Blank Result		eporting Limit	MDL		Aı	nalyzed	Qua	alifiers		
Cadmium		ug/L	3	3.0 U	3.0)	0.34	09/1	4/17 00:41	1c		_	
Zinc		ug/L	10	0.0 U	10.0)	1.1	09/1	4/17 00:41	1c			
LABORATORY CONTROL SA	MPLE:	1334720											
			Spike	LCS	3	LCS	9	6 Rec					
Parameter		Units	Conc.	Resu	ılt	% Rec	L	imits	Qι	ualifiers			
Cadmium		ug/L	500		499	100		80-	120 1c				
Zinc		ug/L	500		498	100		80-	120 1c				
MATRIX SPIKE & MATRIX SP	IKE DUPL	ICATE: 13347	22 MS Spike	MSD Spike	1334723 MS	MSD	MS	3	MSD	% Rec		Max	
Parameter	Units		Conc.	Conc.	Result	Result	% R		% Rec	Limits	RPD	RPD	Qua
Cadmium	ug/L	72.2	500	500	608	569		107	99	75-125	7	20	1c
Zinc	ug/L	382000	500	500	399000	368000	3	3400	-2680	75-125	8	20	1c,MH ML
MATRIX SPIKE SAMPLE:	,	1334725	3022957	70004	Spike	MS		MS	 S	% Rec			
Parameter		Unito	Posi		Conc	Posult		0/ D		Limite		Oual	ifiore

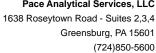
MATRIX SPIKE SAMPLE:	1334725						
		30229570004	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	0.37J	500	497	99	75-125	1c
Zinc	ug/L	184	500	677	99	75-125	1c

SAMPLE DUPLICATE: 1334721

Date: 09/14/2017 02:47 PM

Parameter	Units	30229376001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cadmium Zinc	ug/L ug/L	72.2 382000	74.4 397000	3 4	20 1c 20 1c	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





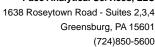
Project: Rod and Wire Mill GW Sampling

30229570 Pace Project No.:

Date: 09/14/2017 02:47 PM

SAMPLE DUPLICATE: 1334724		30229570004	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	0.37J	0.48J		20) 1c
Zinc	ug/L	184	189	3	20) 1c

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

QC Batch: 271273 Analysis Method: SM4500H+B-00
QC Batch Method: SM4500H+B-00 Analysis Description: 4500H+B pH

Associated Lab Samples: 30229570003, 30229570004, 30229570005, 30229570006, 30229570007, 30229570008, 30229570009

SAMPLE DUPLICATE: 1334856

Date: 09/14/2017 02:47 PM

30229627001 Dup Max Parameter Units Result Result **RPD** RPD Qualifiers 9.7 pH at 25 Degrees C 10 H6 Std. Units 9.7 0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 271286

[1] Cadmium failed on the PDS.

ANALYTE QUALIFIERS

Date: 09/14/2017 02:47 PM

1c Cadmium failed on the PDS.

H6 Analysis initiated outside of the 15 minute EPA required holding time.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased

high

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased

low.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30229570

Date: 09/14/2017 02:47 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
30229570001	RW19-MW(I)	EPA 3005A	271239	EPA 6010C	271286
30229570002	RW19-MW(S)	EPA 3005A	271239	EPA 6010C	271286
30229570003	RW22-MW(I)	EPA 3005A	271239	EPA 6010C	271286
30229570004	RW22-MW(S)	EPA 3005A	271239	EPA 6010C	271286
30229570005	RW02-MW(S)	EPA 3005A	271239	EPA 6010C	271286
30229570006	RW02-MW(I)	EPA 3005A	271239	EPA 6010C	271286
30229570007	RW21-MW(D)	EPA 3005A	271239	EPA 6010C	271286
30229570008	RW01-MW(S)	EPA 3005A	271239	EPA 6010C	271286
30229570009	RW01-MW(I)	EPA 3005A	271239	EPA 6010C	271286
30229570003	RW22-MW(I)	SM4500H+B-00	271273		
30229570004	RW22-MW(S)	SM4500H+B-00	271273		
30229570005	RW02-MW(S)	SM4500H+B-00	271273		
30229570006	RW02-MW(I)	SM4500H+B-00	271273		
30229570007	RW21-MW(D)	SM4500H+B-00	271273		
30229570008	RW01-MW(S)	SM4500H+B-00	271273		
30229570009	RW01-MW(I)	SM4500H+B-00	271273		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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C)

The Chain-of-Custody is a LEGAL DOCUMENT, All relevant fields must be completed accurately.

Pace Project No./ Lab I.D. DRINKING WATER OTHER ŏ GROUND WATER Residual Chlorine (Y/N) Page: ΔÃ REGULATORY AGENCY RCRA Requested Analysis Filtered (Y/N) STATE Site Location NPDES UST 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Ot09 princ leto Otol Gadmium 6010 Company Name: Enviro Analytics Group ₽nalysis Test ÌN./A Other Samantha Bayura Methanol Laura Sargent Preservatives $O_S S_S O_3$ HOsN HCI invoice Information: HNO³ ⁷OS²H Reference; Pace Project Manager: Pace Profile #; Section C Attention: Unpreserved ace Quote Address: # OF CONTAINERS SAMPLE TEMP AT COLLECTION TIME COMPOSITE END/GRAB COLLECTED DATE Rod and Wire Mill GW Sampling TIME COMPOSITE DATE Report To: James Calenda Stewart Kabis Required Project Information: (G=GRAB C=COMP) SAMPLE TYPE ourchase Order No. Project Number: (see valid codes to left) **MATRIX CODE** Project Name: Section B Copy To: Valid Matrix Codes DRINKING WATER WATER WASTER WASTE WATER PRODUCT SOIL/SOLID 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com OIL WIPE AIR OTHER TISSUE Sparrows Point, MD 21219 (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE EnviroAnalytics Group 5 Day SAMPLEID Fax: Section D Required Client Information Section A Required Client Information: Phone: 314-620-3056 Requested Due Date/TAT: Sompany: Email To: Address: # WJLI

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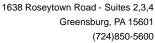
99570.
Provide: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% par month for any involces not pate, within 30 day

Pittsburgh Lab Sample Condition Upon Receipt Spawows Project # 0 2 2 9 5 7 Client Name: Courier: Fed Ex UPS USPS Client Commercial Pace Other Label Tracking #: Custody Seal on Cooler/Box Present: yes in no Æeals intact: ☐ yes ☐ no Wet ! Biue None Type of Ice. Thermometer Used Correction Factor: +0.0 °C Final Temp: 1.2 ٠C Observed Temp Cooler Temperature Temp should be above freezing to 6°C Date and Initials of person examining Comments: Yes No N/A Chain of Custody Present: 2. Chain of Custody Filled Out: Chain of Custody Relinquished: 3. 4. Sampler Name & Signature on COC: 5. Sample Labels match COC: -Includes date/time/ID 6. Samples Arrived within Hold Time: 7. Short Hold Time Analysis (<72hr remaining): 8. Rush Turn Around Time Requested: 9. Sufficient Volume: 10. Correct Containers Used: -Pace Containers Used: 11. Containers Intact: 12. Orthophosphate field filtered 13. Hex Cr Aqueous Compliance/NPDES sample field filtered 14. Organic Samples checked for dechlorination: 15. Filtered volume received for Dissolved tests 16. Samples ook and 009 All containers have been checked for preservation. impresenced bothles were basic. All containers needing preservation are found to be in compliance with EPA recommendation. Date/time of exceptions: VOA, coliform, TOC, O&G, Phenolics preservation completed Lot # of added preservative 17. Headspace in VOA Vials (>6mm): 18. Trip Blank Present: Trip Blank Custody Seals Present Initial when Rad Aqueous Samples Screened > 0.5 mrem/hr Date: completed: Client Notification/ Resolution: Contacted By: Person Contacted: Comments/ Resolution:

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





April 13, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on April 09, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification
Hawaii Certification

Idaho Certification
Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1

New Hampshire/TNI Certification #: 297617 New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706

North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

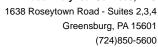
Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L



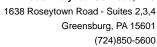


SAMPLE SUMMARY

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30248825001	RW08-MWI	Water	04/08/18 10:05	04/09/18 22:25
30248825002	RW08-MWS	Water	04/08/18 10:40	04/09/18 22:25
30248825003	RW07-MWI	Water	04/08/18 11:30	04/09/18 22:25
30248825004	RW07-MWS	Water	04/08/18 12:05	04/09/18 22:25
30248825005	RW11-MWI	Water	04/08/18 13:30	04/09/18 22:25
30248825006	RW11-MWS	Water	04/08/18 14:20	04/09/18 22:25



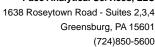


SAMPLE ANALYTE COUNT

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30248825001	RW08-MWI	EPA 6010C	KAS	2
30248825002	RW08-MWS	EPA 6010C	KAS	2
30248825003	RW07-MWI	EPA 6010C	KAS	2
30248825004	RW07-MWS	EPA 6010C	KAS	2
30248825005	RW11-MWI	EPA 6010C	KAS	2
30248825006	RW11-MWS	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 13, 2018

General Information:

6 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Sample: RW08-MWI	Lab ID:	30248825001	Collecte	d: 04/08/18	3 10:05	Received: 04/	09/18 22:25 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	6.2	ug/L	3.0	0.87	1	04/10/18 15:27	04/12/18 15:57	7440-43-9	
Zinc	1050	ug/L	10.0	1.0	1	04/10/18 15:27	04/12/18 15:57	04/12/18 15:57 7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Date: 04/13/2018 05:39 PM

Sample: RW08-MWS	Lab ID:	30248825002	Collecte	d: 04/08/18	3 10:40	Received: 04/	09/18 22:25 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	2.2J	ug/L	3.0	0.87	1	04/10/18 15:27	04/12/18 16:11	7440-43-9	
Zinc	13200	ug/L	1000	104	100	04/10/18 15:27	04/12/18 16:31	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Sample: RW07-MWI	Lab ID:	30248825003	Collecte	d: 04/08/18	3 11:30	Received: 04/	09/18 22:25 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	1.3J	ug/L	3.0	0.87	1	04/10/18 15:27	04/12/18 16:13	7440-43-9	
Zinc	756	ug/L	10.0	1.0	1	04/10/18 15:27	04/12/18 16:13	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Sample: RW07-MWS	Lab ID:	30248825004	Collecte	d: 04/08/18	3 12:05	Received: 04/	09/18 22:25 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	4.6	ug/L	3.0	0.87	1	04/10/18 15:27	04/12/18 16:23	7440-43-9	
Zinc	204	ug/L	10.0	1.0	1	04/10/18 15:27	04/12/18 16:23	7440-66-6	





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Sample: RW11-MWI	Lab ID:	30248825005	Collecte	d: 04/08/18	3 13:30	Received: 04/	09/18 22:25 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium Zinc	1660 215000	ug/L ug/L	3.0 10000	0.87 1040	1 1000	04/10/18 15:27 04/10/18 15:27	04/12/18 16:25 04/12/18 16:34		





Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Date: 04/13/2018 05:39 PM

Sample: RW11-MWS	Lab ID:	30248825006	Collecte	d: 04/08/18	3 14:20	Received: 04/	09/18 22:25 Ma	atrix: Water		
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	4.1	ug/L	3.0	0.87	1	04/10/18 15:27	04/12/18 16:28	7440-43-9		
Zinc	37100	ug/L	1000	104	100	04/10/18 15:27	04/12/18 16:37	18 16:37 7440-66-6		



Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Date: 04/13/2018 05:39 PM

Zinc

QC Batch: 294181 Analysis Method: **EPA 6010C** QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

Associated Lab Samples: 30248825001, 30248825002, 30248825003, 30248825004, 30248825005, 30248825006

METHOD BLANK: 1440582 Matrix: Water

Associated Lab Samples: 30248825001, 30248825002, 30248825003, 30248825004, 30248825005, 30248825006

Blank Reporting Limit MDL Qualifiers Parameter Units Result Analyzed Cadmium 3.0 U 3.0 04/12/18 15:52 ug/L 0.87 ug/L 10.0 U 10.0 1.0 04/12/18 15:52

LABORATORY CONTROL SAMPLE: 1440583 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 500 519 104 80-120 ug/L

Zinc 500 516 103 80-120 ug/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1440586 1440585 MSD MS 30248825001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 6.2 500 500 515 502 102 99 75-125 3 20 Zinc ug/L 1050 500 500 1550 1500 100 90 75-125 3 20

SAMPLE DUPLICATE: 1440584 30248825001 Dup Max

RPD RPD Qualifiers Parameter Units Result Result Cadmium 6.2 6.4 3 20 ug/L 1050 1080 3 20 Zinc ug/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600



QUALIFIERS

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

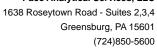
U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Date: 04/13/2018 05:39 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod & Wire Mill GW Sampling

Pace Project No.: 30248825

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30248825001	RW08-MWI	EPA 3005A	 294181	EPA 6010C	294236
30248825002	RW08-MWS	EPA 3005A	294181	EPA 6010C	294236
30248825003	RW07-MWI	EPA 3005A	294181	EPA 6010C	294236
30248825004	RW07-MWS	EPA 3005A	294181	EPA 6010C	294236
30248825005	RW11-MWI	EPA 3005A	294181	EPA 6010C	294236
30248825006	RW11-MWS	EPA 3005A	294181	EPA 6010C	294236

Face Analytical www.pecsebs.com

DRINKING WATER OTHER 9 NPDES | GROUND WATER | Requested Analysis Filtered (Y/N) Page: Ω REGULATORY AGENCY F RCRA STATE Site Location TSU T CHAIN-OF-CUST MO#: 30248825 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Company Name: EnviroAnalytics Group Pace Quote
Reference:
Pace Project
Samantha Bayura
Pace Project
Pace Profile #: Attention: Laura Sargent Section Invoice Inc. Address: Project Name: Rod and Wire Mill GW Sampling Report To: James Calenda Section B Required Project Information: Copy To: Stewart Kabis Purchase Order No.: Project Number: 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 EnviroAnalytics Group 5 Day Fax: Section A
Required Client Information:
Company: EnviroAnaly1 hone: 314-620-3056 Requested Due Date/TAT: Email To: Address:

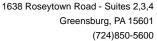
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Pittsburgh Lab Sample Conc	lition	Up	on F	Receipt					
Face Analytical Client Name:	_		- -	rivo Ana	F	Project #	<u> 30 2</u>	948	382
Courier: Fed Ex UPS USPS Client	nt [Domi	mercia	il Pace Oth	her		La LIMS Log		NV
Custody Seal on Cooler/Box Present:	$\neg f$	no	Se	eals intact:	lyes □r	no	a warman		
Thermometer Used 6	Тур	e of lo	:e: (М					,	
Cooler Temperature Observed Temp Temp should be above freezing to 6°C	<u> l</u>	_ ° C	Co	prrection Factor			Temp:		- ° C
Comments:	Yes	i No	o N	pH paper Lot#	, 71	Date and content	Initials of p	erson exa	10-18
Chain of Custody Present:	1			1.	···			# Character Control	
Chain of Custody Filled Out:	子			2.				***************************************	
Chain of Custody Relinquished:	1			3.					
Sampler Name & Signature on COC:	17			4.					
Sample Labels match COC:	17			5.					
-Includes date/time/ID Matrix:	W	_							
Samples Arrived within Hold Time:	X			6,					
Short Hold Time Analysis (<72hr remaining):	1	7		7.					
Rush Turn Around Time Requested:	X			8.	-				
Sufficient Volume:	X		1	9.					
Correct Containers Used:	X			10.			***		
-Pace Containers Used:	X								
Containers Intact:	7			11.					
Orthophosphate field filtered			X	12.					
Hex Cr Aqueous Compliance/NPDES sample field filtered			K	13.		-			
Organic Samples checked for dechlorination:			K	14.					
Filtered volume received for Dissolved tests			1	15.					
All containers have been checked for preservation.	+			16.					
All containers needing preservation are found to be in compliance with EPA recommendation,	1								
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed Lot # of added	1/1	te/time of servation			
			-	preservative					
leadspace in VOA Vials (>6mm):				17.					
rip Blank Present:		\nearrow		18.					
rip Blank Custody Seals Present and Aqueous Samples Screened > 0.5 mrem/hr			<u> </u>	Initial when 🔥				*******	
ad Aqueeus camples dereened > 0.0 milenim				completed: A1	M Date	e:			
lient Notification/ Resolution:				,					
Person Contacted:			Date/1	Time:		Contacte	d By:		
Comments/ Resolution:									
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Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

 $\hfill \square$ A check in this box indicates that additional information has been stored in ereports.

