CUMMINGS RITER CONSULTANTS, INC.

Closure Monitoring Plan Data Summary Report October 2014 Data

Operable Unit No. 2
Kentucky Avenue Wellfield Site
Horseheads, New York

WOODARD &CURRAN

A Woodard & Curran Company

Project No. 96206.10/10
CBS Corporation
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1. INTRODUCTION

On behalf of CBS Corporation (CBS), Cummings/Riter Consultants, Inc. (Cummings/Riter has prepared this Data Summary Report (DSR) related to Operable Unit No. 2 (OU-2) at the Kentucky Avenue Wellfield Site (the Site) located in Horseheads, New York (Figure 1). This DSR was prepared in accordance with the Revised Closure Monitoring Plan (CMP) (Cummings/Riter, 2014)[1], which was subsequently approved by the U.S. Environmental Protection Agency (USEPA) during a conference call on March 20, 2014. This DSR documents quarterly groundwater monitoring activities completed in October 2014.

This DSR includes the following information: Section 2 provides a summary of the field activities, and Section 3 summarizes the results for groundwater sampling and laboratory analysis conducted at the Site. Section 4 provides a discussion of future Site activities and reporting.

[1] Cummings/Riter Consultants, Inc., 2014, "Revised Closure Monitoring Plan, Operable Unit No. 2, Kentucky Avenue Wellfield Site, Horseheads, New York," January 7.

2. FIELD ACTIVITIES SUMMARY

Groundwater sampling and analysis has been performed in association with the implementation of the CMP. The sampling and analysis activities are summarized in the following sections.

2.1 GROUNDWATER SAMPLING AND ANALYSIS

Groundwater samples were collected on October 7 and 8, 2014 from monitoring wells identified in Table 1. Consistent with previous monitoring events, the monitoring wells were purged and sampled using either dedicated or portable QED Environmental Systems Well Wizard® low-flow, positive-displacement, bladder pumps. Purging and sampling were completed using low-flow techniques. The water level in the well being sampled was monitored during purging, and the purge rate was maintained less than 500 milliliters per minute to minimize drawdown in the well. The following geochemical parameters were measured every five minutes during purging:

- temperature
- pH
- specific conductance
- oxidation-reduction potential
- dissolved oxygen
- turbidity

Purging was considered complete once the wells stabilized (i.e., three consecutive readings within 10 percent for each geochemical field parameter). Groundwater samples were then collected by filling the required sample containers from the pump discharge.

Groundwater samples were analyzed for volatile organic compounds (VOCs) using USEPA Method 8260B by Eurofins Lancaster Laboratories of Lancaster, Pennsylvania. In addition, quality assurance/quality control samples, including one blind duplicate and one trip blank, were collected and submitted to the analytical laboratory. Groundwater samples were appropriately labeled and placed into coolers containing ice. Groundwater samples were shipped to the laboratory via overnight courier at the completion of each monitoring event. Proper documentation was completed, including well purging forms, water sample collection forms, and chain-of-custody records, and has been included in Appendix A. Purge water generated was collected and contained on Site in a 55-gallon drum stored in the barrier well treatment system (BWTS) building for subsequent characterization and disposal.

3. SUMMARY OF FINDINGS

This section summarizes the results of groundwater sampling and laboratory analysis conducted in October 2014 at the Site.

3.1 GROUNDWATER SAMPLING AND ANALYSIS

Groundwater from 14 monitoring wells (Figure 2) was sampled on October 7 and 8, 2014, and samples from these wells were analyzed for select VOCs including the following:

- *cis*-1,2-dichloroethene (DCE)
- *trans*-1,2-DCE
- trichloroethene (TCE)
- 1,1,1-trichloroethane (TCA)
- vinyl chloride

Groundwater analytical results were tabulated and compared to applicable USEPA drinking water maximum contaminant levels (MCLs). Table 2 presents a summary of the recent analytical results compared to applicable standards. Laboratory data sheets are included in Appendix B. The results are summarized below.

During the monitoring event, each parameter analyzed, except for vinyl chloride and *trans*-1,2-DCE, was detected above laboratory reporting limits in at least one sample collected. The only parameter with detected concentrations exceeding its respective MCL was TCE. Consistent with previous monitoring events, TCE was the most prevalent VOC detected and exceeded the MCL (5 micrograms per liter [µg/l]) in samples collected from six monitoring wells (MW-9D, MW-10S, MW-16S, CW-3D, CW-3S and MW-113D) during the October 2014 monitoring event. Figures 3 and 4 provide October 2014 TCE concentrations detected in monitoring wells in the shallow and deep portions of the Newtown Creek Aquifer, respectively. Generally, concentrations of VOCs detected in CMP monitoring wells were consistent with previous results, and VOC concentrations detected in the new monitoring wells (MW-15S, MW-15D, MW-16S, and MW-16D) were as expected based on their location within the VOC plume. Notable changes include the TCE concentration detected in the sample collected from Monitoring Well MW-8S during the October 2014 monitoring event. The July 2014 TCE concentration (4 µg/l) reported at Monitoring Well MW-8S was considerably less than historical TCE concentrations observed at this well, and the October 2014 concentration (2 µg/l) represents the second consecutive event in which the detected TCE concentration was less than the MCL (5 µg/l). The October 2014 TCE concentration reported at Monitoring Well MW-8S was the lowest concentration reported at this well since sampling was initiated in October 1998 (Table 2). TCE time-trend graphs for each of the CMP wells are provided in Appendix C. Generally, the graphs demonstrate that TCE concentrations continue to be stable or exhibit a downward trend. TCE trends will continue to be evaluated during subsequent monitoring events.

In accordance with the CMP, the average groundwater flux at the downgradient property boundary was used to assess performance monitoring for Site groundwater. If the combined average TCE concentration in groundwater samples collected from Monitoring Wells MW-15S, MW-15D, MW-16S, and MW-16D remains below a concentration of 5 µg/l for four consecutive quarters, CBS intends to move forward with the decommissioning of the barrier wells and the water treatment facility. If the combined average TCE

concentration of these monitoring wells exceeds 5 µg/l, one or both of the barrier wells will be placed back in service. The selection of the specific barrier well(s) placed back into service will be determined based on the analytical data obtained from Monitoring Wells MW-15S, MW-15D, MW-16S, and MW-16D. Toward that end, the average TCE concentration in groundwater samples collected from Monitoring Wells MW-15S, MW-15D, MW-16S, and MW-16D were less than the MCL during the October 2014 event with an average concentration of 2.75 µg/l. Furthermore, the concentration of TCE in these monitoring wells is stable or decreasing during the monitoring period. The groundwater flux at the downgradient property boundary will continue to be evaluated during subsequent monitoring events.

4. FUTURE SITE ACTIVITIES AND REPORTING

In accordance with the CMP, water level elevations will continue to be measured on a semiannual basis and groundwater quality samples will continue to be collected on a quarterly basis from the monitoring wells listed in Table 1 for a minimum of one more sampling event. Field activities will continue to be performed in accordance with the CMP. Groundwater sample results will continue to be monitored with regard to remedial objectives during future sampling events. A DSR will be submitted following each quarterly monitoring event. The next quarterly monitoring event is will take place in the first quarter of 2015. Water level elevations will be measured during the next event.

TABLES

TABLE 1
CLOSURE MONITORING PLAN
GROUNDWATER MONITORING WELLS
FORMER WESTINGHOUSE ELECTRIC CORPORATION FACILITY
KENTUCKY AVENUE WELLFIELD SUPERFUND SITE
HORSEHEADS, NEW YORK

WELL NO.	FUNCTION
MW-7D	Monitoring point near the downgradient property boundary.
MW-7S	Monitoring point near the downgradient property boundary.
MW-8D	Monitoring point near Barrier Wells.
MW-8S	Monitoring point near Barrier Wells.
MW-9D	Monitoring point with VOC detections upgradient of Barrier Wells.
MW-9S	Monitoring point with VOC detections upgradient of Barrier Wells.
MW10S	Monitoring point downgradient of TCE source area (Disposal Area F).
MW-15D	Monitoring point near downgradient property boundary.
MW-15S	Monitoring point near downgradient property boundary.
MW-16D	Monitoring point near downgradient property boundary.
MW-16S	Monitoring point near downgradient property boundary.
MW-113D	Downgradient monitoring point downgradient of Barrier Wells with consistent VOC detections.
CW-3D	Monitoring point downgradient of Barrier Wells.
CW-3S	Monitoring point downgradient of Barrier Wells.

TABLE 2
CLOSURE MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS (µg/l)
FORMER WESTINGHOUSE ELECTRIC CORPORATION FACILITY
KENTUCKY AVENUE WELLFIELD SUPERFUND SITE
HORSEHEADS, NEW YORK

Well ID	cis-1,2-DCE	trans-1,2-DCE	TCE	Vinyl Chloride	1,1,1-TCA
USEPA MCL (µg/l)[a]	70	100	5	2	200
Sample Date					
MW-7D					
Dec-96	<1.0[b]	<1.0	<1.0	<1.0	NA[e]
Mar-97	<1.0	<1.0	2	<1.0	NA
Oct-98	<1.0	<1.0	1	<1.0	NA
Mar-99	<1.0	<1.0	1.8	<1.0	NA
Oct-99	<1.0	<1.0	2.2	<1.0	NA
May-00	< 1.0 / < 1.0[c]	< 1.0 / < 1.0	1.9 / 1.9	< 1.0 / < 1.0	NA
Oct-00	< 2.5	< 2.5	< 5.0	<10	NA
Apr-01	< 5.0	< 5.0	2.0 J	< 10	NA
Oct-01	<5.0	<5.0	1.6 J	<10	NA
Apr-02	< 1	< 1	2.2	< 2	NA
Oct-02	< 1.0	< 1.0	1.2	< 2.0	NA
Apr-03	< 1.0 / < 1.0	< 1.0 / < 1.0	1.3 / 1.1	< 2.0 / < 2.0	NA
Oct-03	0.78 J[d]	< 1.0	3.5	< 2.0	NA
Jul-04	< 0.8	< 0.8	2 J	< 1.0	NA
Jul-05	< 0.8	< 0.8	1 J	< 1.0	NA
Aug-06	< 0.8	< 0.8	2 J	< 1.0	NA
Jul-07	< 0.8	< 0.8	2 J	< 1.0	NA
Jul-08	< 0.8	< 0.8	2 J	< 1.0	NA
Jul-09	< 0.8	< 0.8	2 J	< 1	NA
Jun-10	< 0.8	< 0.8	3 J	< 1	NA
Sep-11	< 0.8	< 0.8	1 J	< 1	NA
Jul-12	< 0.1	< 0.1	1.2	< 0.1	NA
Dec-13	< 0.8	< 0.8	2 J	< 1	NA
Apr-14	< 0.5	< 0.5	2.0	< 0.5	1
Jul-14	< 0.5	< 0.5	1	< 0.5	1
Oct-14	< 0.5	< 0.5	1 J	< 0.5	0.8 J
MW-7S					
Dec-96	<1.0	<1.0	15	<1.0	NA
Mar-97	<1.0	<1.0	12	<1.0	NA
Oct-98	<1.0	<1.0	7	<1.0	NA
Mar-99	<1.0	<1.0	7.5	<1.0	NA
Oct-99	<1.0	<1.0	7.2	<1.0	NA
May-00	< 1.0	< 1.0	6.3	< 1.0	NA
Oct-00	< 2.5	< 2.5	4.9 J	<10	NA
Apr-01	< 5.0	< 5.0	5.4	< 10	NA
Oct-01	<5.0	<5.0	3.7 J	<10	NA
Apr-02	< 1 / < 1	< 1 / < 1	4.1 / 3.4	< 2 / < 2	NA
Oct-02	< 1.0	< 1.0	3.9	< 2.0	NA
Apr-03	< 1.0	< 1.0	2.4	< 2.0	NA
Oct-03	< 1 / < 1	< 1 / < 1	4.5 / 2.9	< 2 / < 2	NA
Jul-04	< 0.8	< 0.8	4 J	< 1.0	NA
Jul-05	< 0.8	< 0.8	3 J	< 1.0	NA
Aug-06	< 0.8 / < 0.8	< 0.8 / < 0.8	3 J / 3J	< 1.0 / < 1.0	NA
Jul-07	< 0.8 / < 0.8	< 0.8 / < 0.8	3 J / 3J	< 1.0 / < 1.0	NA
Jul-08	< 0.8	< 0.8	3 J	< 1.0	NA
Jul-09	< 0.8	< 0.8	3 J	< 1	NA
Jun-10	< 0.8	< 0.8	3 J	< 1	NA
Sep-11	< 0.8	< 0.8	3 J	< 1	NA
Jul-12	0.1 J	< 0.1	2.9	< 0.1	NA
Dec-13	< 0.8	< 0.8	3 J	< 1	NA
Apr-14	< 0.5	< 0.5	3.0	< 0.5	< 0.5
Jul-14	< 0.5	< 0.5	4	< 0.5	0.6 J
Oct-14	< 0.5	< 0.5	3	< 0.5	0.6 J

TABLE 2
CLOSURE MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS (µg/l)
FORMER WESTINGHOUSE ELECTRIC CORPORATION FACILITY
KENTUCKY AVENUE WELLFIELD SUPERFUND SITE
HORSEHEADS, NEW YORK

Well ID	cis-1,2-DCE	trans-1,2-DCE	TCE	Vinyl Chloride	1,1,1-TCA
USEPA MCL (µg/l)[a]	70	100	5	2	200
Sample Date					
MW-8D					
Oct-98	2.3	<1.0	23.4	<1.0	NA
Mar-99	<1.0	<1.0	12.7	<1.0	NA
Oct-99	2.7/2.9	<1.0/<1.0	30.6/30.9	<1.0/<1.0	NA
May-00	< 1.0	< 1.0	9.1	< 1.0	NA
Oct-00	1.1	< 1.0	10.3	< 1.0	NA
Apr-01	<1.0	<1.0	6.9	<1.0	NA
Oct-01	2.1	< 1.0	16	< 1.0	NA
Apr-02	2 J	< 1	14	< 1	NA
Oct-02	2 J	< 0.8	19	< 1.0	NA
Apr-03	< 0.8 / < 0.8	< 0.8 / < 0.8	5/5	< 1.0 / < 1.0	NA
Oct-03	1 J	< 0.8	8	< 1.0	NA
Jul-04	< 0.8	< 0.8	7	< 1.0	NA
Jul-05	< 0.8	< 0.8	6	< 1.0	NA
Aug-06	< 0.8	< 0.8	5 J	< 1.0	NA
Jul-07	1 J	< 0.8	7	< 1.0	NA
Jul-08	< 0.8 / < 0.8	< 0.8 / < 0.8	2 J / 2 J	< 1.0 / < 1.0	NA
Jul-09	< 0.8	< 0.8	5	< 1	NA
Jun-10	< 0.8	< 0.8	5 J	< 1	NA
Sep-11	< 0.8	< 0.8	3 J	< 1	NA
Jul-12	0.7	< 0.1	4.9	< 0.1	NA
Dec-13	0.9 J	< 0.8	5	< 1	NA
Apr-14	< 0.5	< 0.5	2	< 0.5	1
Jul-14	< 0.5	< 0.5	5	< 0.5	2
Oct-14	< 0.5	< 0.5	5	< 0.5	2
MW-8S					
Oct-98	0.6 J	<1.0	21.4	<1.0	NA
Mar-99	<1.0	<1.0	21.4	<1.0	NA
Oct-99	<1.0	<1.0	15.4	<1.0	NA
May-00	0.8 J	< 1.0	25.3	< 1.0	NA
Oct-00	0.7 J	< 1.0	21.2	< 1.0	NA
Apr-01	<1.0	<1.0	14.9	<1.0	NA
Oct-01	0.64 J	< 1.0	15	< 1.0	NA
Apr-02	< 1	< 1	21	< 1	NA
Oct-02	< 0.8	< 0.8	15	< 1.0	NA
Apr-03	< 0.8	< 0.8	13	< 1.0	NA
Oct-03	< 0.8	< 0.8	17	< 1.0	NA
Jul-04	< 0.8	< 0.8	16	< 1.0	NA
Jul-05	< 0.8 / < 0.8	< 0.8 / < 0.8	9/10	< 1.0 / < 1.0	NA
Aug-06	< 0.8	< 0.8	11	< 1.0	NA
Jul-07	< 0.8	< 0.8	9	< 1.0	NA
Jul-08	< 0.8	< 0.8	13	< 1.0	NA
Jul-09	< 0.8	< 0.8	16	< 1	NA
Jun-10	< 0.8	< 0.8	17	< 1	NA
Sep-11	< 0.8	< 0.8	15	< 1	NA
Jul-12	0.4 J	< 0.1	12	< 0.1	NA
Dec-13	< 0.8	< 0.8	16	< 1	NA
Apr-14	< 0.5	< 0.5	15	< 0.5	1
Jul-14	< 0.5	< 0.5	4	< 0.5	2
Oct-14	< 0.5	< 0.5	2	< 0.5	1

