

July 25, 2016

3200 Windy Hill Rd., SE
Suite 1500W
Atlanta, GA 30339
(678) 486-2700
(404) 745-0103 (fax)

Mr. David Brownlee
Unit Coordinator
Response & Remediation Program
Georgia Environmental Protection Division
2 Martin Luther King Jr. Dr., SE, Suite 1054
Atlanta, Georgia 30334

Project No. 0121103



Subject: Fifth Annual Ground Water Monitoring Report for
Compliance with the Environmental Covenant
Industrial Laundry Services, Inc.
(Former Dickies Industrial Services, Inc.)
2411 Sullivan Road, College Park, Fulton County, Georgia

Dear Mr. Brownlee:

Environmental Resources Management (ERM) is submitting this fifth and final Annual Ground Water Monitoring report on behalf of Industrial Laundry Services, Inc. (ILSI) (formerly known as Dickies Industrial Services, Inc.) in accordance with the Environmental Covenant. Per the Environmental Covenant, ILSI has sampled the following 14 wells annually for five years: MW-1, MW-9, MW-10, MW-10A, MW-18D, MW-19, MW-20, MW-25, MW-28R, MW-29R, MW-37, MW-37A, MW-38, and MW-38A. Year 2016 was the fifth year of the five year monitoring period. Because this is the final year of required sampling, this report also includes a demonstration that concentrations from the source area at the Site do not have the potential to impact the unnamed creek located 1,780 feet east-northeast of the source area at levels about the In Stream Water Quality Standards.

GROUND WATER SAMPLING

The annual ground water sampling event was conducted on May 4-5, 2016. Ground water samples were collected from 13 of the 14 monitoring wells during the annual sampling event. A ground water sample was not collected from MW-28R due to the continued presence of residual lactate, which was injected in the well in 2010. Monitoring well locations are shown in [Figure 1](#).

Ground water samples were collected utilizing low flow/low volume techniques in accordance with the SESDPROC-301-R2 sampling protocol. Temperature, specific conductance, pH, and turbidity were measured in the field as the ground water samples were collected. The ground water samples and associated trip blanks were analyzed for site-specific VOCs by EPA Method 8260B.

ANALYTICAL RESULTS

Analytical results for the ground water sampling event are summarized in [Table 1](#). Ground water sampling log forms and the laboratory report are also attached to this report.

Statistical analysis of plume changes was conducted using total VOC concentrations to account for the biodegradation that is taking place throughout the plume. Concentration trends for total VOCs over time at the monitoring wells were evaluated using the Mann-Kendall statistical test. The Mann-Kendall test is a non-parametric test that can be used to assess whether concentrations exhibit increasing or decreasing trends over time to a specified level of confidence. The Mann-Kendall test was performed using a modified version of a spreadsheet developed by the Wisconsin Department of Natural Resources. Trend test require a minimum of four (4) sampling events. The results are provided as "Increasing", "Decreasing", or "No Trend" at the 80% and 90% confidence level.

The Mann-Kendall test was performed on all of the monitoring wells that had detectable concentrations of total VOCs for more than four (4) sampling events. The test was run at the 80% and 90% confidence interval. The results of the test are summarized below.

| Monitoring Well | 80% Confidence | 90% Confidence | Stability Test |
|-----------------|----------------------|-------------------|----------------|
| MW-1 | Decreasing | Decreasing | --- |
| MW-9 | ND for all compounds | | |
| MW-10 | No Trend | No Trend | Stable |
| MW-10A | No Trend | No Trend | Stable |
| MW-18D | ND for all compounds | | |
| MW-19 | ND for all compounds | | |
| MW-20 | No Trend | No Trend | Stable |
| MW-25 | Decreasing | No Trend | --- |
| MW-29/MW-29R | ND for all compounds | | |
| MW-37 | ND for all compounds | | |
| MW-37A | <i>Increasing</i> | <i>Increasing</i> | --- |
| MW-38 | <i>Increasing</i> | No Trend | --- |
| MW-38A | No Trend | No Trend | Stable |

Total VOC concentrations in five of the monitoring wells are less than the detection limit. Stable or decreasing trends are observed at the 90% confidence interval in all of the wells with detectable concentration of VOCs with the exception of monitoring well MW-37A. Monitoring well MW-37A is located side gradient, to the north of the source area, and is 300 feet from the excavated source area. Contaminant concentrations in monitoring wells downgradient of MW-37A are below the detection limit. All of the wells along the centerline of the plume exhibit decreasing or stable concentration trends.

VERIFICATION OF FATE AND TRANSPORT MODELING

At the time of Site delisting from the Hazardous Sites Inventory (HSI) in 2011, EPD requested the following actions

1. Five years of groundwater monitoring at a limited number of wells.
2. An exercise to evaluate whether an unnamed creek located 1,780 feet east-northeast of the source area might be impacted by VOC remaining in groundwater in the source area

ERM submitted a Supplemental Conceptual Site Model Information report to GAEPD on March 16, 2012. The report provided the results of an initial ground water modeling effort to assess whether concentrations from the source area at the Site would have the potential to impact the unnamed creek at levels about the In Stream Water Quality Standards. The 2012 exercise used BIOCHLOR to attempt to model the fate and transport of tetrachloroethene (PCE) and associated daughter products along the flow path of the plume. As explained in the 2012 report, BIOCHLOR is a screening level model created by EPA to simulate natural attenuation of dissolved chlorinated ethenes by simulating one-dimensional advection, three dimensional dispersion, linear adsorption, and biotransformation via the reductive dechlorination process. BIOCHLOR is not capable, however, of simulating more complicated fate and transport processes, including varying rates of contaminant mass reduction achieved throughout the footprint of the plume through a variety of physical and chemical remediation processes.

GAEPD responded to the 2012 Supplemental Conceptual Site Model Information report in a correspondence dated April 30, 2012, and raised several concerns regarding the calibration and validation of the BIOCHLOR model. Subsequent to receipt of the May 2016 ground water quality data, ERM reevaluated the model inputs and resulting calibration, and validation output. Based on this evaluation, we have determined that, due to the extensive remediation history of this Site which includes use of an air sparge and soil vapor extraction system, in-situ chemical oxidation, enhanced bioremediation, and excavation, a simplistic fate and transport model such as BIOCHLOR will not be able to be properly calibrated or validated to the site data.

As an alternative to attempting to model the complicated contaminant transport scenario present at the Site, ERM used empirical data to demonstrate that the source area concentrations which remain on-Site will not affect the unnamed creek at levels above the In Stream Water Quality Standards. Specifically, concentration over distance graphs for PCE and the associated daughter products trichloroethene (TCE), cis-1,2-dichloroethene (cDCE), and vinyl chloride (VC) are attached as Figures 2, 3, 4, and 5. Concentrations over distance was graphed for several data sets collected throughout the extensive monitoring history of the Site and were used to establish a reliable trend line to project the concentrations at the unnamed creek located 1,780 feet east-northeast

of the source area. The results are summarized below.

| Parameter | Total VOCs | PCE | TCE | cDCE | VC |
|--|---------------|--------|--------|---------------|--------|
| Projected concentration in ground water adjacent to the unnamed creek (ug/L) | 6 | 3 | <0.1 | 2 | <0.1 |
| In Stream Water Quality Standard (ug/L) | Not Available | 3.3 | 30 | Not Available | 2.4 |
| R ² value for trend line | 0.9880 | 0.9004 | 0.9259 | 0.9856 | 0.9975 |

The projected concentrations shown in the table above represent what ERM views as conservative estimates of the potential concentrations in ground water at the unnamed creek. All are below established In Stream Water Quality Standards. They are protective of surface water quality as dilution by or mixing with surface water would occur as ground water discharges to the creek.

Based on this conservative analysis, ERM believes that the source area concentrations remaining at the Site will not result in impacts the unnamed creek located 1,780 feet east-northeast of the source area at levels above the In Stream Water Quality Standards. Furthermore, the results of the Mann-Kendall statistical test show that contaminant concentrations in the wells along the centerline of the plume exhibit decreasing or stable concentration trends. Because of this and the fact that the required five years of ground water monitoring has been completed, ERM recommends that no further action at this Site is warranted. Subsequent to your review of this report and concurrence with this recommendation, ERM will abandon the remaining ground water monitoring wells in accordance with GAEPD regulations.

If you have any questions or comments about this report, please contact us at 678-486-2700.

Sincerely,

Jennifer Byrd, P.E.
Project Engineer

Jeffrey N. Bilkert
Principal

Attachments: Table 1 – 2016 Ground Water Data
 Figures
 Ground Water Sampling Logs
 Laboratory Reports

cc: Joan B. Sasine, Esq. (via email)
 Tobin Clark (via email)