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





April 16, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on April 10, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617

New Jersey/TNI Certification #: PA051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

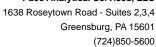
Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L



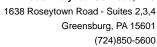


SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30248944001	RW04-MWS	Water	04/10/18 10:00	04/10/18 22:50
30248944002	RW03-MWI	Water	04/10/18 10:55	04/10/18 22:50
30248944003	RW03-MWS	Water	04/10/18 11:40	04/10/18 22:50
30248944004	RW06-MWI	Water	04/10/18 12:29	04/10/18 22:50
30248944005	RW09-MWI	Water	04/10/18 14:25	04/10/18 22:50
30248944006	RW09-MWS	Water	04/10/18 14:50	04/10/18 22:50
30248944007	RW16-MWS	Water	04/10/18 15:30	04/10/18 22:50





SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Lab ID	Sample ID	Method	Analysts	Analytes Reported	
30248944001	RW04-MWS	EPA 6010C	KAS	2	
30248944002	RW03-MWI	EPA 6010C	KAS	2	
30248944003	RW03-MWS	EPA 6010C	KAS	2	
30248944004	RW06-MWI	EPA 6010C	KAS	2	
30248944005	RW09-MWI	EPA 6010C	KAS	2	
30248944006	RW09-MWS	EPA 6010C	KAS	2	
30248944007	RW16-MWS	EPA 6010C	KAS	2	

(724)850-5600





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Method: **EPA 6010C** Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 16, 2018

General Information:

7 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Date: 04/16/2018 10:47 AM

Sample: RW04-MWS	Lab ID: 30248944001		Collected: 04/10/18 10:00		Received: 04/10/18 22:50 Ma		atrix: Water		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium	3.0 U	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 15:58	7440-43-9	
Zinc	300	ug/L	10.0	1.0	1	04/12/18 15:57	04/13/18 15:58	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Sample: RW03-MWI	Lab ID:	30248944002	2 Collecte	d: 04/10/18	3 10:55	Received: 04/	10/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	thod: El	PA 3005A			
Cadmium	128	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 16:12	7440-43-9	
Zinc	6920	ug/L	1000	104	100	04/12/18 15:57	04/13/18 17:06	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Sample: RW03-MWS	Lab ID:	30248944003	Collecte	d: 04/10/18	3 11:40	Received: 04/	10/18 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Dranarad	Analyzad	CAS No.	Ougl
Faiameters	—— Results			IVIDL	DF	Prepared	Analyzed		Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	11.8	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 16:15	7440-43-9	
Zinc	44000	ug/L	1000	104	100	04/12/18 15:57	04/13/18 17:09	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Sample: RW06-MWI	Lab ID:	30248944004	Collecte	d: 04/10/18	3 12:29	Received: 04/	10/18 22:50 Ma	atrix: Water	
			Report					0.0.1	
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	89.2	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 16:24	7440-43-9	
Zinc	27900	ug/L	1000	104	100	04/12/18 15:57	04/13/18 17:11	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Date: 04/16/2018 10:47 AM

Sample: RW09-MWI	Lab ID:	30248944005	Collecte	d: 04/10/18	3 14:25	Received: 04/	10/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.8J	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 16:27	7440-43-9	
Zinc	38400	ug/L	1000	104	100	04/12/18 15:57	04/13/18 17:14	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Date: 04/16/2018 10:47 AM

Sample: RW09-MWS	Lab ID:	30248944006	Collecte	d: 04/10/18	3 14:50	Received: 04/	10/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: El	PA 3005A			
Cadmium	9.8	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 16:29	7440-43-9	
Zinc	8980	ug/L	1000	104	100	04/12/18 15:57	04/13/18 17:16	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Sample: RW16-MWS	Lab ID:	30248944007	Collecte	d: 04/10/18	15:30	Received: 04/	10/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 16:31	7440-43-9	
Zinc	25.0	ug/L	10.0	1.0	1	04/12/18 15:57	04/13/18 16:31	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Date: 04/16/2018 10:47 AM

Zinc

QC Batch: 294517 Analysis Method: **EPA 6010C** QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30248944001, 30248944002, 30248944003, 30248944004, 30248944005, 30248944006, 30248944007

METHOD BLANK: 1441805 Matrix: Water

Associated Lab Samples: 30248944001, 30248944002, 30248944003, 30248944004, 30248944005, 30248944006, 30248944007

Blank Reporting Limit MDL Parameter Units Result Analyzed Qualifiers Cadmium 3.0 U 3.0 04/13/18 15:53 ug/L 0.87 ug/L 10.0 U 10.0 1.0 04/13/18 15:53

LABORATORY CONTROL SAMPLE: 1441806 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 500 512 102 80-120 ug/L 500 505 101 80-120 Zinc ug/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1441809 1441808 MS MSD 30248944001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 3.0 U 500 500 506 504 101 101 75-125 0 20 Zinc ug/L 300 500 500 782 774 97 95 75-125 20

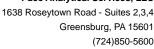
MATRIX SPIKE SAMPLE: 1441811 MS 30249071004 MS % Rec Spike Parameter Units Result Conc. Result % Rec Limits Qualifiers Cadmium 41.2 548 101 75-125 500 ug/L 5940 75-125 500 6470 105 7inc ug/L

SAMPLE DUPLICATE: 1441807 30248944001 Dup Max Units Result Result RPD RPD Qualifiers Parameter Cadmium 3.0 U 3.0 U 20 ug/L Zinc ug/L 300 298 0 20

SAMPLE DUPLICATE: 1441810 30249071004 Dup Max Units Result RPD **RPD** Qualifiers Parameter Result

Cadmium 41.2 ug/L 40.8 1 20 5940 Zinc ug/L 5960 0 20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

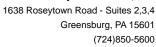
U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Date: 04/16/2018 10:47 AM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30248944

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30248944001	RW04-MWS	EPA 3005A		EPA 6010C	<u>294562</u>
30248944002	RW03-MWI	EPA 3005A	294517	EPA 6010C	294562
30248944003	RW03-MWS	EPA 3005A	294517	EPA 6010C	294562
30248944004	RW06-MWI	EPA 3005A	294517	EPA 6010C	294562
30248944005	RW09-MWI	EPA 3005A	294517	EPA 6010C	294562
30248944006	RW09-MWS	EPA 3005A	294517	EPA 6010C	294562
30248944007	RW16-MWS	EPA 3005A	294517	EPA 6010C	294562

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical

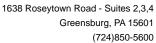
Pace Project No./ Lab I.D. (N/A) DRINKING WATER SAMPLE CONDITIONS OTHER Custody Sealed Cooler (Y/V) 1 ₽ 30248944 Ice (Y/N) Received on GROUND WATER Residual Cl ე₀ ni gmaT . است Page: g REGULATORY AGENCY RCRA 320 TIME Requested Analysis Filtered (Y/N) :: #0**1** STATE 30248944 Site Location 7 NPDES UST DATE Signed (MM/DD/YY): 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 ACCEPTED BY JAFFILIATION otal Zinc 6010 0108 mulmbeO leto Sompany Name: EnviroAnalytics Group \$ test is γεεί β ŶN /A Other Samantha Bayura Methanol Laura Sargent Preservatives Na₂S₂O₃ NaOH HCI Invoice Information; OS²H Manager: Pace Profile #: Pace Quote Reference: Pace Project Section C Attention: Unpreserved Address: SAMPLER NAME AND SIGNATURE # OF CONTAINERS SIGNATURE of SAMPLER:\ **9** PRINT Name of SAMPLER: 41076 SAMPLE TEMP AT COLLECTION DATE 5 2 TIME 000 2 COMPOSITE END/GRAB 17873800 COLLECTED Project Name: Rod and Wire Mill GW Sampling RELINQUISHED BY / AFFILIATION TIME COMPOSITE START DATE Report To: James Calenda Required Project Information: Copy To: Stewart Kabis (G=GRAB C=COMP) SAMPLE TYPE Purchase Order No.: Ž Project Number: (see valid codes to left) MATRIX CODE Section B Valid Matrix Codes DRINKING WATER WATER WASTE WATER PRODUCT SOIL/SOLID 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com OIL WIPE AIR OTHER TISSUE Sparrows Point, MD 21219 ADDITIONAL COMMENTS (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE EnviroAnalytics Group 34 5 Day SAMPLE ID Section D Required Client Information 2033 9 3 Required Client Information: 314-620-3056 Requested Due Date/TAT: (A) 035 Section A Sompany: Email To: Address: hone: ø 9 Ε 4 S ø 63 Page 16 of 17 7 # MBTI

Pittsburgh Lab Sample Cond	lition	Upc	n R	eceipt		
Face Analytical Client Name:	T-in	م والا	Mas	~ A 100 C	Project #	302489
Face Analytical Client Name:	En	MRC	M	alytics	Froject #_	
Courier: Fed Ex UPS USPS Clier	nt F	Lomm	ercial	Peace Other		Label 1984
Tracking #:	St. E	DOMIN	Citiai		 L	IMS Login
Custody Seal on Cooler/Box Present:		no	Sea	ıls intact: ☐ yes	no	
Thermometer Used (/)	Турс	e of Ice	e: Æ	Blue None		
Cooler Temperature Observed Temp		° C	₹.	rection Factor: 10.0	O °C Final To	emp: () ° C
Temp should be above freezing to 6°C						······································
				pH paper Lot#	Date and Ini contents:	tials of person examining
Comments:	Yes	No	N/A	TODIOTI		13/H 4-11-[8
Chain of Custody Present:	1		-	1.		
Chain of Custody Filled Out:	+		<u> </u>	2.		
Chain of Custody Relinquished:	4		1	3.		
Sampler Name & Signature on COC:	+		_	4.		
Sample Labels match COC:		AND THE PARTY OF T	<u> </u>	5.		
-Includes date/time/ID Matrix:	<u> </u>	1	T			
Samples Arrived within Hold Time:	\vdash	ļ.,		6.		
Short Hold Time Analysis (<72hr remaining):	₩,		ļ	7.		
Rush Turn Around Time Requested:				8. 5 day	~~~	
Sufficient Volume:			ļ	9.		
Correct Containers Used:		ļ		10.		
-Pace Containers Used:		ļ				
Containers Intact:		<u> </u>		11.		
Orthophosphate field filtered	_		,	12.		
Hex Cr Aqueous Compliance/NPDES sample field filtered				13.		
Organic Samples checked for dechlorination:				14.		
Filtered volume received for Dissolved tests				15.		
All containers have been checked for preservation.				16.		j
All containers needing preservation are found to be in						
compliance with EPA recommendation.		1		Initial when 10 AA I	Date/time of	
exceptions: VOA, coliform, TOC, O&G, Phenolics				completed 1381-1	preservation	-
				Lot # of added preservative		
Headspace in VOA Vials (>6mm):				17.		
Trip Blank Present:	ı			18.		
Trip Blank Custody Seals Present						
Rad Aqueous Samples Screened > 0.5 mrem/hr		-	_	Initial when completed:	Date: (- [~	\$
Client Notification/ Resolution:				1/2911		<u> </u>
Person Contacted:		(Date/T	ime:	Contacted	By:
Comments/ Resolution:			•		· · · · · · · · · · · · · · · · · · ·	
				·		

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

 \square A check in this box indicates that additional information has been stored in ereports.

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





April 16, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on April 11, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification #. C040

Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617 New Jersey/TNI Certification #: PA051

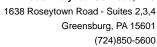
New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30249071001	RW12-MWI	Water	04/11/18 09:15	04/11/18 22:50
30249071002	RW12-MWS	Water	04/11/18 09:45	04/11/18 22:50
30249071003	RW15-MWI	Water	04/11/18 10:30	04/11/18 22:50
30249071004	RW15-MWS	Water	04/11/18 11:15	04/11/18 22:50
30249071005	RW18-MWI	Water	04/11/18 12:10	04/11/18 22:50
30249071006	RW18-MWS	Water	04/11/18 12:35	04/11/18 22:50
30249071007	RW19-MWI	Water	04/11/18 14:24	04/11/18 22:50
30249071008	RW19-MWS	Water	04/11/18 15:00	04/11/18 22:50

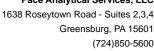


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30249071001	RW12-MWI	EPA 6010C	KAS	2
30249071002	RW12-MWS	EPA 6010C	KAS	2
30249071003	RW15-MWI	EPA 6010C	KAS	2
30249071004	RW15-MWS	EPA 6010C	KAS	2
30249071005	RW18-MWI	EPA 6010C	KAS	2
30249071006	RW18-MWS	EPA 6010C	KAS	2
30249071007	RW19-MWI	EPA 6010C	KAS	2
30249071008	RW19-MWS	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 16, 2018

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

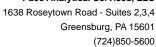
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Date: 04/16/2018 10:47 AM

Sample: RW12-MWI Lab ID: 30249071001 Collected: 04/11/18 09:15 Received: 04/11/18 22:50 Matrix: Water

Comments: • Sample ID on co	ntainers does not m	atch COC.	Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	\ 6010C Prepa	aration Met	hod: El	PA 3005A			
Cadmium Zinc	121 103000	ug/L ug/L	3.0 1000	0.87 104	1 100		04/13/18 16:34 04/13/18 17:19		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Date: 04/16/2018 10:47 AM

Sample: RW12-MWS Lab ID: 30249071002 Collected: 04/11/18 09:45 Received: 04/11/18 22:50 Matrix: Water

			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: FPA	6010C Prep	aration Mot	had: El	DA 3005A			
60 TOC WIET TOP	7 ti laiy tioai	Wicthod. Li	too loc i lep	aration ivie	iiou. Er	-A 3003A			





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Date: 04/16/2018 10:47 AM

Sample: RW15-MWI	Lab ID:	30249071003	Collecte	d: 04/11/18	3 10:30	Received: 04/	11/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 16:39	7440-43-9	
Zinc	252	ug/L	10.0	1.0	1	04/12/18 15:57	04/13/18 16:39	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Sample: RW15-MWS	Lab ID:	30249071004	Collecte	d: 04/11/18	3 11:15	Received: 04/	11/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	41.2	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 16:41	7440-43-9	
Zinc	5940	ug/L	1000	104	100	04/12/18 15:57	04/13/18 17:30	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Sample: RW18-MWI	Lab ID:	30249071005	Collecte	d: 04/11/18	3 12:10	Received: 04/	11/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: Ef	PA 3005A			
Cadmium	55.8	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 16:55	7440-43-9	
Zinc	396000	ug/L	10000	1040	1000	04/12/18 15:57	04/13/18 17:37	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Sample: RW18-MWS	Lab ID:	30249071006	Collecte	d: 04/11/18	3 12:35	Received: 04/	11/18 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	448	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 16:58	7440-43-9	
Zinc	25900	ug/L	1000	104	100	04/12/18 15:57	04/13/18 17:40	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Date: 04/16/2018 10:47 AM

