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August 28, 2015

Mr. Jason Metzger
Georgia Department of Natural Resources
Environmental Protection Division
Response and Remediation Program
2 Martin Luther King, Jr. Drive, S.E.
Suite 1054 East Tower
Atlanta, Georgia 30334-9000

Subject: **Eighth VIRP Semi-annual Progress Report**
VOPAK Terminal Savannah
HSI Site No. 10464
Turner and Hart Street, Savannah, Chatham County, Georgia
Tax Parcel: 1-0618-01-003L

Dear Mr. Metzger:

On behalf of VOPAK Terminal Savannah, Inc. Environmental International Corporation (EIC) is pleased to submit the attached Eighth VIRP Semi-annual Progress Report for the above referenced site.

Enclosed are the following:

1. One signed and sealed certification page for the Semiannual Report.
2. One bound paper copy of the Eighth VIRP Semi-annual Progress Report.
3. Two Compact Discs each with the report in searchable PDF format.

If you have any questions regarding this submittal, please contact Mr. Branden Jones of VOPAK at 912-964-1811 extn. 10114, or me at the above location.

Sincerely,
ENVIRONMENTAL INTERNATIONAL CORPORATION

Raj Mahadevaiah, P.E., C.G.W.P.
President & CEO

Cc: Branden Jones, VOPAK
Chris Novack, GPA

CERTIFICATION AND SUPPORTING DOCUMENTATIONS
Eighth VIRP Semi-annual Progress Report
VOPAK Terminal Savannah
HSI Site No. 10464
August 28, 2015

"I certify under penalty of law that the accompanying report referenced above and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary Investigation and Remediation Plan (VIRP) development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Basavaraj Mahadevaiah, GA PE No. 23198
Environmental International Corporation
770-772-7100, ext. 223

8/28/15
Date

GEORGIA REGISTERED No. 23198 PROFESSIONAL ENGINEER BASAVARAJ MAHADEVAIAH

Signature and Stamp

PCE REMEDIATION, HSI SITE 10464, VOPAK TERMINAL SAVANNAH
SAVANNAH, GEORGIA

EIGHTH VIRP SEMI-ANNUAL PROGRESS REPORT

Friday, August 28, 2015

Submitted To:
GEORGIA ENVIRONMENTAL PROTECTION DIVISION
Georgia Department of Natural Resources
Environmental Protection Division
Response and Remediation Program
Suite 1054 East Tower
2 Martin Luther King Jr. Drive, S.E.
Atlanta, Georgia 30334

Prepared for:
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SECTION

1

1.0 INTRODUCTION

On behalf of VOPAK Terminal Savannah, Inc. (VOPAK), Environmental International Corporation (EIC) is pleased to submit the Eighth VIRP Semi-annual Progress Report for review by the Georgia Environmental Protection Division Response and Remediation Program (EPD). This report was prepared as specified in the April 2, 2011 "Revised Voluntary Investigation and Remediation Plan (VIRP) and Application" that was approved by the EPD on August 31, 2011 under the Voluntary Remediation Program (VRP) (EIC, 2011a).

1.1 Primary Objectives

The primary objective of this report is to present a compilation of tasks completed and findings determined by EIC during the six-month period from March 2015 through August 2015. This report documents the following subjects:

- Responses to the July 29, 2015 EPD comment letter
- Revision of the Site Conceptual Model
- Further evaluation of COC trends
- Evaluation MNA goals and the development of a remedial strategy

The following sections describe each task related to these subjects.

SECTION

2

2.0 EPD COMMENT LETTERS

2.1 EPD Comment Letter dated July 29, 2015

EIC received a copy of the July 29, 2015 EPD comment letter from VOPAK on August 4, 2015 and has prepared the following responses on behalf of VOPAK.

2.1.1 EPD Comment 1

EPD concurs that natural attenuation is occurring at the site and that data collected after enrollment in the VRP has expanded the known footprint of the plume. However, we do not agree that this is the reason that the property will not meet Type 1 through 4 RRS within the 5-year timeframe, as implied in Section 5.3 of the Report. Since enrollment, EPD has indicated that meeting these cleanup goals within the prescribed timeframe was unlikely based on data from wells such as LAW-PZ-8R, MW-29, and PAN-MW-9, all of which have been sampled consistently before and after enrollment. EPD expects the forthcoming report(s) to evaluate the VIRP timeline, consider alternatives to reach risk reduction standards (RRS), and provide a final remediation plan, such as active corrective action or certification to Type 5 RRS with Uniform Environmental Covenants (UECs) to address exposure pathways. EPD is eager to work with VOPAK in developing a path to certification.

Response to EPD Comment 1:

VOPAK understands that natural attenuation alone may be insufficient in reaching the RRS within the 5-year time frame. Referring to the April 2015 groundwater analytical data, however, it is apparent that the CVOC plume has substantially reduced in size at the leading edge. Consequently, CVOCs in only MW-29 appear to be recalcitrant – but at very low ppbs. VOPAK will review analytical data from the next sampling event - scheduled for October 2015 - to verify whether the areal extent of the CVOC is further reduced. Based on that finding, VOPAK will evaluate the need for contingency remedial measures for localized

treatment, request a time extension to reach remedial end points, or explore Type 5 RRS with UECs to address exposure pathways.

2.1.2 EPD Comment 2

EPD has previously noted concern over the possibility that contaminated groundwater is discharging to the Savannah River (or the Tidal Flat) as a pathway that could create ecological risks associated with concentrations in surface water or sediment. There is no groundwater data available for the small area between two higher concentration monitoring wells (MW-32 and PAN-MW-9) and the Tidal Flat, and thus no evidence that contaminated groundwater is not discharging to the Tidal Flat. Additionally, Figure 4-6 and 4-7 indicate two discrete plumes of DCE and VC, respectively, at these wells and MW-16, though there is no evidence that these plumes are not connected. Additional monitoring well(s) or sediment sampling may be necessary to better delineate the plume and characterize ecological risks.

Response to EPD Comment 2:

As discussed in the updated site conceptual model (Appendix A), it appears that the area previously presumed to be a tidal flat in previous maps is actually a narrow area that functions as a drainage channel or an inlet depending on the river tides. The retaining wall (labeled on the site figures as a concrete bulkhead) equipped with a sluice gate and the tides in the Savannah River affect the fluid flow hydrodynamics in this localized area. EIC is currently compiling additional supporting material from various sources to substantiate this finding. As stated in the aforementioned EIC's response to EPD Comment 1, the CVOC plume has also substantially reduced in size at the leading edge. Consequently, EIC is developing a detailed work plan to evaluate whether potential ecological risks are present from the contaminated groundwater that may migrate to the Savannah River. Prior to the preparation of a work plan, EIC proposes a meeting with EPD to discuss the plan objectives and scope of work.