Tables
Attachment 1

*July 25, 2016
Project No. 0121103*

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Table 1
Ground Water Analytical Data Through May 2016
Industrial Laundry Services, Inc.
ug/L

| Well ID | Date Sampled | Analysis Results (ug/L) | | | | | | |
|------------|--------------|-------------------------|---------|---------|---------------|-------------|---------|-------------|
| | | PCE | TCE | 1,1-DCE | trans-1,2-DCE | cis-1,2-DCE | VC | 1,4-Dioxane |
| MW-1 | 6/5/2012 | 22000 | 420 | < 5 | 17 | 1100 | 8.9 | < 150 |
| MW-1 | 5/22/2013 | 27,000 | < 2,500 | < 2,500 | < 2,500 | < 2,500 | < 1,000 | < 75,000 |
| MW-1 | 5/19/2014 | 16,000 | < 2,500 | < 2,500 | < 2,500 | < 2,500 | < 1,000 | < 75,000 |
| MW-1 | 4/20/2015 | 9,300 | 130 | < 50 | < 50 | 220 | < 20 | < 1,500 |
| MW-1 | 5/5/2016 | 7,600 | 140 | < 5 | < 5 | 300 | < 2 | < 150 |
| MW-1 (DUP) | 5/5/2016 | 8,000 | 130 | < 5 | < 5 | 360 | < 2 | < 150 |
| MW-9 | 6/5/2012 | 5.9 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-9 | 5/23/2013 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-9 | 5/19/2014 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-9 | 4/20/2015 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-9 | 5/4/2016 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-10 | 6/5/2012 | 460 | 8.5 | < 5 | < 5 | 8.3 | < 2 | < 150 |
| MW-10 | 5/23/2013 | 1,700 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-10 | 5/20/2014 | 760 | 36 | < 5 | < 5 | 270 | < 2 | < 150 |
| MW-10 | 4/20/2015 | 290 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-10 | 5/5/2016 | 1,100 | 15 | < 5 | < 5 | 400 | < 2 | < 150 |
| MW-10A | 6/5/2012 | 670 | 110 | < 5 | < 5 | 310 | < 2 | < 150 |
| MW-10A | 5/23/2013 | 1,300 | 99 | < 5 | < 5 | 260 | < 2 | < 150 |
| MW-10A | 5/20/2014 | 2,400 | 160 | < 5 | < 5 | 290 | < 2 | < 150 |
| MW-10A | 4/21/2015 | 1,800 | 110 | < 5 | < 5 | 220 | < 2 | < 150 |
| MW-10A | 5/5/2016 | 920 | 60 | < 5 | < 5 | 160 | < 2 | < 150 |
| MW-18D | 6/6/2012 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-18D | 5/23/2013 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-18D | 5/20/2014 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-18D | 4/20/2015 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-18D | 5/5/2016 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-19 | 6/5/2012 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-19 | 5/21/2013 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-19 | 5/21/2014 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-19 | 4/22/2015 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-19 | 5/4/2016 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-20 | 6/5/2012 | 30 | 78 | < 5 | < 5 | 260 | 31 | < 150 |
| MW-20 | 5/22/2013 | < 5 | 50 | < 5 | < 5 | 180 | 29 | < 150 |
| MW-20 | 5/20/2014 | < 5 | 79 | < 5 | < 5 | 190 | 7.7 | < 150 |
| MW-20 | 4/21/2015 | < 5 | < 5 | < 5 | < 5 | 83 | 47 | < 150 |
| MW-20 | 5/4/2016 | 17 | 180 | < 5 | < 5 | 470 | 68 | < 150 |
| MW-25 | 6/5/2012 | 120 | 12 | < 5 | < 5 | 48 | < 2 | < 150 |
| MW-25 | 5/21/2013 | 100 | 14 | < 5 | < 5 | 63 | < 2 | < 150 |
| MW-25 | 5/22/2014 | 120 | 8.8 | < 5 | < 5 | 79 | < 2 | < 150 |
| MW-25 | 4/21/2015 | 76 | < 5 | < 5 | < 5 | 51 | < 2 | < 150 |
| MW-25 | 5/4/2016 | 42 | < 5 | < 5 | < 5 | 34 | < 2 | < 150 |
| MW-29/29R | 6/5/2012 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-29/29R | 5/22/2013 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-29/29R | 5/21/2014 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-29/29R | 4/22/2015 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-29/29R | 5/4/2016 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-37 | 6/5/2012 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-37 | 5/22/2013 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-37 | 5/22/2013 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-37 | 4/22/2015 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-37 | 5/4/2016 | < 5 | < 5 | < 5 | < 5 | < 5 | < 2 | < 150 |
| MW-37A | 6/5/2012 | < 5 | < 5 | < 5 | < 5 | 72 | 2.4 | < 150 |
| MW-37A | 5/22/2013 | < 5 | < 5 | < 5 | < 5 | 310 | 7.6 | < 150 |

| | | | | | | | | |
|--------|-----------|------------|------------|-----------|------------|---------------|------------|----------|
| MW-37A | 5/21/2014 | < 5 | < 5 | < 5 | < 5 | 440 | 5.8 | < 150 |
| MW-37A | 4/22/2015 | < 5 | < 5 | < 5 | < 5 | 460 | 4.8 | < 150 |
| MW_37A | 5/4/2016 | < 5 | < 5 | < 5 | < 5 | 510 | 4.3 | < 150 |
| MW-38 | 6/5/2012 | 20 | 5.6 | < 5 | < 5 | 6.1 | < 2 | < 150 |
| MW-38 | 5/21/2013 | 17 | 11 | < 5 | < 5 | 7.3 | < 2 | < 150 |
| MW-38 | 5/22/2014 | 9.5 | 22 | < 5 | < 5 | 6.8 | < 2 | < 150 |
| MW-38 | 4/21/2015 | < 5 | 9.6 | < 5 | < 5 | 25 | < 2 | < 150 |
| MW-38 | 5/5/2016 | < 5 | < 5 | < 5 | < 5 | 310 | < 2 | < 150 |
| MW-38A | 6/5/2012 | <250 | < 250 | < 250 | < 250 | 11000 | < 100 | < 7,500 |
| MW-38A | 5/21/2013 | < 5 | < 5 | 27 | 8.7 | 6500 | 32 | < 150 |
| MW-38A | 5/22/2014 | < 250 | < 250 | < 250 | < 250 | 6300 | < 100 | < 7,500 |
| MW-38A | 4/21/2015 | < 500 | < 500 | < 500 | < 500 | 14,000 | < 200 | < 15,000 |

Figures

Attachment 2

July 25, 2016
Project No. 0121103

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Legend

Parcels

Site

Monitor Wells

Shallow Well

Deep Well

Potential Receptors

Sullivan Creek (arrows indicate flow direction)