Sample: RW19-MWI	Lab ID:	30249071007	Collecte	d: 04/11/1	8 14:24	Received: 04/	11/18 22:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	1700	ug/L	300	87.0	100	04/12/18 15:57	04/13/18 17:45	7440-43-9	
Zinc	4190000	ug/L	100000	10400	10000	04/12/18 15:57	04/13/18 17:49	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Sample: RW19-MWS	Lab ID:	30249071008	Collecte	d: 04/11/18	3 15:00	Received: 04/	11/18 22:50 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	6.6	ug/L	3.0	0.87	1	04/12/18 15:57	04/13/18 17:03	7440-43-9	
Zinc	7060	ug/L	1000	104	100	04/12/18 15:57	04/13/18 17:51	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Date: 04/16/2018 10:47 AM

QC Batch: 294517 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30249071001, 30249071002, 30249071003, 30249071004, 30249071005, 30249071006, 30249071007,

30249071008

METHOD BLANK: 1441805 Matrix: Water

Associated Lab Samples: 30249071001, 30249071002, 30249071003, 30249071004, 30249071005, 30249071006, 30249071007,

	249071001, 3024907100 249071008				.02 1007 100	0, 002	10011	000, 002	007.1007,			
Parameter	Units	Blank Resul		eporting Limit	MDL		Ar	nalyzed	Qua	alifiers		
Cadmium	ug/L		3.0 U	3.0)	0.87	04/13	3/18 15:53			_	
Zinc	ug/L	10	0.0 U	10.0)	1.0	04/13	3/18 15:53	i			
LABORATORY CONTROL SAM	PLE: 1441806											
Doromotor	Units	Spike	LCS		LCS % Rec		6 Rec	0	alifiers			
Parameter		Conc.	Resu				imits		ailleis	-		
Cadmium Zinc	ug/L ug/L	500 500		512 505	102 101		80- ⁻					
ZIIIC	ug/L	500		505	101		OU-	120				
MATRIX SPIKE & MATRIX SPIK	E DUPLICATE: 1441	808		1441809								
		MS	MSD									
Parameter	30248944001 Units Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % R		MSD % Rec	% Rec Limits	RPD	Max RPD	Qua
Cadmium	ug/L 3.0 l		500	506			101	101	75-125			
Zinc	ug/L 3.0 c		500	782			97	95	75-125	_	_	
MATRIX SPIKE SAMPLE:	1441811											
MATRIX OF IRE OAM! EE.	1441011	3024907	71004	Spike	MS		MS	8	% Rec			
Parameter	Units	Resi	ult	Conc.	Result		% R		Limits		Qualif	iers
Cadmium	ug/L		41.2	500	5	48		101	75-	125		
Zinc	ug/L		5940	500	64	70		105	75-	125		
SAMPLE DUPLICATE: 144180)7											
		30248944		Dup				1ax				
Parameter	Units	Result	t 	Result	RPD		R	.PD	Qualifie	ers		
Cadmium	ug/L	3	3.0 U	3.0 U				20				
Zinc	ug/L		300	298	;	0		20				
SAMPLE DUPLICATE: 144181	10											
De	11-9-	30249071		Dup	000			1ax	01""			
Parameter	Units	Result		Result	RPD		R	.PD 	Qualifie	ers		
Cadmium	ug/L		41.2	40.8	}	1		20				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

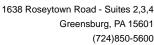
Date: 04/16/2018 10:47 AM

SAMPLE DUPLICATE: 1441810

30249071004 Dup Max

ParameterUnitsResultResultRPDRPDQualifiersZincug/L59405960020

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Date: 04/16/2018 10:47 AM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249071

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30249071001	RW12-MWI	EPA 3005A		EPA 6010C	 294562
30249071002	RW12-MWS	EPA 3005A	294517	EPA 6010C	294562
30249071003	RW15-MWI	EPA 3005A	294517	EPA 6010C	294562
30249071004	RW15-MWS	EPA 3005A	294517	EPA 6010C	294562
30249071005	RW18-MWI	EPA 3005A	294517	EPA 6010C	294562
30249071006	RW18-MWS	EPA 3005A	294517	EPA 6010C	294562
30249071007	RW19-MWI	EPA 3005A	294517	EPA 6010C	294562
30249071008	RW19-MWS	EPA 3005A	294517	EPA 6010C	294562

Pace Analytical"

CHAIN-OF-CUS WO#: 30249071

DRINKING WATER OTHER of I GROUND WATER Page: MD REGULATORY AGENCY RCRA Requested Analysis Filtered (Y/N) STATE Site Location NPDES I UST 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 Sompany Name: EnviroAnalytics Group Samantha Bayura Laura Sargent Pace Quote Reference: Pace Project Manager: Pace Profile #: Invoice ... Attention: Address: Secti The Chain-of-Custody is a LE Project Name: Rod and Wire Mill GW Sampling Project Number: 170384m-1-1 Report To: James Calenda Section B Required Project Information: Copy To: Stewart Kabis Purchase Order No.: 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 EnviroAnalytics Group 5 Day Fax: Required Client Information: Phone: 314-620-3056 Requested Due Date/TAT: Section A Company: Email To: Address:

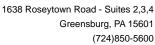
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	Section D Valid M Required Client Information MATRIX	Valid Matrix Codes	(fiel o	(AN		COLLECTED	CTED			ا	Draconstines	ofines	ÎNA	3	0							
		WATER WATER V	see valid codes	OD=D BARD	COMPOSITE	SITE	COMPOSITE	ОГГЕСТІОИ	S				1						(N/X)			
# MƏTI	Sample IDs MUST BE UNIQUE TISSUE		MATRIX CODE (s		DATE	TIME	DATE	R SAMPLE TEMP AT C	# OF CONTAINER:	H ₂ SO ₄ Unpreserved	HCI HNO ³	NaOH Na ₂ S ₂ O ₃ Nethanol	Other Test	0108 muimbsO lsto	otal Zinc 6010				esidual Chlorine	C A C A C A C A C A C A C A C A C A C A	2	. <u>.</u>
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4	RWIS- MWS		3	5	1		=	S	-				E III	X							700	
9	1		3	6	1		121	0	_		_			X	X						00	
9	KWIB-MWS		13	b			(235	35	_					X	<u> </u>						000	
7	KW19-MWI		3	5			142	7	-					X	×						000	1
80	12019-mus		3	P			(320)	90	-		_			X	>						300	
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		X	26	I	A		7	1113	5	555	JAMA	1/2/10	11,1	NO.	18.13	effel	id thou	34	-	-	-	
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Pittsburgh Lab Sample Condi	tion	Upo	n Re	eceipt	
Face Analytical Client Name:		En	Vic	oAna_	Project # 30 2 4 9 0 7 1
Courier: Fed Ex UPS USPS Clien	t 🔲	bomme	ercial	Pace Other	Label_ AM
Tracking #:				-	LIMS Login PAM
Custody Seal on Cooler/Box Present: yes		no	Seal	ls intact: yes [no
Thermometer Used	Type	of Ice	: (We	Blue None	
Cooler Temperature Observed Temp	3.7	° C		rection Factor: 10.	°c Final Temp: 3.7 °c
Temp should be above freezing to 6°C		_			
				pH paper Lot#	Date and Initials of person examining contents:
Comments:	Yes	No	N/A	10001	
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	$\langle \rangle$			2.	,
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X	- 1		4.	201 - 2007 - 1010
Sample Labels match COCFM 4-111-16-	X	1		5. 1Um 5	samples -> 001-RWM-MWS
-Includes date/time/ID Matrix:	_			but date I in	ne match
Samples Arrived within Hold Time:				6.	
Short Hold Time Analysis (<72hr remaining):				7.	
Rush Turn Around Time Requested:				8.	
Sufficient Volume:				9.	
Correct Containers Used:				10.	
-Pace Containers Used:					
Containers Intact:				11.	Application of the second of t
Orthophosphate field filtered				12.	
Hex Cr Aqueous Compliance/NPDES sample field filtered				13.	
Organic Samples checked for dechlorination:				14.	
Filtered volume received for Dissolved tests All containers have been checked for preservation.				15.	
All containers have been checked for preservation.	_			16.	
All containers needing preservation are found to be in compliance with EPA recommendation.	- 1				
Estimated with El Arecontinentation.				Initial when	Date/time of
exceptions: VOA, coliform, TOC, O&G, Phenolics			- 1	completed	preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):				17.	
Frip Blank Present:				18.	9
rip Blank Custody Seals Present					
Rad Aqueous Samples Screened > 0.5 mrem/hr				nitial when completed:	Date:
Client Notification/ Resolution:					
Person Contacted:		D	ate/Ti	me:	Contacted By:
Comments/ Resolution:					
			ti		

 $\ \square$ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





April 18, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on April 13, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

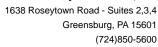
(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617

New Jersey/TNI Certification #: PA051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30249283001	RW22-MWI	Water	04/12/18 09:55	04/13/18 00:25
30249283002	RW10-MWI	Water	04/12/18 10:30	04/13/18 00:25
30249283003	RW13-MWI	Water	04/12/18 11:10	04/13/18 00:25
30249283004	RW14-MWS	Water	04/12/18 11:45	04/13/18 00:25
30249283005	RW16-MWI	Water	04/12/18 12:20	04/13/18 00:25
30249283006	RW02-MWI	Water	04/12/18 13:05	04/13/18 00:25
30249283007	RW01-MWS	Water	04/12/18 13:35	04/13/18 00:25
30249283008	RW05-MWS	Water	04/12/18 14:30	04/13/18 00:25

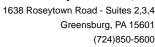


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30249283001	RW22-MWI	EPA 6010C	KAS	2
30249283002	RW10-MWI	EPA 6010C	KAS	2
30249283003	RW13-MWI	EPA 6010C	KAS	2
30249283004	RW14-MWS	EPA 6010C	KAS	2
30249283005	RW16-MWI	EPA 6010C	KAS	2
30249283006	RW02-MWI	EPA 6010C	KAS	2
30249283007	RW01-MWS	EPA 6010C	KAS	2
30249283008	RW05-MWS	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 18, 2018

General Information:

8 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 294831

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30249283001,30249472003

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1443730)
 - Zinc
- MSD (Lab ID: 1443731)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Date: 04/18/2018 09:44 AM

Sample: RW22-MWI	Lab ID: 30249283001		Collected: 04/12/18 09:55			Received: 04/13/18 00:25 M		latrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Cadmium	3.0 U	ug/L	3.0	0.87	1	04/16/18 15:46	04/17/18 16:39	7440-43-9	
Zinc	44700	ua/L	1000	104	100	04/16/18 15:46	04/17/18 16:49	7440-66-6	ML





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Date: 04/18/2018 09:44 AM

Sample: RW10-MWI	Lab ID:	Lab ID: 30249283002 Collected: 04/12/18 10:30 Received:				Received: 04/	13/18 00:25 Ma	13/18 00:25 Matrix: Water			
			Report								
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A					
Cadmium	44.4	ug/L	3.0	0.87	1	04/16/18 15:46	04/17/18 15:52	7440-43-9			
Zinc	13500	ug/L	1000	104	100	04/16/18 15:46	04/17/18 16:59	7440-66-6			





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Date: 04/18/2018 09:44 AM

Sample: RW13-MWI	Lab ID:	Lab ID: 30249283003 Collected: 04/12/18 11:10 Received: 04/13/18 00:25 Matrix:					atrix: Water		
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	19400	ug/L	300	87.0	100	04/16/18 15:46	04/17/18 17:01	7440-43-9	
Zinc	201000	ug/L	1000	104	100	04/16/18 15:46	04/17/18 17:01	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Date: 04/18/2018 09:44 AM

Sample: RW14-MWS	Lab ID:	Lab ID: 30249283004			3 11:45	Received: 04/	Received: 04/13/18 00:25 Matrix: Water			
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	thod: El	PA 3005A				
Cadmium	3220	ug/L	3.0	0.87	1	04/16/18 15:46	04/17/18 15:56	7440-43-9		
Zinc	62100	ug/L	1000	104	100	04/16/18 15:46	04/17/18 17:09	7440-66-6		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Date: 04/18/2018 09:44 AM

Sample: RW16-MWI	Lab ID:	Lab ID: 30249283005 Collected: 04/12/18 12:20 Received: 04/13/18 00:25					13/18 00:25 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Me	hod: El	PA 3005A			
Cadmium	1.1J	ug/L	3.0	0.87	1	04/16/18 15:46	04/17/18 15:59	7440-43-9	
Zinc	11200	ug/L	1000	104	100	04/16/18 15:46	04/17/18 17:12	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Date: 04/18/2018 09:44 AM

Sample: RW02-MWI	Lab ID:	30249283006	Collecte	d: 04/12/18	3 13:05	Received: 04/	13/18 00:25 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0	ug/L	3.0	0.87	1	04/16/18 15:46	04/17/18 16:08	7440-43-9	
Zinc	452	ug/L	10.0	1.0	1	04/16/18 15:46	04/17/18 16:08	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Date: 04/18/2018 09:44 AM

Sample: RW01-MWS	Lab ID:	Lab ID: 30249283007			3 13:35	Received: 04/	eceived: 04/13/18 00:25 Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Dranarad	Analyzad	CAS No.	Ougl	
	— Results	——————————————————————————————————————		IVIDL	DF	Prepared	Analyzed		Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A				
Cadmium	7.6	ug/L	3.0	0.87	1	04/16/18 15:46	04/17/18 16:11	7440-43-9		
Zinc	52000	ug/L	1000	104	100	04/16/18 15:46	04/17/18 17:14	7440-66-6		





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Date: 04/18/2018 09:44 AM

Sample: RW05-MWS	Lab ID:	30249283008	Collecte	d: 04/12/18	3 14:30	Received: 04/	Received: 04/13/18 00:25 Matrix: \		
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	04/16/18 15:46	04/17/18 16:13	7440-43-9	
Zinc	75.3	ug/L	10.0	1.0	1	04/16/18 15:46	04/17/18 16:13	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Date: 04/18/2018 09:44 AM

QC Batch: 294831 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30249283001, 30249283002, 30249283003, 30249283004, 30249283005, 30249283006, 30249283007,

30249283008

METHOD BLANK: 1443727 Matrix: Water

Associated Lab Samples: 30249283001, 30249283002, 30249283003, 30249283004, 30249283005, 30249283006, 30249283007,