TABLE 2
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FORMER WESTINGHOUSE ELECTRIC CORPORATION FACILITY
KENTUCKY AVENUE WELLFIELD SUPERFUND SITE
HORSEHEADS, NEW YORK

Well ID	cis-1,2-DCE	trans-1,2-DCE	TCE	Vinyl Chloride	1,1,1-TCA
USEPA MCL (µg/l)[a]	70	100	5	2	200
Sample Date					
MW-9D					
Oct-98	1.1	<1.0	31.7	<1.0	NA
Mar-99	1.1	<1.0	34	<1.0	NA
Oct-99	1.6	<1.0	31.7	<1.0	NA
May-00	1.4	< 1.0	30.6	< 1.0	NA
Oct-00	1.4	< 1.0	25.9	< 1.0	NA
Apr-01	1.1/1.1	<1.0/<1.0	20.7/20.1	<1.0/<1.0	NA
Oct-01	1.6	< 1.0	22	< 1.0	NA
Apr-02	< 1	< 1	25	< 1	NA
Oct-02	1 J / 1 J	< 0.8 / < 0.8	26 / 26	< 1.0 / < 1.0	NA
Apr-03	1 J	< 0.8	25	< 1.0	NA
Oct-03	< 0.8	< 0.8	10	< 1.0	NA
Jul-04	1 J	< 0.8	30	< 1.0	NA
Jul-05	< 0.8	< 0.8	22	< 1.0	NA
Aug-06	< 0.8	< 0.8	21	< 1.0	NA
Jul-07	< 0.8	< 0.8	20	< 1.0	NA
Jul-08	< 0.8	< 0.8	18	< 1.0	NA
Jul-09	< 0.8	< 0.8	18	< 1	NA
Jun-10	< 0.8	< 0.8	18	< 1	NA
Sep-11	< 0.8	< 0.8	17	< 1	NA
Jul-12	0.7	< 0.1	18	< 0.1	NA
Dec-13	< 0.8	< 0.8	18	< 1	NA
Apr-14	0.6 J	< 0.5	17	< 0.5	2
Jul-14	0.7 J	< 0.5	17	< 0.5	3
Oct-14	< 0.5	< 0.5	15	< 0.5	2
MW-9S					
Oct-98	0.7 J	<1.0	28.1	<1.0	NA
Mar-99	<1.0/<1.0	<1.0/<1.0	29.7 / 27.7	<1.0/<1.0	NA
Oct-99	<1.0	<1.0	9.8	<1.0	NA
May-00	0.8 / 0.9 J	< 1.0 / < 1.0	28.0 / 27.9	< 1.0 / < 1.0	NA
Oct-00	< 1.0	< 1.0	15.2	< 1.0	NA
Apr-01	1.4	<1.0	16.7	<1.0	NA
Oct-01	< 1.0	< 1.0	8.9	< 1.0	NA
Apr-02	1 J	< 1	24	< 1	NA
Oct-02	< 0.8	< 0.8	12	< 1.0	NA
Apr-03	< 0.8	< 0.8	17	< 1.0	NA
Oct-03	< 0.8	< 0.8	13	< 1.0	NA
Jul-04	< 0.8	< 0.8	16	< 1.0	NA
Jul-05	< 0.8	< 0.8	11	< 1.0	NA
Aug-06	< 0.8	< 0.8	12	< 1.0	NA
Jul-07	< 0.8	< 0.8	11	< 1.0	NA
Jul-08	< 0.8	< 0.8	8	< 1.0	NA
Jul-09	< 0.8	< 0.8	8	< 1	NA
Jun-10	< 0.8	< 0.8	7	< 1	NA
Sep-11	< 0.8	< 0.8	7	< 1	NA
Jul-12	0.2 J	< 0.1	8	< 0.1	NA
Dec-13	< 0.8	< 0.8	8	< 1	NA
Apr-14	< 0.5	< 0.5	4	< 0.5	0.7 J
Jul-14	< 0.5	< 0.5	5	< 0.5	2
Oct-14	< 0.5	< 0.5	5	< 0.5	2

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FORMER WESTINGHOUSE ELECTRIC CORPORATION FACILITY
KENTUCKY AVENUE WELLFIELD SUPERFUND SITE
HORSEHEADS, NEW YORK

Well ID	cis-1,2-DCE	trans-1,2-DCE	TCE	Vinyl Chloride	1,1,1-TCA
USEPA MCL (µg/l)[a]	70	100	5	2	200
Sample Date					
MW-10S					
Oct-98	7.2	<1.0	404 D [f]	<1.0	NA
Mar-99	<1.0	<1.0	58.2	<1.0	NA
Oct-99	11.9	<1.0	445.9 D	<1.0	NA
May-00	0.8 J	< 1.0	50.3	< 1.0	NA
Oct-00	3.2	< 1.0	247 D	< 1.0	NA
Apr-01	2.4	<1.0	67.0	<1.0	NA
Oct-01	4.5	< 1.0	150	< 1.0	NA
Apr-02	7.0	< 1	310	< 1	NA
Oct-02	4 J	< 0.8	280	< 1.0	NA
Apr-03	< 0.8	< 0.8	34	< 1.0	NA
Oct-03	1 J	< 0.8	64	< 1.0	NA
Jul-04	< 0.8	< 0.8	23	< 1.0	NA
Jul-05	< 0.8	< 0.8	23	< 1.0	NA
Aug-06	< 0.8	< 0.8	13	< 1.0	NA
Jul-07	3 J	< 0.8	56	< 1.0	NA
Jul-08	< 0.8	< 0.8	16	< 1.0	NA
Jul-09	3 J	< 0.8	62	< 1	NA
Jun-10	1 J	< 0.8	74	< 1	NA
Sep-11	1 J	< 0.8	24	< 1	NA
Jul-12	3.3	< 0.1	35	< 0.1	NA
Dec-13	5 / 5	< 0.8 / < 0.8	53 / 53	< 1 / < 1	NA
Apr-14	3.0	< 0.5	27	< 0.5	2
Jul-14	0.7 J	< 0.5	10	< 0.5	2
Oct-14	3 / 3	< 0.5 / < 0.5	19 / 20	< 0.5 / < 0.5	2 / 2
MW-15D					
Apr-14	< 0.5	< 0.5	1	< 0.5	0.9 J
Jul-14	< 0.5	< 0.5	1	< 0.5	1
Oct-14	< 0.5	< 0.5	1	< 0.5	1
MW-15S					
Apr-14	< 0.5	< 0.5	1	< 0.5	1
Jul-14	< 0.5	< 0.5	1	< 0.5	1
Oct-14	< 0.5	< 0.5	1	< 0.5	0.9 J
MW-16D					
Apr-14	1	< 0.5	0.7 J	< 0.5	< 0.5
Jul-14	< 0.5	< 0.5	2	< 0.5	2
Oct-14	< 0.5	< 0.5	2	< 0.5	1
MW-16S					
Apr-14	< 0.5 / < 0.5	< 0.5 / < 0.5	9 / 9	< 0.5 / < 0.5	1 / 1
Jul-14	< 0.5	< 0.5	10	< 0.5	1
Oct-14	< 0.5	< 0.5	7	< 0.5	1

TABLE 2
CLOSURE MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS (µg/l)
FORMER WESTINGHOUSE ELECTRIC CORPORATION FACILITY
KENTUCKY AVENUE WELLFIELD SUPERFUND SITE
HORSEHEADS, NEW YORK

Well ID	cis-1,2-DCE	trans-1,2-DCE	TCE	Vinyl Chloride	1,1,1-TCA
USEPA MCL (µg/l)[a]	70	100	5	2	200
Sample Date					
CW-3D					
Dec-96	<1.0	<1.0	29	<1.0	NA
Mar-97	<1.0	<1.0	24	<1.0	NA
Oct-98	1 J	<1.0	17	<1.0	NA
Mar-99	<1.0	<1.0	18	<1.0	NA
Oct-99	<1.0	<1.0	17	<1.0	NA
May-00	< 1.0	< 1.0	15	< 1.0	NA
Oct-00	0.7J / 0.7J	< 1.0 / < 1.0	15.8 / 15.0	< 1.0 / < 1.0	NA
Apr-01	<1.0	<1.0	12.3	<1.0	NA
Oct-01	0.61 J	< 1.0	14	< 1.0	NA
Apr-02	< 1 / < 1	< 1 / < 1	15 / 15	< 1 / < 1	NA
Oct-02	< 0.8	< 0.8	15	< 1.0	NA
Apr-03	< 0.8	< 0.8	12	< 1.0	NA
Oct-03	< 0.8	< 0.8	14	< 1.0	NA
Jul-04	< 0.8	< 0.8	8	< 1.0	NA
Jul-05	< 0.8	< 0.8	11	< 1.0	NA
Aug-06	< 0.8	< 0.8	11	< 1.0	NA
Jul-07	< 0.8	< 0.8	9	< 1.0	NA
Jul-08	< 0.8	< 0.8	8	< 1.0	NA
Jul-09	< 0.8	< 0.8	9	< 1	NA
Jun-10	< 0.8	< 0.8	10	< 1	NA
Sep-11	< 0.8	< 0.8	8	< 1	NA
Jul-12	0.2 J	< 0.1	9.2	< 0.1	NA
Dec-13	< 0.8	< 0.8	9	< 1	NA
Apr-14	< 0.5	< 0.5	8	< 0.5	1
Jul-14	< 0.5	< 0.5	8	< 0.5	1
Oct-14	< 0.5	< 0.5	9	< 0.5	1
CW-3S					
Dec-96	<1.0	<1.0	20	<1.0	NA
Mar-97	<1.0	<1.0	17	<1.0	NA
Oct-98	1 J	<1.0	14	<1.0	NA
Mar-99	<1.0	<1.0	11.9	<1.0	NA
Oct-99	<1.0	<1.0	14.5	<1.0	NA
May-00	< 1.0	< 1.0	10.7	< 1.0	NA
Oct-00	0.6J	< 1.0	10.8	< 1.0	NA
Apr-01	<1.0	<1.0	8.5	<1.0	NA
Oct-01	< 1.0	< 1.0	9.7	< 1.0	NA
Apr-02	< 1	< 1	9	< 1	NA
Oct-02	< 0.8	< 0.8	10	< 1.0	NA
Apr-03	< 0.8	< 0.8	7	< 1.0	NA
Oct-03	< 0.8	< 0.8	9	< 1.0	NA
Jul-04	< 0.8	< 0.8	12	< 1.0	NA
Jul-05	< 0.8	< 0.8	6	< 1.0	NA
Aug-06	< 0.8	< 0.8	7	< 1.0	NA
Jul-07	< 0.8	< 0.8	6	< 1.0	NA
Jul-08	< 0.8	< 0.8	5	< 1.0	NA
Jul-09	< 0.8	< 0.8	6	< 1	NA
Jun-10	< 0.8	< 0.8	6	< 1	NA
Sep-11	< 0.8	< 0.8	6	< 1	NA
Jul-12	< 0.1	< 0.1	5.7	< 0.1	NA
Dec-13	< 0.8	< 0.8	6	< 1	NA
Apr-14	< 0.5	< 0.5	5	< 0.5	1 J
Jul-14	< 0.5	< 0.5	5	< 0.5	1
Oct-14	< 0.5	< 0.5	6	< 0.5	1

TABLE 2
CLOSURE MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS (µg/l)
FORMER WESTINGHOUSE ELECTRIC CORPORATION FACILITY
KENTUCKY AVENUE WELLFIELD SUPERFUND SITE
HORSEHEADS, NEW YORK

Well ID	cis-1,2-DCE	trans-1,2-DCE	TCE	Vinyl Chloride	1,1,1-TCA
USEPA MCL (µg/l)[a]	70	100	5	2	200
Sample Date					
MW-113D					
Oct-98	1	<1.0	44	<1.0	NA
Mar-99	0.7 J	<1.0	33.7	<1.0	NA
Oct-99	<1.0	<1.0	48.8	<1.0	NA
May-00	< 1.0	< 1.0	43.2	< 1.0	NA
Oct-00	1.0J	< 1.0	35.2	< 1.0	NA
Apr-01	0.9J	<1.0	34	<1.0	NA
Oct-01	< 1.0	< 1.0	9.8	< 1.0	NA
Apr-02	< 1	< 1	41	< 1	NA
Oct-02	0.9 J	< 0.8	42	< 1.0	NA
Apr-03	< 0.8	< 0.8	37	< 1.0	NA
Oct-03	< 0.8	< 0.8	38	< 1.0	NA
Jul-04	< 0.8	< 0.8	37	< 1.0	NA
Jul-05	< 0.8	< 0.8	32	< 1.0	NA
Aug-06	< 0.8	< 0.8	32	< 1.0	NA
Jul-07	< 0.8	< 0.8	28	< 1.0	NA
Jul-08	< 0.8 / < 0.8	< 0.8 / < 0.8	25 / 25	< 1.0 / < 1.0	NA
Jul-09	< 0.8	< 0.8	25	< 1	NA
Jun-10	< 0.8	< 0.8	25	< 1	NA
Sep-11	< 0.8	< 0.8	20	< 1	NA
Jul-12	0.4 J	< 0.1	23	< 0.1	NA
Dec-13	< 0.8	< 0.8	23	< 1	NA
Jul-14	< 0.5	< 0.5	22	< 0.5	0.8 J
Oct-14	< 0.5	< 0.5	19	< 0.5	0.6 J
BW-1					
Apr-01	<1.0	<1.0	5.6	<1.0	NA
Oct-01	< 1.0	< 1.0	5.7	< 1.0	NA
Apr-02	< 1.0	< 1.0	6	< 1.0	NA
Oct-02	< 0.8	< 0.8	6	< 1.0	NA
Apr-03	< 0.8	< 0.8	5 J	< 1.0	NA
Oct-03	< 0.8	< 0.8	6	< 1.0	NA
Jul-04	< 0.8	< 0.8	5	< 1.0	NA
Jul-05	< 0.8	< 0.8	4 J	< 1.0	NA
Aug-06	< 0.8	< 0.8	3 J	< 1.0	NA
Jul-07	< 0.8	< 0.8	3 J	< 1.0	NA
Jul-08	< 0.8	< 0.8	3 J	< 1.0	NA
Jul-09	< 0.8	< 0.8	4 J	< 1	NA
Jun-10	< 0.8	< 0.8	4 J	< 1	NA
Sep-11	< 0.8	< 0.8	3 J	< 1	NA
Jul-12	< 0.1	< 0.1	3	< 0.1	NA
Dec-13	< 0.8	< 0.8	4 J	< 1	NA
Apr-14	< 0.8	< 0.8	4 J	< 1	NA
BW-2					
Apr-01	0.5 J	<1.0	17.5	<1.0	NA
Oct-01	< 1.0	< 1.0	19	< 1.0	NA
Apr-02	<1.0	<1.0	18	<1.0	NA
Oct-02	<0.8	< 0.8	17	< 1.0	NA
Apr-03	< 0.8	< 0.8	14	< 1.0	NA
Oct-03	< 0.8	< 0.8	17	< 1.0	NA
Jul-04	< 0.8	< 0.8	16	< 1.0	NA
Jul-05	< 0.8	< 0.8	8	< 1.0	NA
Aug-06	< 0.8	< 0.8	8	< 1.0	NA
Jul-07	< 0.8	< 0.8	10	< 1.0	NA
Jul-08	< 0.8	< 0.8	7	< 1.0	NA
Jul-09	< 0.8	< 0.8	7	< 1	NA
Jun-10	< 0.8	< 0.8	9	< 1	NA
Sep-11	< 0.8	< 0.8	10	< 1	NA
Jul-12	0.3 J	< 0.1	7.9	< 0.1	NA
Dec-13	< 0.8	< 0.8	7	< 1	NA
Apr-14	< 0.8	< 0.8	7	< 1	NA

TABLE 2
CLOSURE MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS (µg/l)
FORMER WESTINGHOUSE ELECTRIC CORPORATION FACILITY
KENTUCKY AVENUE WELLFIELD SUPERFUND SITE
HORSEHEADS, NEW YORK

Notes:

(a) µg/l is micrograms per liter or parts per billion (ppb).