Dry Drainage Area

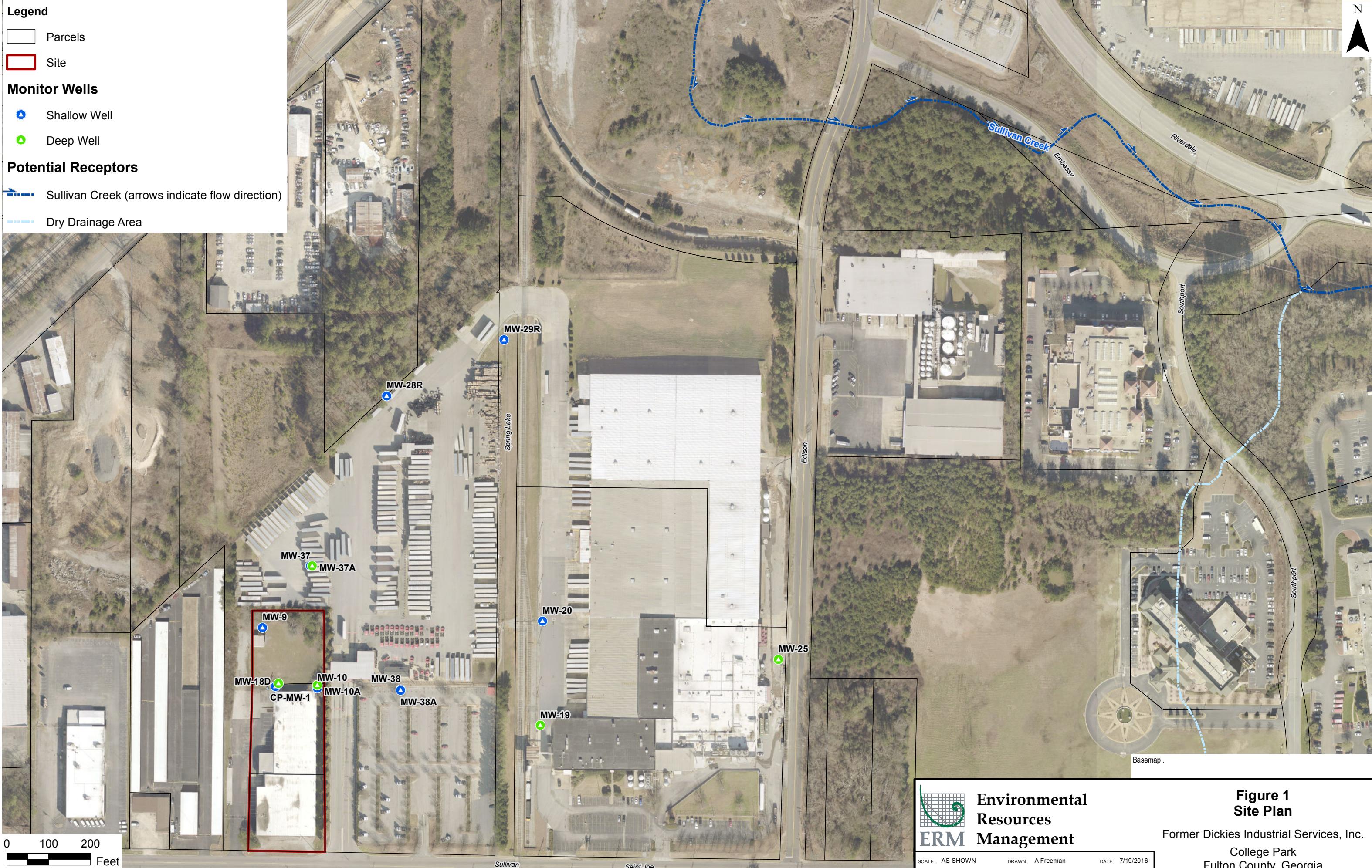


Figure 1
Site Plan

Former Dickies Industrial Services, Inc.
College Park
Fulton County, Georgia

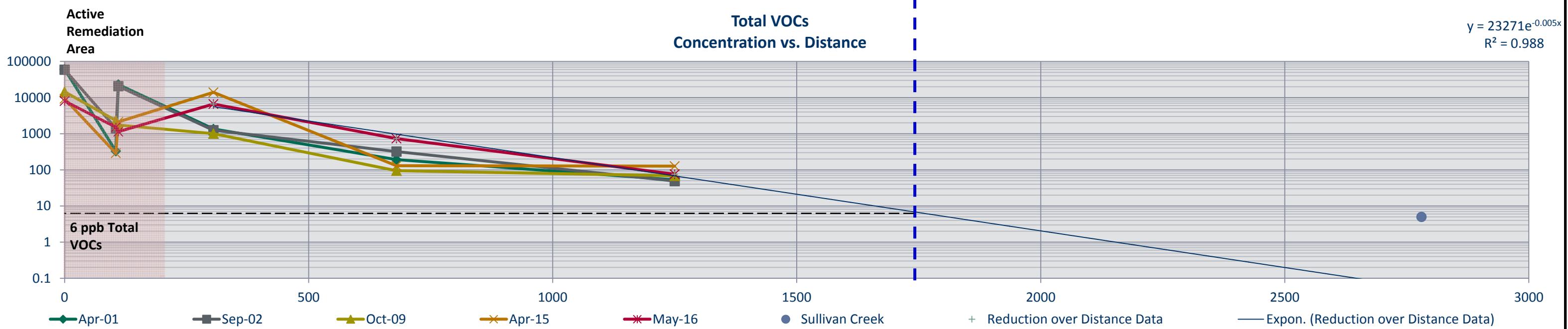
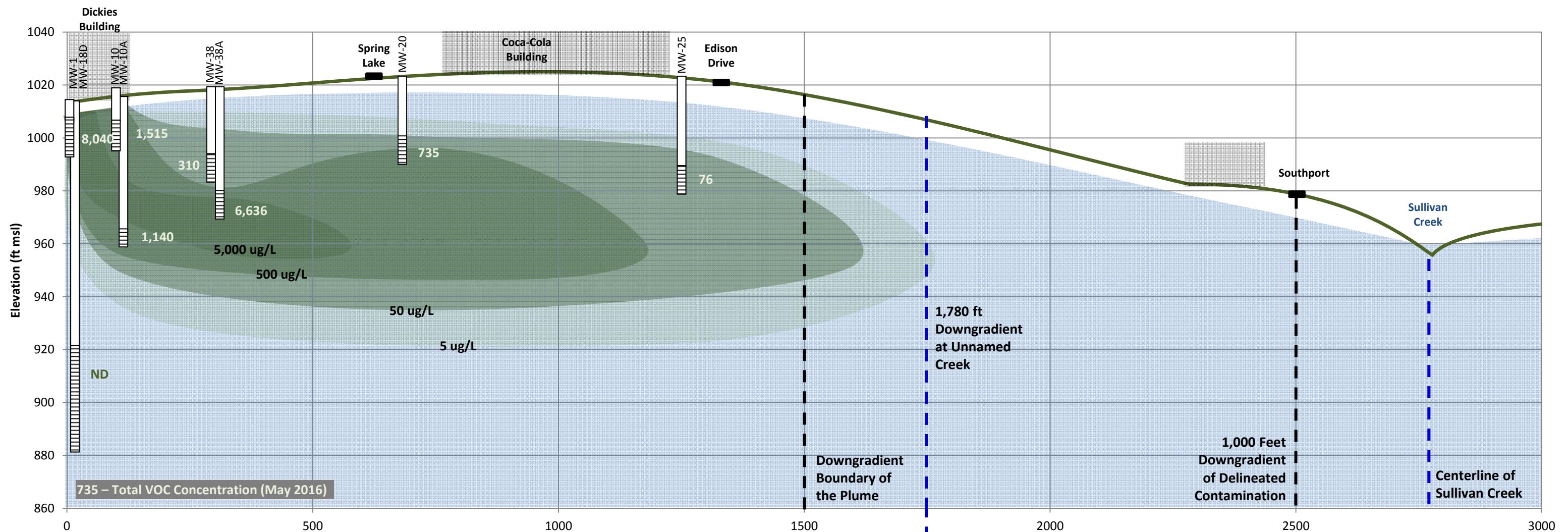
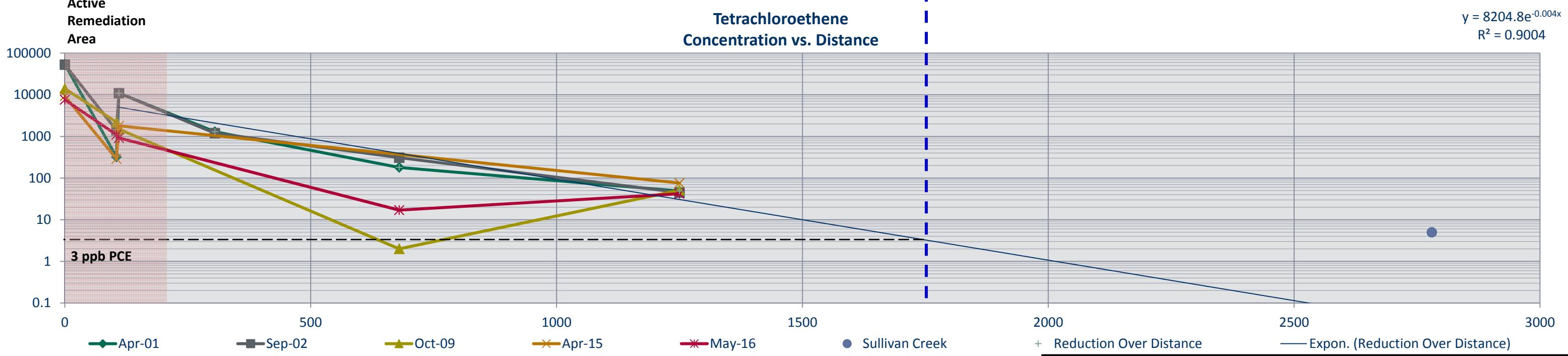