2.1.3 EPD Comment 3

EPD anticipates reviewing VOPAK's assessment of potential preferential flow through utility trenches, such as the large stormwater conveyance pipe discharging to the Tidal Flat near MW-32, as well as the hydraulic and transport evaluation of the sheet pile wall.

Response to EPD Comment 3:

As noted in the updated site conceptual model (Appendix A), EIC has provided detailed schematics of the retaining wall and other related substructures. In addition, VOPAK is evaluating the feasibility of performing a flow-net analysis to determine fluid flow pathways.

2.1.4 EPD Comment 4

EPD anticipates reviewing the forthcoming vapor intrusion study, indicated to assess potential risks to existing and potential future structures as well as an assessment of potential risks to construction workers in areas of shallow groundwater. Risks to construction workers are associated with incidental contact and possible ingestion of contaminated groundwater during subsurface work. Any risks associated with these pathways will need to be addressed in an institutional control.

Response to EPD Comment 4:

A work plan for vapor intrusion study to evaluate the potential risks to structures and construction workers is currently under preparation. VOPAK will submit the plan to EPD for concurrence of the scope of work. Upon EPD approval, VOPAK will complete the study and submit the results in a subsequent semiannual report.

SECTION

3

3.0 SITE CONCEPTUAL MODEL

VOPAK Terminal Savannah, Inc. (VOPAK) submitted a preliminary site conceptual model (SCM) of the area affected by a tetrachloroethene/perchloroethene (PCE) plume as a part of the VIRP. A SCM is typically updated as additional material is progressively gained during the implementation of the VIRP.

In the Sixth VIRP Semi-annual Progress Report submitted on August 29, 2014 (EIC, 2014), VOPAK included a revised SCM. Subsequently, EIC has compiled additional data to further define the site characteristics and potential fluid flow hydrodynamics. The updated SCM is included as Appendix A. In Preparing the 2015 SCM Report, EIC made significant revisions to the groundwater hydrology section of the 2014 SCM Report regarding fluid flow hydrodynamics, COC plume delineation, and COC concentration trend analysis.

SECTION

4

4.0 GROUNDWATER MONITORING

The semi-annual groundwater monitoring (sampling) event documented in this section was conducted from March 30, to April 2, 2015. This was the second semi-annual sampling event of the VIRP program following EPD's approval of semi-annual sampling, as opposed to quarterly sampling that EIC previously conducted at the site.

The sampling event entailed the collection of groundwater samples, for laboratory analysis of constituents (or contaminants) of concern (COCs), from wells within the previously established area of concern. COCs that EIC monitored included dissolved chlorinated volatile organic compounds (CVOCs) and volatile organic compounds (VOCs) contamination.

During this event, all available monitoring wells and two selected former injection wells within and adjacent to the CVOC/VOC contaminant plumes were utilized for groundwater sampling. Accordingly, EIC collected groundwater samples for CVOC/VOC analysis from a total of 25 wells.

The analytical data from the March/April 2015 sampling event was compared to the first quarterly sampling event (EIC, 2011b) and all other subsequent sampling events (EIC, 2012a, 2012b, 2012c, 2012d, 2013a, 2013b, 2013c, 2014a, 2014b, and 2015) to track prevailing contaminant concentration trends. A statistical analysis of these trends is documented in the 2015 Site Conceptual Model (SCM) Report, submitted as Appendix A of this report.

The following subsections describe the results of the seventh groundwater monitoring event.

4.1 Groundwater Monitoring Objective

During the March/April 2015 groundwater monitoring event, the primary objective was to meet the following goals set forth in the VIRP.

- Review plume stability.
- Track natural attenuation of COCs by monitoring the groundwater concentrations of VOCs/CVOCs within the existing plume.
- Determine if the prevailing groundwater contaminant concentrations meet or are trending towards meeting the established RRS.
- Determine if the horizontal and vertical extents of the COC on all impacted properties have been and remain defined, respectively.
- Determine if conditions throughout the plume promote natural attenuation.

The following sections outline the tasks performed by EIC to meet this objective.

4.2 Groundwater Monitoring Field Program

During the March/April 2015 groundwater monitoring event, EIC conducted groundwater monitoring utilizing 22 shallow monitoring wells, two shallow injection wells, and one deep monitoring well. The site layout is illustrated in Figure 4-1. The following sub-sections describe EIC's technical approach regarding this event.

4.2.1 Sampling Protocol

The groundwater sampling program was conducted in accordance with the current U.S. Region 4 EPA groundwater sampling procedure "Field Branches Quality System and Technical Procedures" (FBQSTP) per EPD regulations. Each monitoring well was gauged, purged, and sampled following the "low-flow" purge technique established in the standard operating procedure (SOP) SESDPROC-301-R3 under the FBQSTP (EPA, 2013).

4.2.2 Site Access

Prior to EIC's site visit, EIC coordinated with the Georgia Ports Authority (GPA) and GAF Materials Corp. (GAF) in gaining access during the sampling event to collect groundwater samples from a total of seven off-site monitoring wells consisting of MW-17R, MW-28, MW-32, MW-34, MW-35, MW-36, and MW-37. Monitoring wells MW-28 and MW-37 are located on GAF property and wells MW-17R, MW-32, MW-34, MW-35, and MW-36 are located on GPA property.

4.2.3 Groundwater Gauging

Prior to sampling, EIC gauged each well with a Solinst Model 122 interface meter ("oil/water interface probe") to determine the static depth to groundwater. The gauging data is tabulated in Table 4-1. In preparing this table, EIC utilized top-of-casing (TOC) elevations from the multiple well surveys to calculate the groundwater elevation data regarding this event. From Table 4-1, EIC noted that, while gauging IW-1R, the oil/water interface probe detected a light non-aqueous phase liquid (LNAPL). Upon retrieval of the probe, EIC observed a clear oily substance which resembled the lactate injection fluid that had been previously utilized at the site. The LNAPL was evacuated from the well via hand-bailing, the groundwater level was allowed to equilibrate, and EIC then gauged the well again prior to sampling.