	3024928300 3024928300	1, 30249283002 8	, 30249283	003, 30249	9283004, 3	3024928300	5, 302	49283006,	3024	9283007,			
5		11.5	Blank		eporting					_			
Parameter		Units	Result		Limit	MDL		Analyz			alifiers		
Cadmium		ug/L		3.0 U	3.0		0.87	04/17/18					
Zinc		ug/L	10	0.0 U	10.0)	1.0	04/17/18	15:37				
LABORATORY CONTROL S	SAMPLE: 1	443728											
Parameter		Units	Spike Conc.	LCS Resu		LCS % Rec		6 Rec ∟imits	Qu	alifiers			
Cadmium		ug/L	500		488	98		80-120			-		
Zinc		ug/L	500		497	99		80-120					
MATRIX SPIKE & MATRIX S	PIKE DUPLI	CATE: 14437	30		1443731								
			MS	MSD									
		30249283001	Spike	Spike	MS	MSD	MS			% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% R	tec % F	Rec	Limits	RPD	RPD	Qua
Cadmium	ug/L	3.0 U	500	500	540	537		108	107	75-125	1	20	
Zinc	ug/L	44700	500	500	44500	44900		-46	34	75-125	1	20	ML
MATRIX SPIKE SAMPLE:	1	443733											
_			3024947		Spike	MS		MS		% Rec			
Parameter		Units	Resu	ult 	Conc.	Result		% Rec		Limits		Quali	fiers
Cadmium		ug/L		2.6J	500		32		06	75-			
Zinc		ug/L		402	500	8	869	!	93	75-	125		
SAMPLE DUPLICATE: 144	13729												
			30249283		Dup			Max					
Parameter		Units	Result	t 	Result	RPD		RPD		Qualifie	ers		
Cadmium		ug/L	3	3.0 U	3.0 L	J			20				
Zinc		ug/L	4	4700	44400)	1		20				
SAMPLE DUPLICATE: 144	13732												
			30249472		Dup			Max					
Parameter		Units	Result	t 	Result	RPD		RPD		Qualifie	ers		
Cadmium		ug/L		2.6J	2.8	J			20				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

(724)850-5600



Max



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Date: 04/18/2018 09:44 AM

SAMPLE DUPLICATE: 1443732 30249472003 Dup

RPD Parameter Units Result Result **RPD** Qualifiers

Zinc 402 ug/L 399 20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

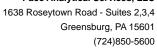
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 04/18/2018 09:44 AM

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249283

Date: 04/18/2018 09:44 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30249283001	RW22-MWI	EPA 3005A	294831	EPA 6010C	 294864
30249283002	RW10-MWI	EPA 3005A	294831	EPA 6010C	294864
30249283003	RW13-MWI	EPA 3005A	294831	EPA 6010C	294864
30249283004	RW14-MWS	EPA 3005A	294831	EPA 6010C	294864
30249283005	RW16-MWI	EPA 3005A	294831	EPA 6010C	294864
30249283006	RW02-MWI	EPA 3005A	294831	EPA 6010C	294864
30249283007	RW01-MWS	EPA 3005A	294831	EPA 6010C	294864
30249283008	RW05-MWS	EPA 3005A	294831	EPA 6010C	294864

Face Analytical"

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Project No./ Lab I.D. (N/X) DRINKING WATER Samples Intact SAMPLE CONDITIONS OTHER Cooler (Y/V) ಕ JO#: 30249283 Received on loe (Y/V) GROUND WATER Residual Ch Jemp In °C \widetilde{N} Page: REGULATORY AGENCY ð RCRA 125N Requested Analysis Filtered (Y/N) TIME C.D 是是 STATE Site Location NPDES DATE JST DATE Signed (MIM/DD/YY): 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION otal Zinc 6010 0103 mulmbsO lsto Company Name: EnviroAnalytics Group JasaT sisylsnAJ ↑N/A Other Jan Ca Samantha Bayura Methanol 2 Laura Sargent Preservatives Na₂S₂O₃ HOBN HCI Invoice Information: HNO3 Reference: Pace Project Manager: Pace Profile #; PSO4 Section C TIME ace Quote Unpreserved Attention: ddress; SAMPLER NAME AND SIGNATURE # OF CONTAINERS SIGNATURE of SAMPLER: PRINT Name of SAMPLER: SAMPLE TEMP AT COLLECTION DATE EIME TIME COMPOSITE END/GRAB COLLECTED DA TE **6** Rod and Wire Mill GW Sampling RELINQUISHED BY / AFFILIATION TIME COMPOSITE DATE Report To: James Calenda Required Project Information: Stewart Kabis Daviel SAMPLE TYPE (G=GRAB C=COMP) Purchase Order No.: (see valid codes to left) Ź Project Number: MATRIX CODE Project Name: Section B Copy To: Valid Matrix Codes ^교 역 육 수 용 DRINKING WATER
WATER
WASTE WATER
PRODUCT
SOIL/SOLID 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com OIL WIPE AIR OTHER TISSUE Sparrows Point, MD 21219 2018 10 mm ADDITIONAL COMMENTS 3 (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE 5 EnviroAnalytics Group 5 Day SAMPLE 1D Fax. Section D Required Client Information Rusoll Section A Required Client Information: T hone: 314-620-3056 Requested Due Date/TAT: 08 Email To: company: Address: 2 4 10 00 Ŧ 7 Pag**¢** 18 of 19 # M3TI

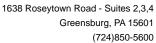
Pittsburgh Lab Sample Cond	ition	Upo	n R	leceipt	
Face Analytical Client Name:		E	M	vo Ana.	Project # 30 24928
Courier: Fed Ex UPS USPS Clien	at 🔲	bomm	ercial	Pace Other	Label PSM-
Custody Seal on Cooler/Box Preşent:		no	Sea	als intact; yes	no
Thermometer Used	l Type	of Ice	: (w		
Cooler Temperature Observed Temp	3,7	° C	١.	,	O°C Final Temp: 3. C
Temp should be above freezing to 6°C	,~	-			
				pH paper Lot#	Date and Initials of person examining contents:
Comments:	Yes	No	N/A	A (0)(0)(
Chain of Custody Present:			_	1.	
Chain of Custody Filled Out:	1/_	ļ	_	2.	·
Chain of Custody Relinquished:	/ >	<u> </u>	<u> </u>	3.	
Sampler Name & Signature on COC:	<u> </u>		ļ	4.	
Sample Labels match COC:	+			5.	
-Includes date/time/ID Matrix: √	ÝĘ.	·	-		
Samples Arrived within Hold Time:	1/-	<u> </u>		6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	\times			9.	
Correct Containers Used:	1			10.	4
-Pace Containers Used:	X				
Containers Intact:	1			11.	
Orthophosphate field filtered			\prec	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtered			4	13.	
Organic Samples checked for dechlorination:			4	14.	
Filtered volume received for Dissolved tests			7	15.	
All containers have been checked for preservation.	\times		•	16.	
All containers needing preservation are found to be in compliance with EPA recommendation.	1				
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when Completed Completed Completed Completed Completed Complete Com	Date/time of preservation
Headspace in VOA Vials (>6mm):			$\overline{\angle}$	17.	
rip Blank Present:	-	A	/	18.	
Frip Blank Custody Seals Present			\overline{X}		
Rad Aqueous Samples Screened > 0.5 mrem/hr			· /	Initial when completed;	Date:
 			<u> </u>	completed,	Date.
		_	Эфел	lime:	Contacted By:
Person Contacted: Comments/ Resolution:			atel !	anc.	Contacted by.
COMMON TODORADA			-		C. Life Marry Cong
					May A

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR

Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





April 18, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249472

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on April 13, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249472

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391

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Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617

New Jersey/TNI Certification #: PA051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249472

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
30249472001	RW01-MWI	Water	04/13/18 10:00	04/13/18 23:15	
30249472002	RW02-MWS	Water	04/13/18 10:50	04/13/18 23:15	
30249472003	RW05-MWI	Water	04/13/18 11:45	04/13/18 23:15	



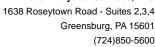


SAMPLE ANALYTE COUNT

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249472

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30249472001	RW01-MWI	EPA 6010C	KAS	2
30249472002	RW02-MWS	EPA 6010C	KAS	2
30249472003	RW05-MWI	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249472

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: April 18, 2018

General Information:

3 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 294831

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30249283001,30249472003

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1443730)
 - Zinc
- MSD (Lab ID: 1443731)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249472

Date: 04/18/2018 09:44 AM

Sample: RW01-MWI	Lab ID:	30249472001	Collecte	d: 04/13/18	3 10:00	Received: 04/	/13/18 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	16.5	ug/L	3.0	0.87	1	04/16/18 15:46	04/17/18 16:15	7440-43-9	
Zinc	576	ug/L	10.0	1.0	1	04/16/18 15:46	04/17/18 16:15	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249472

Date: 04/18/2018 09:44 AM

Sample: RW02-MWS	Lab ID:	30249472002	Collecte	d: 04/13/18	3 10:50	Received: 04/	13/18 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A			
Cadmium	16.7	ug/L	3.0	0.87	1	04/16/18 15:46	04/17/18 16:18	7440-43-9	
Zinc	5320	ug/L	1000	104	100	04/16/18 15:46	04/17/18 17:17	7440-66-6	





Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249472

Date: 04/18/2018 09:44 AM

Sample: RW05-MWI	Lab ID:	30249472003	Collecte	d: 04/13/18	11:45	Received: 04/	13/18 23:15 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	2.6J	ug/L	3.0	0.87	1	04/16/18 15:46	04/17/18 16:20	7440-43-9	
Zinc	402	ug/L	10.0	1.0	1	04/16/18 15:46	04/17/18 16:20	7440-66-6	



QUALITY CONTROL DATA

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249472

Date: 04/18/2018 09:44 AM

QC Batch: 294831 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30249472001, 30249472002, 30249472003

METHOD BLANK: 1443727 Matrix: Water

Associated Lab Samples: 30249472001, 30249472002, 30249472003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.87	04/17/18 15:37	
Zinc	ug/L	10.0 U	10.0	1.0	04/17/18 15:37	

LABORATORY CONTROL SAMPLE: Parameter	1443728 Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	500	488	98	80-120	
Zinc.	ua/l	500	497	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1443730 1443731												
			MS	MSD								
	3	30249283001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	3.0 U	500	500	540	537	108	107	75-125	1	20	
Zinc	ug/L	44700	500	500	44500	44900	-46	34	75-125	1	20	ML

MATRIX SPIKE SAMPLE:	1443733						
		30249472003	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	2.6J	500	532	106	75-125	
Zinc	ug/L	402	500	869	93	75-125	

SAMPLE DUPLICATE: 1443729						
		30249283001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	3.0 U	3.0 U		20	
Zinc	ug/L	44700	44400	1	20	

SAMPLE DUPLICATE: 1443732						
		30249472003	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	2.6J	2.8J		20	
Zinc	ug/L	402	399	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600



QUALIFIERS

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249472

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 04/18/2018 09:44 AM

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Rod and Wire Mill GW Sampling

Pace Project No.: 30249472

Date: 04/18/2018 09:44 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30249472001	RW01-MWI	EPA 3005A	294831	EPA 6010C	294864
30249472002	RW02-MWS	EPA 3005A	294831	EPA 6010C	294864
30249472003	RW05-MWI	EPA 3005A	294831	EPA 6010C	294864

CHAIN-OF-CUSTODY / Analytical Request Document

Pace Analytical"

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Don't go

Pace Project No./ Lab I.D. DRINKING WATER SAMPLE CONDITIONS OTHER ö L \$ 0249472 GROUND WATER Residual Chlorit Ŋ Page: <u>お</u>で REGULATORY AGENCY 2 RCRA JME STATE Site Location NPDES DATE 30249472 UST L 1650 Des Peres Road, Suite 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION Redue Otal Zinc 6010 Oto9 muimbsO listo Company Name: EnviroAnalytics Group ↓ is9T sievisnA **1**N/A Other Samantha Bayura Methanol Laura Sargent Preservatives Na₂S₂O₃ NaOH HCI Invoice Information: ²ONH [†]OS^zH Reference: Pace Project Manager: Pace Profile #: Section C 1936 TIME Unpreserved Attention: Pace Quote Address: # OF CONTAINERS SAMPLE TEMP AT COLLECTION DATE 2 HME 080 COMPOSITE END/GRAB 1-187856L PATE 50 COLLECTED Rod and Wire Mill GW Sampling RELINQUISHED BY / AFFILIATION TIME COMPOSITE DATE Report To: James Calenda Required Project Information: Copy To: Stewart Kabis (G=GRAB C=COMP) SAMPLE TYPE Purchase Order No.: Project Number: (see valid codes to left) MATRIX CODE Project Name; Section B Valid Matrix Codes 8 ¥ 8 유무 DRINKING WATER WASTE WATER PRODUCT SOIL/SOLID 1600 Sparrows Point Blvd, Suite B2 icalenda@enviroanalyticsgroup.com OIL WIPE AIR OTHER TISSUE Sparrows Point, MD 21219 ADDITIONAL COMMENTS (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE EnviroAnalytics Group 32-5 Pay SAMPLEID Section D Required Client Information Required Client Information: 314-620-3056 Requested Due Date/TAT: Ç Section A Sompany: Email To: Address: Phone: 7 4 90 Ŧ 'n ø • 8 တ ILEM#

(N/J)

Samples Intact

Custody Sealed Cooler (Y/N)

Ice (Y/V)

Received on

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DATE Signed (MM/DD/YY):

SAMPLER NAME AND SIGNATURE

Page 12 of 13

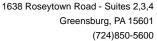
PRINT Name of SAMPLER: SIGNATURE of SAMPLER:

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	Yes /	Yes No	Yes No N/	Type of Ice Wet Blue None N

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

 $\hfill \Box$ A check in this box indicates that additional information has been stored in ereports.

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





August 03, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: A3 metals gw 3rd Quarter

Pace Project No.: 30260765

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on July 30, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

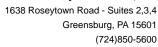
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: A3 metals gw 3rd Quarter

Pace Project No.: 30260765

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification #: 39

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617 New Jersey/TNI Certification #: PA051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: A3 metals gw 3rd Quarter

Pace Project No.: 30260765

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30260765001	RW05-MW(I)	Water	07/30/18 11:44	07/30/18 23:00
30260765002	RW05-MW(S)	Water	07/30/18 12:27	07/30/18 23:00
30260765003	RW18-MW(S)	Water	07/30/18 13:51	07/30/18 23:00
30260765004	RW18-MW(I)	Water	07/30/18 14:34	07/30/18 23:00



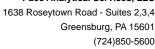


SAMPLE ANALYTE COUNT

Project: A3 metals gw 3rd Quarter

Pace Project No.: 30260765

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30260765001	RW05-MW(I)	EPA 6010C	KAS	2
30260765002	RW05-MW(S)	EPA 6010C	KAS	2
30260765003	RW18-MW(S)	EPA 6010C	KAS	2
30260765004	RW18-MW(I)	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: A3 metals gw 3rd Quarter

Pace Project No.: 30260765

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: August 03, 2018

General Information:

4 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 308040

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30260765001,30260854007

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 1505750)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: A3 metals gw 3rd Quarter

Pace Project No.: 30260765

Date: 08/03/2018 12:05 PM

Sample: RW05-MW(I)	Lab ID: 30260765001		260765001 Collected: 07/30/18 11:44 F			Received: 07/30/18 23:00 Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A									
Cadmium Zinc	1.3J 282	ug/L ug/L	3.0 10.0	0.87 1.0	1 1	08/01/18 16:04 08/01/18 16:04			





Project: A3 metals gw 3rd Quarter

Pace Project No.: 30260765

Date: 08/03/2018 12:05 PM

Sample: RW05-MW(S)	Lab ID:	30260765002	02 Collected: 07/30/18 12:27 Received: 07/30/18 23:00 Matr					atrix: Water	rix: Water	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: E	PA 3005A				
Cadmium	3.0 U	ug/L	3.0	0.87	1	08/01/18 16:04	08/02/18 15:13	7440-43-9		
Zinc	32.6	ug/L	10.0	1.0	1	08/01/18 16:04	08/02/18 15:13	7440-66-6		