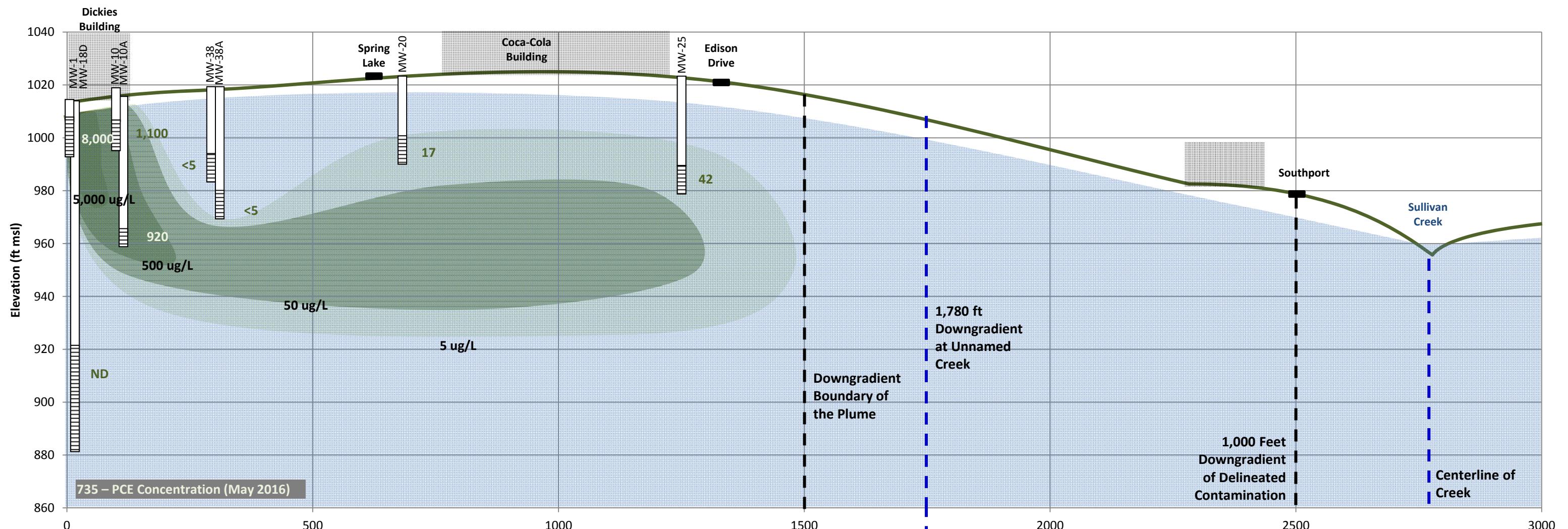
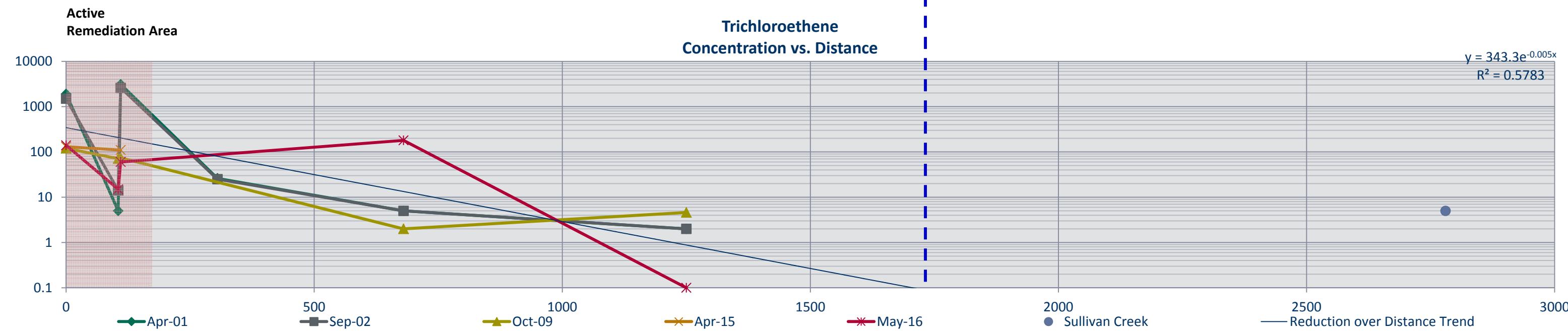
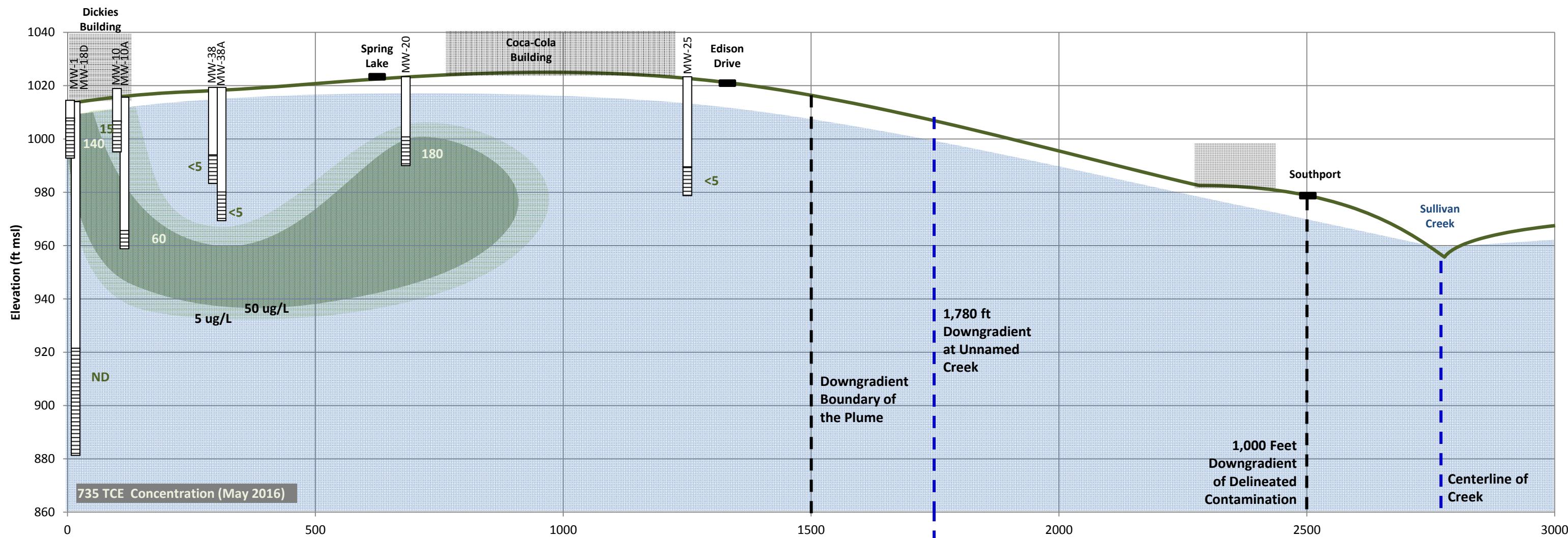
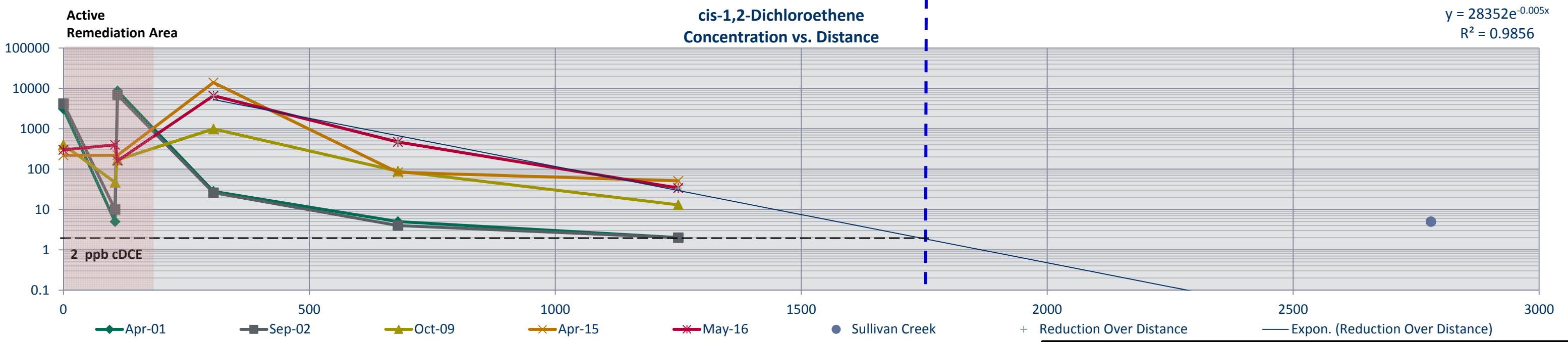
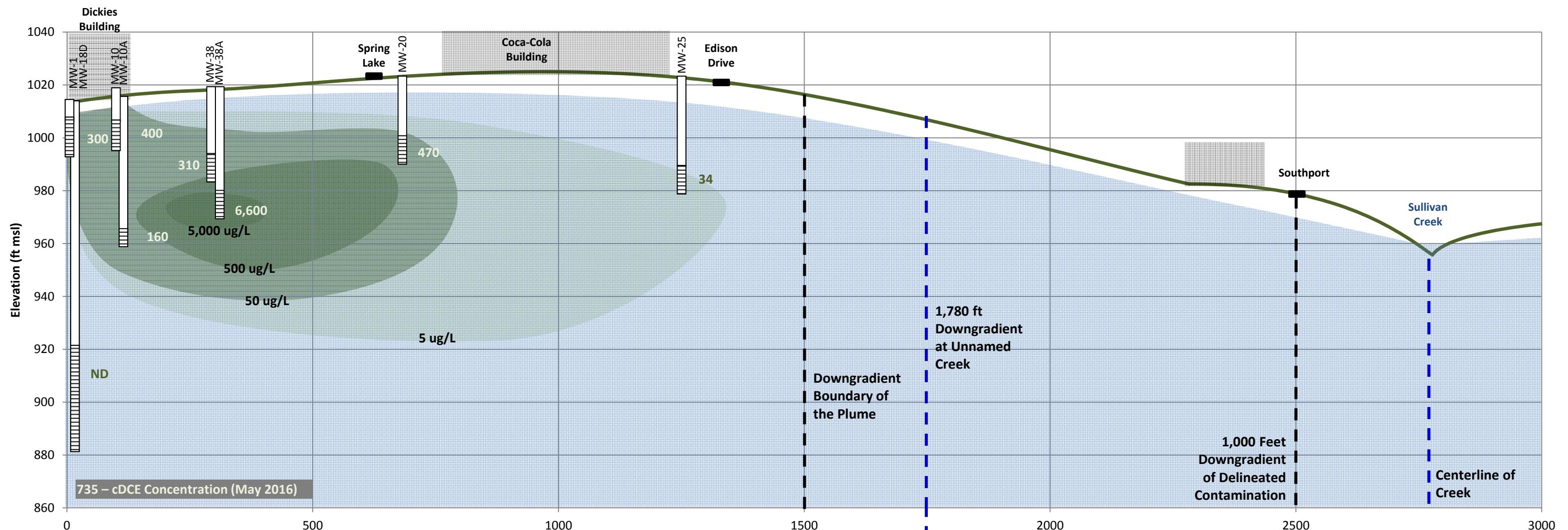
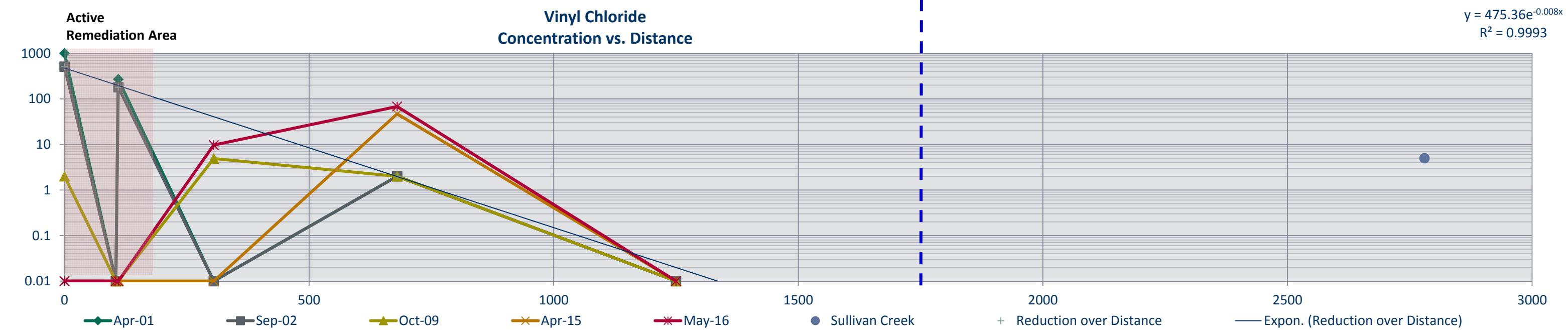
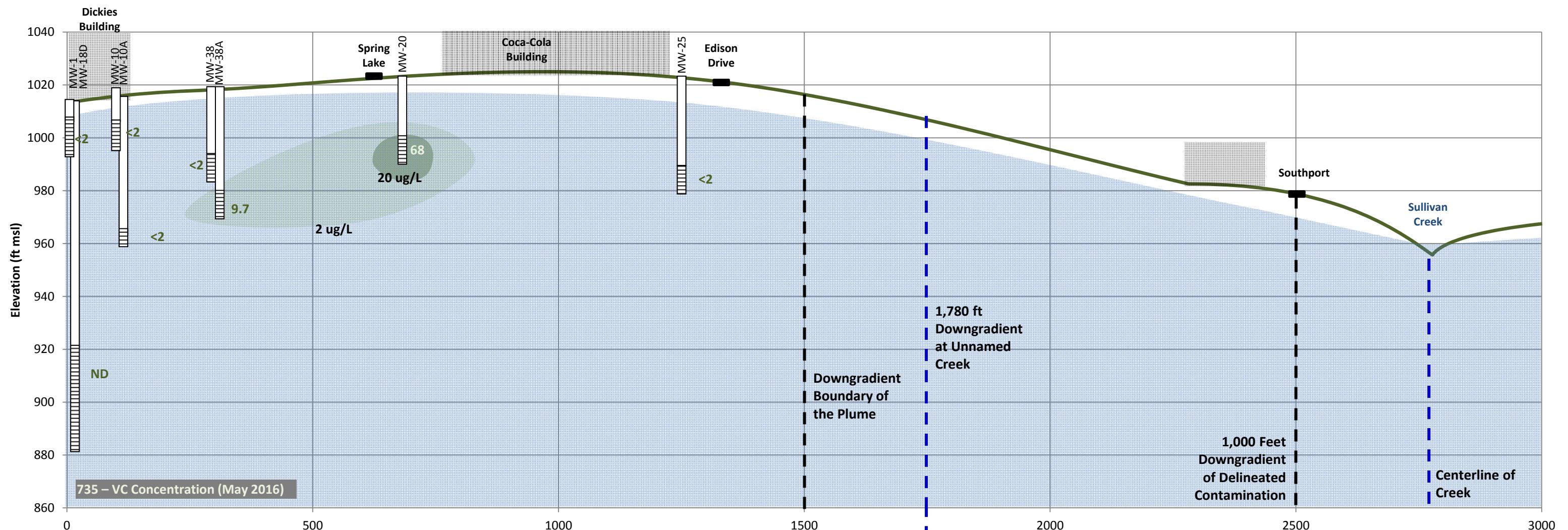