4.2.4 Groundwater Sampling Field Procedures

Prior to EIC initiating field sampling activities, EIC obtained a 55-gallon drum from VOPAK to containerize purged groundwater. During the March/April 2015 event, the 55-gallon drum was placed on the west shoulder of the Hart Street, which lies between Tank Farm #2 and Tank Farm #3, near well MW-27. EIC placed a non-hazardous waste label on the drum and marked the contents on it as investigative derived waste ("IDW") well purge water and the accumulation date with a black permanent marker. The drum was later disposed of by VOPAK.

At each well-head designated for sampling, EIC monitored VOC air concentrations in parts per million (ppm) with a calibrated photoionization detector. A total of three measurements were taken at each well to document VOC concentrations in the ambient air within two feet of and outside the outer well casing, air between the inner well casing and the outer protective casing or vault, and air within the inner well casing once the well cap was removed. The VOC concentrations observed during the second quarter of 2014 were recorded on EIC's March/April 2015 EIC Well Purging and Sampling Data Field Logs (Attachment A).

EIC followed the "low-flow" purge technique, noted in Section 4.2.1, to conduct all groundwater sampling. EIC used a peristaltic pump with disposable 1/4-inch ID Teflon-lined tubing and a 6-inch segment of 3/16-inch ID silicon tubing at the pump head to purge each well until groundwater quality parameters reached stabilization prior to sampling. The length of Teflon-tubing necessary to place the intake at the center of the wetted screened interval was determined from water levels and available well construction data noted in EIC well purging and sampling data field logs (Attachment A).

Groundwater stabilization parameters were monitored via direct pumping to a multi-parameter field water quality field meter equipped with a flow-through cell. These parameters were recorded at approximately five minute intervals on EIC field logs (Attachment A). Additionally, purge volumes and depth-to-water (DTW) measurements were recorded at the same five-minute intervals when

possible. At each well, the pumping rate and tubing depth were adjusted accordingly if excessive drawdown was observed. In 1-inch and ¾-inch diameter wells, where downhole assembly constricted the access for the interface probe, the depth to water could not be gauged during purging. In these wells gauging was performed only just prior to inserting the tubing and immediately after the tubing was removed.

EIC considered that stabilization was reached when 3 consecutive stabilization parameter readings were within ± 0.1 for pH and ± 5% for specific conductivity. Reasonable attempts were made at each well to reach 0.2 mg/L dissolved oxygen (DO) and a turbidity reading below 10 Nephelometric Turbidity Units (NTUs) prior to sampling. Groundwater quality field parameters (Temperature, pH, oxygen reduction potential (ORP), conductivity, turbidity, and DO) after stabilization and prior to sample collection are summarized in Table 4-3. Note, however, that during the March/April 2015 sampling event, the turbidity levels at 9 wells could not be lowered below 10 NTUs and the DO levels could not be lowered below 0.2 mg/L at any of the wells sampled. All samples were collected using the "soda straw method" specified in SOP SESDPROC-301-R3.

4.2.5 Sample Custody and Laboratory Analysis

Immediately after each sample set was collected, the sample bottles were sealed and labeled in the field. Each sample set was then placed in padded sealable plastic bags to prevent breakage and stored with ice in insulated cooler containers provided by the laboratory. Complete and signed chain of custody forms accompanied all samples. EIC delivered and relinquished the samples to Test America Laboratories, a Georgia-certified laboratory located in Savannah, Georgia, prior to returning to EIC headquarters.

The laboratory conducted analysis of volatile organic compounds via EPA method 8260B. The laboratory report for the March/April 2015 event is included as Attachment B. The results of COC analysis of samples collected during this event, along with historical COC analytical data, are summarized in Table 4-4.

4.3 Quality Assurance and Quality Control

For quality assurance and quality control purposes during the groundwater sampling process, EIC submitted one trip blank set, provided by the laboratory, with each sample container with CVOC/VOC samples for analysis via EPA Method 8260B. The trip blanks were kept in the same thermal cooler as the collected CVOC/VOC samples over the entire period these samples were in the cooler until they were relinquished to the laboratory along with the CVOC/VOC samples.

To prevent cross-contamination, new disposable 1/4-inch inner diameter and 3/8-inch outer diameter Teflon-lined tubing was used to collect samples at each well, which was later properly disposed of. EIC's oil/water interface meter, 2,000 mL cylinder, and Teflon tubing cutter were field decontaminated prior to use and between sampling locations by washing with a phosphate-free detergent solution and rinsing with pressurized de-ionized (DI) water. After each sample was collected, the water quality parameters instrument was also decontaminated with DI water.

4.4 Data Evaluation

EIC conducted an evaluation of the data compiled from field measurements and laboratory analyses to determine the groundwater potentiometric surface, the horizontal and the vertical extent of the prevailing contaminant plumes based on the March/April 2015 monitoring event. Data from the sampling event was compared with the data from the baseline and each of the eleven subsequent quarterly sampling events to develop a strategy to reach remedial end points.

4.4.1 Groundwater Potentiometric Map

Table 4-5 tabulates the historical groundwater elevations for all gauging events at the site since groundwater monitoring was initiated under the VIRP. From this table, it is apparent that during the March/April 2015 gauging event, the overall potentiometric surface was similar in elevation to the previous two March/April gauging events. In general, the potentiometric surface elevation at the site during the March/April 2015 event was slightly above the global average groundwater elevation. As compared to the previous March/April gauging events, the average groundwater potentiometric surface elevation for the 2015 gauging event was neither the highest nor lowest observed since the inception of the VIRP program.

Figure 4-2 illustrates the March/April 2015 potentiometric surface map. Referring to Figure 4-2, the prevailing groundwater flow direction in the vicinity of the COC plume footprint remains from the southwest to the northeast. Of note, in this potentiometric surface contains an anomaly in the area of well MW-32. The groundwater elevation measured during the March/April event was the highest ever recorded at MW-32 since the approval of the VIRP.

4.4.2 Horizontal Extent of COC Plumes

Figure 4-3 illustrates a summary of the analytical results of the monitored COCs from the March/April 2015 sampling event for each well sampled. Figures 4-4 through 4-11 illustrate each of the eight monitored COC plumes. Table 4-4 lists a compilation of available analytical results since September 1997. The following sub-sections describe a spatial and temporal analysis of the COC plumes.

4.4.2.1 CVOC Plume

The CVOC plume consists of Perchloroethylene (PCE), Trichlorethylene (TCE), Cis-1, 2 Dichloroethylene (DCE), and Vinyl Chloride (VC). Based on current analytical results, it is apparent that the overall extent and concentration of the CVOC plume at the site has significantly decreased since the inception of the VIRP sampling program in October 2011. However, residual CVOC contamination is present in certain areas. The following subsections describe spatial and temporal changes of individual CVOC constituents since October 2011.