(b) "< x" indicates value is below quantitation limit, x.

(c) --/-- indicates a duplicate sample was collected at specified well.

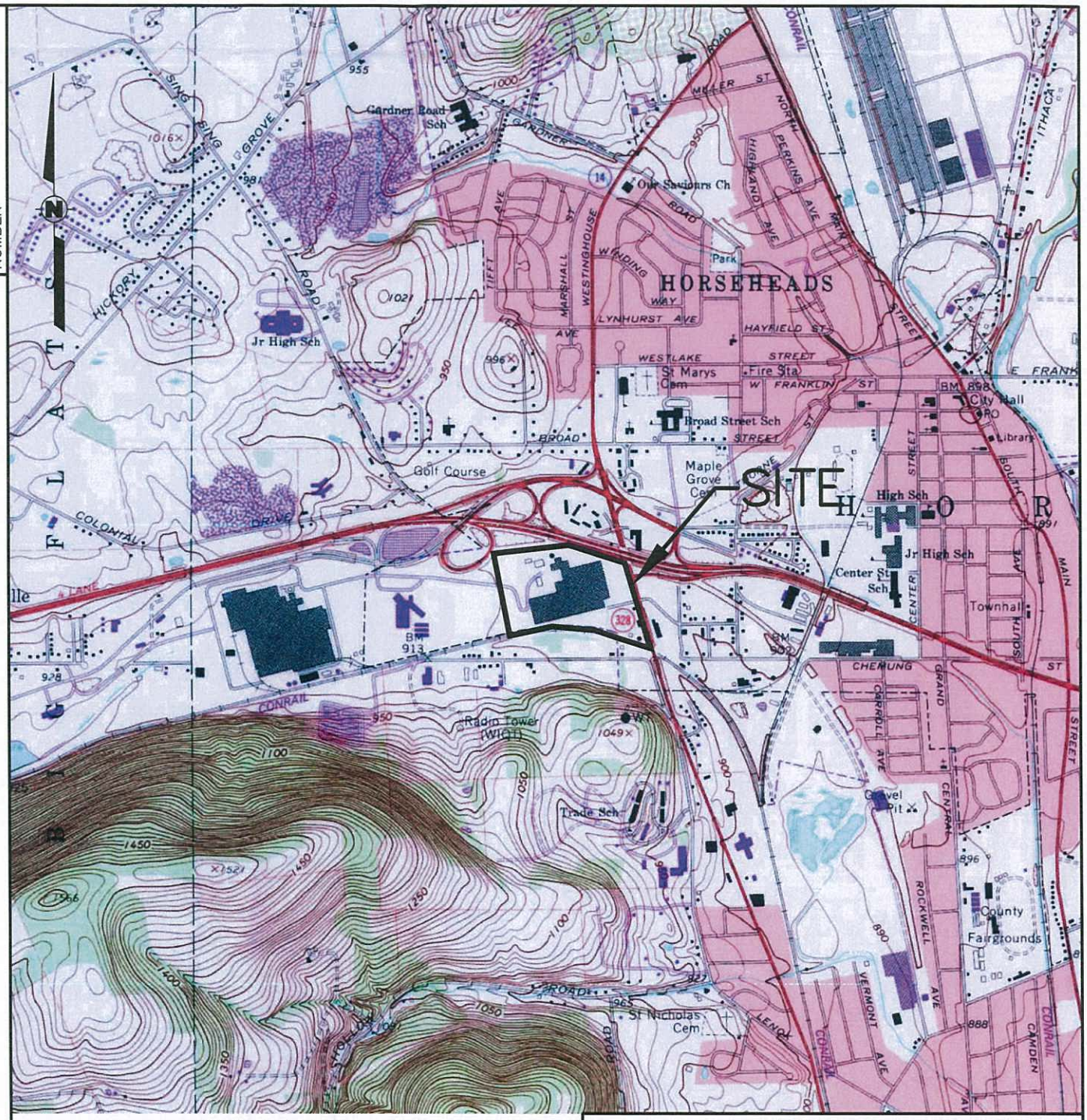
(d) "J" represents a value that is estimated and is below the quantitation limit.

(e) "NA" indicates that the compound has not been analyzed.

(f) "D" indicates that the compound was found in an analysis at a secondary dilution factor.

FIGURES

DRAWING NUMBER 96206A1



SCALE

0 2000 4000 FEET

REFERENCE
USGS 7.5-MIN TOPOGRAPHIC QUADRANGLE
HORSEHEADS, NEW YORK, DATED 1969
PHOTO REVISED 1978
SCALE 1:24000.

QUADRANGLE LOCATION

FIGURE 1

SITE LOCATION MAP

KENTUCKY AVENUE WELLFIELD SITE – OU3
HORSEHEADS, NEW YORK

PREPARED FOR
VIACOM INC.
PITTSBURGH, PENNSYLVANIA

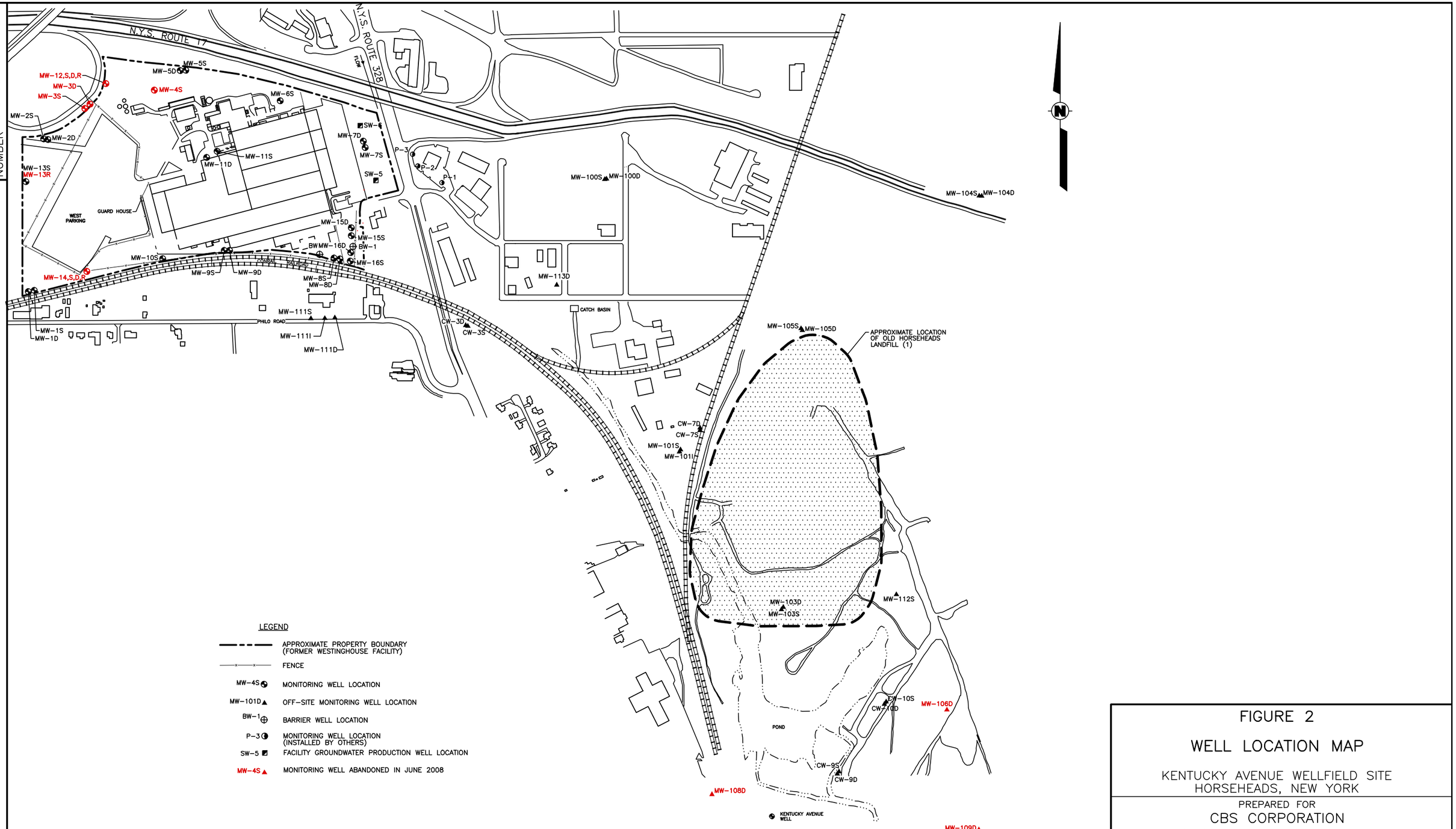
CUMMINGS RITER CONSULTANTS, INC.

DRAWING NUMBER 96206A1

REVISION	DATE	DESCRIPTION

DRAWN BY:	T.N. Fitzroy	DATE:	9-21-05
CHECKED BY:	C.R. Kuzmkowski	DATE:	9-21-05
APPROVED BY:	D.E. Spicuzza	DATE:	9-21-05

DRAWING NUMBER 96206B115



LEGEND

- APPROXIMATE PROPERTY BOUNDARY (FORMER WESTINGHOUSE FACILITY)
- FENCE
- MW-4S — MONITORING WELL LOCATION
- MW-101D — OFF-SITE MONITORING WELL LOCATION
- BW-1 — BARRIER WELL LOCATION
- P-3 — MONITORING WELL LOCATION (INSTALLED BY OTHERS)
- SW-5 — FACILITY GROUNDWATER PRODUCTION WELL LOCATION
- MW-4S — MONITORING WELL ABANDONED IN JUNE 2008

SCALE

400 0 400 800 FEET

REFERENCE:

BASE MAP PROVIDED BY PHILLIP ENVIRONMENTAL, DRAWING NUMBER 427100BV, TITLED "STUDY AREA BASE MAP", DATED 8-31-95.

PLOT SCALE: 1=600

FIGURE 2

WELL LOCATION MAP

KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

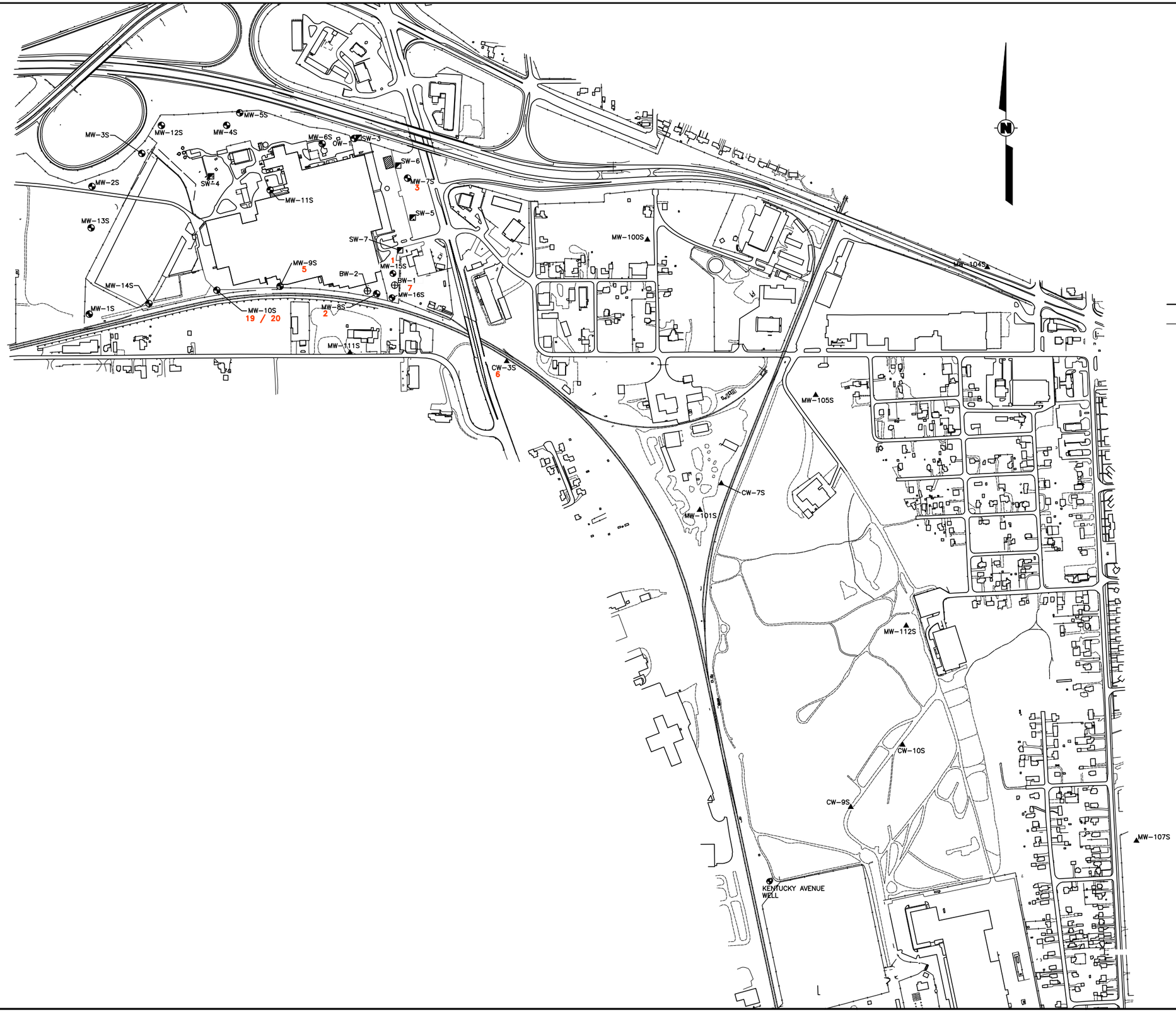
CUMMINGS RITER CONSULTANTS, INC.