Figure 2
Analysis of Total VOCs









Ground Water Sampling Logs Sheets

Attachment 3

July 25, 2016
Project No. 0121103

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700



GROUND WATER SAMPLING LOG SHEET

Client: Williamson-Dickie

Project No.: 121103

Site/Location: College Park, GA

Sampling Date: 5/4/16
Sampler's Name: W. Virge

Well ID: MW-9
Total Depth (ft): 16.97'
Depth to Water (ft): 10.00
Well Diameter (in): 2"
Well Volume (gal) = $0.041d^2h$: 1.14 gal / 4.32 L

Pump Type/Model: Mexis / Peri
Tubing Material: Teflon
Pump Intake Depth (ft): ~ 10
Start/Stop Purge Time: 1512 / 1602
Purge Rate (L/min)²: ~ 0.1

d = well diameter (inches) h = length of water column (feet)

Well Condition: Good

Total Purge Volume (L):

Total Purge Volume (L):

Sample Collection Time: 1604

Sample Purge Rate (L/min)³: 600 (Feed)

Sample ID: MW-9-20150504-01

QA/QC Collected? NO

QA/QC I.D. _____

Laboratory Analyses: VOCs EPA Method 8260

pump head discharge (Inorganics including cyanide)

□ [View Details](#)

(1) Do not measure depth to bottom of well until after purging and sampling, to reduce resuspending times that may be resting on the well bottom.

(2) Purge rate to be 0.5 lpm or less.

(3) - Sampling rate to be 0.25 lpm or less.

(4) - Field parameter measurements to be recorded every 3 to 5 minutes.

(5) - Stabilization criteria based on three most recent consecutive measurements

(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to

(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

(8) - CRP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.



GROUND WATER SAMPLING LOG SHEET

Client: Williamson-Dickie

Project No.: 121103

Site/Location: College Park, GA

Well ID: MW-10
21.875 Total Depth (ft)¹: 3000

Depth to Water (ft): 2.07'

Well Diameter (in): 2 "

$$\text{Well Volume (gal)} = 0.041d^2h$$

d = well diameter (inches) h = length of water column (feet)

Well Condition: Good

Pump Type/Model: Alexis Peristaltic

Tubing Material: LDPE

Intake Depth (ft): 14'

1349 1314

Start/Stop Purge Time: 1-2-3

Purge Rate (L/min)²:

Total Purge Volume (L): 100

bed (check all that apply): soda straw (MOCs) vacuum jug

Method (check all that apply): soda straw (VOCs) vacuum jug

Total Purge Volume (L): 3.0

Sampling Method (check all that apply): soda straw (VOCs) vacuum jug (SVOCs)

Bladder pump = pump discharge (all angles)

Bladder pump - pump discharge (all analyses)

- (1) Do not measure depth to bottom of well until after purging, and sampling to reduce resuspending times that may be resting on the well bottom.
 - (2) Purge rate to be 0.5 lpm or less.
 - (3) Sampling rate to be 0.25 lpm or less.
 - (4) Field parameter measurements to be recorded every 3 to 5 minutes.
 - (5) Stabilization criteria based on three most recent consecutive measurements.
 - (6) Monitor DTW every 5 min. Well drawdown to be 0.3 H or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 H.
 - (7) DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
 - (8) ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.



GROUND WATER SAMPLING LOG SHEET

Client: Williamson-Dickie

Project No.: 121103

Site/Location: College Park, GA

Well ID: MW-18D

Pump Type/Model: Alexis Peristaltic

Total Depth (ft): 125.5'

Tubing Material: LDPE

Depth to Water (ft): 7.29

Pump Intake Depth (ft): 55'

Well Diameter (in): 6"

Purge Rate (l/min)²: 0.1

d = well diameter (inches) h = length of water column (feet)

Well Condition: Good

For more information about the U.S. Census Bureau's American Community Survey, visit www.census.gov/acs/www.

Laboratory Analyses: VOCs EPA Method 8260

non-medical discharge (non-suicide, including suicide)

Bailer (only used if necessary)

©WGC LP

Sample ID: MW-10B-2060503-0

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©WGC LP

(1) Do not measure depth to bottom of well until after purging and sampling to reduce resuspending times that may be resting on the well bottom.

(2) - Purge rate to be 0.5 lpm or less.

(3) - Sampling rate to be 0.25 lpm or less.

(4) - Field parameter measurements to be recorded every 3 to 5 minutes.

(5) - Stabilization criteria based on three most recent consecutive measurements.

(6) - Monitor DTTs every 5 min. Well drawdown is to be 0.3 H or less. Purge sampling rate is to be lowered as necessary to keep drawdown below 0.3 H.

(7) DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

Laboratory Analytical Reports
Attachment 4

July 25, 2016
Project No. 0121103

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

May 12, 2016

Andreas Shoredits
ERM-Southeast
3200 Windy Hill Rd., Suite 1500 W
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (770) 590-9164

RE: Williamson - Dickies

Dear Andreas Shoredits:

Order No: 1605416

Analytical Environmental Services, Inc. received 15 samples on May 5, 2016 4:15 pm for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES's accreditations are as follows:

-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/15-06/30/16.

-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/15-06/30/16.

-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.

-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Mirzeta Kararic

Mirzeta Kararic

Project Manager



ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1605416

Date: 5/5/16 Page 1 of 2

| COMPANY: ERM | | ADDRESS: 3200 Windy Hill Rd ATL GA 30339 | | List ANALYSIS REQUESTED | | | | | | | | Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc. | No # of Containers | | |
|--|---------------------|--|------------------------------|---|------------------------------------|-----------------------|--------------------------|--|--|--|--|--|---------------------------|-------------|---|
| PHONE: 678-486-2700 | | FAX: | | 8260 W-D | | | | | | | | | | | |
| SAMPLED BY: KS, WV | | SIGNATURE: <i>[Signature]</i> | | | | | | | | | | | | | |
| # | SAMPLE ID | SAMPLING | | Grab | Composite | Matrix (See codes) | PRESERVATION (See codes) | | | | | | | REMARKS | |
| | | DATE | TIME | | | | | | | | | | | | |
| 1 | MW-10A-20160505-01 | 5/5/16 | 1430 | X | GW | X | | | | | | | | | 2 |
| 2 | MW-10-20160505-01 | 5/5/16 | 1325 | | | | | | | | | | | | 2 |
| 3 | MW-38A-20160505-01 | 5/5/16 | 1130 | | | | | | | | | | | | 2 |
| 4 | MW-38-20160505-01 | 5/5/16 | 1045 | | | | | | | | | | | | 2 |
| 5 | MW-18D-20160505-01 | 5/5/16 | 0925 | | | | | | | | | | | | 2 |
| 6 | MW-1-20160505-01 | 5/5/16 | 0840 | | | | | | | | | | | | 2 |
| 7 | MW-19-20160504-01 | 5/4/16 | 1305 | | | | | | | | | | | | 2 |
| 8 | MW-20-20160504-01 | 5/4/16 | 1436 | | | | | | | | | | | | 2 |
| 9 | MW-9-20160504-01 | 5/4/16 | 1604 | | | | | | | | | | | | 2 |
| 10 | MW-25-20160504-01 | 5/4/16 | 1600 | | | | | | | | | | | | 2 |
| 11 | MW-29R-20160504-01 | 5/4/16 | 1435 | | | | | | | | | | | | 2 |
| 12 | MW-37-20160504-01 | 5/4/16 | 1330 | | | | | | | | | | | | 2 |
| 13 | MW-37 A-20160504-01 | 5/4/16 | 1230 | | | | | | | | | | | | 2 |
| 14 | DUP-01-20160505-01 | 5/5/16 | — | X | | | | | | | | | | | 2 |
| RELINQUISHED BY | | DATE/TIME | RECEIVED BY | DATE/TIME | PROJECT INFORMATION | | | | | | | | RECEIPT | | |
| <i>Fern J. A.</i> | | 1615 | 1: M. Karacic 5/5/16 4:15 pm | 2: | PROJECT NAME: Williamson - Dickies | | | | | | | | Total # of Containers | 28 | |
| | | 5/5/16 | 3: | PROJECT #: 0121103 | | | | | | | | Turnaround Time Request | | | |
| | | | | SITE ADDRESS: 2411 Sullivan Road | | | | | | | | Standard 5 Business Days | | | |
| | | | | SEND REPORT TO: Andreas.Shorelits@erm.com | | | | | | | | 2 Business Day Rush | | | |
| | | | | INVOICE TO: (IF DIFFERENT FROM ABOVE) | | | | | | | | Next Business Day Rush | | | |
| | | | | QUOTE #: PO#: | | | | | | | | Same Day Rush (auth req.) | | | |
| | | | | | | | | | | | | Other _____ | | | |
| | | | | | | | | | | | | STATE PROGRAM (if any): _____ | | | |
| | | | | | | | | | | | | E-mail? Y/N: _____ Fax? Y/N: _____ | DATA PACKAGE: I II III IV | | |
| SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE. | | | | | | | | | | | | | | Page 2 of 2 | |

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client



ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1605416

Date: 5/5/16 Page 2 of 2

COMPANY:

ERM

ADDRESS:

3200 Windy Hill Rd
ATL GA 30339

PHONE: 678-486-2700

FAX:

SAMPLED BY: FS, WV

SIGNATURE:

SAMPLED

DATE

TIME

Grab

Composite

Matrix
(See codes)

ANALYSIS REQUESTED

8260 w-dust only

PRESERVATION (See codes)

Visit our website
www.aesatlanta.comto check on the status of
your results, place bottle
orders, etc.