Project: A3 metals gw 3rd Quarter

Pace Project No.: 30260765

Date: 08/03/2018 12:05 PM

Sample: RW18-MW(S)	Lab ID:	30260765003	Collecte	d: 07/30/18	07/30/18 13:51 Received: 07/30/18 23:00 Matrix: Water				
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	7.1	ug/L	3.0	0.87	1	08/01/18 16:04	08/02/18 15:16	7440-43-9	
Zinc	439	ug/L	10.0	1.0	1	08/01/18 16:04	08/02/18 15:16	7440-66-6	





Project: A3 metals gw 3rd Quarter

Pace Project No.: 30260765

Date: 08/03/2018 12:05 PM

Sample: RW18-MW(I)	Lab ID: 30260765004		Collecte	Collected: 07/30/18 14:34 Received:			07/30/18 23:00 Matrix: Water		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A									
Cadmium Zinc	35.1 330000	ug/L ug/L	3.0 10000	0.87 1040	1 1000		08/02/18 15:24 08/02/18 15:57		



QUALITY CONTROL DATA

Project: A3 metals gw 3rd Quarter

1505744

Pace Project No.: 30260765

Zinc

Date: 08/03/2018 12:05 PM

QC Batch: 308040 Analysis Method: **EPA 6010C** QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

ug/L

Associated Lab Samples: 30260765001, 30260765002, 30260765003, 30260765004

METHOD BLANK: Matrix: Water Associated Lab Samples: 30260765001, 30260765002, 30260765003, 30260765004 Blank Reporting Limit MDL Parameter Units Result Analyzed Qualifiers

Cadmium 3.0 U 3.0 08/02/18 15:54 ug/L 0.87 Zinc ug/L 10.0 U 10.0 1.0 08/02/18 15:54

LABORATORY CONTROL SAMPLE: 1505745 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 500 524 105 80-120 ug/L

500

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1505748 1505747 MS MSD 30260765001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual

517

103

80-120

Cadmium ug/L 1.3J 500 500 530 532 106 106 75-125 0 20 Zinc ug/L 282 500 500 770 771 98 98 75-125 0 20

MATRIX SPIKE SAMPLE: 1505750 MS 30260854007 MS % Rec Spike Parameter Units Result Conc. Result % Rec Limits Qualifiers Cadmium 44.7 600 111 75-125 500 ug/L 17600 500 18400 158 75-125 MH Zinc ug/L

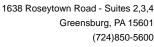
SAMPLE DUPLICATE: 1505746 30260765001 Dup Max Units Result Result RPD RPD Qualifiers Parameter 1.3J 1.2J 20 ug/L

Cadmium Zinc ug/L 282 277 2 20

SAMPLE DUPLICATE: 1505749 30260854007 Dup Max Units Result RPD **RPD** Qualifiers Parameter Result Cadmium 44.7 2 ug/L 45.5 20 17600 2 Zinc ug/L 18000 20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.







QUALIFIERS

Project: A3 metals gw 3rd Quarter

Pace Project No.: 30260765

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

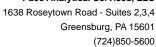
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 08/03/2018 12:05 PM

MH

Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: A3 metals gw 3rd Quarter

Pace Project No.: 30260765

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30260765001	RW05-MW(I)	EPA 3005A	308040	EPA 6010C	308108
30260765002	RW05-MW(S)	EPA 3005A	308040	EPA 6010C	308108
30260765003	RW18-MW(S)	EPA 3005A	308040	EPA 6010C	308108
30260765004	RW18-MW(I)	EPA 3005A	308040	EPA 6010C	308108

AA A T.L. AAA4 ... 0 222

(N/X)

Sumac DATE Signed (MM/DD/YY): 07/30/18

SIGNATURE of SAMPLER:

PRINT Name of SAMPLER:

CHAIN-OF-CUSTODY / Analytical Regulacy Document
The Chain-of-Custody is a LEGAL DOCUMENT. All ref MO#: 30260765

Section C

Section B

Required Client Information:

Section A

Face Analytical

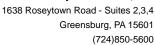
Pace Project No./ Lab I.D. Samples Intact DRINKING WATER SAMPLE CONDITIONS OTHER Cooler (Y/N) ö (eceined on ici I GROUND WATER Residual Chlorine (Y/N) O' ni qmaT RCRA 8 REGULATORY AGENCY TIME Requested Analysis Filtered (Y/N) 7-30782 785/6 STATE Site Location T NPDES DATE **TSU** L 1650 Des Peres Road, Sulte 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION ナラフラ 4 Codm Company Name: EnviroAnalytics Group Analysis Test ÎN/A Other Methanol Na2S2O3 Laura Sargen HOBN НСІ invoice information: HNO3 19:00 *OSZH 3300 Pace Quote Reference: Pace Project Manager: Pace Profile #: 1640 TIME Unpreserved Attention: Address: SAMPLER NAME AND SIGNATURE # OF CONTAINERS 20 SAMPLE TEMP AT COLLECTION 120 DATE 1/30/ 15.51 1251 TIME 1144 COMPOSITE END/GRAB COLLECTED DATE 0 100/6 RELINQUISHED BY, AFFILIATION ストタ TIME COMPOSITE Barminghere! Project Name:
A S. metacls and Froject Number: DATE Report To: James Calenda Required Project Information: (G=GRAB C=COMP) **34YT 3J4MA2** 5 MATRIX CODE PO Number: Sopy To: Valid Matrix Codes
MATRIX
CODE
DENGKS WITE
WASTE WIT
WASTE WE
PRODUCT
SOLICULO
OIL
WIP
WIP
WIP
WIP
MAR
OTHER
TISSUE f data package is required, attach data package checklist. icalenda@enviroanalyticsgroup.com 200 Sparrows Point, MD 21219 ADDITIONAL COMMENTS 1430 Sparrows Point Blvd (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE Data Validation Required? (Y/N); EnviroAnalytics Group PWIS-MIDE Data Package Required?((Y)N): R1205-M12/5 NO - 20 C Fax RWOS-MW SAMPLE ID Section D Required Clent Information hone: 314-620-3056 Requested Due Date/TAT: ютрапу: Email To: 9 42 7 **# M3TI**

Page 13 of 14

Pittsburgh Lab Sample Conditi	on U	lpon	Red	eipt	30260765
Face Analytical Client Name:	En	ìx	Ar	alxtics 1	Project #
Courier: Fed Ex UPS USPS Client	Па	nmer	cial	Pace Other	Label
		Jimion	oidi	T	LIMS Login
Tracking #:	The	1	Seals	intact: yes	no
Custody Seal on Cooler/Box Present: yes Thermometer Used	Type o	of Ice:	Wet	Blue None	- (1 °C
Cooler Temperature Observed Temp	3	°c '	Corre	ction Factor: TO .	℃ Final Temp: 5,4°C
Temp should be above freezing to 6°C			9		Date and Initials of person examining
				pH paper Lot#	contents: 17 17 7-30
Comments:	Yes	No	N/A	1003011	
Chain of Custody Present:	$\langle \rangle$			1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X			4.	
Sample Labels match COC:	X			5.	
-Includes date/time/ID Matrix:	VI				
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	\times			9.	
Correct Containers Used:	X			10.	
-Pace Containers Used:	X				
Containers Intact:	4	1		11.	
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.	
Organic Samples checked for dechlorination:			X	14.	
Filtered volume received for Dissolved tests			1	15.	
All containers have been checked for preservation.	X			16.	
All containers needing preservation are found to be in		-		= "	
compliance with EPA recommendation.				Littleban 6 A	Date/time of
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed AM	preservation
exceptions. VOA, comorni, 100, 111,				Lot # of added preservative	
			1		
Headspace in VOA Vials (>6mm):		_/	/	17.	
Trip Blank Present:	-	_	1	18.	
Trip Blank Custody Seals Present Rad Aqueous Samples Screened > 0.5 mrem/hr			7	Initial when	
Rad Aqueous Samples Screened 7 6.5 million			X	completed:	Date:
Client Notification/ Resolution:			Date/	Time:	Contacted By:
Person Contacted:					
Comments/ Resolution:					
☐ A check in this box indicates that add	itional	infor	matio	n has been stored in	ereports.
					N. dh Carolina DEHND

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





August 03, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on July 31, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 **Project Manager**

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

New Jersey/TNI Certification #: PA051

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L





SAMPLE SUMMARY

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30260854001	RW19-MW(S)	Water	07/31/18 10:15	07/31/18 23:15
30260854002	RW19-MW(I)	Water	07/31/18 10:50	07/31/18 23:15
30260854003	RW08-MW(S)	Water	07/31/18 11:40	07/31/18 23:15
30260854004	RW08-MW(I)	Water	07/31/18 12:20	07/31/18 23:15
30260854005	RW07-MW(S)	Water	07/31/18 14:00	07/31/18 23:15
30260854006	RW07-MW(I)	Water	07/31/18 14:45	07/31/18 23:15
30260854007	RW10-MW(I)	Water	07/31/18 15:35	07/31/18 23:15



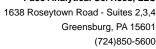


SAMPLE ANALYTE COUNT

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30260854001	RW19-MW(S)	EPA 6010C	KAS	2
30260854002	RW19-MW(I)	EPA 6010C	KAS	2
30260854003	RW08-MW(S)	EPA 6010C	KAS	2
30260854004	RW08-MW(I)	EPA 6010C	KAS	2
30260854005	RW07-MW(S)	EPA 6010C	KAS	2
30260854006	RW07-MW(I)	EPA 6010C	KAS	2
30260854007	RW10-MW(I)	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: August 03, 2018

General Information:

7 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 308040

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30260765001,30260854007

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 1505750)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

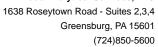




Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Sample: RW19-MW(S) Lab ID: 302		30260854001	0260854001 Collected: 07/31/18 10:15			Received: 07/	31/18 23:15 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	1.2J	ug/L	3.0	0.87	1	08/01/18 16:04	08/02/18 15:27	7440-43-9	
Zinc	10100	ug/L	1000	104	100	08/01/18 16:04	08/02/18 15:59	7440-66-6	





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Sample: RW19-MW(I)	Lab ID:	Lab ID: 30260854002			3 10:50	Received: 07/	31/18 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL		Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	thod: EF	PA 3005A			
Cadmium	1560	ug/L	30.0	8.7	10	08/01/18 16:04	08/02/18 16:02	7440-43-9	
Zinc	4880000	ug/L	20000	2080	2000	08/01/18 16:04	08/02/18 16:31	7440-66-6	





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Date: 08/03/2018 12:07 PM

Sample: RW08-MW(S)	Lab ID:	30260854003	Collecte	d: 07/31/18	3 11:40	Received: 07/	31/18 23:15 Ma	atrix: Water	
D	Deserte	11-26-	Report	MDI	D.E.	Dunnand	A b l	040 N	0
Parameters	Results	Units -	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	08/01/18 16:04	08/02/18 15:32	7440-43-9	
Zinc	6640	ug/L	1000	104	100	08/01/18 16:04	08/02/18 16:07	7440-66-6	

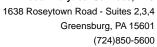




Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Sample: RW08-MW(I)	Lab ID:	Lab ID: 30260854004			3 12:20	Received: 07/	31/18 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	14.1	ug/L	3.0	0.87	1	08/01/18 16:04	08/02/18 15:34	7440-43-9	
Zinc	2540	ug/L	10.0	1.0	1	08/01/18 16:04	08/02/18 15:34	7440-66-6	





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Sample: RW07-MW(S)	Sample: RW07-MW(S) Lab ID: 30260854005		Collecte	d: 07/31/18	3 14:00	Received: 07/	31/18 23:15 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium Zinc	4.8 248	ug/L ug/L	3.0 10.0	0.87 1.0	1 1				





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Sample: RW07-MW(I)	Lab ID:	Lab ID: 30260854006			3 14:45	Received: 07/	31/18 23:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	52.9	ug/L	3.0	0.87	1	08/01/18 16:04	08/02/18 15:39	7440-43-9	
Zinc	26300	ug/L	1000	104	100	08/01/18 16:04	08/02/18 16:09	7440-66-6	





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Sample: RW10-MW(I)	Lab ID:	Lab ID: 30260854007			3 15:35	Received: 07/	31/18 23:15 Ma	atrix: Water	
Dava es eta ea	Daguita	Llaita	Report	MDI	סר	Duananad	A l	CACNI	0
Parameters	Results -	Units	Limit -	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	44.7	ug/L	3.0	0.87	1	08/01/18 16:04	08/02/18 15:41	7440-43-9	
Zinc	17600	ug/L	1000	104	100	08/01/18 16:04	08/02/18 16:11	7440-66-6	MH



QUALITY CONTROL DATA

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Date: 08/03/2018 12:07 PM

QC Batch: 308040 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30260854001, 30260854002, 30260854003, 30260854004, 30260854005, 30260854006, 30260854007

METHOD BLANK: 1505744 Matrix: Water

Associated Lab Samples: 30260854001, 30260854002, 30260854003, 30260854004, 30260854005, 30260854006, 30260854007

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.87	08/02/18 15:54	
Zinc	ug/L	10.0 U	10.0	1.0	08/02/18 15:54	

LABORATORY CONTROL SAMPLE:	1505745					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	524	105	80-120	
Zinc	ug/L	500	517	103	80-120	

MATRIX SPIKE & MATRIX SPIR	KE DUPLICA	TE: 15057	47		1505748							
			MS	MSD								
	30	0260765001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	1.3J	500	500	530	532	106	106	75-125	0	20	
Zinc	ug/L	282	500	500	770	771	98	98	75-125	0	20	

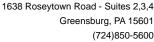
MATRIX SPIKE SAMPLE:	1505750						
		30260854007	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	44.7	500	600	111	75-125	_
Zinc	ug/L	17600	500	18400	158	75-125 I	ΜН

SAMPLE DUPLICATE: 1505746		30260765001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	1.3J	1.2J		20	
Zinc	ug/L	282	277	2	20	

SAMPLE DUPLICATE: 1505749						
		30260854007	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	44.7	45.5	2	20	
Zinc	ug/L	17600	18000	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.