DRAWING NUMBER 96206B115

REVISION	DATE	DESCRIPTION

DRAWN BY: *B.J. SIMMONS* DATE: *08-14-14*
CHECKED BY: *C.L. NIX* DATE: *11-14-14*
APPROVED BY: *D.E. SPICUZZA* DATE: *11-14-14*

DRAWING NUMBER 96206E50



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY (FORMER WESTINGHOUSE FACILITY)
- FENCE
- MW-7S / 4 — ON-SITE SHALLOW MONITORING WELL LOCATION WITH TCE CONCENTRATION IN µg/l (OCTOBER 2014)
- CW-3S / 5 — OFF-SITE SHALLOW MONITORING WELL LOCATION WITH TCE CONCENTRATION IN µg/l (OCTOBER 2014)
- SW-7 — FACILITY GROUNDWATER PRODUCTION WELL LOCATION

SCALE
300 0 300 600 FEET

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

CUMMINGS RITER CONSULTANTS, INC.
A WOODARD & CURRAN COMPANY
300 Penn Center Blvd.
Suite 800
Pittsburgh, PA 15235
(412) 241-4600
Fax: (412) 241-7500

FIGURE 3
TCE CONCENTRATIONS SHALLOW PORTION OF NEWTOWN CREEK AQUIFER, OCTOBER 2014

KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

SIZE	SCALE	REV.	DRAWING NUMBER
E	SCALE: 1" = 300'		96206E50

DRAWN BY:	B.J. SIMMONS	DATE: 11-04-14
CHECKED BY:	S.J. Barber	DATE: 11-04-14
APPROVED BY:	C.L. Nix	DATE: 11-14-14

PLOT SCALE: 1=1

DRAWING NUMBER 96206E51

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY (FORMER WESTINGHOUSE FACILITY)
- FENCE
- MW-9D ⊕ 17 — ON-SITE DEEP MONITORING WELL LOCATION WITH TCE CONCENTRATION IN µg/l (OCTOBER 2014)
- MW-100D ▲ 6 — OFF-SITE DEEP MONITORING WELL LOCATION WITH TCE CONCENTRATION IN µg/l (OCTOBER 2014)
- SW-7 ◪ — FACILITY GROUNDWATER PRODUCTION WELL LOCATION

NOTES:

1. "X / X" INDICATES A DUPLICATE SAMPLE WAS COLLECTED AT THIS LOCATION

SCALE
300 0 300 600 FEET

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

CUMMINGS RITER CONSULTANTS, INC.
A WOODARD & CURRAN COMPANY
300 Penn Center Blvd.
Suite 800
Pittsburgh, PA 15235
(412) 241-4500
Fax: (412) 241-7500

FIGURE 4

TCE CONCENTRATIONS DEEPER PORTION OF NEWTOWN CREEK AQUIFER, OCTOBER 2014

KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

SIZE	SCALE	REV.	DRAWING NUMBER
E	1" = 300'	X	96206E51

DRAWN BY:	B.J. SIMMONS	DATE: 11-04-14
CHECKED BY:	S.J. Barber	DATE: 11-04-14
APPROVED BY:	C.L. Nix	DATE: 11-14-14

PLOT SCALE: 1=1

APPENDIX A: FIELD FORMS

October 2014 Well Purging Records

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	1/4 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	13.45 ft TOR
SAMPLING DEVICE:	Portable Bladder Pump	**DEPTH TO PUMP:**	22.00 ft TOR
DATE:	10/8/14	**FEET OF WATER IN LINE:**	8.55 feet
WELL I.D.:	MW-15S	**VOLUME OF WATER IN LINE:**	0.02 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPER-ATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	13.45	7.36	0.856	16.76	6.85	>1000	164
5	13.45	7.33	0.861	15.22	5.93	>1000	165
10	13.45	7.34	0.859	14.55	5.79	>1000	165
15	13.45	7.34	0.862	14.47	5.72	>1000	167
20	13.45	7.34	0.864	14.57	5.66	997	169
25	13.45	7.34	0.864	14.42	5.60	645	171
30	13.45	7.34	0.864	14.13	5.61	421	172
35	13.45	7.34	0.864	14.05	5.56	258	174
40	13.45	7.33	0.862	14.04	5.55	195	175
45	13.45	7.33	0.866	14.02	5.55	187	175
50	13.45	7.33	0.870	14.05	5.53	182	175

PURGE START TIME: 14:50 **PURGE END TIME:** 15:40 **TOTAL VOLUME PURGED:** ~ 2.64 gal

APPROXIMATE PURGE RATE: 200 ml/min **PURGED/SAMPLED BY:** MAL

WEATHER CONDITIONS: Cool / Partly Cloudy

COMMENTS:

f52/corp

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	1/4 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	12.35 ft TOR
SAMPLING DEVICE:	Portable Bladder Pump	**DEPTH TO PUMP:**	52.00 ft TOR
DATE:	10/8/14	**FEET OF WATER IN LINE:**	39.65 feet
WELL I.D.:	MW-16D	**VOLUME OF WATER IN LINE:**	0.09 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPER-ATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	12.37	7.39	0.776	16.52	5.06	135	143
5	12.37	7.36	0.782	15.16	3.50	72.4	162
10	12.37	7.38	0.782	14.76	3.41	99.6	162
15	12.37	7.37	0.783	14.58	3.62	102	162
20	12.37	7.36	0.787	14.70	3.74	73.9	161
25	12.37	7.36	0.784	14.62	3.71	68.1	161
30	12.37	7.36	0.788	14.53	3.71	51.2	160
35	12.37	7.36	0.782	14.35	3.81	49.5	161
40	12.37	7.36	0.785	14.51	3.79	51.9	161

PURGE START TIME: 13.40 **PURGE END TIME:** 14.20 **TOTAL VOLUME PURGED:** ~ 2.11 gal

APPROXIMATE PURGE RATE: 200 ml/min **PURGED/SAMPLED BY:** MAC

WEATHER CONDITIONS: Warm / Partly Sunny

COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	3/8 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	14.68 ft TOR
SAMPLING DEVICE:	Dedicated Bladder Pump	**DEPTH TO PUMP:**	49.00 ft TOR
DATE:	10/8/14	**FEET OF WATER IN LINE:**	34.32 feet
WELL I.D.:	MW-8D	**VOLUME OF WATER IN LINE:**	0.17 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPERATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	14.68	6.57	0.731	13.09	5.03	153	132
5	14.68	7.32	0.741	13.03	4.07	37.1	76
10	14.68	7.36	0.741	13.03	3.86	17.4	71
15	14.68	7.36	0.741	13.04	3.90	8.6	72
20	14.68	7.36	0.742	13.03	3.70	6.2	74
25	14.68	7.36	0.740	13.05	3.89	6.1	76
30	14.68	7.35	0.740	13.06	3.85	6.0	78

PURGE START TIME: 10:05 **PURGE END TIME:** 10:35 **TOTAL VOLUME PURGED:** ~ 3.37 **gal**

APPROXIMATE PURGE RATE: 425 **ml/min** **PURGED/SAMPLED BY:** M-L

WEATHER CONDITIONS: Cool / Partly Sunny

COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	3/8 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	14.79 ft TOR
SAMPLING DEVICE:	Dedicated Bladder Pump	**DEPTH TO PUMP:**	24.35 ft TOR
DATE:	10/8/14	**FEET OF WATER IN LINE:**	9.56 feet
WELL I.D.:	MW-85	**VOLUME OF WATER IN LINE:**	0.05 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPER-ATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	14.79	7.02	0.803	14.04	6.79	13.6	132
5	14.79	7.35	0.807	14.09	6.40	1.9	125
10	14.79	7.36	0.809	14.15	6.00	1.7	129
15	14.79	7.35	0.808	14.12	6.30	1.9	131
20	14.79	7.35	0.810	14.29	5.87	1.2	132
25	14.79	7.35	0.810	14.30	5.82	0.9	134
30	14.79	7.35	0.808	14.24	6.06	0.6	136

PURGE START TIME: 10:55 **PURGE END TIME:** 11:25 **TOTAL VOLUME PURGED:** ~ 3.12 gal

APPROXIMATE PURGE RATE: 400 ml/min **PURGED/SAMPLED BY:** MAL

WEATHER CONDITIONS: Cool / Partly Sunny

COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	3/8 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	17.70 ft TOR
SAMPLING DEVICE:	Dedicated Bladder Pump	**DEPTH TO PUMP:**	24.80 ft TOR
DATE:	10/8/14	**FEET OF WATER IN LINE:**	7.10 feet
WELL I.D.:	MW-9S	**VOLUME OF WATER IN LINE:**	0.04 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPERATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	17.76	6.97	0.772	12.83	6.22	98.2	171
5	17.76	7.26	0.772	12.78	5.30	67.1	141
10	17.76	7.31	0.772	12.85	5.48	14.3	93
15	17.76	7.32	0.766	12.88	4.78	26.5	82
20	17.76	7.33	0.766	12.88	4.40	25.8	85
25	17.76	7.31	0.765	12.84	4.35	25.7	85
30	17.76	7.31	0.766	12.89	4.48	23.6	83

PURGE START TIME: 9:05 **PURGE END TIME:** 9:40 **TOTAL VOLUME PURGED:** ~2.75 **gal**

APPROXIMATE PURGE RATE: 350 **ml/min** **PURGED/SAMPLED BY:** MAC

WEATHER CONDITIONS: Cool / Partly Cloudy

COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	3/8 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	17.49 ft TOR
SAMPLING DEVICE:	Dedicated Bladder Pump	**DEPTH TO PUMP:**	41.60 ft TOR
DATE:	10/15/14	**FEET OF WATER IN LINE:**	24.11 feet
WELL I.D.:	MW-9D	**VOLUME OF WATER IN LINE:**	0.12 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPERATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	17.52	6.80	0.754	12.14	6.15	27.4	142
5	17.52	7.21	0.774	12.07	5.37	15.9	141
10	17.52	7.36	0.759	12.06	4.58	3.1	144
15	17.52	7.35	0.750	12.01	4.40	1.6	147
20	17.52	7.38	0.744	12.03	4.62	1.2	150
25	17.52	7.38	0.740	12.01	4.13	0.9	150
30	17.52	7.39	0.738	12.05	4.04	1.2	152

PURGE START TIME: 8:20 **PURGE END TIME:** 8:50 **TOTAL VOLUME PURGED:** ~ ~~4.2~~ 3.17 **gal**

APPROXIMATE PURGE RATE: 400 **ml/min** **PURGED/SAMPLED BY:** MAL

WEATHER CONDITIONS: Cool / partly cloudy

COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	1/4 inches	
PROJECT NO.:	96206	**DEPTH TO WATER:**	12.07	ft TOR
SAMPLING DEVICE:	Portable Bladder Pump	**DEPTH TO PUMP:**	22.00	ft TOR
DATE:	10 / 6 / 14	**FEET OF WATER IN LINE:**	9.93	feet
WELL I.D.:	MW-165	**VOLUME OF WATER IN LINE:**	0.62	gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPER-ATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	12.07	7.39	0.824	15.77	6.51	490	155
5	12.07	7.33	0.845	14.59	6.12	416	156
10	12.07	7.32	0.856	15.46	5.98	242	157
15	12.07	7.32	0.852	15.50	5.85	180	158
20	12.07	7.33	0.853	14.91	5.89	131	159
25	12.07	7.34	0.856	15.14	5.83	96	160
30	12.07	7.34	0.855	14.65	5.79	72.5	161
35	12.07	7.34	0.855	14.76	5.80	67.8	161
40	12.07	7.34	0.860	15.16	5.77	44.5	161
45	12.07	7.34	0.860	14.53	5.78	29.4	161
50	12.07	7.34	0.860	14.42	5.77	31.2	162
55	12.07	7.34	0.860	14.29	5.82	32.1	162

PURGE START TIME: 12:20 **PURGE END TIME:** 13:15 **TOTAL VOLUME PURGED:** ~ 2.91 **gal**

APPROXIMATE PURGE RATE: 200 **ml/min** **PURGED/SAMPLED BY:** MAC

WEATHER CONDITIONS: Cool / Partly Sunny

COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	1/4 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	13.27 ft TOR
SAMPLING DEVICE:	Portable Bladder Pump	**DEPTH TO PUMP:**	51.00 ft TOR
DATE:	10/8/14	**FEET OF WATER IN LINE:**	37.73 feet
WELL I.D.:	MW-15D	**VOLUME OF WATER IN LINE:**	0.09 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPER-ATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	13.27	7.40	0.832	15.93	4.55	651	173
5	13.27	7.36	0.841	15.15	3.03	675	172
10	13.27	7.35	0.847	15.27	3.28	459	171
15	13.27	7.34	0.847	14.76	3.53	330	170
20	13.27	7.34	0.851	14.92	3.74	195	170
25	13.27	7.34	0.852	15.12	3.75	176	170
30	13.27	7.34	0.851	14.52	3.86	127	170
35	13.27	7.33	0.856	14.69	3.97	87	169
40	13.27	7.33	0.849	14.76	3.92	85	169
45	13.27	7.33	0.851	14.99	3.96	93	169

PURGE START TIME: 1600 **PURGE END TIME:** 1645 **TOTAL VOLUME PURGED:** ~2.35 **gal**

APPROXIMATE PURGE RATE: 200 **ml/min** **PURGED/SAMPLED BY:** MAC

WEATHER CONDITIONS: Cool / Partly Cloudy

COMMENTS:

f52/corp

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	3/8 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	9.40 ft TOR
SAMPLING DEVICE:	Dedicated Bladder Pump	**DEPTH TO PUMP:**	35.50 ft TOR
DATE:	10/7/14	**FEET OF WATER IN LINE:**	26.10 feet
WELL I.D.:	MW-113D	**VOLUME OF WATER IN LINE:**	0.43 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPER-ATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	9.40	6.70	1.302	13.80	7.06	8.1	140
5	9.40	6.86	1.244	13.74	6.75	9.8	143
10	9.40	7.01	1.183	13.94	6.35	10.7	142
15	9.40	7.03	1.169	14.04	6.26	8.6	142
20	9.40	7.04	1.120	14.25	5.97	6.0	133
25	9.40	7.04	1.115	14.30	5.94	5.8	131
30	9.40	7.05	1.115	14.09	5.91	5.3	126

PURGE START TIME: 13:10 **PURGE END TIME:** 13:40 **TOTAL VOLUME PURGED:** ~ 2.3 **gal**

APPROXIMATE PURGE RATE: 300 **ml/min** **PURGED/SAMPLED BY:** MAL

WEATHER CONDITIONS: Cool / Partly Cloudy

COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	3/8 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	12.06 ft TOR
SAMPLING DEVICE:	Dedicated Bladder Pump	**DEPTH TO PUMP:**	48.00 ~~12.06~~ ft TOR
DATE:	10/21/14	**FEET OF WATER IN LINE:**	35.94 feet
WELL I.D.:	CW-30	**VOLUME OF WATER IN LINE:**	0.18 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPER-ATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	12.11	6.20	0.841	12.74	5.93	126	154
5	12.11	7.07	0.818	12.61	5.53	24.3	34
10	12.11	7.20	0.804	12.51	5.67	16.0	42
15	12.11	7.23	0.790	12.55	5.54	14.3	57
20	12.11	7.25	0.780	12.52	5.57	6.7	73
25	12.11	7.26	0.775	12.58	5.46	2.6	78
30	12.11	7.27	0.770	12.65	5.32	2.0	82
35	12.11	7.26	0.769	12.41	5.27	1.6	84

PURGE START TIME: 14:05 **PURGE END TIME:** 14:40 **TOTAL VOLUME PURGED:** ~ 3.47 **gal**

APPROXIMATE PURGE RATE: 375 **ml/min** **PURGED/SAMPLED BY:** MAL

WEATHER CONDITIONS: Cool / cloudy

COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	3/8 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	11.98 ft TOR
SAMPLING DEVICE:	Dedicated Bladder Pump	**DEPTH TO PUMP:**	28.51 ft TOR
DATE:	10/7/14	**FEET OF WATER IN LINE:**	16.53 feet
WELL I.D.:	CW-35	**VOLUME OF WATER IN LINE:**	0.08 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPER-ATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	11.98	6.82	0.767	12.87	6.50	7.5	122
5	11.98	7.20	0.760	12.77	6.15	7.2	116
10	11.98	7.23	0.750	12.78	5.99	6.9	118
15	11.98	7.23	0.752	12.79	5.69	6.9	116
20	11.98	7.22	0.742	12.75	5.56	7.3	119
25	11.98	7.22	0.740	12.74	5.48	7.0	119
30	11.98	7.22	0.742	12.66	5.54	6.7	119