No # of Contain

REMARKS

2

1 TB-20160505-01

W

X

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14

RELINQUISHED BY

DATE/TIME

1: *John G. Frantz* 6/6 M.Karanic 11:58 am pm2: *SJS/16*3: *SJS/16*

RECEIVED BY

DATE/TIME

1: M.Karanic 11:58 am pm

2: *SJS/16*3: *SJS/16*

PROJECT INFORMATION

PROJECT NAME:

Williamson-Dickies

PROJECT #: 0721103

SITE ADDRESS:

2411 Sullivan Road

SEND REPORT TO: Andreas S. Shorshitzis (@CRM.CU)

RECEIPT

Total # of Containers

2 + 28

Turnaround Time Request

Standard 5 Business Days

2 Business Day Rush

Next Business Day Rush

Same Day Rush (auth req.)
Other

STATE PROGRAM (if any):

E-mail? Y/N; Fax? Y/N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:
Please See Williamson-Dickies
Reporting ListSHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHERINVOICE TO:
(IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

Page 3 of 21

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|---------------------|
| Client: | ERM-Southeast | Client Sample ID: | MW-10A-20160505-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/5/2016 2:30:00 PM |
| Lab ID: | 1605416-001 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|---------------|------------------------|-------------|--------------|----------------|------------------------|----------------------|----------------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/07/2016 23:21 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/07/2016 23:21 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 23:21 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 23:21 | CH |
| cis-1,2-Dichloroethene | 160 | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 23:21 | CH |
| Trichloroethene | 60 | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 23:21 | CH |
| Tetrachloroethene | 920 | 50 | | ug/L | 223734 | 10 | 05/07/2016 18:10 | CH |
| Surr: 4-Bromofluorobenzene | 75.5 | 70.7-125 | | %REC | 223734 | 1 | 05/07/2016 23:21 | CH |
| Surr: 4-Bromofluorobenzene | 76.5 | 70.7-125 | | %REC | 223734 | 10 | 05/07/2016 18:10 | CH |
| Surr: Dibromofluoromethane | 102 | 82.2-120 | | %REC | 223734 | 1 | 05/07/2016 23:21 | CH |
| Surr: Dibromofluoromethane | 103 | 82.2-120 | | %REC | 223734 | 10 | 05/07/2016 18:10 | CH |
| Surr: Toluene-d8 | 97.1 | 81.8-120 | | %REC | 223734 | 1 | 05/07/2016 23:21 | CH |
| Surr: Toluene-d8 | 96.3 | 81.8-120 | | %REC | 223734 | 10 | 05/07/2016 18:10 | CH |

Qualifiers: * Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|---------------------|
| Client: | ERM-Southeast | Client Sample ID: | MW-10-20160505-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/5/2016 1:25:00 PM |
| Lab ID: | 1605416-002 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/07/2016 23:47 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/07/2016 23:47 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 23:47 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 23:47 | CH |
| cis-1,2-Dichloroethene | 400 | 50 | | ug/L | 223734 | 10 | 05/07/2016 18:36 | CH |
| Trichloroethene | 15 | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 23:47 | CH |
| Tetrachloroethene | 1100 | 50 | | ug/L | 223734 | 10 | 05/07/2016 18:36 | CH |
| Surr: 4-Bromofluorobenzene | 75.3 | 70.7-125 | | %REC | 223734 | 1 | 05/07/2016 23:47 | CH |
| Surr: 4-Bromofluorobenzene | 76.3 | 70.7-125 | | %REC | 223734 | 10 | 05/07/2016 18:36 | CH |
| Surr: Dibromofluoromethane | 99.6 | 82.2-120 | | %REC | 223734 | 10 | 05/07/2016 18:36 | CH |
| Surr: Dibromofluoromethane | 104 | 82.2-120 | | %REC | 223734 | 1 | 05/07/2016 23:47 | CH |
| Surr: Toluene-d8 | 93.7 | 81.8-120 | | %REC | 223734 | 1 | 05/07/2016 23:47 | CH |
| Surr: Toluene-d8 | 95.1 | 81.8-120 | | %REC | 223734 | 10 | 05/07/2016 18:36 | CH |

Qualifiers: * Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|----------------------|
| Client: | ERM-Southeast | Client Sample ID: | MW-38A-20160505-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/5/2016 11:30:00 AM |
| Lab ID: | 1605416-003 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/10/2016 04:06 | CH |
| Vinyl chloride | 9.7 | 2.0 | | ug/L | 223734 | 1 | 05/10/2016 04:06 | CH |
| 1,1-Dichloroethene | 20 | 5.0 | | ug/L | 223734 | 1 | 05/10/2016 04:06 | CH |
| trans-1,2-Dichloroethene | 6.6 | 5.0 | | ug/L | 223734 | 1 | 05/10/2016 04:06 | CH |
| cis-1,2-Dichloroethene | 6600 | 500 | | ug/L | 223734 | 100 | 05/07/2016 16:01 | CH |
| Trichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/10/2016 04:06 | CH |
| Tetrachloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/10/2016 04:06 | CH |
| Surr: 4-Bromofluorobenzene | 72.8 | 70.7-125 | | %REC | 223734 | 1 | 05/10/2016 04:06 | CH |
| Surr: 4-Bromofluorobenzene | 76.6 | 70.7-125 | | %REC | 223734 | 100 | 05/07/2016 16:01 | CH |
| Surr: Dibromofluoromethane | 106 | 82.2-120 | | %REC | 223734 | 100 | 05/07/2016 16:01 | CH |
| Surr: Dibromofluoromethane | 107 | 82.2-120 | | %REC | 223734 | 1 | 05/10/2016 04:06 | CH |
| Surr: Toluene-d8 | 93.2 | 81.8-120 | | %REC | 223734 | 1 | 05/10/2016 04:06 | CH |
| Surr: Toluene-d8 | 99.5 | 81.8-120 | | %REC | 223734 | 100 | 05/07/2016 16:01 | CH |

Qualifiers: * Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|----------------------|
| Client: | ERM-Southeast | Client Sample ID: | MW-38-20160505-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/5/2016 10:45:00 AM |
| Lab ID: | 1605416-004 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/09/2016 13:44 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/09/2016 13:44 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/09/2016 13:44 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/09/2016 13:44 | CH |
| cis-1,2-Dichloroethene | 310 | 50 | | ug/L | 223734 | 10 | 05/07/2016 19:28 | CH |
| Trichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/09/2016 13:44 | CH |
| Tetrachloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/09/2016 13:44 | CH |
| Surr: 4-Bromofluorobenzene | 72.9 | 70.7-125 | | %REC | 223734 | 1 | 05/09/2016 13:44 | CH |
| Surr: 4-Bromofluorobenzene | 78 | 70.7-125 | | %REC | 223734 | 10 | 05/07/2016 19:28 | CH |
| Surr: Dibromofluoromethane | 105 | 82.2-120 | | %REC | 223734 | 10 | 05/07/2016 19:28 | CH |
| Surr: Dibromofluoromethane | 108 | 82.2-120 | | %REC | 223734 | 1 | 05/09/2016 13:44 | CH |
| Surr: Toluene-d8 | 96.3 | 81.8-120 | | %REC | 223734 | 1 | 05/09/2016 13:44 | CH |
| Surr: Toluene-d8 | 98.1 | 81.8-120 | | %REC | 223734 | 10 | 05/07/2016 19:28 | CH |

Qualifiers: * Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|---------------------|
| Client: | ERM-Southeast | Client Sample ID: | MW-18D-20160505-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/5/2016 9:25:00 AM |
| Lab ID: | 1605416-005 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/07/2016 19:54 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/07/2016 19:54 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 19:54 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 19:54 | CH |
| cis-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 19:54 | CH |
| Trichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 19:54 | CH |
| Tetrachloroethene | 13 | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 19:54 | CH |
| Surr: 4-Bromofluorobenzene | 77.1 | 70.7-125 | | %REC | 223734 | 1 | 05/07/2016 19:54 | CH |
| Surr: Dibromofluoromethane | 104 | 82.2-120 | | %REC | 223734 | 1 | 05/07/2016 19:54 | CH |
| Surr: Toluene-d8 | 97.4 | 81.8-120 | | %REC | 223734 | 1 | 05/07/2016 19:54 | CH |