PCE Plume:

Figure 4-4 illustrates the horizontal extent of the PCE plume during the March/April 2015 sampling event. The current PCE plume is composed of two distinctly separated areas of contamination, with the peak concentration of the first area centered near IW-1R at the up-gradient southwestern end of the original CVOC plume footprint, and the peak concentration of the second area centered near MW-29 near the down-gradient northeastern end of the original CVOC plume footprint.

Within the up-gradient portion of the original CVOC plume footprint, the peak PCE concentration in IW-1R increased from 170 µg/L to 310 µg/L from October 2014 to March/April 2015 respectively. However, no significant changes in concentrations at the surrounding wells were observed. It is noteworthy that in April 2014 the concentration at IW-1R was also found to be 310 µg/L.

Within the down-gradient portion of the original CVOC plume footprint, the overall extent and concentrations in this area has fluctuated since the first VIRP sampling event in October 2011, however, overall there has been a decreasing concentrations trend. In particular, the PCE concentration at MW-32 has sharply decreased from 1,900 µg/L to below laboratory method detection limits (MDLs) from October 2014 to March/April 2015, respectively. However, during the same time interval, the PCE concentration slightly increased in MW-29 from 74 µg/L to 160 µg/L.

In summary, the overall extents of the PCE plume have reduced substantially or remained stable over time and concentrations are decreasing and trending towards RRS values. Clearly, MNA is effective in reducing the PCE mass concentrations especially at the leading edge.

TCE Plume:

Figure 4-5 illustrates the horizontal extent of the TCE plume during the March/April 2015 sampling event. Similar to the PCE footprint, the TCE plume is also composed of two distinct areas of contamination. The up-gradient area of peak concentration is centered near IW-1R. The areal extent of PCE in this area reduced slightly since the October 2014 sampling event and the PCE concentration

in IW-1R reduced from 190 µg/L to 150 µg/L. There were also other slight reductions in concentration near the adjacent monitoring wells, such as at wells IW-18 and MW-37 and the down-gradient well MW-33. These reductions effectively split the TCE plume into two pockets of plume.

In April 2015, the peak concentration of down-gradient TCE plume was centered near well MW-29. This area of the plume had a significant reduction in concentration and horizontal extent as compared to the previous October 2014 and other previous sampling events. The most significant areas of reduction occurred near wells MW-32 and PAN-MW-9. The TCE concentrations MW-32 and PAN-MW-9 reduced from 680 and 35 µg/L to <0.48 and 4.9 µg/L respectively. However, concentrations increased in MW-29 from 55 to 90 µg/L.

In summary, the overall extents of the TCE plume have reduced or remained stable over time and concentrations are decreasing and trending towards RRS values. Considering that TCE is produced from the reductive dechlorination of PCE, substantial reduction in concentration relative to the original foot-print is indicative that MNA is effective in reducing the TCE concentrations.

DCE Plume:

Figure 4-6 illustrates the horizontal extent of the DCE plume during the March/April 2015 sampling event. During the March/April 2015 event the DCE concentration in LAW-PZ-8R decreased significantly from 15,000 µg/L in October 2014 to 4,100 µg/L. The concentrations near the up-gradient portion of the DCE plume have been decreasing significantly over time and the DCE concentrations measured during March/April 2015 indicate a continuation of that trend.

The overall plume extent had significant decreases in concentration since the October 2014 and previous sampling events as well; such as near wells IW-1R, IW-18, MW-24R, and MW-32. It is notable that the concentration near MW-32 was below MDLs for DCE during the March/April 2015 sampling event.

In summary, the overall extent of the DCE plume has reduced or has remained stable over time and concentrations are decreasing and trending towards RRS values. Considering that DCE is a second step daughter product from the reductive dechlorination of PCE, substantial reduction in concentration relative to the original footprint is indicative that the MNA is effective in reducing the DCE concentrations.

VC Plume:

Figure 4-7 illustrates the horizontal extent of the VC plume during the March/April 2015 sampling event. Referring to historical analytical data, the March/April 2015 VC plume concentrations data

indicates that VC concentrations are decreasing over time or remaining stable. The most notable areas of decreased concentrations were in wells IW-18, LAW-PZ-8R, MW-32, and MW-33.

The mid to down-gradient portion of the VC plume was characterized by both reductions and increases in VC concentrations. The concentrations in MW-32 and MW-33 reduced from 100 and 440 µg/L to <0.50 and 100 µg/L from the October 2014 to March/April 2015 sampling event, respectively. Whereas, at well MW-29 the concentration increased from 660 to 790 µg/L from the October 2014 to March/April 2015 sampling event. Due to the reductions in concentration in wells MW-32 and MW-33, the VC plume footprint decreased significantly.

In summary, the VC plume has significantly reduced in both areal extent and in concentration relative to the original footprint and continues to trend towards RRS values. This indicates that MNA is effective in reducing VC concentrations.

4.4.2.2 VOC Plume

The COCs monitored within the VOC plume consists of Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX). Since the first VIRP sampling event, conducted in October 2011, the VOC plume concentrations within the original VOC plume footprint have declined substantially. The following subsections describe spatial and temporal changes of individual VOC constituents since VIRP sampling was initiated in October 2011.

Benzene Plume:

Figure 4-8 illustrates the horizontal extent of the benzene plume from the March/April 2015 sampling event The benzene plume is composed of two isolated areas of contamination near the up-gradient and down-gradient portions of the original VOC plume footprint. The up-gradient benzene plume continues to maintain stability and decreased significantly in LAW-PZ-8R from 3,400 to 1,100 µg/L from the October 2014 to March/April 2015 sampling event, respectively. However, the concentration in IW-18 increased from 170 to 350 µg/L.

The down-gradient plume, centered in MW-29, has remained relatively stable over time as compared to the original footprint. The most notable change in the down-gradient Benzene concentration was observed in MW-32 where the concentration decreased from 8.3 µg/L to below MDLs. In summary, the Benzene plume has reduced significantly in concentration and extent as compared to the original plume footprint and continues to trend towards RRS values.

Toluene Plume:

Figure 4-9 illustrates the horizontal extent of the toluene plume from the March/April 2015 sampling event. In the previous October 2014 sampling event, the toluene concentration in LAW-PZ-8R increased to 800 µg/L. However, during the March/April 2015 event, Toluene concentrations Toluene reduced to below MDLs or to <480 µg/L. Additionally, concentrations in IW-1R decreased from 320 to 260 µg/L. As such, it is apparent that the toluene plume continues to decrease in concentration and has remained below RRS values since the initiation of the VIRP program.