PURGE START TIME: 14:45 **PURGE END TIME:** 15:15 **TOTAL VOLUME PURGED:** ~ 3.17 **gal**

APPROXIMATE PURGE RATE: 400 **ml/min** **PURGED/SAMPLED BY:** MAC

WEATHER CONDITIONS: Warm / Partly Sunny

COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	3/8 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	13.42 ft TOR
SAMPLING DEVICE:	Dedicated Bladder Pump	**DEPTH TO PUMP:**	19.50 ft TOR
DATE:	10/21/14	**FEET OF WATER IN LINE:**	6.08 feet
WELL I.D.:	MW-105	**VOLUME OF WATER IN LINE:**	0.03 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPER-ATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	13.42	6.91	0.769	14.37	5.14	185	136
5	13.42	6.97	0.767	14.40	4.75	45.1	131
10	13.42	6.99	0.766	14.38	4.77	14.7	130
15	13.42	6.99	0.760	14.44	4.42	9.9	131
20	13.42	6.99	0.761	14.56	4.45	7.7	132
25	13.42	6.99	0.756	14.38	4.60	6.4	132
30	13.42	6.99	0.754	14.38	4.56	6.0	131

PURGE START TIME: 15.40 **PURGE END TIME:** 16.10 **TOTAL VOLUME PURGED:** ~2.77 **gal**

APPROXIMATE PURGE RATE: 350 **ml/min** **PURGED/SAMPLED BY:** Mac

WEATHER CONDITIONS: Warm / Partly cloudy

COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	3/8 inches	
PROJECT NO.:	96206	**DEPTH TO WATER:**	11.30	ft TOR
SAMPLING DEVICE:	Dedicated Bladder Pump	**DEPTH TO PUMP:**	20.70	ft TOR
DATE:	10 / 17 / 14	**FEET OF WATER IN LINE:**	9.40	feet
WELL I.D.:	MW-75	**VOLUME OF WATER IN LINE:**	0.05	gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPER-ATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	11.30	6.74	0.859	13.70	5.50	7.6	151
5	11.30	7.10	0.878	13.47	5.77	1.9	147
10	11.30	7.11	0.878	13.45	5.55	0.5	145
15	11.30	7.11	0.880	13.55	5.30	0.4	149
20	11.30	7.11	0.880	13.50	5.37	0.6	149
25	11.30	7.10	0.880	13.44	5.54	0.0	149
30	11.30	7.10	0.883	13.44	5.60	0.0	145
35	11.30	7.11	0.882	13.46	5.50	0.0	149

PURGE START TIME: 16:40 **PURGE END TIME:** 17:15 **TOTAL VOLUME PURGED:** ~ 3.70 gal

APPROXIMATE PURGE RATE: 400 ml/min **PURGED/SAMPLED BY:** Mac

WEATHER CONDITIONS: Warm / Partly Cloudy

COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

SITE:	CBS–Horseheads, NY	**TUBING DIAMETER:**	3/8 inches
PROJECT NO.:	96206	**DEPTH TO WATER:**	11.55 ft TOR
SAMPLING DEVICE:	Dedicated Bladder Pump	**DEPTH TO PUMP:**	57.00 ft TOR
DATE:	10/7/14	**FEET OF WATER IN LINE:**	45.45 feet
WELL I.D.:	MW-70	**VOLUME OF WATER IN LINE:**	0.23 gallons

(0.005 gal/ft for 3/8" tubing, 0.0023 gal/ft for ¼" tubing)

ELAPSED TIME (min)	DEPTH TO WATER (ft TOR)	pH (s.u.)	SPECIFIC CONDUCTANCE (mS/cm)	TEMPER-ATURE (°C)	DISSOLVED OXYGEN (ppm)	TURBIDITY (NTU)	REDOX (mV)
0	11.55	5.94	0.593	13.49 ~~14.72~~	4.65	1.5	178
5	11.55	6.75	0.876	13.29	4.90	6.1	149
10	11.55	7.01	0.870	13.33	4.83	1.9	105
15	11.55	7.05	0.870	13.22	4.85	2.0	86
20	11.55	7.06	0.871	13.20	4.82	1.0	77
25	11.55	7.06	0.869	13.33	4.78	1.6	68
30	11.55	7.06	0.873	13.15	4.68	1.7	66
35	11.55	7.06	0.872	13.24	4.52	1.8	65

PURGE START TIME: 17:25 **PURGE END TIME:** 18:00 **TOTAL VOLUME PURGED:** ~ 3.47 gal

APPROXIMATE PURGE RATE: 375 ml/min **PURGED/SAMPLED BY:** MAL

WEATHER CONDITIONS: Cool / Partly Cloudy

COMMENTS:

October 2014 Water Sample Collection Forms

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT: CBS - Horseheads, NY
SAMPLE ID: MW-113D / 101714
PROJECT NO.: 96206
WELL NO.: MW-113D
SAMPLE DATE: 10/7/14
SAMPLED BY: MAC
SAMPLE TIME (START/END): 13:45 / 13:50
SAMPLE SEQUENCE NO.: 1
SAMPLE COLLECTION EQUIPMENT: Dedicated Bladder Pump
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT): 9.40 / 9.40
RECHARGE TIME: NA
MEASURED FROM ☐ TOC ☑ TOR ☐ GS

FIELD MEASUREMENTS		
pH	Standard Units	7.05
Specific Conductance	ms/cm	1.115
Water Temperature	°C	14.09
Dissolved Oxygen	ppm	5.91
Redox	mV	126
Turbidity	NTU	5.3

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE: 10/7/14
WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Clear
SAMPLING FLOW RATE: 100 mL/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCl N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS: 3
FILTRATION METHOD: —
LABORATORY: Lancaster
DELIVERED VIA: Fed Ex DATE: ____
WEATHER CONDITIONS: Cool / Partly cloudy
COMMENTS: ____

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT: CBS - Horseheads, NY
SAMPLE ID: CW-30 / 10/7/14
PROJECT NO.: 96206
WELL NO.: CW-30
SAMPLE DATE: 10 / 7 / 14
SAMPLED BY: MAL
SAMPLE TIME (START/END): 14:40 / 14:45
SAMPLE SEQUENCE NO.: 2
SAMPLE COLLECTION EQUIPMENT: Dedicated Bladder Pump
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT): 12.06 / 12.11
RECHARGE TIME: NA
MEASURED FROM ☐ TOC ☑ TOR ☐ GS

FIELD MEASUREMENTS		
pH	Standard Units	7.26
Specific Conductance	ms/cm	0.769
Water Temperature	°C	12.41
Dissolved Oxygen	ppm	5.27
Redox	mV	54
Turbidity	NTU	1.6

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE: 10/7/14
WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Clear
SAMPLING FLOW RATE: 100 ml/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCl N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS: 3
FILTRATION METHOD: -
LABORATORY: Lancaster
DELIVERED VIA: FED-EX DATE: ____
WEATHER CONDITIONS: Cool / Cloudy
COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT	CBS - Horseheads, NY	SAMPLE ID	CW-35 / 10/7/14
PROJECT NO.	96206	WELL NO.	CW-35
SAMPLE DATE	10 / 7 / 14	SAMPLED BY	MAL
SAMPLE TIME (START/END)	15:20 / 15:25	SAMPLE SEQUENCE NO.	3
SAMPLE COLLECTION EQUIPMENT	Dedicated Bladder Pump		
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT)	11.95 / 11.95		
RECHARGE TIME	NA	MEASURED FROM ☐ TOC ☑ TOR ☐ GS	

FIELD MEASUREMENTS

pH	Standard Units	7.22
Specific Conductance	ms/cm	0.742
Water Temperature	°C	12.66
Dissolved Oxygen	ppm	5.54
Redox	mV	119
Turbidity	NTU	6.7

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE 10/7/14

WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Clear

SAMPLING FLOW RATE: 100 ml/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCl N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS 3 FILTRATION METHOD —

LABORATORY Lancaster DELIVERED VIA FED-EX DATE ____

WEATHER CONDITIONS Warm / Partly Sunny

COMMENTS ____

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

Dup-1

PROJECT	CBS - Horseheads, NY	SAMPLE ID	MW-10S / 10/7/14
PROJECT NO.	96206	WELL NO.	MW-10S
SAMPLE DATE	10 / 7 / 14	SAMPLED BY	MAL
SAMPLE TIME (START/END)	16:15 / 16:20	SAMPLE SEQUENCE NO.	4
SAMPLE COLLECTION EQUIPMENT	Dedicated Bladder Pump		
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT)	13.42 / 13.42		
RECHARGE TIME	NA	MEASURED FROM ☐ TOC ☑ TOR ☐ GS	

FIELD MEASUREMENTS		
pH	Standard Units	6.99
Specific Conductance	ms/cm	0.754
Water Temperature	°C	14.38
Dissolved Oxygen	ppm	4.56
Redox	mV	131
Turbidity	NTU	6.0

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE 10/7/14

WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Clear

SAMPLING FLOW RATE: 100 ml/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCl N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS 3 x 6 FILTRATION METHOD —

LABORATORY Lancaster DELIVERED VIA Fed-Ex DATE

WEATHER CONDITIONS Warm / Partly Cloudy

COMMENTS Duplicate 1st was Collected on This Sample.

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT	CBS - Horseheads, NY	SAMPLE ID	MW-7S / 10/7/14
PROJECT NO.	96206	WELL NO.	MW-7S
SAMPLE DATE	10 / 7 / 14	SAMPLED BY	M-C
SAMPLE TIME (START/END)	17:15 / 17:20	SAMPLE SEQUENCE NO.	5
SAMPLE COLLECTION EQUIPMENT	Dedicated Bladder Pump		
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT)	11.30 / 11.30		
RECHARGE TIME	NA	MEASURED FROM ☐ TOC ☑ TOR ☐ GS	

FIELD MEASUREMENTS		
pH	Standard Units	7.11
Specific Conductance	ms/cm	0.512
Water Temperature	°C	13.46
Dissolved Oxygen	ppm	5.50
Redox	mV	149
Turbidity	NTU	0.0

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE 10/7/14

WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Clear

SAMPLING FLOW RATE: 100 ml/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCl N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS 3 FILTRATION METHOD -

LABORATORY Lancaster DELIVERED VIA Fed-Ex DATE ____

WEATHER CONDITIONS Warm / Partly Cloudy

COMMENTS

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT	CBS - Horseheads, NY	SAMPLE ID	MW-20 / 10/7/14
PROJECT NO.	96206	WELL NO.	MW-20
SAMPLE DATE	10 / 7 / 14	SAMPLED BY	M-L
SAMPLE TIME (START/END)	15:05 / 15:10	SAMPLE SEQUENCE NO.	6
SAMPLE COLLECTION EQUIPMENT	Dedicated Bladder Pump		
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT)	11.55 / 11.55		
RECHARGE TIME	NA	MEASURED FROM ☐ TOC ☑ TOR ☐ GS	

FIELD MEASUREMENTS

pH	Standard Units	7.06
Specific Conductance	ms/cm	0.872
Water Temperature	°C	13.24
Dissolved Oxygen	ppm	4.52
Redox	mV	65
Turbidity	NTU	1.4

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE 10/7/14

WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Clear

SAMPLING FLOW RATE: 100 ml/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCl N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS 3 FILTRATION METHOD —

LABORATORY Lancaster DELIVERED VIA FedEx DATE ____

WEATHER CONDITIONS Cool / Partly Cloudy

COMMENTS

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT	CBS - Horseheads, NY	SAMPLE ID	MW-9D / 10/F/14
PROJECT NO.	96206	WELL NO.	MW-9D
SAMPLE DATE	10 / F / 14	SAMPLED BY	M-L
SAMPLE TIME (START/END)	8:55 / 9:00	SAMPLE SEQUENCE NO.	7
SAMPLE COLLECTION EQUIPMENT	Dedicated Bladder Pump		
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT)	17.49 / 17.52		
RECHARGE TIME	NA	MEASURED FROM ☐ TOC ☑ TOR ☐ GS	

FIELD MEASUREMENTS

pH	Standard Units	7.39
Specific Conductance	ms/cm	0.738
Water Temperature	°C	12.05
Dissolved Oxygen	ppm	4.04
Redox	mV	152
Turbidity	NTU	1.2

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE 10/F/14

WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: clear

SAMPLING FLOW RATE: 100 ml/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCL N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS 3 FILTRATION METHOD —

LABORATORY Lancaster DELIVERED VIA FED-EX DATE ____

WEATHER CONDITIONS Cool / Partly cloudy

COMMENTS

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT	CBS - Horseheads, NY	SAMPLE ID	MW-95 / 101814
PROJECT NO.	96206	WELL NO.	MW-95
SAMPLE DATE	10/8/14	SAMPLED BY	MAL
SAMPLE TIME (START/END)	9:45 / 9:50	SAMPLE SEQUENCE NO.	8
SAMPLE COLLECTION EQUIPMENT	Dedicated Bladder Pump		
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT)	17.70 / 17.76		
RECHARGE TIME	NA	MEASURED FROM	☐ TOC ☑ TOR ☐ GS

FIELD MEASUREMENTS

pH	Standard Units	7.31
Specific Conductance	ms/cm	0.766
Water Temperature	°C	12.49
Dissolved Oxygen	ppm	4.48
Redox	mV	83
Turbidity	NTU	23.6

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE 10/8/14

WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Slightly Cloudy

SAMPLING FLOW RATE: 100 ml/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCl N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS 3 FILTRATION METHOD —

LABORATORY Lancaster DELIVERED VIA Fed-Ex DATE ____

WEATHER CONDITIONS Cool / Partly Cloudy

COMMENTS

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT: CBS - Horseheads, NY
SAMPLE ID: MW-8D / 10/8/14 MS/MSD
PROJECT NO.: 96206
WELL NO.: MW-8D
SAMPLE DATE: 10/8/14
SAMPLED BY: MAL
SAMPLE TIME (START/END): 10:40 / 10:45
SAMPLE SEQUENCE NO.: 9
SAMPLE COLLECTION EQUIPMENT: Dedicated Bladder Pump
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT): 14.68 / 14.68
RECHARGE TIME: NA
MEASURED FROM ☐ TOC ☑ TOR ☐ GS

FIELD MEASUREMENTS

pH	Standard Units	7.35
Specific Conductance	ms/cm	0.740
Water Temperature	°C	13.06
Dissolved Oxygen	ppm	3.85
Redox	mV	78
Turbidity	NTU	6.0

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE: 10/8/14
WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Clear
SAMPLING FLOW RATE: 100 mL/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCl N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS: 3 x 9 = 27
FILTRATION METHOD: —
LABORATORY: Lancaster
DELIVERED VIA: FED-EX DATE: ____
WEATHER CONDITIONS: Cool / Partly Cloudy
COMMENTS: A MS/MSD was Collected on this Sample.

f21/corp

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT: CBS - Horseheads, NY
SAMPLE ID: MW-8S / 10/8/14
PROJECT NO.: 96206
WELL NO.: MW-8S
SAMPLE DATE: 10 / 8 / 14
SAMPLED BY: M-C
SAMPLE TIME (START/END): 11:30 / 11:35
SAMPLE SEQUENCE NO.: 10
SAMPLE COLLECTION EQUIPMENT: Dedicated Bladder Pump
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT): 14.79 / 14.79
RECHARGE TIME: NA
MEASURED FROM ☐ TOC ☑ TOR ☐ GS

FIELD MEASUREMENTS		
pH	Standard Units	7.35
Specific Conductance	ms/cm	0.808
Water Temperature	°C	14.24
Dissolved Oxygen	ppm	6.06
Redox	mV	136
Turbidity	NTU	0.6

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE: 10/8/14
WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Clear
SAMPLING FLOW RATE: 100 mL/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCl N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS: 3
FILTRATION METHOD: —
LABORATORY: Lancaster
DELIVERED VIA: FED-EX DATE: ____
WEATHER CONDITIONS: Cool / Partly Sunny
COMMENTS:

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT	CBS - Horseheads, NY	SAMPLE ID	MW-16S
PROJECT NO.	96206	WELL NO.	MW-16S
SAMPLE DATE	10/8/14	SAMPLED BY	MC
SAMPLE TIME (START/END)	13:20 / 13:25	SAMPLE SEQUENCE NO.	11
SAMPLE COLLECTION EQUIPMENT	Portable Bladder Pump		
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT)	12.07 / 12.07		
RECHARGE TIME	NA	MEASURED FROM	☐ TOC ☑ TOR ☐ GS

FIELD MEASUREMENTS		
pH	Standard Units	7.34
Specific Conductance	ms/cm	0.560
Water Temperature	°C	14.29
Dissolved Oxygen	ppm	5.52
Redox	mV	162
Turbidity	NTU	32.1

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE 10/8/14

WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Slightly cloudy

SAMPLING FLOW RATE: 100 ml/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCl N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS 3 FILTRATION METHOD —

LABORATORY Lancaster DELIVERED VIA Fed-Ex DATE ____

WEATHER CONDITIONS Cool / Partly Sunny

COMMENTS

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT	CBS - Horseheads, NY	SAMPLE ID	MW-16D / 10/8/14
PROJECT NO.	96206	WELL NO.	MW-16D
SAMPLE DATE	10/8/14	SAMPLED BY	MAL
SAMPLE TIME (START/END)	14:25 / 14:30	SAMPLE SEQUENCE NO.	12
SAMPLE COLLECTION EQUIPMENT	Portable Bladder Pump		
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT)	12.35 / 12.37		
RECHARGE TIME	NA	MEASURED FROM	☐ TOC ☑ TOR ☐ GS

FIELD MEASUREMENTS		
pH	Standard Units	7.36
Specific Conductance	ms/cm	0.785
Water Temperature	°C	14.51
Dissolved Oxygen	ppm	3.29
Redox	mV	161
Turbidity	NTU	51.9

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE 10/8/14

WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Slightly cloudy

SAMPLING FLOW RATE: 100 ml/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?		PRESERVED?		
Vocs (8260 Select)	40 ml	3	Y ☐	N ☑	Y ☑	HCl	N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐

NUMBER OF CONTAINERS 3 FILTRATION METHOD –

LABORATORY Lancaster DELIVERED VIA FED-EX DATE

WEATHER CONDITIONS Warm / Partly Sunny

COMMENTS

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT	CBS - Horseheads, NY	SAMPLE ID	MW-15S
PROJECT NO.	96206	WELL NO.	MW-15S
SAMPLE DATE	10/8/14	SAMPLED BY	MAL
SAMPLE TIME (START/END)	15:45 / 15:50	SAMPLE SEQUENCE NO.	13
SAMPLE COLLECTION EQUIPMENT	Portable Bladder Pump		
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT)	13.45 / 13.45		
RECHARGE TIME	NA	MEASURED FROM ☐ TOC ☑ TOR ☐ GS	

FIELD MEASUREMENTS		
pH	Standard Units	7.33
Specific Conductance	ms/cm	0.870
Water Temperature	°C	14.65
Dissolved Oxygen	ppm	5.53
Redox	mV	175
Turbidity	NTU	162

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE 10/8/14

WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Cloudy, Tan-10

SAMPLING FLOW RATE: 100 ml/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?		PRESERVED?		
Vocs (8260 Select)	40 ml	3	Y ☐	N ☑	Y ☑	HCl	N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐
			Y ☐	N ☐	Y ☐		N ☐

NUMBER OF CONTAINERS 3 FILTRATION METHOD —

LABORATORY Lancaster DELIVERED VIA FED-EX DATE

WEATHER CONDITIONS Cool / Partly Cloudy

COMMENTS Strong Solvent odor in the Air During Sample Collection Due to Nearby Construction.

f21/corp

CUMMINGS RITER CONSULTANTS, INC.

WATER SAMPLE COLLECTION REPORT

PROJECT	CBS - Horseheads, NY	SAMPLE ID	MW-15D / 10151.14
PROJECT NO.	96206	WELL NO.	MW-15D
SAMPLE DATE	10 / 15 / 14	SAMPLED BY	MC
SAMPLE TIME (START/END)	16:50 / 16:55	SAMPLE SEQUENCE NO.	14
SAMPLE COLLECTION EQUIPMENT	Portable Bladder Pump		
DEPTH TO WATER PRIOR TO PURGING/SAMPLING (FT)	13.27 / 13.27		
RECHARGE TIME	NA	MEASURED FROM ☐ TOC ☑ TOR ☐ GS	

FIELD MEASUREMENTS		
pH	Standard Units	7.33
Specific Conductance	ms/cm	0.851
Water Temperature	°C	14.99
Dissolved Oxygen	ppm	3.96
Redox	mV	169
Turbidity	NTU	93

METER CALIBRATION PERFORMED? N ☐ Y ☑ DATE 10/15/14

WATER APPEARANCE, IMMISCIBLE PHASES OR ODORS: Cloudy, Tan silt

SAMPLING FLOW RATE: 100 mL/min

SAMPLE TYPES COLLECTED

PARAMETER	VOLUME	# CONTAINERS	FIELD FILTERED?	PRESERVED?
Vocs (8260 Select)	40 ml	3	Y ☐ N ☑	Y ☑ HCl N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐
			Y ☐ N ☐	Y ☐ ____ N ☐

NUMBER OF CONTAINERS 3 FILTRATION METHOD —

LABORATORY Lancaster DELIVERED VIA Fed-Ex DATE ____

WEATHER CONDITIONS Cool / Partly cloudy

COMMENTS

APPENDIX B: LABORATORY DATA PACKAGE – OCTOBER 2014 (ON COMPACT DISK)

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

October 20, 2014

Project: Horseheads, NY

Submittal Date: 10/10/2014
Group Number: 1510094
SDG: HOR44
PO Number: ENV-OM-00137
Release Number: HORSEHEADS
State of Sample Origin: NY

Client Sample Description	Lancaster Labs (LL) #
MW-113D/10/7/14 Grab Groundwater	7632548
CW-3D/10/7/14 Grab Groundwater	7632549
CW-3S/10/7/14 Grab Groundwater	7632550
MW-10S/10/7/14 Grab Groundwater	7632551
DUP-1 Grab Groundwater	7632552
MW-7S/10/7/14 Grab Groundwater	7632553
MW-7D/10/7/14 Grab Groundwater	7632554
MW-9D/10/8/14 Grab Groundwater	7632555
MW-9S/10/8/14 Grab Groundwater	7632556
MW-8D/10/8/14 Grab Groundwater	7632557
MW-8D/MS/10/8/14 Grab Groundwater	7632558
MW-8D/MSD/10/8/14 Grab Groundwater	7632559
MW-8S/10/8/14 Grab Groundwater	7632560
MW-16S/10/8/14 Grab Groundwater	7632561
MW-16D/10/8/14 Grab Groundwater	7632562
MW-15S/10/8/14 Grab Groundwater	7632563
MW-15D/10/8/14 Grab Groundwater	7632564
TB-1 Water	7632565

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CBS Corporation	Attn: Doug Spicuzza
ELECTRONIC COPY TO	Cummings Riter Consultants	Attn: Mike Lambert
ELECTRONIC	Cummings Riter Consultants	Attn: Christine Kuzmkowski

COPY TO

Respectfully Submitted,

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Sample Description: MW-113D/10/7/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632548
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/07/2014 13:45 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HH113 SDG#: HOR44-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	0.6 J	0.5	1
11997	Trichloroethene	79-01-6	19	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/10/2014 22:17	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/10/2014 22:17	Sara E Johnson	1

Sample Description: CW-3D/10/7/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632549
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/07/2014 14:40 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHC3D SDG#: HOR44-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	1	0.5	1
11997	Trichloroethene	79-01-6	9	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/10/2014 22:39	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/10/2014 22:39	Sara E Johnson	1

Sample Description: CW-3S/10/7/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632550
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/07/2014 15:20 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHC3S SDG#: HOR44-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	1	0.5	1
11997	Trichloroethene	79-01-6	6	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/10/2014 23:01	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/10/2014 23:01	Sara E Johnson	1

Sample Description: MW-10S/10/7/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632551
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/07/2014 16:15 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HH10S SDG#: HOR44-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	cis-1,2-Dichloroethene	156-59-2	3	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	2	0.5	1
11997	Trichloroethene	79-01-6	19	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/10/2014 23:23	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/10/2014 23:23	Sara E Johnson	1

Sample Description: DUP-1 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632552
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: n.a.

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHFD1 SDG#: HOR44-05FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	cis-1,2-Dichloroethene	156-59-2	3	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	2	0.5	1
11997	Trichloroethene	79-01-6	20	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/10/2014 23:45	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/10/2014 23:45	Sara E Johnson	1

Sample Description: MW-7S/10/7/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632553
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/07/2014 17:15 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHM7S SDG#: HOR44-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	0.6 J	0.5	1
11997	Trichloroethene	79-01-6	3	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/11/2014 00:07	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/11/2014 00:07	Sara E Johnson	1

Sample Description: MW-7D/10/7/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632554
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/07/2014 18:05 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHM7D SDG#: HOR44-07

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**		**ug/l**	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.		0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.		0.5	1
11997	1,1,1-Trichloroethane	71-55-6	0.8	J	0.5	1
11997	Trichloroethene	79-01-6	1	J	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.		0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/11/2014 00:29	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/11/2014 00:29	Sara E Johnson	1

Sample Description: MW-9D/10/8/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632555
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/08/2014 08:55 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHM9D SDG#: HOR44-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	2	0.5	1
11997	Trichloroethene	79-01-6	15	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/11/2014 00:51	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/11/2014 00:51	Sara E Johnson	1

Sample Description: MW-9S/10/8/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632556
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/08/2014 09:45 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHM9S SDG#: HOR44-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	2	0.5	1
11997	Trichloroethene	79-01-6	5	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/11/2014 01:13	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/11/2014 01:13	Sara E Johnson	1

Sample Description: MW-8D/10/8/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632557
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/08/2014 10:40 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHM8D SDG#: HOR44-10BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	2	0.5	1
11997	Trichloroethene	79-01-6	5	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/10/2014 21:11	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/10/2014 21:11	Sara E Johnson	1

Sample Description: MW-8D/MS/10/8/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632558
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/08/2014 10:40 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHM8D SDG#: HOR44-10MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	
11997	cis-1,2-Dichloroethene	156-59-2	19	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	20	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	17	0.5	1
11997	Trichloroethene	79-01-6	23	0.5	1
11997	Vinyl Chloride	75-01-4	17	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/10/2014 21:33	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/10/2014 21:33	Sara E Johnson	1

Sample Description: MW-8D/MSD/10/8/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632559
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/08/2014 10:40 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHM8D SDG#: HOR44-10MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	cis-1,2-Dichloroethene	156-59-2	19	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	20	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	17	0.5	1
11997	Trichloroethene	79-01-6	24	0.5	1
11997	Vinyl Chloride	75-01-4	16	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/10/2014 21:55	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/10/2014 21:55	Sara E Johnson	1

Sample Description: MW-8S/10/8/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632560
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/08/2014 11:30 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHM8S SDG#: HOR44-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	1	0.5	1
11997	Trichloroethene	79-01-6	2	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/11/2014 01:35	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/11/2014 01:35	Sara E Johnson	1

Sample Description: MW-16S/10/8/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632561
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/08/2014 13:20 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HH16S SDG#: HOR44-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	1	0.5	1
11997	Trichloroethene	79-01-6	7	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/11/2014 01:57	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/11/2014 01:57	Sara E Johnson	1

Sample Description: MW-16D/10/8/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632562
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/08/2014 14:25 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HH16D SDG#: HOR44-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	1	0.5	1
11997	Trichloroethene	79-01-6	2	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/11/2014 02:19	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/11/2014 02:19	Sara E Johnson	1

Sample Description: MW-15S/10/8/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632563
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/08/2014 15:45 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HH15S SDG#: HOR44-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	0.9 J	0.5	1
11997	Trichloroethene	79-01-6	1	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/11/2014 02:41	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/11/2014 02:41	Sara E Johnson	1

Sample Description: MW-15D/10/8/14 Grab Groundwater
Horseheads, NY

LL Sample # WW 7632564
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/08/2014 16:50 by ML

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HH15D SDG#: HOR44-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	1	0.5	1
11997	Trichloroethene	79-01-6	1	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/11/2014 03:03	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/11/2014 03:03	Sara E Johnson	1

Sample Description: TB-1 Water
Horseheads, NY

LL Sample # WW 7632565
LL Group # 1510094
Account # 09314

Project Name: Horseheads, NY

Collected: 10/08/2014

Submitted: 10/10/2014 09:20
Reported: 10/20/2014 16:28

CBS Corporation
20 Stanwix Street Room 1043
Pittsburgh PA 15222-1384

HHTB1 SDG#: HOR44-16TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	L142832AA	10/10/2014 20:50	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L142832AA	10/10/2014 20:50	Sara E Johnson	1

Quality Control Summary

Client Name: CBS Corporation Group Number: 1510094
Reported: 10/20/14 at 04:28 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: L142832AA	Sample number(s): 7632548-7632565							
cis-1,2-Dichloroethene	N.D.	0.5	ug/l	96		80-120		
trans-1,2-Dichloroethene	N.D.	0.5	ug/l	99		80-120		
1,1,1-Trichloroethane	N.D.	0.5	ug/l	75		66-126		
Trichloroethene	N.D.	0.5	ug/l	97		80-120		
Vinyl Chloride	N.D.	0.5	ug/l	78		63-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: L142832AA	Sample number(s): 7632548-7632565 UNSPK: 7632557								
cis-1,2-Dichloroethene	97	97	80-141	0	30				
trans-1,2-Dichloroethene	101	99	86-131	2	30				
1,1,1-Trichloroethane	77	77	69-140	0	30				
Trichloroethene	94	95	88-133	1	30				
Vinyl Chloride	83	80	66-133	4	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 5ml Water by 8260C
Batch number: L142832AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7632548	96	101	98	92
7632549	96	102	97	92
7632550	97	101	98	91
7632551	97	100	97	92
7632552	98	104	97	91
7632553	98	102	97	92
7632554	98	103	97	91
7632555	98	104	97	92
7632556	98	102	98	91

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CBS Corporation Group Number: 1510094
Reported: 10/20/14 at 04:28 PM

Surrogate Quality Control

7632557	97	101	98	92
7632558	96	101	100	94
7632559	94	102	100	94
7632560	97	101	97	92
7632561	98	102	97	91
7632562	98	102	98	91
7632563	100	102	96	91
7632564	99	101	98	91
7632565	96	103	97	92
Blank	96	101	98	92
LCS	96	101	100	94
MS	96	101	100	94
MSD	94	102	100	94
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 9314 | For Eurofins Lancaster Laboratories Environmental use only | Group # ~~1519~~ 151009 | Sample # 76325548-65

Instructions on reverse side correspond with circled numbers.