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|---------------------|
| Client: | ERM-Southeast | Client Sample ID: | MW-1-20160505-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/5/2016 8:40:00 AM |
| Lab ID: | 1605416-006 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/09/2016 14:36 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/09/2016 14:36 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/09/2016 14:36 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/09/2016 14:36 | CH |
| cis-1,2-Dichloroethene | 300 | 200 | | ug/L | 223734 | 100 | 05/07/2016 17:18 | CH |
| Trichloroethene | 140 | 5.0 | | ug/L | 223734 | 1 | 05/09/2016 14:36 | CH |
| Tetrachloroethene | 7600 | 500 | | ug/L | 223734 | 100 | 05/07/2016 17:18 | CH |
| Surr: 4-Bromofluorobenzene | 73.7 | 70.7-125 | | %REC | 223734 | 1 | 05/09/2016 14:36 | CH |
| Surr: 4-Bromofluorobenzene | 75.5 | 70.7-125 | | %REC | 223734 | 100 | 05/07/2016 17:18 | CH |
| Surr: Dibromofluoromethane | 99.8 | 82.2-120 | | %REC | 223734 | 1 | 05/09/2016 14:36 | CH |
| Surr: Dibromofluoromethane | 104 | 82.2-120 | | %REC | 223734 | 100 | 05/07/2016 17:18 | CH |
| Surr: Toluene-d8 | 89.8 | 81.8-120 | | %REC | 223734 | 1 | 05/09/2016 14:36 | CH |
| Surr: Toluene-d8 | 96.5 | 81.8-120 | | %REC | 223734 | 100 | 05/07/2016 17:18 | CH |

Qualifiers: * Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc**Date:** 12-May-16

| | |
|---|---|
| Client: ERM-Southeast | Client Sample ID: MW-19-20160504-01 |
| Project Name: Williamson - Dickies | Collection Date: 5/4/2016 1:05:00 PM |
| Lab ID: 1605416-007 | Matrix: Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/07/2016 20:20 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/07/2016 20:20 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 20:20 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 20:20 | CH |
| cis-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 20:20 | CH |
| Trichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 20:20 | CH |
| Tetrachloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 20:20 | CH |
| Surr: 4-Bromofluorobenzene | 77.1 | 70.7-125 | | %REC | 223734 | 1 | 05/07/2016 20:20 | CH |
| Surr: Dibromofluoromethane | 109 | 82.2-120 | | %REC | 223734 | 1 | 05/07/2016 20:20 | CH |
| Surr: Toluene-d8 | 104 | 81.8-120 | | %REC | 223734 | 1 | 05/07/2016 20:20 | CH |

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|---------------------|
| Client: | ERM-Southeast | Client Sample ID: | MW-20-20160504-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/4/2016 2:36:00 PM |
| Lab ID: | 1605416-008 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/07/2016 20:46 | CH |
| Vinyl chloride | 68 | 2.0 | | ug/L | 223734 | 1 | 05/07/2016 20:46 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 20:46 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 20:46 | CH |
| cis-1,2-Dichloroethene | 470 | 50 | | ug/L | 223734 | 10 | 05/09/2016 15:01 | CH |
| Trichloroethene | 180 | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 20:46 | CH |
| Tetrachloroethene | 17 | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 20:46 | CH |
| Surr: 4-Bromofluorobenzene | 75.9 | 70.7-125 | | %REC | 223734 | 1 | 05/07/2016 20:46 | CH |
| Surr: 4-Bromofluorobenzene | 72.8 | 70.7-125 | | %REC | 223734 | 10 | 05/09/2016 15:01 | CH |
| Surr: Dibromofluoromethane | 106 | 82.2-120 | | %REC | 223734 | 1 | 05/07/2016 20:46 | CH |
| Surr: Dibromofluoromethane | 115 | 82.2-120 | | %REC | 223734 | 10 | 05/09/2016 15:01 | CH |
| Surr: Toluene-d8 | 101 | 81.8-120 | | %REC | 223734 | 1 | 05/07/2016 20:46 | CH |
| Surr: Toluene-d8 | 101 | 81.8-120 | | %REC | 223734 | 10 | 05/09/2016 15:01 | CH |

Qualifiers: * Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|---------------------|
| Client: | ERM-Southeast | Client Sample ID: | MW-9-20160504-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/4/2016 4:04:00 PM |
| Lab ID: | 1605416-009 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/07/2016 21:12 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/07/2016 21:12 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 21:12 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 21:12 | CH |
| cis-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 21:12 | CH |
| Trichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 21:12 | CH |
| Tetrachloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 21:12 | CH |
| Surr: 4-Bromofluorobenzene | 76 | 70.7-125 | | %REC | 223734 | 1 | 05/07/2016 21:12 | CH |
| Surr: Dibromofluoromethane | 106 | 82.2-120 | | %REC | 223734 | 1 | 05/07/2016 21:12 | CH |
| Surr: Toluene-d8 | 102 | 81.8-120 | | %REC | 223734 | 1 | 05/07/2016 21:12 | CH |

Qualifiers: * Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|---------------------|
| Client: | ERM-Southeast | Client Sample ID: | MW-25-20160504-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/4/2016 4:00:00 PM |
| Lab ID: | 1605416-010 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/07/2016 21:38 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/07/2016 21:38 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 21:38 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 21:38 | CH |
| cis-1,2-Dichloroethene | 34 | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 21:38 | CH |
| Trichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 21:38 | CH |
| Tetrachloroethene | 42 | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 21:38 | CH |
| Surr: 4-Bromofluorobenzene | 76.7 | 70.7-125 | | %REC | 223734 | 1 | 05/07/2016 21:38 | CH |
| Surr: Dibromofluoromethane | 103 | 82.2-120 | | %REC | 223734 | 1 | 05/07/2016 21:38 | CH |
| Surr: Toluene-d8 | 95.8 | 81.8-120 | | %REC | 223734 | 1 | 05/07/2016 21:38 | CH |

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|---------------------|
| Client: | ERM-Southeast | Client Sample ID: | MW-29R-20160504-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/4/2016 2:35:00 PM |
| Lab ID: | 1605416-011 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/07/2016 22:04 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/07/2016 22:04 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:04 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:04 | CH |
| cis-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:04 | CH |
| Trichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:04 | CH |
| Tetrachloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:04 | CH |
| Surr: 4-Bromofluorobenzene | 75.1 | 70.7-125 | | %REC | 223734 | 1 | 05/07/2016 22:04 | CH |
| Surr: Dibromofluoromethane | 107 | 82.2-120 | | %REC | 223734 | 1 | 05/07/2016 22:04 | CH |
| Surr: Toluene-d8 | 100 | 81.8-120 | | %REC | 223734 | 1 | 05/07/2016 22:04 | CH |

Qualifiers: * Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc**Date:** 12-May-16

| | |
|---|---|
| Client: ERM-Southeast | Client Sample ID: MW-37-20160504-01 |
| Project Name: Williamson - Dickies | Collection Date: 5/4/2016 1:30:00 PM |
| Lab ID: 1605416-012 | Matrix: Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/07/2016 22:30 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/07/2016 22:30 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:30 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:30 | CH |
| cis-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:30 | CH |
| Trichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:30 | CH |
| Tetrachloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:30 | CH |
| Surr: 4-Bromofluorobenzene | 73.7 | 70.7-125 | | %REC | 223734 | 1 | 05/07/2016 22:30 | CH |
| Surr: Dibromofluoromethane | 113 | 82.2-120 | | %REC | 223734 | 1 | 05/07/2016 22:30 | CH |
| Surr: Toluene-d8 | 104 | 81.8-120 | | %REC | 223734 | 1 | 05/07/2016 22:30 | CH |

Qualifiers: * Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

< Less than Result value

> Greater than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|----------------------|
| Client: | ERM-Southeast | Client Sample ID: | MW-37A-20160504-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/4/2016 12:30:00 PM |
| Lab ID: | 1605416-013 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/07/2016 22:55 | CH |
| Vinyl chloride | 4.3 | 2.0 | | ug/L | 223734 | 1 | 05/07/2016 22:55 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:55 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:55 | CH |
| cis-1,2-Dichloroethene | 510 | 50 | | ug/L | 223734 | 10 | 05/07/2016 19:02 | CH |
| Trichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:55 | CH |
| Tetrachloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 22:55 | CH |
| Surr: 4-Bromofluorobenzene | 77.9 | 70.7-125 | | %REC | 223734 | 1 | 05/07/2016 22:55 | CH |
| Surr: 4-Bromofluorobenzene | 78.5 | 70.7-125 | | %REC | 223734 | 10 | 05/07/2016 19:02 | CH |
| Surr: Dibromofluoromethane | 100 | 82.2-120 | | %REC | 223734 | 10 | 05/07/2016 19:02 | CH |
| Surr: Dibromofluoromethane | 116 | 82.2-120 | | %REC | 223734 | 1 | 05/07/2016 22:55 | CH |
| Surr: Toluene-d8 | 95.4 | 81.8-120 | | %REC | 223734 | 10 | 05/07/2016 19:02 | CH |
| Surr: Toluene-d8 | 107 | 81.8-120 | | %REC | 223734 | 1 | 05/07/2016 22:55 | CH |

Qualifiers: * Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|--------------------|
| Client: | ERM-Southeast | Client Sample ID: | DUP-01-20160505-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/5/2016 |
| Lab ID: | 1605416-014 | Matrix: | Groundwater |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/09/2016 14:10 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/09/2016 14:10 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/09/2016 14:10 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/09/2016 14:10 | CH |
| cis-1,2-Dichloroethene | 360 | 200 | | ug/L | 223734 | 100 | 05/07/2016 17:44 | CH |
| Trichloroethene | 130 | 5.0 | | ug/L | 223734 | 1 | 05/09/2016 14:10 | CH |
| Tetrachloroethene | 8000 | 500 | | ug/L | 223734 | 100 | 05/07/2016 17:44 | CH |
| Surr: 4-Bromofluorobenzene | 75.1 | 70.7-125 | | %REC | 223734 | 1 | 05/09/2016 14:10 | CH |
| Surr: 4-Bromofluorobenzene | 75.8 | 70.7-125 | | %REC | 223734 | 100 | 05/07/2016 17:44 | CH |
| Surr: Dibromofluoromethane | 102 | 82.2-120 | | %REC | 223734 | 1 | 05/09/2016 14:10 | CH |
| Surr: Dibromofluoromethane | 112 | 82.2-120 | | %REC | 223734 | 100 | 05/07/2016 17:44 | CH |
| Surr: Toluene-d8 | 93.8 | 81.8-120 | | %REC | 223734 | 1 | 05/09/2016 14:10 | CH |
| Surr: Toluene-d8 | 106 | 81.8-120 | | %REC | 223734 | 100 | 05/07/2016 17:44 | CH |