Ethylbenzene Plume:

Figure 4-10 illustrates the horizontal extent of the ethylbenzene plume from the March/April 2015 sampling event. In the previous progress report, EIC noted that concentrations of Ethylbenzene in the up-gradient plume increased sharply from the April to October 2014 sampling events (EIC, 2015). During the March/April 2015 sampling event, however, Ethylbenzene concentrations in LAW-PZ-8R decreased from 13,000 to 6,900 µg/L. Other concentrations in the up-gradient plume remained relatively stable, however, concentrations at MW-26R increased from 25 to 760 µg/L.

Concentrations in the down-gradient plume increased from 1,800 to 3,300 between the October 2014 and March/April 2015 sampling events. However, Ethylbenzene concentrations decreased in PAN-MW-9 and MW-32 from 650 and 36 µg/L to 580 and <0.33 µg/L respectively.

In summary, the Ethylbenzene plume has significantly reduced in concentration and extent in comparison to the original plume footprint and continues to trend towards RRS values. This indicates that MNA is effective in reducing Ethylbenzene concentrations.

Total Xylenes Plume:

Figure 4-11 illustrates the horizontal extent of the Total Xylenes plume from the March/April 2015 sampling event. Similar to Ethylbenzene, Total Xylenes within the up-gradient plume increased sharply between the April and the October 2014 sampling events (EIC, 2015). The up-gradient Total Xylenes plume was centered near LAW-PZ-8R in April 2015, and has remained relatively stable in concentration and extent with some variation, as compared to the original plume footprint. However, during the March/April 2015 sampling event, Total Xylenes concentrations sharply decreased in LAW-PZ-8R and IW-1R. Between the October 2014 to March/April 2015 sampling events, the Total Xylenes concentrations in wells LAW-PZ-8R and IW-1R decreased significantly - from 180,000 and 19,000 µg/L to 87,000 and 17,000 µg/L respectively. Also, similar to the Benzene and Ethylbenzene plumes, concentrations of Total Xylenes increased in wells IW-18 and MW-26R. Since the last

sampling event, Total Xylenes concentrations increased in wells IW-18 and MW-26R from 1,100 and 400 µg/L to 1,300 and 11,000 µg/L, respectively.

The down-gradient Total Xylenes plume is centered near MW-29 and has remained relatively stable over time in both concentration and extent as compared to the original plume footprint. The overall down-gradient plume concentrations decreased between October 2014 and March/April 2015- most notably in PAN-MW-9. From the October 2014 to March/April 2015, the concentration at PAN-MW-9 decreased from 1,800 to 1,400 µg/L respectively. Other smaller decreases in concentration were observed in wells MW-32 and MW-33. This slightly reduced the overall extent of the down-gradient Total Xylenes plume. In summary, the Total Xylenes plume has significantly reduced in concentration and extent as compared to the original plume footprint and remains stable in concentration and extent.

4.4.3 Vertical Extent of COC Plumes

The historical groundwater sampling results of samples from the single deep well MW-14 within the original COCs footprint through March/April 2015 are tabulated in Table 4-4. Since the redevelopment and integration of well MW-14 into the regular CVOC and VOC sampling schedule in October 2013 through April 2015, EIC confirmed that all monitored COC concentrations in the well have remained below delineation standards and all but one parameter were below MDLs. In the EPD comment letter to VOPAK dated April 3, 2014, the Georgia EPD concurred with EIC that vertical delineation is complete.

SECTION

5

5.0 REMEDIAL PROGRESS

To determine the remedial progress, EIC performed a spatial and temporal analysis of the COC plumes and an evaluation of COC trends in individual wells. The following subsections discuss the remedial progress.

5.1 COC Degradation

The spatial and temporal analysis of the plume, discussed in Section 4, provides a clear insight into the overall remedial progress and the plume stability. The following subsections discuss the degradation of the COCs.

5.1.1 CVOC Plume

As discussed in the previous report, the prevailing PCE, TCE, DCE, and VC plumes have degraded significantly in comparison to the original plume footprints (EIC, 2015). Since the inception of the VIRP program and subsequent first sampling event in October 2011, EIC has delineated the leading edge of each CVOC plume.

Referring to the March/April 2015 analytical data, the following monitoring wells exceed RRS values as of the time of the March/April 2015 groundwater monitoring event; PCE (IW-1R, IW-18, MW-26R, MW-28, MW-29, MW-37, LAW-PZ-8R, and PAN-MW-9), TCE (IW-1R and MW-29), DCE (IW-1R, LAW-PZ-8R, MW-29, and PAN-MW-9), and VC (IW-1R, IW-18, MW-16, MW-24R, MW-26R, MW-27, MW-28, MW-29, MW-33, MW-37, LAW-PZ-8R, and PAN-MW-9)

5.1.2 VOC Plume

Following a similar trend as the CVOC plume, the VOC plume has also reduced substantially in the center and at the leading edge of the VOC baseline footprint. This has resulted in an isolated pocket

of VOC plume at well LAW-PZ-8R in the trailing edge of the original VOC footprint. EIC has delineated the leading edge of each VOC plume.

Referring to the March/April 2015 analytical data, it is apparent that the following monitoring wells exceed RRS concentrations for VOCs; benzene (IW-1R, IW-18, LAW-PZ-8R, MW-26R, MW-29, and PAN-MW-9), ethylbenzene (IW-1R, LAW-PZ-8R, MW-26R, and MW-29), and total xylenes (IW-1R, LAW-PZ-8R, and MW-26R).

5.2 COC Trends in Individual Wells

Pursuant to EPD's requirement, discussed in the Seventh VIRP Semiannual Progress Report, EIC prepared trend graphs for each constituent for select wells (EIC, 2015). These trend graphs are presented as Figures 5-1 through 5-13.

In general, all graphs illustrate the initial increase in PCE concentrations but then a gradual decline in concentrations during subsequent sampling events. By contrast, the degradation products of PCE have increased in some areas and remained persistent in other areas of the PCE footprint – confirming natural attenuation of PCE. A more detailed analysis of fluid flow hydrodynamics as well as fate and transport evaluation of CVOC and VOC concentrations is included in the revised site conceptual model (Appendix A).