5 KM2 10-10-14

1 of 2

359624

1 Client Information

Client: Cummings/Riter Consultants	Acct. #:
Project Name/#: (Quarterly) CBS - Henrietta, NY	PWSID #:
Project Manager: Douglas Spicuzza	P.O. #:
Sampler: Mike Lamont	Quote #:

Name of state where samples were collected: New York

4 Matrix

Soil ☐ Sediment ☐ | Water: Potable ☐ Ground ☒ NPDES ☐ Surface ☐ | Other: ☐

5 Analysis Requested

Preservation Codes

H

* Select VOCs (8260)

For Lab Use Only

FSC:

SCR#: 162108

Preservation Codes

H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

6 Remarks

* = TCE, cis, 1,2 DCE, trans, 1,2 DCE, 1,1,1 TCA + Vinyl Chloride

2 Sample Identification	Collected Date	Collected Time	3 Grab	Composite	Total # of Containers	*
MW-113D / 10/7/14	10/7/14	13:45	X		3	X
CW-3D / 10/7/14	10/7/14	14:40	X		3	X
CW-3S / 10/7/14	10/7/14	15:20	X		3	X
MW-10S / 10/7/14	10/7/14	16:15	X		3	X
DUP-1	—	—	X		3	X
MW-7S / 10/7/14	10/7/14	17:15	X		3	X
MW-7D / 10/7/14	10/7/14	18:05	X		3	X
MW-9D / 10/8/14	10/8/14	8:55	X		3	X
MW-9S / 10/8/14	10/8/14	9:45	X		3	X
MW-8D / 10/8/14	10/8/14	10:40	X		3	X

DUPLICATE 1 *

7 Turnaround Time (TAT) Requested (please circle)

Standard Rush

(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: _____

E-mail address: _____

8 Data Package Options (circle if required)

Type I (Validation/non-CLP) Type VI (Raw Data Only)

Type III (Reduced non-CLP) TX TRRP-13

Type IV (CLP SOW) MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time (9)
	10/9/14	12:55		10/10/14	7:00
	10/9/14	10:30			
				10/10/14	0920

EDD Required? Yes No

If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No

(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:

UPS _____ FedEx ✓ Other _____

Temperature upon receipt 1.3 °C

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 9314 For Eurofins Lancaster Laboratories Environmental use only Group # 1510094 Sample # 763254 8-65

Instructions on reverse side correspond with circled numbers.

2 of 2

359625

1 Client Information

Client: Cummings/Riter Consultants	Acct. #:
Project Name/#: (Quarterly) CBS - Households, NY	PWSID #:
Project Manager: Douglas Spicuzza	P.O. #:
Sampler: Mike Lambert	Quote #:

Name of state where samples were collected: New York

4 Matrix

Sediment ☐ Soil ☐ | Ground ☒ Potable ☐ Water | Surface ☐ NPDES ☐ | Other: ☐

5 Analysis Requested

Preservation Codes

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	Total # of Containers	H (*Select VOCs)	Remarks
MW-8D/MS/10/8/14	10/8/14	10:40	X		3	X	MATRIX SPIKE
MW-8D/MSD/10/8/14	10/8/14	10:40	X		3	X	MATRIX SPIKE DUP
MW-8S/10/8/14	10/8/14	11:30	X		3	X	
MW-16S/10/8/14	10/8/14	13:20	X		3	X	
MW-16D/10/8/14	10/8/14	14:25	X		3	X	
MW-15S/10/8/14	10/8/14	15:45	X		3	X	
MW-15D/10/8/14	10/8/14	16:50	X		3	X	
TB-1	10/8/14	—	—		2	X	TRIP BLANK 1*

* = TCE, cis, 1,2, DCE, trans 1,2 DCE, 1,1,1, TCA + vinyl chloride

For Lab Use Only

FSC: _____

SCR#: _____

Preservation Codes

H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

7 Turnaround Time (TAT) Requested (please circle)

~~Standard~~ Rush

(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: _____

E-mail address: _____

8 Data Package Options (circle if required)

Type I (Validation/non-CLP) Type VI (Raw Data Only)

Type III (Reduced non-CLP) TX TRRP-13

Type IV (CLP SOW) MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time
	10/9/14	10:30			
			Received by	10/10/14	0920

EDD Required? Yes No

If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No

(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier: UPS _____ FedEx ✓ Other _____

Temperature upon receipt 1.3 °C

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Sample Administration Receipt Documentation Log

Doc Log ID: 33738

Group Number(s): 1510094

Client: CUMMINGS RITER

CBS

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	10/10/2014 9:20
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	NY		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Total Trip Blank Qty:	2
Custody Seal Present:	Yes	Trip Blank Type:	HCL
Custody Seal Intact:	Yes	Air Quality Samples Present:	No
Samples Chilled:	Yes	Air Quality Flow Controllers Present:	N/A
Paperwork Enclosed:	Yes	Flow Controller Quantity:	0
Samples Intact:	Yes	Air Quality Returns:	N/A
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		
Sample IDs on COC match Containers:	Yes		
Sample Date/Times match COC:	Yes		
VOA Vial Headspace ≥ 6mm:	No		
VOA IDs (≥ 6mm):	N/A		

Unpacked by Corey Eshleman (3647) at 11:08 on 10/10/2014

Samples Chilled Details: CBS

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT121	1.3	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

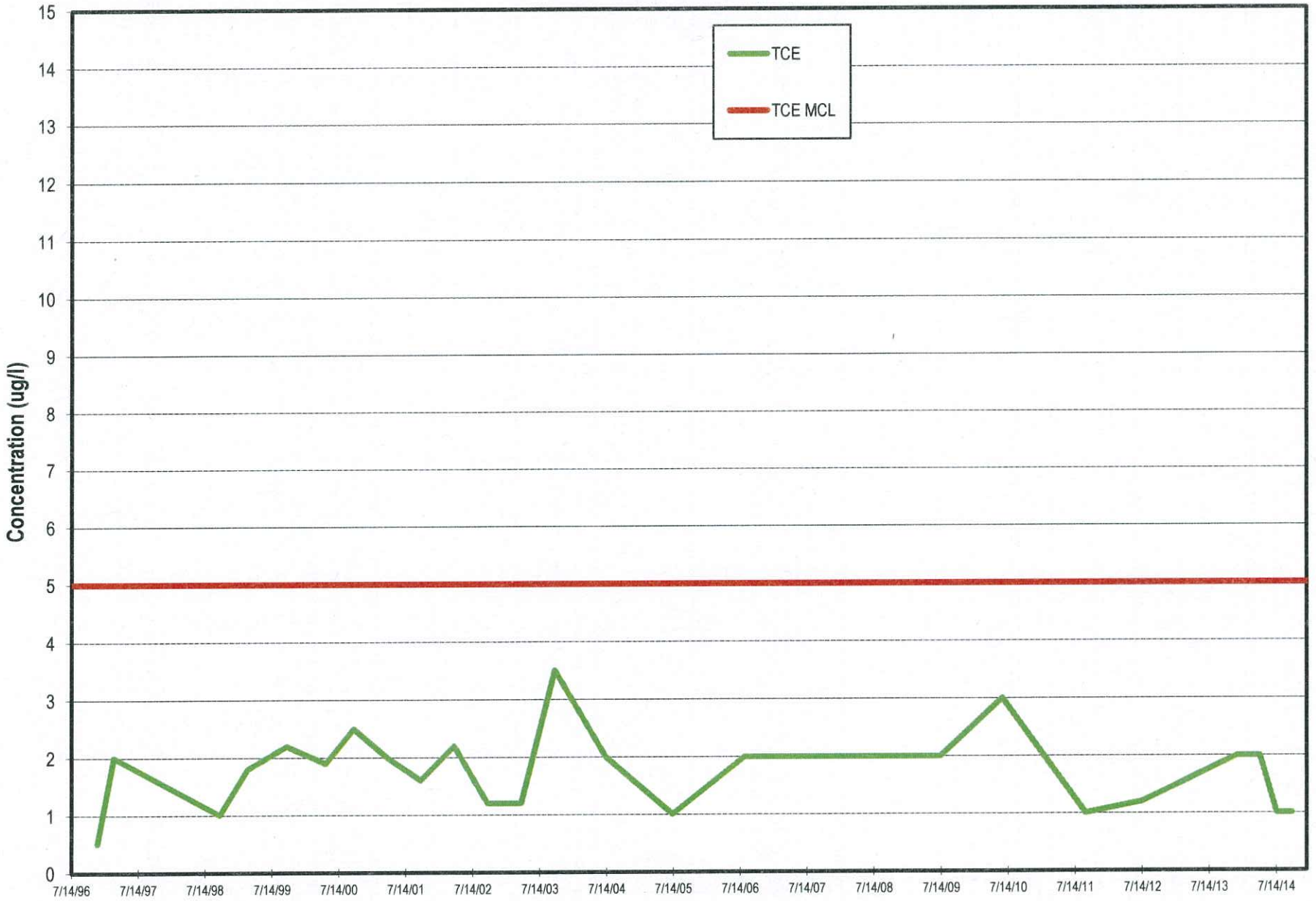
Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

APPENDIX C: TIME-TREND CHARTS

MW-7D

TCE CONCENTRATIONS



J:\Typing Projects\Proj Nos. 200 - 299\206\VT119-HistoricalGWResults 10-14/MW-7D

MW-7S

TCE CONCENTRATIONS

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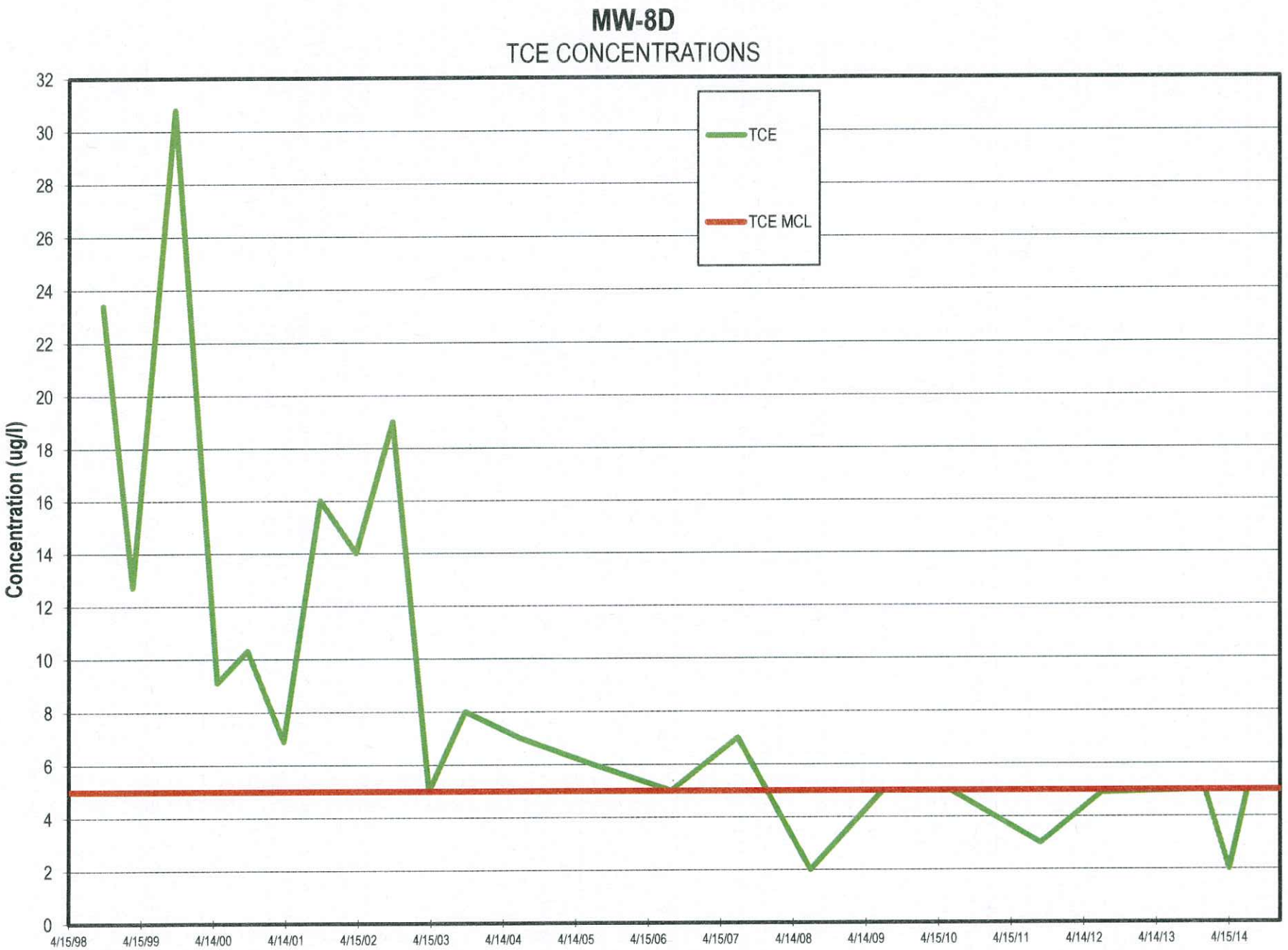