Qualifiers: * Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc
Date: 12-May-16

| | | | |
|----------------------|----------------------|--------------------------|----------------|
| Client: | ERM-Southeast | Client Sample ID: | TB-20160505-01 |
| Project Name: | Williamson - Dickies | Collection Date: | 5/5/2016 |
| Lab ID: | 1605416-015 | Matrix: | Aqueous |

| Analyses | Result | Reporting Limit | Qual | Units | BatchID | Dilution Factor | Date Analyzed | Analyst |
|--|--------|-----------------|------|-------|---------|-----------------|------------------|---------|
| Volatile Organic Compounds by GC/MS SW8260B | | | | | | | | |
| | | | | | | | (SW5030B) | |
| 1,4-Dioxane | BRL | 150 | | ug/L | 223734 | 1 | 05/07/2016 15:35 | CH |
| Vinyl chloride | BRL | 2.0 | | ug/L | 223734 | 1 | 05/07/2016 15:35 | CH |
| 1,1-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 15:35 | CH |
| trans-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 15:35 | CH |
| cis-1,2-Dichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 15:35 | CH |
| Trichloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 15:35 | CH |
| Tetrachloroethene | BRL | 5.0 | | ug/L | 223734 | 1 | 05/07/2016 15:35 | CH |
| Surr: 4-Bromofluorobenzene | 75.8 | 70.7-125 | | %REC | 223734 | 1 | 05/07/2016 15:35 | CH |
| Surr: Dibromofluoromethane | 107 | 82.2-120 | | %REC | 223734 | 1 | 05/07/2016 15:35 | CH |
| Surr: Toluene-d8 | 100 | 81.8-120 | | %REC | 223734 | 1 | 05/07/2016 15:35 | CH |

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM

Work Order Number 1605416

Checklist completed by Christie Jost Signature 5-5-16 Date

Carrier name: FedEx UPS Courier Client US Mail Other _____

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes No

Cooler #1 0.5 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

Sample Condition: Good Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: ERM-Southeast
Project Name: Williamson - Dickies
Workorder: 1605416

ANALYTICAL QC SUMMARY REPORT**BatchID: 223734**

| Sample ID: MB-223734 | Client ID: | | | | Units: ug/L | Prep Date: 05/07/2016 | Run No: 316333 | | | | |
|-----------------------------|--|-----------|-----------|-------------|------------------------|----------------------------------|------------------------|-------------|------|-----------|------|
| SampleType: MLBK | TestCode: Volatile Organic Compounds by GC/MS SW8260B | | | | BatchID: 223734 | Analysis Date: 05/07/2016 | Seq No: 6811700 | | | | |
| Analyte | Result | RPT Limit | SPK value | SPK Ref Val | %REC | Low Limit | High Limit | RPD Ref Val | %RPD | RPD Limit | Qual |

| | | | | | | | | | | | |
|----------------------------|-------|-----|-------|--|------|------|-----|--|--|--|--|
| 1,1-Dichloroethene | BRL | 5.0 | | | | | | | | | |
| 1,4-Dioxane | BRL | 150 | | | | | | | | | |
| cis-1,2-Dichloroethene | BRL | 5.0 | | | | | | | | | |
| Tetrachloroethene | BRL | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | BRL | 5.0 | | | | | | | | | |
| Trichloroethene | BRL | 5.0 | | | | | | | | | |
| Vinyl chloride | BRL | 2.0 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 38.60 | 0 | 50.00 | | 77.2 | 70.7 | 125 | | | | |
| Surr: Dibromofluoromethane | 49.58 | 0 | 50.00 | | 99.2 | 82.2 | 120 | | | | |
| Surr: Toluene-d8 | 47.57 | 0 | 50.00 | | 95.1 | 81.8 | 120 | | | | |

| Sample ID: LCS-223734 | Client ID: | | | | Units: ug/L | Prep Date: 05/07/2016 | Run No: 316333 | | | | |
|------------------------------|--|-----------|-----------|-------------|------------------------|----------------------------------|------------------------|-------------|------|-----------|------|
| SampleType: LCS | TestCode: Volatile Organic Compounds by GC/MS SW8260B | | | | BatchID: 223734 | Analysis Date: 05/07/2016 | Seq No: 6811699 | | | | |
| Analyte | Result | RPT Limit | SPK value | SPK Ref Val | %REC | Low Limit | High Limit | RPD Ref Val | %RPD | RPD Limit | Qual |

| | | | | | | | | | | | |
|----------------------------|-------|-----|-------|--|------|------|-----|--|--|--|--|
| 1,1-Dichloroethene | 58.75 | 5.0 | 50.00 | | 118 | 65.3 | 137 | | | | |
| Trichloroethene | 46.69 | 5.0 | 50.00 | | 93.4 | 73.1 | 128 | | | | |
| Surr: 4-Bromofluorobenzene | 39.41 | 0 | 50.00 | | 78.8 | 70.7 | 125 | | | | |
| Surr: Dibromofluoromethane | 50.51 | 0 | 50.00 | | 101 | 82.2 | 120 | | | | |
| Surr: Toluene-d8 | 47.83 | 0 | 50.00 | | 95.7 | 81.8 | 120 | | | | |

| Sample ID: 1605416-003AMS | Client ID: MW-38A-20160505-01 | | | | Units: ug/L | Prep Date: 05/07/2016 | Run No: 316333 | | | | |
|----------------------------------|--|-----------|-----------|-------------|------------------------|----------------------------------|------------------------|-------------|------|-----------|------|
| SampleType: MS | TestCode: Volatile Organic Compounds by GC/MS SW8260B | | | | BatchID: 223734 | Analysis Date: 05/07/2016 | Seq No: 6811707 | | | | |
| Analyte | Result | RPT Limit | SPK value | SPK Ref Val | %REC | Low Limit | High Limit | RPD Ref Val | %RPD | RPD Limit | Qual |

| | | | | | | | | | | | |
|----------------------------|------|-----|------|--|------|------|-----|--|--|--|--|
| 1,1-Dichloroethene | 6956 | 500 | 5000 | | 139 | 60 | 150 | | | | |
| Trichloroethene | 5363 | 500 | 5000 | | 107 | 70 | 136 | | | | |
| Surr: 4-Bromofluorobenzene | 4086 | 0 | 5000 | | 81.7 | 70.7 | 125 | | | | |

| | | | | | | | |
|--------------------|---------|--|---|---|--|---|--|
| Qualifiers: | > | Greater than Result value | < | Less than Result value | | B | Analyte detected in the associated method blank |
| | BRL | Below reporting limit | E | Estimated (value above quantitation range) | | H | Holding times for preparation or analysis exceeded |
| | J | Estimated value detected below Reporting Limit | N | Analyte not NELAC certified | | R | RPD outside limits due to matrix |
| | Rpt Lim | Reporting Limit | S | Spike Recovery outside limits due to matrix | | | |

Client: ERM-Southeast
Project Name: Williamson - Dickies
Workorder: 1605416

ANALYTICAL QC SUMMARY REPORT**BatchID: 223734**

| Sample ID: 1605416-003AMS | Client ID: MW-38A-20160505-01 | Units: ug/L | Prep Date: 05/07/2016 | Run No: 316333 | | | | | | | |
|----------------------------|---|-----------------|---------------------------|-----------------|------|-----------|------------|-------------|------|-----------|------|
| SampleType: MS | TestCode: Volatile Organic Compounds by GC/MS SW8260B | BatchID: 223734 | Analysis Date: 05/07/2016 | Seq No: 6811707 | | | | | | | |
| Analyte | Result | RPT Limit | SPK value | SPK Ref Val | %REC | Low Limit | High Limit | RPD Ref Val | %RPD | RPD Limit | Qual |
| Surr: Dibromofluoromethane | 4831 | 0 | 5000 | | 96.6 | 82.2 | 120 | | | | |
| Surr: Toluene-d8 | 4663 | 0 | 5000 | | 93.3 | 81.8 | 120 | | | | |
| Sample ID: 1605416-003AMSD | Client ID: MW-38A-20160505-01 | Units: ug/L | Prep Date: 05/07/2016 | Run No: 316333 | | | | | | | |
| SampleType: MSD | TestCode: Volatile Organic Compounds by GC/MS SW8260B | BatchID: 223734 | Analysis Date: 05/07/2016 | Seq No: 6811708 | | | | | | | |
| Analyte | Result | RPT Limit | SPK value | SPK Ref Val | %REC | Low Limit | High Limit | RPD Ref Val | %RPD | RPD Limit | Qual |
| 1,1-Dichloroethene | 6641 | 500 | 5000 | | 133 | 60 | 150 | 6956 | 4.63 | 17.7 | |
| Trichloroethene | 5138 | 500 | 5000 | | 103 | 70 | 136 | 5363 | 4.29 | 20 | |
| Surr: 4-Bromofluorobenzene | 3727 | 0 | 5000 | | 74.5 | 70.7 | 125 | 4086 | 0 | 0 | |
| Surr: Dibromofluoromethane | 5042 | 0 | 5000 | | 101 | 82.2 | 120 | 4831 | 0 | 0 | |
| Surr: Toluene-d8 | 4800 | 0 | 5000 | | 96.0 | 81.8 | 120 | 4663 | 0 | 0 | |

Qualifiers: > Greater than Result value
 BRL Below reporting limit
 J Estimated value detected below Reporting Limit
 Rpt Lim Reporting Limit

< Less than Result value
 E Estimated (value above quantitation range)
 N Analyte not NELAC certified
 S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank
 H Holding times for preparation or analysis exceeded
 R RPD outside limits due to matrix