5.3 Remedial Progress

In the previous report, VOPAK notified EPD that the CVOC foot-print had expanded after additional pockets of CVOCs were discovered from new wells that replaced damaged or missing wells. The CVOC concentrations, however, rapidly declined since the previous semi-annual sampling event. Also, the areal extent of PCE is now confined to two small areas within the original footprint. VOPAK will verify this trend in the based on the analytical data from the next sampling event scheduled for October 2015. VOPAK will then evaluate the contingency remedial measures that may be required for localized treatment, request a time extension to reach remedial end points, or explore Type 5 RRS with UECs to address exposure pathways.

5.4 Final Remediation Plan

Although recent data indicates substantial remedial progress, VOPAK is considering multiple options in finalizing its remedial plan. However, data from the next sampling event scheduled in October 2015 is critical in verifying whether the recent reduction in the leading edge can be reconfirmed and to select the most cost-effective remedial option. Nevertheless, VOPAK is pursuing the following tasks:

1. Using modeling, statistical analysis, or projections, amend the estimate the time needed to reach remedial end points based on the MNA trends relative to the current COC footprint.
2. Conduct Microcosm Testing and Evaluation to determine whether amendments of some of the key parameters support enhanced attenuation option.
3. Conduct an evaluation of the potential for treatment of an isolated pocket of COCs using a treatment train.
4. Evaluate the feasibility of performing a flow-net analysis to determine fluid flow hydrodynamics along the bulkhead and the sheet pile in the adjacent area.
5. Conduct an evaluation of other options to reach remedial end points within the VIRP deadline or extend the deadline with EPD concurrence.

5.5 Updated Schedule and Timeline

Based on the aforementioned findings, VOPAK is deferring the preparation of a final remediation plan, updated schedule, and cost estimate until the analytical data is available from the October 2015 semiannual sampling event.

SECTION

6

6.0 SUMMARY

On behalf of VOPAK, EIC has addressed the comments noted in EPD's letter dated July 29, 2015. EIC has updated the SCM based on new information obtained regarding site conditions and fluid flow hydrodynamics. Data from the recent March/April 2015 sampling event, indicates that the natural attenuation continues to be viable.

As discussed in the previous Seventh VIRP Semiannual Progress Report, pockets of contamination were discovered following the initiation of the VIRP program (EIC, 2015). These additional areas of contamination presents a challenge in reaching remedial end points within the regulatory deadline of August 31, 2016 established in the VIRP. Nevertheless, MNA has successfully attenuated the COCs in a substantial area encompassing the center of the baseline plume footprint, resulting in isolated individual pockets of plumes at the leading and trailing edges.

Data from recent sampling event, a substantial reduction in COC concentrations at the leading edge.

Nevertheless, data from the next sampling event scheduled in October 2015 is critical in verifying whether the recent reduction in the leading edge can be reconfirmed and to select the most cost-effective remedial option. Based on the results of the October 2015 sampling event, VOPAK will explore multiple options in finalizing contingency plans.

SECTION

7

7.0 SUMMARY OF HOURS

A monthly summary of hours invoiced for the aforementioned tasks during the period from March 2015 through August 2015 are summarized in Attachment C.

SECTION

8

8.0 REFERENCES

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EIC, 2012a. *Report on First Quarter 2012 Monitored Natural Attenuation (MNA) Ground Water Monitoring in CVOC/VOC Plumes, VOPAK Terminal Savannah Inc., Savannah, Georgia.* Savannah, Georgia, February 2012.

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State of Georgia (GA), 2011. *Water Wells Standard Act of 1985 O.C.G.A. § 12-5-120 (2011).* Atlanta, Georgia. October 29, 2010.

VOPAK TERMINAL SAVANNAH, SAVANNAH, GEORGIA

EIGHTH SEMI-ANNUAL PROGRESS REPORT

TABLES

Table 4-1: April 2015 Well Gauging Data
VOPAK Terminal Savannah, Savannah, Georgia

Well ID # (Well Diameter, in.)	Gauging Date	TOC Elevation* (ft.)	DTP (ft.)	DTW** (ft.)	Groundwater Surface Elevation (ft.)	Notes
IW-1R (1)	4/2/2015	UNK	ND	3.4	NA	Contact with clear oily substance, used mini bailer to clear
IW-18 (1)	4/2/2015	10.07	ND	3.18	6.89	
LAW-PZ-8R (1)	4/2/2015	9.22	ND	1.53	7.69	
MW-14 (2)	4/1/2015	8.86	ND	6.48	2.38	
MW-16 (1)	4/2/2015	17.01	ND	12.03	4.98	Tubing hit refusal few times when inserted, small bubbles in tubing
MW-17R (1)	3/31/2015	15.89	ND	10.93	4.96	
MW-18R (1)	3/30/2015	14.12	ND	6.18	7.94	
MW-19 (1)	3/30/2015	14.91	ND	6.69	8.22	
MW-23 (1)	3/30/2015	10.39	ND	3.42	6.97	
MW-24R (1)	4/1/2015	11.81	ND	5.45	6.36	
MW-25 (1)	3/30/2015	14.76	ND	6.51	8.25	
MW-26R (1)	4/2/2015	10.59	ND	3.12	7.47	
MW-27 (1)	3/30/2015	9.38	ND	4.08	5.30	
MW-28 (1)	3/31/2015	UNK	ND	4.12	NA	
MW-29 (0.75)	4/1/2015	11.73	ND	6.04	5.69	
MW-30 (2)	4/2/2015	11.23	ND	5.05	6.18	
MW-31 (2)	3/30/2015	9.67	ND	4.48	5.19	
MW-32 (2)	3/31/2015	11.70	ND	5.49	6.21	
MW-33 (2)	4/2/2015	8.96	ND	2.38	6.58	Distinct yellow color in cylinder and sample tube
MW-34 (2)	3/31/2015	10.81	ND	3.28	7.53	Water in vault
MW-35 (2)	3/31/2015	10.40	ND	5.47	4.93	
MW-36 (2)	3/31/2015	10.42	ND	6.48	3.94	
MW-37 (2)	3/31/2015	11.57	ND	3.97	7.60	
PAN-MW-9 (2)	4/1/2015	12.59	ND	6.49	6.10	
PAN-MW-10 (2)	4/1/2015	13.81	ND	8.24	5.57	

Notes:
ID = Identity
TOC = Top of Casing
UNK = Unknown
NM = Not Measured
ND = Not Detected
* TOC elevations are based on well surveys conducted by EMC Engineering on June 30, 2011, January 24, 2013, and on January 20, 2014 and are of the NGVD 29 Datum convention
** DTW measurements were recorded by EIC from 3/30/2015 to 4/2/2015 prior to purging using a Solinst Oil/Water Interface Meter (probe), Model: 122