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MW-8S

TCE CONCENTRATIONS

J:\Typing Projects\Proj Nos. 200 - 299\206\VT119-HistoricalGWResults 10-14/MW-8S

MW-9D

TCE CONCENTRATIONS

J:\Typing Projects\Proj Nos. 200 - 299\206\VT119-HistoricalGWResults 10-14/MW-9D

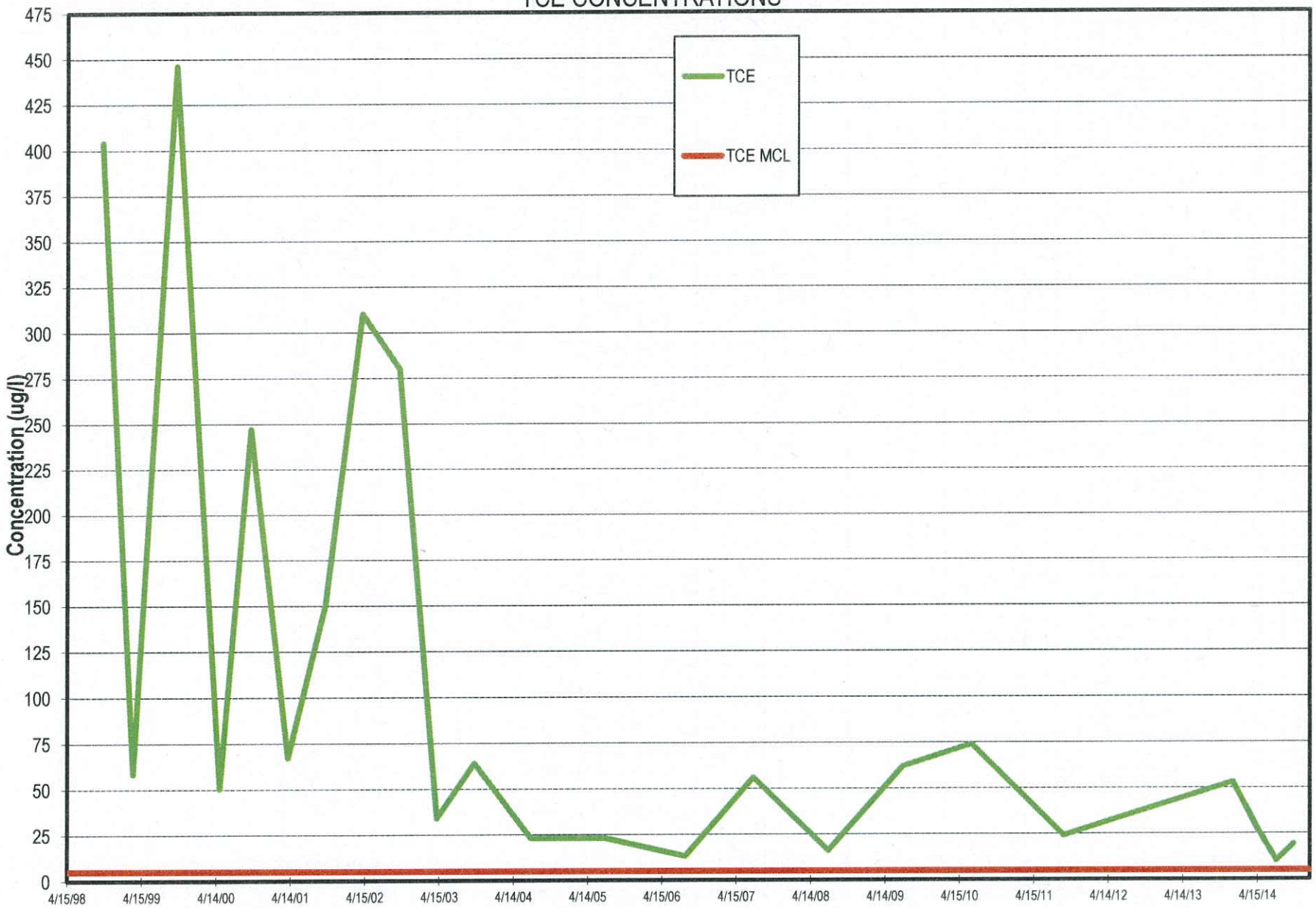
MW-9S

TCE CONCENTRATIONS

J:\Typing Projects\Proj Nos. 200 - 299\206VT119-HistoricalGWResults 10-14/MW-9S

MW-10S

TCE CONCENTRATIONS



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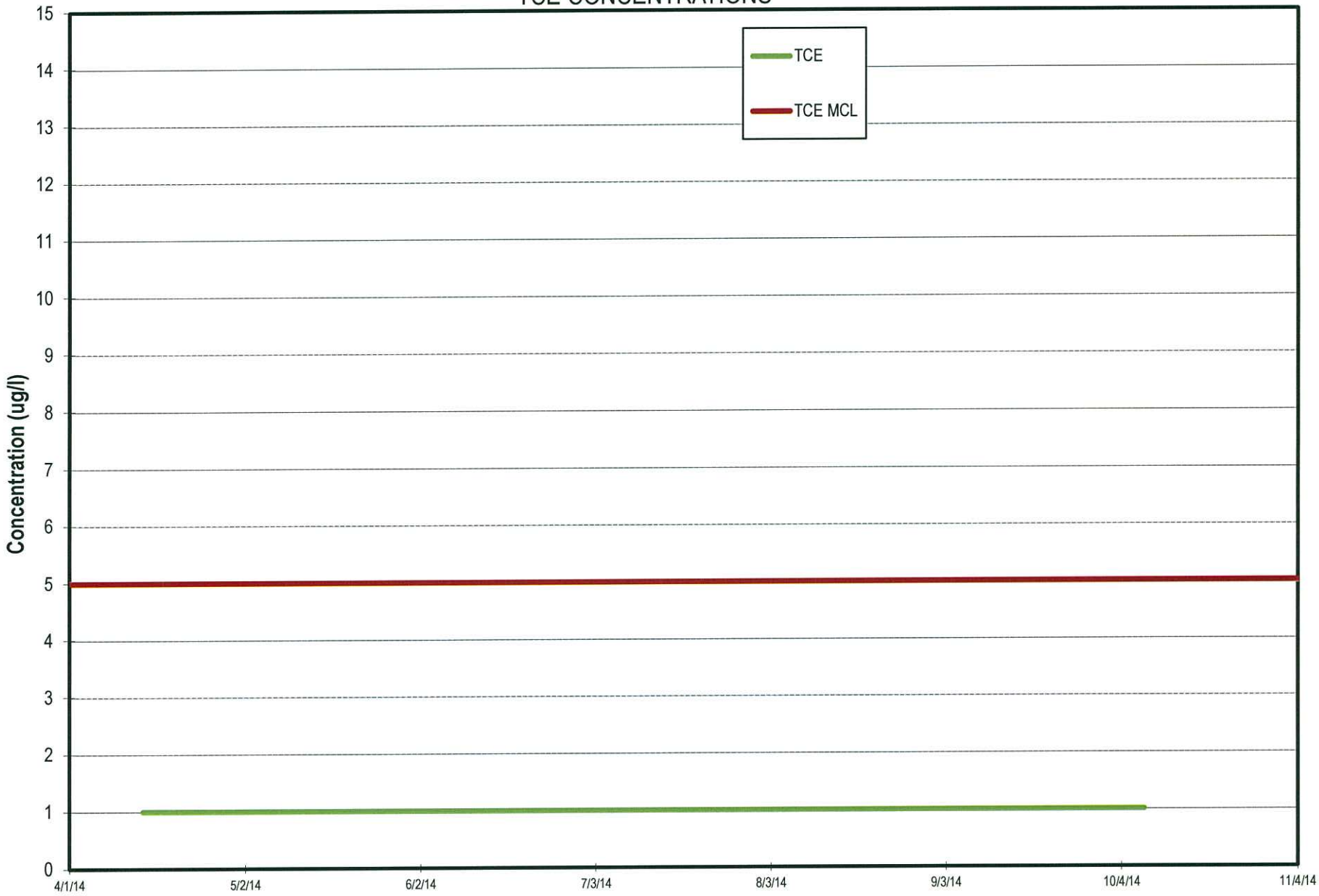
MW-15D

TCE CONCENTRATIONS



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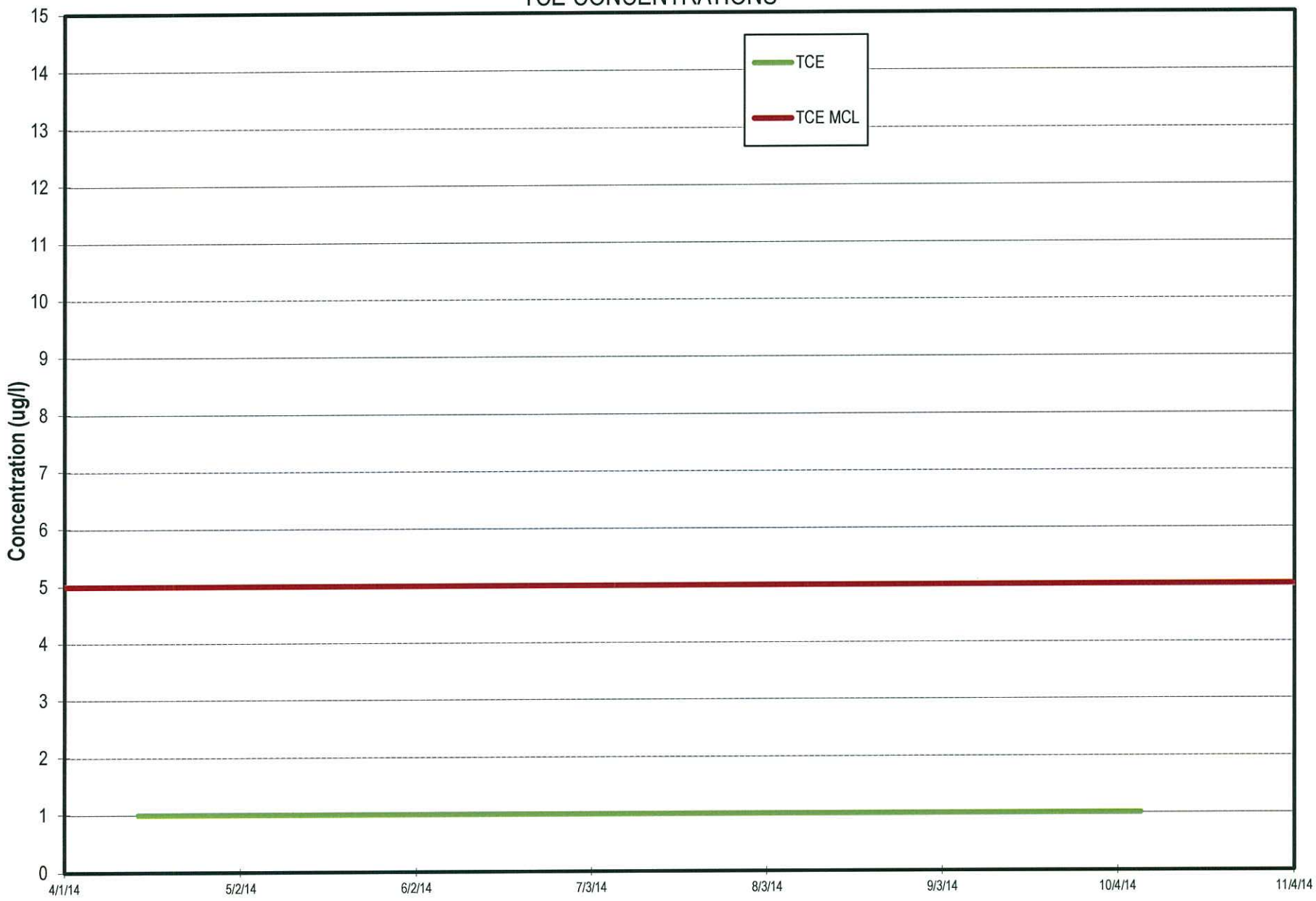
MW-15S

TCE CONCENTRATIONS



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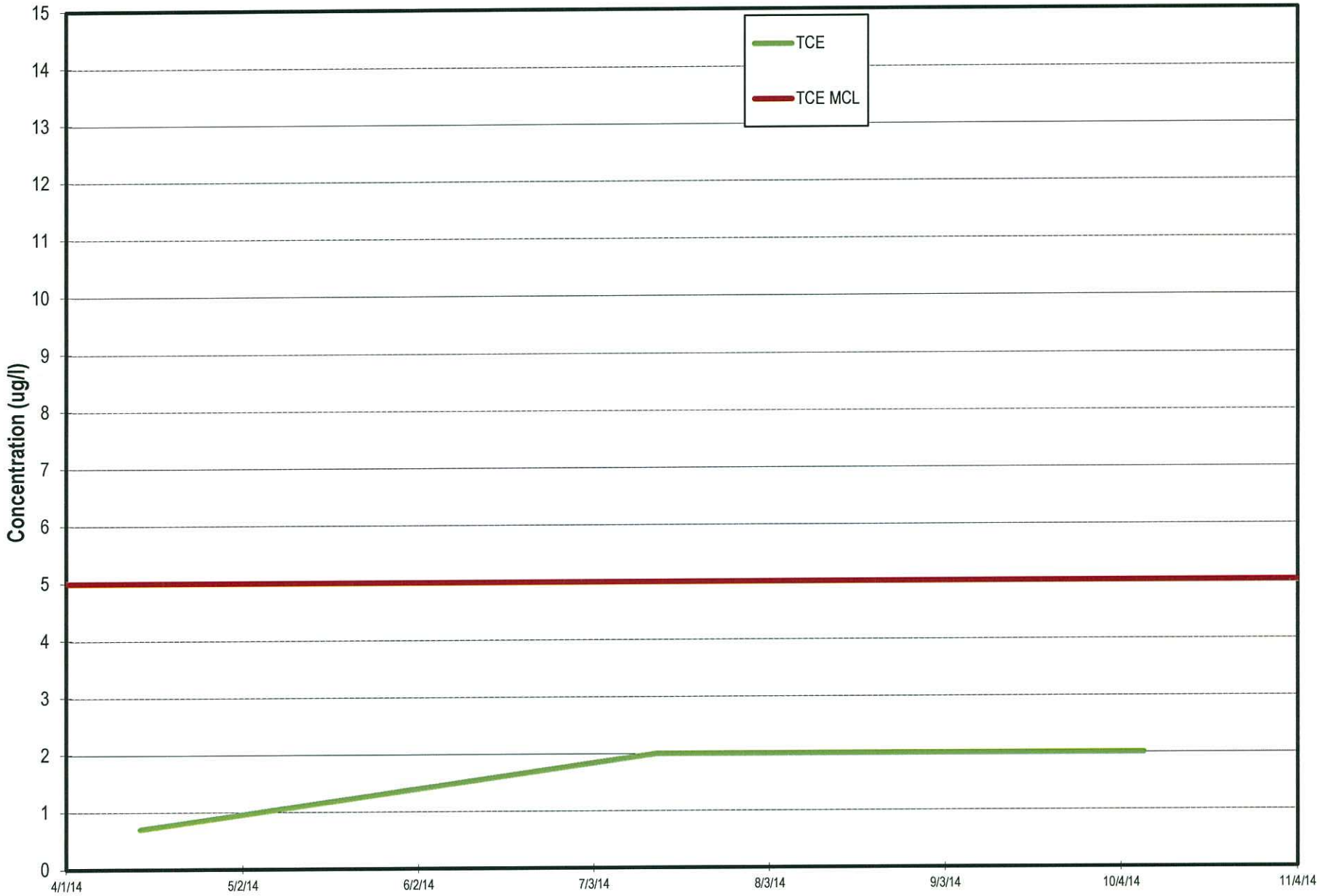
MW-16D

TCE CONCENTRATIONS



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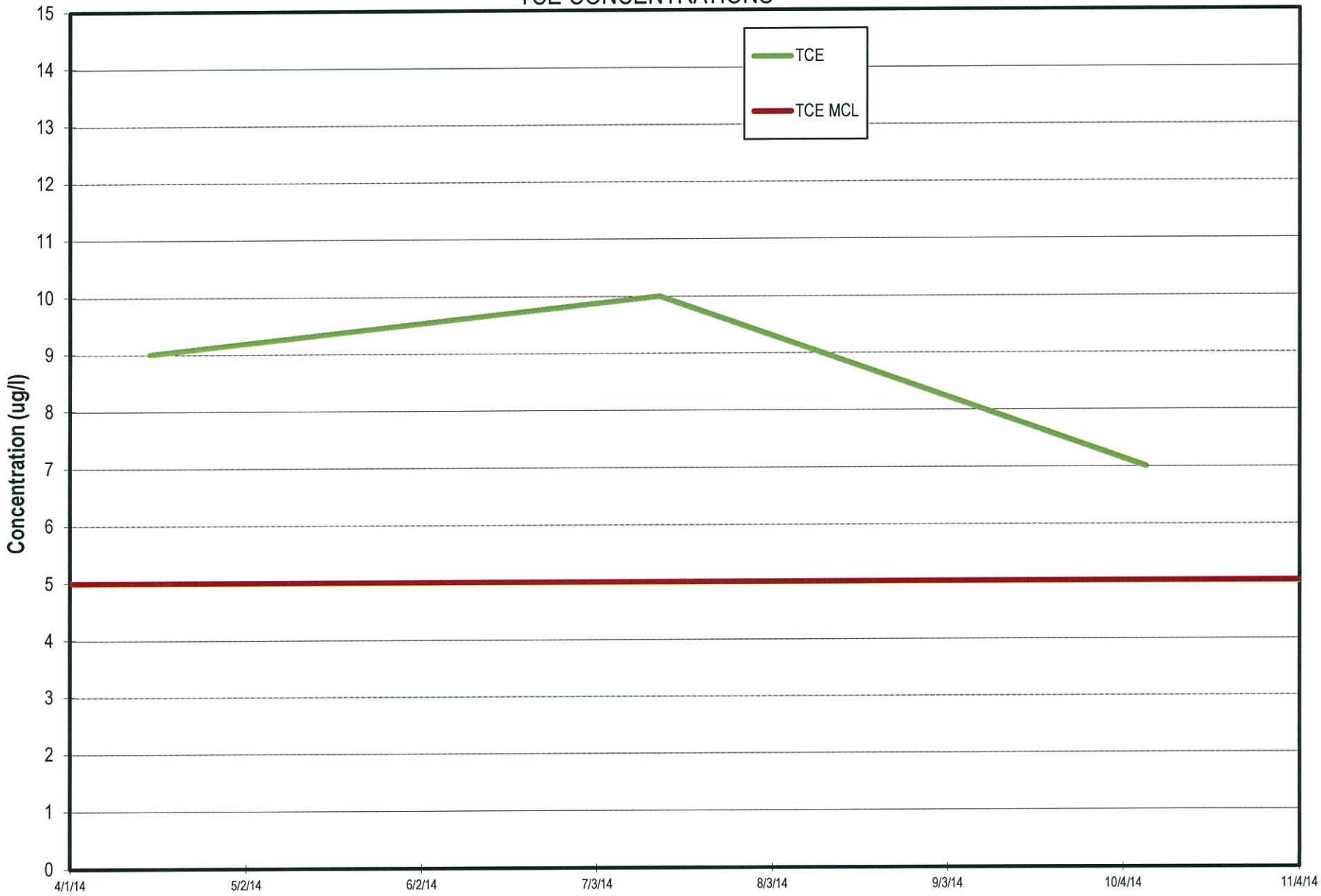
MW-16S

TCE CONCENTRATIONS



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CW-3D

TCE CONCENTRATIONS

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MW-113D

TCE CONCENTRATIONS

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