QUALIFIERS

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 08/03/2018 12:07 PM

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260854

Date: 08/03/2018 12:07 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30260854001	RW19-MW(S)	EPA 3005A	308040	EPA 6010C	308108
30260854002	RW19-MW(I)	EPA 3005A	308040	EPA 6010C	308108
30260854003	RW08-MW(S)	EPA 3005A	308040	EPA 6010C	308108
30260854004	RW08-MW(I)	EPA 3005A	308040	EPA 6010C	308108
30260854005	RW07-MW(S)	EPA 3005A	308040	EPA 6010C	308108
30260854006	RW07-MW(I)	EPA 3005A	308040	EPA 6010C	308108
30260854007	RW10-MW(I)	EPA 3005A	308040	EPA 6010C	308108

DRINKING WATER OTHER ö GROUND WATER RCRA B REGULATORY AGENCY CHAIN-OF-CUSTODY / Analytical Regulary 1000 Secure The Chain-of-Custody is a LEGAL DOCUMENT. All reft MO#: 30260854 L Site Location STATE T NPDES UST L 1650 Des Peres Road, Sulte 303 St. Louis, MO 63131 Company Name: EnviroAnalytics Group Laura Sargent Involce Information: Pace Quote Reference: Pace Project Manager: Pace Profile #: Section C A 1 5130 3 212 Report To: James Calenda 5 Required Project Information: Project Name: roject Number. O Number: Section B Copy To: icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 1430 Sparrows Point Blvd Pace Analytical 314-620-3056 Requested Due Date/TAT: hone:

Pace Project No./ Lab I.D. Samples Intact (V/V) SAMPLE CONDITIONS Custody Sealed Cooler (Y/V) Received on Ice (Y/N) Residual Chlorine (Y/N) O' nì qmaT ~ 16:20 スンスペング TIME Requested Analysis Filtered (Y/N) DATE 7/3% ACCEPTED BY / AFFILIATION J seT sisylenA 1 ÎN/A Other Methanol Na2S2O3 HOBN НСІ **EONH** PS2H 19:10 THE Unpreserved SAMPLER NAME AND SIGNATURE # OF CONTAINERS SAMPLE TEMP AT COLLECTION DATE TIME COMPOSITE END/GRAB Sel Ball COLLECTED DATE RELINQUISHED BY / AFFILIATION TIME Bermenglase COMPOSITE DATE SAN (G=GRAB C=COMP) SAMPLE TYPE (see valid codes to left) MATRIX CODE
 Valid Matrix Codes

 MATRIX
 CODE

 DEROKKSWIER
 WW

 WASTER WAR
 P

 WW
 P

 PRODUCT
 SL

 SOL/SOLID
 OL

 WP
 WP

 WP
 WP

 WP
 AR

 AR
 AR

 TISSUE
 TS
 data package is required, attach data package checklist. ADDITIONAL COMMENTS SAMPLE ID (A-Z, 0-9 / .-) Sample IDS MUST BE UNIQUE Data Validation Required? (Y/N): Data Package Required? (Y)N): Section D Required Clent Information 42 2 11 m ø N3TI

Page 16 of 17

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DATE Signed (MM/DD/YY):

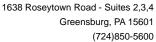
SIGNATURE of SAMPLER: PRINT Name of SAMPLER:

Pittsburgh Lab Sample Condi	tion	Upoi	n R	eceipt	
Face Analytical Client Name:	E	PAVI	M	Analytics	Project # 30 2 6 0 8 5
Courier: Fed Ex UPS USPS Clien	t 🗆	Comme	ercial	Pace Other	Label ENC
Tracking #:	2 (21)			7	LIMS Login
Custody Seal on Cooler/Box Present: yes	h		Sea	Is intact: yes [no
Thermometer Used		of Ice			
Cooler Temperature Observed Temp 3		° C			°C Final Temp: 3, 4 °C
Temp should be above freezing to 6°C		-			
				pH paper Lot#	Date and Initials of person examining contents:
Comments:	Yes	No	N/A	1003671	1 301101111
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X			3,	
Sampler Name & Signature on COC:	X			4.	
Sample Labels match COC:	X			5.	
-Includes date/time/ID Matrix:\	N		_		
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	X			9.	
Correct Containers Used:	X			10.	
-Pace Containers Used:	X			1	
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.	
Organic Samples checked for dechlorination:			X	14.	3
Filtered volume received for Dissolved tests			X	15.	
All containers have been checked for preservation.	V		/	16.	
All containers needing preservation are found to be in compliance with EPA recommendation.	9				
				Initial when AML	Date/time of preservation
exceptions: VOA, coliform, TOC, O&G, Phenolics				Lot # of added	preservation
			1	preservative	
Headspace in VOA Vials (>6mm):		_/	X	17.	
Trip Blank Present:		>	1	18.	n 200
Trip Blank Custody Seals Present Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when	
kad Aqueous Samples Screened > 0.5 mrem/nr			<u> </u>	completed:	Date:
Client Notification/ Resolution:					
Person Contacted:			Date/	Time:	Contacted By:
Comments/ Resolution:					

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





August 08, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on August 02, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133

KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

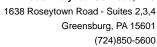
New Jersey/TNI Certification #: PA051

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L



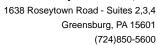


SAMPLE SUMMARY

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30260983001	RW02-MW(I)	Water	08/01/18 10:30	08/02/18 00:15
30260983002	RW02-MW(S)	Water	08/01/18 11:35	08/02/18 00:15
30260983003	RW01-MW(S)	Water	08/01/18 13:55	08/02/18 00:15
30260983004	RW01-MW(I)	Water	08/01/18 14:40	08/02/18 00:15
30260983005	RW03-MW(S)	Water	08/01/18 16:25	08/02/18 00:15





SAMPLE ANALYTE COUNT

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30260983001	RW02-MW(I)	EPA 6010C	KAS	2
30260983002	RW02-MW(S)	EPA 6010C	KAS	2
30260983003	RW01-MW(S)	EPA 6010C	KAS	2
30260983004	RW01-MW(I)	EPA 6010C	KAS	2
30260983005	RW03-MW(S)	EPA 6010C	KAS	2



PROJECT NARRATIVE

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: August 08, 2018

General Information:

5 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 308395

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30260983001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1507324)
 - Zinc
- MSD (Lab ID: 1507325)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Date: 08/08/2018 04:53 PM

Sample: RW02-MW(I)	Lab ID:	30260983001	Collecte	d: 08/01/18	3 10:30	Received: 08/	02/18 00:15 Ma	atrix: Water		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual	
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A										
Cadmium	79.9	ug/L	3.0	0.87	1		08/07/18 15:35	7440-43-9		
Zinc	5030	ug/L	1000	104	100		08/07/18 16:14		ML	





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Sample: RW02-MW(S)	Lab ID:	30260983002	Collecte	d: 08/01/18	3 11:35	Received: 08/	02/18 00:15 Ma	atrix: Water			
			Report								
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A											
Cadmium	5.2	ug/L	3.0	0.87	1	08/03/18 17:48	08/07/18 15:49	7440-43-9			
Zinc	5470	ug/L	1000	104	100	08/03/18 17:48	08/07/18 16:35	7440-66-6			





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Sample: RW01-MW(S)	Lab ID:	30260983003	Collecte	d: 08/01/18	3 13:55	Received: 08/	02/18 00:15 Ma	atrix: Water			
			Report								
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A											
Cadmium	1.6J	ug/L	3.0	0.87	1	08/03/18 17:48	08/07/18 15:52	7440-43-9			
Zinc	24100	ug/L	1000	104	100	08/03/18 17:48	08/07/18 16:37	7440-66-6			





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Sample: RW01-MW(I)	Lab ID: 30260983004		Collected: 08/01/18 14:40		Received: 08/02/18 00:15		atrix: Water		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Analytical Method: EPA 6010C Preparation Method: EPA							
Cadmium Zinc	250 9710	ug/L ug/L	3.0 1000	0.87 104	1 100		08/07/18 16:00 08/07/18 16:40		





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Sample: RW03-MW(S)	Lab ID:	Lab ID: 30260983005		Collected: 08/01/18 16:25		Received: 08/	02/18 00:15 Ma	atrix: Water	
			Report						
Parameters	Results	Units -	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Analytical Method: EPA 601		aration Met	hod: El	PA 3005A			
Cadmium	10.8	ug/L	3.0	0.87	1	08/03/18 17:48	08/07/18 16:02	7440-43-9	
Zinc	25600	ug/L	1000	104	100	08/03/18 17:48	08/07/18 16:42	7440-66-6	



QUALITY CONTROL DATA

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Date: 08/08/2018 04:53 PM

Zinc

QC Batch: 308395 Analysis Method: **EPA 6010C** QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET 30260983001, 30260983002, 30260983003, 30260983004, 30260983005 Associated Lab Samples:

METHOD BLANK: 1507321 Matrix: Water

Associated Lab Samples: 30260983001, 30260983002, 30260983003, 30260983004, 30260983005

Blank Reporting Limit MDL Qualifiers Parameter Units Result Analyzed Cadmium 3.0 U 3.0 08/07/18 15:30 ug/L 0.87 ug/L 1.1J 10.0 1.0 08/07/18 15:30

LABORATORY CONTROL SAMPLE: 1507322 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Cadmium 500 535 107 80-120 ug/L Zinc 500 529 106 80-120 ug/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1507324 1507325 MSD MS 30260983001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Cadmium ug/L 79.9 500 500 605 610 105 106 75-125 20 Zinc ug/L 5030 500 500 5300 5300 54 54 75-125 0 20 ML

SAMPLE DUPLICATE: 1507323 30260983001 Dup Max **RPD RPD** Qualifiers Parameter Units Result Result Cadmium 79.9 72.9 9 20 ug/L 5030 Zinc 4840 4 20 ug/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALIFIERS

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

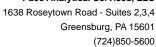
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 08/08/2018 04:53 PM

Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased ML





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30260983

Date: 08/08/2018 04:53 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30260983001	RW02-MW(I)	EPA 3005A	308395	EPA 6010C	308422
30260983002	RW02-MW(S)	EPA 3005A	308395	EPA 6010C	308422
30260983003	RW01-MW(S)	EPA 3005A	308395	EPA 6010C	308422
30260983004	RW01-MW(I)	EPA 3005A	308395	EPA 6010C	308422
30260983005	RW03-MW(S)	EPA 3005A	308395	EPA 6010C	308422

AA A P. L AAA

CHAIN-OF-CUSTODY / Ar

MO#: 30260983 The Chain-of-Custody is a LEGAL DOCUMENT

Section C

Section B

Face Analytical

ő

DRINKING WATER OTHER I GROUND WATER N N RCRA REGULATORY AGENCY Requested Analysis Filtered (Y/N) STATE Site Location ☐ NPDES ⊓ TSU 1650 Des Peres Road, Sulte 303 St. Louis, MO 83131 Company Name: EnviroAnalytics Group Laura Sargent Involce Information: Attention: Lau Pace Guote Reference: Pace Project Manager: Pace Profile #: Address: Project Number: 180227777 Required Project Information: Report To: James Calenda PO Number: Copy To: icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 1430 Sparrows Point Blvd day s Section A
Required Clent Information:
EnviroAnalytics Group tequested Due Date/TAT: hone: 314-620-3056 mail To:

Pace Project No./ Lab I.D.	7.020	534 X N Y	-	1ce	1/X) 16	() Custod
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TED AME TIME III 16 36 III 175 III	8	83		ME AND SIGNATURE	PRINT Name of SAMPLER:	E of SAMPLER
TIME DATE GOMP	a face		\	SAMPLER NAM	UNT Name	SIGNATURE
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	3. Be		\cup			
MATELY COdes MATELY COD DIAMONA MATER DW WATER PRODUCT OIL WP WEE ARR OT OTHER TSUE TISSUE TISSUE	Data Validation Required?((MN):	If data package is required, attach data package checklist.				
SAMPLE ID Required Clert Information SAMPLE ID (A-Z, 0-9 I) Sample IDs MUST BE UNIQU 2	ta Validation I	data package is i		F	Page	14 of

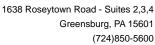
age 14 of 15

Pittsburgh Lab Sample Condition Upon Receipt

Face Analytical Client Name:	EI	VI	0	Inalytics	Project # 30 2 6 0 9 8			
Courier: Fed Ex UPS USPS Clien	· D	Comme	rcial	Pace Other	Label COLV			
Tracking #:		Johnne	loai	7 400 011101 -	LIMS Login OC			
Custody Seal on Cooler/Box Present: yes	Шr	-	Seal	s intact: yes [no			
Thermometer Used	Type	of Ice:	We	t) Blue None				
Cooler Temperature Observed Temp	3	° C	(rection Factor: †/)	°C Final Temp: 3.4 °C			
Temp should be above freezing to 6°C		-						
				pH paper Lot#	Date and Initials of person examining contents:			
Comments:	Yes	No	N/A	110173011	1			
Chain of Custody Present:	X			1.				
Chain of Custody Filled Out:	X			2.				
Chain of Custody Relinquished:	X			3.				
Sampler Name & Signature on COC:	X			4.				
Sample Labels match COC:	×			5.	9			
-Includes date/time/ID Matrix:	V		_					
Samples Arrived within Hold Time:	X			6.				
Short Hold Time Analysis (<72hr remaining):	Ĺ	X		7.				
Rush Turn Around Time Requested:	X			8.				
Sufficient Volume:	X			9.				
Correct Containers Used:	\times			10.				
-Pace Containers Used:	X							
Containers Intact:	X			11.				
Orthophosphate field filtered		•	X	12.				
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.				
Organic Samples checked for dechlorination:			X	14.				
Filtered volume received for Dissolved tests			\mathcal{F}	15.				
All containers have been checked for preservation.	X			16.				
All containers needing preservation are found to be in compliance with EPA recommendation.	X							
TOC OSC Phonoline				Initial when AM	Date/time of preservation			
exceptions: VOA, coliform, TOC, O&G, Phenolics				completed TIVL Lot # of added	preservation			
			1	preservative				
Headspace in VOA Vials (>6mm):			X	17.				
Trip Blank Present:		1		18.	1			
Trip Blank Custody Seals Present		;	X	List-Links	<u></u>			
Rad Aqueous Samples Screened > 0.5 mrem/hr			~	Initial when completed:	Date:			
Client Notification/ Resolution:								
Person Contacted: Date/Time: Contacted By:								
Comments/ Resolution:				0				
				and the second s				
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A check in this box indicates that additi	onal ir	nforma	ation	has been stored in	ereports.			

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





August 08, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on August 02, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622

Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617 New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L



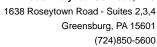


SAMPLE SUMMARY

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
30261111001	RW22-MW(I)	Water	08/02/18 10:45	08/02/18 23:45	
30261111002	RW14-MW(S)	Water	08/02/18 14:10	08/02/18 23:45	
30261111003	RW15-MW(S)	Water	08/02/18 12:05	08/02/18 23:45	
30261111004	RW15-MW(I)	Water	08/02/18 13:05	08/02/18 23:45	



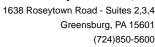


SAMPLE ANALYTE COUNT

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30261111001	RW22-MW(I)	EPA 6010C	KAS	2
30261111002	RW14-MW(S)	EPA 6010C	KAS	2
30261111003	RW15-MW(S)	EPA 6010C	KAS	2
30261111004	RW15-MW(I)	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

Method: EPA 6010C
Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: August 08, 2018

General Information:

4 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 308395

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30260983001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 1507324)
 - Zinc
- MSD (Lab ID: 1507325)
 - Zinc

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

Sample: RW22-MW(I)	Lab ID:	30261111001	Collecte	d: 08/02/18	3 10:45	Received: 08/	02/18 23:45 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A									
Cadmium	3.0 U	ug/L	3.0	0.87	1	08/03/18 17:48	08/07/18 16:05	7440-43-9	
Zinc	73300	ug/L	1000	104	100	08/03/18 17:48	08/07/18 16:45	7440-66-6	





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

Date: 08/08/2018 04:57 PM

Sample: RW14-MW(S)	Lab ID:	30261111002	Collecte	d: 08/02/18	3 14:10	Received: 08/	02/18 23:45 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3630	ug/L	3.0	0.87	1	08/03/18 17:48	08/07/18 16:07	7440-43-9	
Zinc	64100	ug/L	1000	104	100	08/03/18 17:48	08/07/18 16:47	7440-66-6	

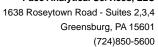




Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

Sample: RW15-MW(S)	Lab ID:	30261111003	Collecte	d: 08/02/18	3 12:05	Received: 08/	02/18 23:45 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A									
Cadmium Zinc	38.5 1320	ug/L ug/L	3.0 10.0	0.87 1.0	1 1		08/07/18 16:09 08/07/18 16:09		





Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

Sample: RW15-MW(I)	Lab ID:	30261111004	Collecte	d: 08/02/18	3 13:05	Received: 08/	02/18 23:45 Ma	atrix: Water		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	6010C MET ICP Analytical Method: EPA 6010C Preparation Method: EPA 3005A									
Cadmium	15.3	ug/L	3.0	0.87	1	08/03/18 17:48	08/07/18 16:12	7440-43-9		
Zinc	18600	ug/L	1000	104	100	08/03/18 17:48	08/07/18 16:49	7440-66-6		



QUALITY CONTROL DATA

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

QC Batch: 308395 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30261111001, 30261111002, 30261111003, 30261111004

METHOD BLANK: 1507321 Matrix: Water
Associated Lab Samples: 30261111001, 30261111002, 30261111003, 30261111004

Blank Reporting

MDL Parameter Result Limit Qualifiers Units Analyzed Cadmium 3.0 U 3.0 0.87 08/07/18 15:30 ug/L Zinc ug/L 1.1J 10.0 1.0 08/07/18 15:30

LABORATORY CONTROL SAMPLE: 1507322

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers ug/L Cadmium 500 535 107 80-120 Zinc ug/L 500 529 106 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1507324 1507325

MS MSD

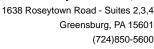
		30260983001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	79.9	500	500	605	610	105	106	75-125	1	20	
Zinc	ug/L	5030	500	500	5300	5300	54	54	75-125	0	20	ML

SAMPLE DUPLICATE: 1507323

Date: 08/08/2018 04:57 PM

		30260983001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	79.9	72.9	9	20	
Zinc	ug/L	5030	4840	4	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALIFIERS

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

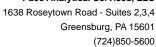
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 08/08/2018 04:57 PM

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261111

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30261111001	RW22-MW(I)	EPA 3005A	308395	EPA 6010C	308422
30261111002	RW14-MW(S)	EPA 3005A	308395	EPA 6010C	308422
30261111003	RW15-MW(S)	EPA 3005A	308395	EPA 6010C	308422
30261111004	RW15-MW(I)	EPA 3005A	308395	EPA 6010C	308422

CHAIN-OF-CUSTODY /

TTT19208:#0M

The Chain-of-Custody is a LEGAL DOCUM

NPDES RSI 1650 Des Peres Road, Sulte 303 St. Louis, MO 63131 Company Name: EnviroAnalytics Group Laura Sargent involce Information: Section C Attention: Address: Required Project Information: Report To: James Calenda Section B PO Number: Copy To:

EnviroAnalytics Group

Section A Required Clent Information:

Face Analytical "

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Samples Intact (Y/V) Pace Project No./ Lab I.D. DRINKING WATER SAMPLE CONDITIONS Cooler (Y/N) (N/A) Received on lox ☐ GROUND WATER Residual Chlorine (Y/N) O' ni qmaT Ţ ₽ RCRA REGULATORY AGENCY Requested Analysis Filtered (Y/N) Site Location STATE DATE J, ACCEPTED BY / AFFILIATION FOCT COMMINIM Analysis Test 4 ÎN/A lonsiteM IOND ANTIOS Na₂S₂O₃ HOBN HCI 444 EONH 20:20 *os^zH Pace Quote
Reference:
Pace Project
Manager:
Pace Profile #: 17:03 Unpreserved SAMPLER NAME AND SIGNATURE A M # OF CONTAINERS PRINT Name of SAMPLER: 3 2 3/ SAMPLE TEMP AT COLLECTION DATE 13:02 TIME 813/18/10-45 2 COMPOSITE END/GRAB % ₹ S 32 (8 5/8/18 DATE COLLECTED RELINQUISHED BY / AFFILIATION どこのかの 빏 COMPOSITE START Tradest Name: 1 C D C No. DATE MAN CONTURB c T Ŋ J **34YT 3J9MA2** (G=GRAB C=COMP) } MATRIX CODE (see velid codes to left) Valid Matrix Codes

MAIRIX CODE
DISPAGNATER DW WT
WASTE WW
WASTE WO
PRODUCT SIL
SOLSOLIO OL
WP
WP
WP
MP
AR
AR
TSSUE If data package is required, attach data package checklist. icalenda@enviroanalyticsgroup.com वैद्धा ५ Sparrows Point, MD 21219 ADDITIONAL COMMENTS 1430 Sparrows Point Blvd SAMPLE ID (A-Z, 0-9 / -,) Sample IDe MUST BE UNIQUE Data Validation Required?(WN): Data Package Required?(WN): Section D Required Clent Information 314-620-3056 Requested Due Date/TAT: Email To: Page 13 of 14 Ç ë - qua ۶-条 附当工 N

DATE Signed CR (CA)

SIGNATURE OF SAMPLER ALL ALL ALL

AA A P.S. AAA

Pittsburgh Lab Sample Cond	ition	Upo	n R	eceipt	
Face Analytical Client Name:	E	l N	of	tnalytics	Project#
Courier: Fed Ex UPS USPS Clier				1	Label
Tracking #:		_		•	LIMS Login COC
Custody Seal on Cooler/Box Present:	. □	10	Sea	ls intact: yes	☐ no
Thermometer Used	Type	of Ice	: (We	et) Blue None	
Cooler Temperature Observed Temp	<u>.3</u>	° C	Cor	rection Factor: 10.	C Final Temp: 4.4 °C
Temp should be above freezing to 6°C				pH paper Lot#	Date and initials of person examining
Comments:	Yes	No	N/A	1 .00.131	Date and Initials of person examining contents: 19 10 8 8
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X			4.	
Sample Labels match COC:	X			5.	
-Includes date/time/ID Matrix:	M	Man,			
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	$ \mathcal{S} $			9.	
Correct Containers Used:				_10.	
-Pace Containers Used:	X				
Containers Intact:	X			11.	
Orthophosphate field filtered		<u></u>	\times	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.	
Organic Samples checked for dechlorination:			\times	14.	
Filtered volume received for Dissolved tests			X	15.	
All containers have been checked for preservation.	X			16.	
All containers needing preservation are found to be in compliance with EPA recommendation.	X	-			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when AWL	Date/time of preservation
Checking.				Lot # of added	
			. /	preservative	
Headspace in VOA Viats (>6mm):		$ \nearrow \!\!\! +$	_	17.	
Trip Blank Present:		\rightarrow		18.	
Trip Blank Custody Seals Present Rad Aqueous Samples Screened > 0,5 mrem/hr		—₽		Initial when	
Nau Aqueous Samples Screened 7 5.5 michimi				completed:	Date:
Client Notification/ Resolution:					
Person Contacted:			Pate/T	ime:	Contacted By:
Comments/ Resolution:					
					THE PROPERTY OF THE PROPERTY O

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

 \square A check in this box indicates that additional information has been stored in ereports.

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Greensburg, PA 15601 (724)850-5600



August 08, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on August 04, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

(724)850-5622 Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040 Guam Certification

Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

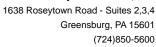
New Jersey/TNI Certification #: PA051

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L



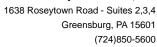


SAMPLE SUMMARY

Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30261276001	RW16-MW(S)	Water	08/03/18 08:15	08/04/18 00:45
30261276002	RW16-MW(I)	Water	08/03/18 08:40	08/04/18 00:45
30261276003	RW13-MW(I)	Water	08/03/18 09:20	08/04/18 00:45
30261276004	RW12-MW(S)	Water	08/03/18 09:50	08/04/18 00:45
30261276005	RW12-MW(I)	Water	08/03/18 10:29	08/04/18 00:45
30261276006	RW11-MW(I)	Water	08/03/18 11:35	08/04/18 00:45
30261276007	RW11-MW(S)	Water	08/03/18 12:14	08/04/18 00:45
30261276008	RW04-MW(S)	Water	08/03/18 13:09	08/04/18 00:45
30261276009	RW06-MW(S)	Water	08/03/18 13:40	08/04/18 00:45
30261276010	RW06-MW(I)	Water	08/03/18 14:30	08/04/18 00:45
30261276011	RW06-MW(D)	Water	08/03/18 15:45	08/04/18 00:45



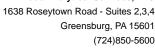


SAMPLE ANALYTE COUNT

Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30261276001	RW16-MW(S)	EPA 6010C	KAS	2
30261276002	RW16-MW(I)	EPA 6010C	KAS	2
30261276003	RW13-MW(I)	EPA 6010C	KAS	2
30261276004	RW12-MW(S)	EPA 6010C	KAS	2
30261276005	RW12-MW(I)	EPA 6010C	KAS	2
30261276006	RW11-MW(I)	EPA 6010C	KAS	2
30261276007	RW11-MW(S)	EPA 6010C	KAS	2
30261276008	RW04-MW(S)	EPA 6010C	KAS	2
30261276009	RW06-MW(S)	EPA 6010C	KAS	2
30261276010	RW06-MW(I)	EPA 6010C	KAS	2
30261276011	RW06-MW(D)	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: August 08, 2018

General Information:

11 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Sample: RW16-MW(S)	Lab ID:	Collecte	Collected: 08/03/18 08:15			04/18 00:45 Ma	atrix: Water		
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	08/06/18 16:46	08/07/18 19:09	7440-43-9	
Zinc	35.9	ug/L	10.0	1.0	1	08/06/18 16:46	08/07/18 19:09	7440-66-6	





Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Sample: RW16-MW(I)	Lab ID:	30261276002	Collecte	d: 08/03/18	3 08:40	Received: 08/	atrix: Water		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A			
Cadmium Zinc	3.0 U 1230	ug/L ug/L	3.0 10.0	0.87 1.0	1 1		08/07/18 19:23 08/07/18 19:23		





Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Sample: RW13-MW(I)	Lab ID:	30261276003	Collecte	Collected: 08/03/18 09:20			04/18 00:45 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Me	hod: El	PA 3005A			
Cadmium Zinc	21000 274000	ug/L ug/L	300 1000	87.0 104	100 100		08/07/18 20:12 08/07/18 20:12		





Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Date: 08/08/2018 04:57 PM

Sample: RW12-MW(S)	Lab ID:	30261276004	Collecte	d: 08/03/18	3 09:50	Received: 08/	Received: 08/04/18 00:45 Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A					
Cadmium Zinc	5.2 2900	ug/L ug/L	3.0 10.0	0.87 1.0	1 1		08/07/18 19:34 08/07/18 19:34				





Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Sample: RW12-MW(I)	Lab ID:	30261276005	Collecte	d: 08/03/18	3 10:29	Received: 08/	04/18 00:45 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	6010C Prep	aration Met	hod: El	PA 3005A	-		
Cadmium Zinc	134 2410	ug/L ug/L	3.0 10.0	0.87 1.0	1 1		08/07/18 19:37 08/07/18 19:37		





Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Sample: RW11-MW(I)	Lab ID:	30261276006	Collecte	d: 08/03/18	3 11:35	Received: 08/	04/18 00:45 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	4.7	ug/L	3.0	0.87	1	08/06/18 16:46	08/07/18 19:39	7440-43-9	
Zinc	15700	ug/L	1000	104	100	08/06/18 16:46	08/07/18 20:14	7440-66-6	





Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Sample: RW11-MW(S)	Lab ID:	30261276007	Collecte	Collected: 08/03/18 12:14			04/18 00:45 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analvzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	 PA 3005A			
Cadmium	66.3	ug/L	3.0	0.87	1	08/06/18 16:46	08/07/18 19:42	7440-43-9	
Zinc	109000	ug/L	1000	104	100	08/06/18 16:46	08/07/18 20:17	7440-66-6	





Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Sample: RW04-MW(S)	Lab ID:	30261276008	Collecte	Collected: 08/03/18 13:09			04/18 00:45 Ma	atrix: Water	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	08/06/18 16:46	08/07/18 20:19	7440-43-9	
Zinc	7.9J	ug/L	10.0	1.0	1	08/06/18 16:46	08/07/18 20:19	7440-66-6	





Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Sample: RW06-MW(S)	Lab ID:	30261276009	Collecte	d: 08/03/18	3 13:40	Received: 08/	04/18 00:45 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	08/06/18 16:46	08/07/18 19:46	7440-43-9	
Zinc	22.0	ug/L	10.0	1.0	1	08/06/18 16:46	08/07/18 19:46	7440-66-6	





Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Sample: RW06-MW(I)	Lab ID:	30261276010	Collecte	Collected: 08/03/18 14:30			04/18 00:45 Ma	atrix: Water	c: Water	
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: E	PA 3005A				
Cadmium	3.0 U	ug/L	3.0	0.87	1	08/06/18 16:46	08/07/18 19:49	7440-43-9		
Zinc	191	ug/L	10.0	1.0	1	08/06/18 16:46	08/07/18 19:49	7440-66-6		





Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Sample: RW06-MW(D)	Lab ID:	30261276011	Collecte	Collected: 08/03/18 15:45			Received: 08/04/18 00:45 Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual		
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: Ef	PA 3005A					
Cadmium Zinc	3.0 U 72.6	ug/L ug/L	3.0 10.0	0.87 1.0	1 1		08/07/18 19:51 08/07/18 19:51				



QUALITY CONTROL DATA

Reporting

Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Date: 08/08/2018 04:57 PM

QC Batch: 308580 Analysis Method: **EPA 6010C** QC Batch Method: **EPA 3005A** Analysis Description: 6010C MET

30261276001, 30261276002, 30261276003, 30261276004, 30261276005, 30261276006, 30261276007, Associated Lab Samples:

30261276008, 30261276009, 30261276010, 30261276011

METHOD BLANK: 1507957 Matrix: Water

Associated Lab Samples: Blank

30261276008, 30261276009, 30261276010, 30261276011

Parameter		Units	Result		Limit	MDL		Analy	zed	Qua	alifiers		
Cadmium Zinc		ug/L ug/L		3.0 U 0.0 U	3.0 10.0			08/07/18 08/07/18				_	
LABORATORY CONTROL SAMP	LE: 1	507958											
Parameter		Units	Spike Conc.	LCS Resi		LCS % Rec		Rec imits	Qı	ualifiers			
Cadmium		ug/L	500		516	103		80-120					
Zinc		ug/L	500		516	103		80-120					
MATRIX SPIKE & MATRIX SPIKE	DUPLI	CATE: 15079	60		1507961								
Parameter	Units	30261276001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Re			% Rec	RPD	Max RPD	Qual
Cadmium	ug/L	3.0 U	500	500				103	105	75-125	2		
Zinc	ug/L	35.9	500	500	531	536		99	100	75-125	1		
MATRIX SPIKE SAMPLE:	1	507963											
Parameter		Units	302612 Resu		Spike Conc.	MS Result		MS % Rec		% Rec Limits		Qualif	iers
Cadmium		ug/L		3.0 U	500	5	35	1	 07	75-	 125		
Zinc		ug/L		72.6	500	5	666		99	75-1	125		
SAMPLE DUPLICATE: 1507959)												
Parameter		Units	30261276 Result		Dup Result	RPD		Max RPD		Qualifie	ers		
Cadmium		ug/L		3.0 U	3.0 L				20				
Zinc		ug/L		35.9	34.6	6	4		20				
SAMPLE DUPLICATE: 1507962	2												
Parameter		Units	30261276 Result		Dup Result	RPD		Max RPD		Qualifie	ers		
Cadmium		ug/L		3.0 U	3.0 L			5	20				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALITY CONTROL DATA

Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

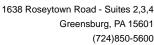
Date: 08/08/2018 04:57 PM

SAMPLE DUPLICATE: 1507962

30261276011 Dup Max

ParameterUnitsResultResultRPDRPDQualifiersZincug/L72.672.3020

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALIFIERS

Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: A3 metals gw 3rd quarter

Pace Project No.: 30261276

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method EPA 6010C	Analytical Batch 308602	
30261276001	RW16-MW(S)	EPA 3005A	308580			
30261276002	RW16-MW(I)	EPA 3005A	308580	EPA 6010C	308602	
30261276003	RW13-MW(I)	EPA 3005A	308580	EPA 6010C	308602	
30261276004	RW12-MW(S)	EPA 3005A	308580	EPA 6010C	308602	
30261276005	RW12-MW(I)	EPA 3005A	308580	EPA 6010C	308602	
30261276006	RW11-MW(I)	EPA 3005A	308580	EPA 6010C	308602	
30261276007	RW11-MW(S)	EPA 3005A	308580	EPA 6010C	308602	
30261276008	RW04-MW(S)	EPA 3005A	308580	EPA 6010C	308602	
30261276009	RW06-MW(S)	EPA 3005A	308580	EPA 6010C	308602	
30261276010	RW06-MW(I)	EPA 3005A	308580	EPA 6010C	308602	
30261276011	RW06-MW(D)	EPA 3005A	308580	EPA 6010C	308602	

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Project No./ Lab I.D. Samples Intact (V/V) DRINKING WATER . 00 8 8 $\frac{d}{c}$ S 000 700 Z SAMPLE CONDITIONS 9 Cooler (Y/N) 2 ö seceived on loa (V/V) GROUND WATER Residual Cl O' of qmaT ίÓ :0886 RCRA Ş REGULATORY AGENCY 525 TIME Requested Analysis Filtered (Y/N) OS 100 July 100 3026127 2 Site Location STATE DATE T NPDES 3 DATE Signed (MM/DD/YY): ○≫ / 15 15 13 1650 Des Peres Road, Sulte 303 St. Louis, MO 6313 ACCEPTED BY / AFFILIATION 1. Kenninghouse विशामान्य TITE Company Name: EnviroAnalytics Group Ē # feaT sisylenA # N/A Olher Nethanol Laura Sargent CS2SEN HOBN НСІ Invoice Information: ^EONH POS2H Č Pace Quote Reference: Pace Project Manager: Pace Profile #: Section C TIME Unpreserved Address: Attention. SAMPLER NAME AND SIGNATURE # OF CONTAINERS SIGNATURE OF SAMPLERS PRINT Name of SAMPLER: N8/20/20 RICAGO SAMPLE TEMP AT COLLECTION DATE 1209 545 1009 2, 4 HWE. チタ COMPOSITE END/GRAB COLLECTED DATE S N RELINQUISHED BY / AFFILIATION I partox E E 80 T COMPOSITE START BENNAMME C G DATE Report To: James Calenda Required Project Information: Project Name:
A 3 (M)CACLS
Project Number: (G=GRAB C=COMP) SAMPLE TYPE (see valid codes to left) **BOOD XINTAM** Section B PO Number: Capy To:
 Valid Matrix Codes

 MAIRIX
 SQDE

 DIPRANCEMARIE
 DW

 WASTERWATER
 P

 PRODUCT
 SL

 SOL-SOLID
 CL

 OIL
 WP

 WIE
 AR

 AR
 OI

 TISSUE
 TS

 TISSUE
 TS

 TISSUE
 TS
 í data package is required, attach data package checklist. icalenda@enviroanalyticsgroup.com 0 0 0 0 2ano4 muk DAM TO 3 Sparrows Point, MD 21219 ADDITIONAL COMMENTS 77.7 1430 Sparrows Point Blvd (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE Data Validation Required? (V/N): 35-53 RUN N- WE EnviroAnalytics Group NAM-Data Package Required? (Y/N): ا 3 Ä SAMPLED Section D Required Clerk Information P. 1 JO(0 3 Section A Required Client Information: hone: 314-620-3056 Requested Due Date/TAT: 2 company: Email To: Page 21 of 22 2 5 F **(3) E**9 松 州ヨエ

POPO TILL OF COP C 11 I

Pittsburgh Lab Sample Condition Upon Receipt											
Face Analytical Client Name:		<u> </u>		waws	30 2 6 1 2 7 Project #						
Courier: Fed Ex UPS USPS Client		rcial	ace Other	Label							
Tracking #:											
Custody Seal on Cooler/Box Present:	∠ n	o	Seals	intact: 🗌 yes 📗	no						
Thermometer Used Type of Ice: Wet Blue None											
Cooler Temperature Observed Temp 3.9 °C Correction Factor + 0.0 °C Final Temp: 3.9 °C											
Temp should be above freezing to 6°C											
				pH paper Lot#	contents:						
Comments:	Yes	No	N/A		The state of the s						
Chain of Custody Present:				1.							
Chain of Custody Filled Out:	James .	ļ		2.							
Chain of Custody Relinquished:	Caparant			3.							
Sampler Name & Signature on COC:				4.							
Sample Labels match COC:			<u> </u>	5.							
-Includes date/time/ID Matrix: WT											
Samples Arrived within Hold Time:				6.							
Short Hold Time Analysis (<72hr remaining):				7.							
Rush Turn Around Time Requested:				8.							
Sufficient Volume:	- Market			9.							
Correct Containers Used:	general			10.							
-Pace Containers Used:											
Containers Intact:				11.							
Orthophosphate field filtered			para de la companya della companya della companya de la companya della companya d	12.							
Hex Cr Aqueous Compliance/NPDES sample field filtered			De la companya della companya della companya de la companya della	13.							
Organic Samples checked for dechlorination:			port of the same	14							
Filtered volume received for Dissolved tests		, .		15.							
All containers have been checked for preservation.	par a said	,		16.							
All containers needing preservation are found to be in compliance with EPA recommendation.											
TOO ORO Phanalisa				Initial when completed	Date/time of preservation						
exceptions: VOA, coliform, TOC, O&G, Phenolics				Lot # of added	, in the second						
				preservative							
Headspace in VOA Vials (>6mm):			<u>/</u>	17.							
Trip Blank Present:			1	18.							
Trip Blank Custody Seals Present				f-tiel whom							
Rad Aqueous Samples Screened > 0.5 mrem/hr				Initial when completed:	Date:						
Client Notification/ Resolution:	- Anna anna anna anna		·								
Person Contacted: Date/Time: Contacted By:											
Comments/ Resolution:											
	<u></u> -			· · · · · · · · · · · · · · · · · · ·							

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

 \square A check in this box indicates that additional information has been stored in ereports.

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.





August 08, 2018

Mr. James Calenda EnviroAnalytics Group, LLC 1600 Sparrows Point Blvd Suite B2 Sparrows Point, MD 21219

RE: Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261277

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on August 04, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayune

samantha.bayura@pacelabs.com

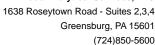
(724)850-5622 **Project Manager**

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.

Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.







CERTIFICATIONS

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261277

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133

Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617 New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

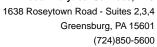
Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L



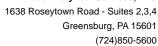


SAMPLE SUMMARY

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261277

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
30261277001	RW09-MW(S)	Water	08/02/18 17:50	08/04/18 00:45	
30261277002	RW09-MW(I)	Water	08/02/18 18:30	08/04/18 00:45	
30261277003	RW03-MW(I)	Water	08/02/18 20:10	08/04/18 00:45	



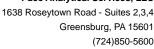


SAMPLE ANALYTE COUNT

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261277

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30261277001	RW09-MW(S)	EPA 6010C	KAS	2
30261277002	RW09-MW(I)	EPA 6010C	KAS	2
30261277003	RW03-MW(I)	EPA 6010C	KAS	2





PROJECT NARRATIVE

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261277

Method: EPA 6010C

Description: 6010C MET ICP

Client: EnviroAnalytics Group, LLC

Date: August 08, 2018

General Information:

3 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





ANALYTICAL RESULTS

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261277

Date: 08/08/2018 04:58 PM

Sample: RW09-MW(S)	Lab ID:	30261277001	Collecte	d: 08/02/18	3 17:50	Received: 08/	/04/18 00:45 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	13.1	ug/L	3.0	0.87	1	08/06/18 16:46	08/07/18 20:05	7440-43-9	
Zinc	10700	ug/L	1000	104	100	08/06/18 16:46	08/07/18 20:22	7440-66-6	





ANALYTICAL RESULTS

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261277

Date: 08/08/2018 04:58 PM

Sample: RW09-MW(I)	Lab ID:	30261277002	Collecte	d: 08/02/18	3 18:30	Received: 08/	04/18 00:45 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA 6	010C Prep	aration Met	hod: El	PA 3005A			
Cadmium	3.0 U	ug/L	3.0	0.87	1	08/06/18 16:46	08/07/18 20:07	7440-43-9	
Zinc	54700	ug/L	1000	104	100	08/06/18 16:46	08/07/18 20:24	7440-66-6	





ANALYTICAL RESULTS

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261277

Date: 08/08/2018 04:58 PM

Sample: RW03-MW(I) Lab ID: 30261277003 Collected: 08/02/18 20:10 Received: 08/04/18 00:45 Matrix: Water

Comments: • Sample collection times were not present on the sample containers.

			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical	Method: EPA	6010C Prep	aration Me	thod: El	PA 3005A	-		
Cadmium	236	ug/L	3.0	0.87	1	08/06/18 16:46	08/07/18 20:09	7440-43-9	
Zinc	9710	ug/L	1000	104	100	08/06/18 16:46	08/07/18 20:27	7440-66-6	



QUALITY CONTROL DATA

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261277

Date: 08/08/2018 04:58 PM

QC Batch: 308580 Analysis Method: EPA 6010C QC Batch Method: EPA 3005A Analysis Description: 6010C MET

Associated Lab Samples: 30261277001, 30261277002, 30261277003

METHOD BLANK: 1507957 Matrix: Water

Associated Lab Samples: 30261277001, 30261277002, 30261277003

Parameter	Units	Blank Result	Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/L	3.0 U	3.0	0.87	08/07/18 19:04	
Zinc	ug/L	10.0 U	10.0	1.0	08/07/18 19:04	

LABORATORY CONTROL SAMPLE:	1507958					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	500	516	103	80-120	
Zinc	ua/L	500	516	103	80-120	

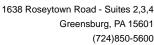
MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1507960 1507961												
			MS	MSD								
	3	80261276001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	ug/L	3.0 U	500	500	518	527	103	105	75-125	2	20	
Zinc	ug/L	35.9	500	500	531	536	99	100	75-125	1	20	

MATRIX SPIKE SAMPLE:	1507963						
		30261276011	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Cadmium	ug/L	3.0 U	500	535	107	75-125	
Zinc	ug/L	72.6	500	566	99	75-125	

SAMPLE DUPLICATE: 1507959		30261276001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	3.0 U	3.0 U		20	
Zinc	ug/L	35.9	34.6	4	20	

SAMPLE DUPLICATE: 1507962						
		30261276011	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Cadmium	ug/L	3.0 U	3.0 U		20	
Zinc	ug/L	72.6	72.3	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALIFIERS

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261277

DEFINITIONS

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TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

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Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

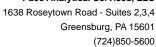
U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Date: 08/08/2018 04:58 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: A3 Metals GW 3rd quarter

Pace Project No.: 30261277

Date: 08/08/2018 04:58 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30261277001	RW09-MW(S)	EPA 3005A	308580	EPA 6010C	308602
30261277002	RW09-MW(I)	EPA 3005A	308580	EPA 6010C	308602
30261277003	RW03-MW(I)	EPA 3005A	308580	EPA 6010C	308602

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

(V/V) Pace Project No./ Lab I.D. Samples Intact DRINKING WATER SAMPLE CONDITIONS 5000 000 000 OTHER Custody Sealed Cooler (Y/N) 2 ö (N/N) Received on Ice GROUND WATER Residual Chlorine (Y/N) O° ni qmaT 3 Page: 00455 8/103/18/16:113 RCRA 9 8-119 2020 REGULATORY AGENCY TIME Requested Analysis Filtered (Y/N) 3026127 8/4/18 STATE Site Location DATE L NPDES (MM/DD/Y): 08/02 UST BUR 1550 Des Peres Road, Sulte 303 St. Louis, MO 63131 ACCEPTED BY / AFFILIATION Berminghow Company Name: EnviroAnalytics Group ÎN/A Jest sisylenA Other Ortho) Methanol Carlos Laura Sargent Na₂S₂O₃ Preservatives NaOH НСІ **EONH** - CASH SIGNATURE of SAMPLER CALL 2/2/18/1600 *OSZH Pace Quote Reference: Pace Project Manager: Pace Profile #: 045 TIME Section C Unpreserved Attention: Address: SAMPLER NAME AND SIGNATURE # OF CONTAINERS PRINT Name of SAMPLER: 27-00 SAMPLE TEMP AT COLLECTION DATE 26:10 8/2/18 17:50 812/18 18:30 TIME COMPOSITE END/GRAB 8/2/18 COLLECTED DATE RELINQUISHED BY (AFFILIATION / KID IN Genminohard TIME COMPOSITE DATE 5 Report To: James Calenda Required Project Information: Project Name: SAMPLE TYPE (G=GRAB C=COMP) (see valid codes to left) **AMATRIX CODE** roject Number Section B PO Number: Copy To:
 Valid Matrix Codes

 MATRIX
 CODE

 DRNKKSWITER
 WW

 WASTE WATER
 P

 PRODUCT
 SL

 SOL/SOLID
 OL

 WP
 WP

 WR
 AR

 AR
 OT

 TSSUE
 TS

 TSSUE
 TS
 If data package is required, attach data package checklist. icalenda@enviroanalyticsgroup.com Sparrows Point, MD 21219 ADDITIONAL COMMENTS 1430 Sparrows Point Blvd Requested Due Date/TAT: 5 day S (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE Data Validation Required? (YN): Data Package Required?(WN): EnviroAnalytics Group Fax SAMPLE ID Section D Required Clent Information Section A Required Client Information: 314-620-3056 Phone: 4 2 9 -# M3TI N

AA A F.L. AAA

Pittsburgh Lab Sample Condition Upon Receipt δραψως Project # 30 2 6 . Face Analytical Client Name: Courier: Fed Ex UPS USPS Client Commercial Pace Other LIMS Login Tracking #: no Seals intact: Type of Ice: (Wet Blue None Thermometer Used °C Correction Factor: +6.0 °C Final Temp: **Cooler Temperature** Temp should be above freezing to 6°C Date and Initials of person examining pH paper Lot# 1003071 No N/A Yes Comments: Chain of Custody Present: Chain of Custody Filled Out: Chain of Custody Relinquished: Sampler Name & Signature on COC: 5.NO time on 003. Sample Labels match COC: INT -Includes date/time/ID Matrix: Samples Arrived within Hold Time: 7. Short Hold Time Analysis (<72hr remaining): Rush Turn Around Time Requested: 9. Sufficient Volume: 10. Correct Containers Used: -Pace Containers Used: 11. Containers Intact: Orthophosphate field filtered 12. 13. Hex Cr Aqueous Compliance/NPDES sample field filtered Organic Samples checked for dechlorination: 14. 15. Filtered volume received for Dissolved tests All containers have been checked for preservation. 16. All containers needing preservation are found to be in compliance with EPA recommendation. Date/time of Initial when preservation exceptions: VOA, coliform, TOC, O&G, Phenolics completed. Lot # of added preservative 17. Headspace in VOA Vials (>6mm): 18. Trip Blank Present: Trip Blank Custody Seals Present Initial when Rad Aqueous Samples Screened > 0.5 mrem/hr Date: completed: Client Notification/ Resolution: Contacted By: Date/Time: Person Contacted: Comments/ Resolution:

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR

Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.