Table 4-2: March/April Well Purging Data
VOPAK Terminal Savannah, Savannah, Georgia

Well ID # (Well Diameter, in.)	Date of Purge	Purge Time (minutes)	Total Purge Volume (mL)	Average Purge Rate (mL/minute)	Initial Tubing Intake Depth below TOC* (ft.)	Final Tubing Intake Depth below TOC (ft.)
IW-1R (1)	4/2/2015	15	1,120	75	14.0	14.0
IW-18 (1)	4/2/2015	20	1,280	64	15.0	15.0
LAW-PZ-8R (1)	4/2/2015	35	3,140	90	6.0	6.0
MW-14 (2)	4/1/2015	20	1,280	64	45.0	45.0
MW-16 (1)	4/2/2015	20	840	42	13.0	13.0
MW-17R (1)	3/31/2015	20	880	44	17.5	17.5
MW-18R (1)	3/30/2015	30	4,200	140	11.5	11.5
MW-19 (1)	3/30/2015	20	2,980	149	13.0	13.0
MW-23 (1)	3/30/2015	30	3,020	101	8.5	8.5
MW-24R (1)	4/1/2015	35	2,830	81	14.0	14.0
MW-25 (1)	3/30/2015	30	4,100	137	14.0	14.0
MW-26R (1)	4/2/2015	15	1,180	79	9.5	9.5
MW-27 (1)	3/30/2015	15	880	59	10.5	10.5
MW-28 (1)	3/31/2015	15	780	52	9.0	9.0
MW-29 (0.75)	4/1/2015	40	1,940	49	18.0	18.0
MW-30 (2)	4/2/2015	30	3,500	117	10.0	10.0
MW-31 (2)	3/30/2015	15	2,000	133	15.0	15.0
MW-32 (2)	3/31/2015	15	2,000	133	11.0	11.0
MW-33 (2)	4/2/2015	15	1,980	132	10.5	10.5
MW-34 (2)	3/31/2015	15	2,400	160	11.0	11.0
MW-35 (2)	3/31/2015	15	1,740	116	10.0	10.0
MW-36 (2)	3/31/2015	15	1,540	103	11.0	11.0
MW-37 (2)	3/31/2015	15	2,150	143	10.0	10.0
PAN-MW-9 (2)	4/1/2015	15	920	61	10.0	10.0
PAN-MW-10 (2)	4/1/2015	15	2,200	147	12.5	12.5

Notes:

ID = Identity

mL = Milliliter

TOC = Well Top of Casing

* During well purging, the Teflon-lined tubing was lowered as needed when the water level fell to the depth of the intake, causing air to be recovered.

Table 4-3: Groundwater Natural Attenuation Parameters
VOPAK Terminal Savannah, Savannah, Georgia

Well ID # (Well Diameter, in.)	Groundwater Quality Field Parameters					
	Temp (Celcius)	pH (SU)	ORP (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
IW-1R (1)	25.2	4.14	102	0.52	4.6	0.39
IW-18 (1)	25.23	5.14	-2	0.736	157.0	0.61
LAW-PZ-8R (1)	23.36	5.53	-36	0.813	116.0	0.31
MW-14 (2)	19.43	7.01	-75	0.477	0.0	1.62
MW-16 (1)	21.50	5.55	5	0.489	0.0	0.64
MW-17R (1)	28.74	5.93	-50	0.405	3.3	0.76
MW-18R (1)	16.71	3.91	291	0.300	24.8	1.90
MW-19 (1)	17.38	6.33	-28	1.060	0.0	0.90
MW-23 (1)	18.61	6.33	35	1.040	41.9	0.75
MW-24R (1)	16.43	4.60	56	0.468	0.0	0.90
MW-25 (1)	19.24	6.00	-79	0.693	10.1	0.70
MW-26R (1)	21.84	5.57	7	0.621	15.7	0.83
MW-27 (1)	22.93	6.15	51	0.391	0.0	1.00
MW-28 (1)	18.22	6.30	203	0.390	0.0	1.83
MW-29 (0.75)	21.22	4.44	43	1.240	79.0	0.62
MW-30 (2)	22.87	4.14	111	0.286	0.0	0.43
MW-31 (2)	21.51	6.52	33	0.864	0.0	0.63
MW-32 (2)	23.48	6.47	-38	0.719	27.5	1.47
MW-33 (2)	23.61	4.97	45	0.399	41.1	0.48
MW-34 (2)	20.11	4.33	201	0.178	0.0	1.03
MW-35 (2)	23.39	6.58	-132	0.616	0.0	0.73
MW-36 (2)	24.81	6.38	-128	1.370	0.0	0.79
MW-37 (2)	17.42	5.31	40	0.324	0.0	0.71
PAN-MW-9 (2)	17.62	4.75	24	0.602	5.4	0.76
PAN-MW-10 (2)	18.42	5.68	143	0.541	0.0	2.33

Notes:
Field parameters were recorded by EIC from 10/13/2014 to 10/17/2014 after parameters had stabilized and prior to sample collection.
Parameters were measured with a Horiba U-52 Water Quality Meter with a Flow-Through Cell.
ID= Identity
SU= Standard Unit
mV= Millivolts
mS/cm= Microsiemens per centimeter
NTU= Nephelometric Turbidity Unit
mg/L= Milligrams per liter

Table 4-4: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Terminal Savannah, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
IW-1R	Apr-14	310		210		13,000		640		130		300		2,900		25,000	
	Oct-14	170		190		11,000		450		130	J	320		2,200		19,000	
	Apr-15	310		150	J	9,900		440		110	J	260		2,300		17,000	
IW-18	Oct-11	55		58		4,400		220		36		7.3	J	38		93	
	Jan-12	48	J	43	J	4,800		230		29	J	<50		33	J	86	
	Apr-12	44	J	46	J	4,500		210		25	J	<50		24	J	55	J
	Jul-12	31	J	33	J	4,500		160		21	J	<50		29	J	92	J
	Oct-12	36	J	37	J	5,200		320		24	J	<50		31	J	110	
	Jan-13	43	J	44	J	6,000		310		25	J	<50		40	J	170	
	Apr-13	42		37		6,000		410		26		13		49		270	
	Jul-13	27		31		5,900		770		30		21		110		1,000	
	Oct-13	29		26		6,400		670		26		12		56		510	
	Jan-14	19		28		5,300		1,900		60		24		100		810	
	Apr-14	39		34		7,400		1,100		73		35		220		1,900	
	Oct-14	11	J	12	J	2,900		1,500		170		28	J	130		1,100	
	Apr-15	<7.4		8.4	J	920		830		350		14		180		1,300	
LAW-PZ-8 / LAW-PZ-8R	Sep-97	50/500		NR		NR		350/<500		NS		NS		NS		NS	
	Dec-98	<1000		NR		NR		<1,000		<1000		<1000		4,300		5,600	
	Nov-99	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-99	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-00	<250		<250		1,800		890		<250		<250		5,100		59,000	
	Jun-01	<1200		<1200		3,900		670		69	J	220	J	5,700		64,000	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	70	J	18	J	350		120		42	J	<100		3,700		42,000	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	300		<100		31,000		1,700		190		1,200		6,100		84,000	
	Dec-06	240		72		12,000		630		47		410		3,000		41,000	
	Mar-07	<250		<250		16,000		1,200		<500		760		5,000		70,000	
	Sep-07	240		<100		18,000		1,200		310		720		4,400		54,000	
	May-08	380		34		6,900		660		450		330		6,500		94,000	
	Dec-08	570		52		4,600		360		290		290		4,900		55,000	
	Apr-09	510		<250		<250		560		320		280		3,800		48,000	
	Sep-09	99		34		4,500		470		390		260		4,100		47,000	
	Apr-10	240		49		5,100		480		NS		NS		NS		NS	
	Oct-11	150		28	J	22,000		1,500		1,600		1,100		8,000		73,000	
	Jan-12	130	J	<500		17,000		1,600		1,700		930		7,500		88,000	
	Apr-12	99	J	<500		17,000		1,800		2,300		1,100		7,500		110,000	
	Jul-12	110	J	<500		16,000		1,200		2,000		820		7,100		91,000	
	Oct-12	83		<500		8,000		870		1,300		530		7,300		100,000	
	Jan-13	99		<500		13,000		1,100		2,000		800		7,500		100,000	
	Apr-13	71		12		9,100		960		1,400		570		7,200		110,000	
	Jul-13	30		5.6	J	11,000		990		1,900		650		7,600		110,000	
	Oct-13	44		8.5	J	8,500		830		1,500		510		6,800		110,000	
	Jan-14	38		<1.9		7,200		980		1,200		370		4,000		88,000	
	Apr-14	22		8.6	J	7,400		840		1,200		400		4,900		58,000	
	Oct-14	<150		<130		15,000		1,900		3,400		1,100		13,000		180,000	
	Apr-15	<740		<480		4,100		<500		1,100		<480		6,900		87,000	

Table 4-4: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Terminal Savannah, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-14	Feb-91	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-91	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-96	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-97	33		NR		NR		<5		NS		NS		NS		NS	
	Dec-98	<1		NR		NR		<1		<1		<1		**2.9**		**1.4**	
	Nov-99	<5		<5		<2		<2		NS		NS		NS		NS	
	Dec-99	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-00	<1		<1		<1		<1		<1		<1		<1		<2	
	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	<5		<5		<5		<2		<10		<5		<5		<5	
	Oct-06	<2		<2		<2		<2		<2		<2		<2		<5	
	Dec-06	<2		<2		<2		<2		<2		<2		<2		<5	
	Mar-07	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	<2		<2		<2		<2		NS		<2		<2		<5	
	Dec-08	<5		<5		<5		<2		<5		<5		<5		<5	
	Apr-09	<5		<5		<5		<2		<5		<5		<5		<5	
	Sep-09	<2		<2		<2		<2		<2		<2		<2		<2	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-13	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-13	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		**3.5**		<0.19		<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.11		<0.33		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	
MW-15*	Feb-91	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-91	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-96	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-97	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-98	NS		NS		NS		NS		NS		NS		NS		NS	
	Nov-99	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-99	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-00	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	5.3		**14**		<5		NS		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	<5		<5		<5		<2		<10		<5		<5		<5	
	Oct-06	<2		<2		<2		<2		<2		<2		<2		<5	
	Dec-06	12		**12**		**4**		<2		<2		<2		<2		<5	
	Mar-07	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-07	<3		**4**		**3**		<2		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	<5		<5		<5		<2		<5		<5		<5		<5	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	<5		<5		<5		17		NS		NS		NS		NS	
	Apr-11	69		39		2,200		150		34		**8.3**	**J**	**26**		**86**	

Table 4-4: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Terminal Savannah, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-16	Oct-00	NS		<1		110		2.2		<1		<1		<1		<2	
	Jun-01	<5		<5		41		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		33		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	<5		<5		36		<2		<10		<5		<5		<5	
	Oct-06	<2		12		120		4		<2		<2		<2		7	
	Dec-06	<2		24		120		8		<2		<2		<2		<5	
	Mar-07	9		71		320		25		<10		<5		<5		<5	
	Sep-07	<2		<2		260		63		<2		<2		<2		<5	
	May-08	<2		<2		61		53		<2		<2		6		<5	
	Dec-08	<5		<5		60		49		<5		<5		<5		<5	
	Apr-09	<5		<5		78		82		<5		<5		<5		<5	
	Sep-09	<2		4.1		78		69		<2		<2		<2		<5	
	Apr-10	<5		<5		89		83		NS		NS		NS		NS	
	Oct-11	0.57	J	0.66	J	160		77		0.52	J	<1		0.3	J	1.9	J
	Jan-12	0.67	J	0.94	J	130		85		0.44	J	0.42	J	0.12	J	1.3	J
	Apr-12	<1		0.94	J	140		200		0.74	J	0.33	J	1.7		21	
	Jul-12	0.28	J	0.63	J	87		48		0.41	J	<1		0.23	J	1.1	J
	Oct-12	<2		0.37	J	200		94		<2		<2		0.52	J	1.7	J
	Jan-13	<1		<1		120		78		0.27	J	<1		0.49	J	1.4	J
	Apr-13	<0.22		0.6	J	140		85		0.42	J	0.24	J	2.1		8	
	Jul-13	<0.16		<0.19		320		100		<0.16		<0.14		<0.19		<0.20	
	Oct-13	0.58	J	1.1		110		86		0.83		<0.14		1.2		5.6	
	Jan-14	<0.16		<0.19		170		180		1.5		<0.14		<0.19		<0.20	
	Apr-14	<0.16		1.1		310		160		2		<0.14		8.3		4.1	
	Oct-14	<0.15		0.34	J	130		81		1.3		<0.33		<0.11		<0.20	
	Apr-15	<1.5		6		210		120		2.7		<0.96		3.4		1.3	J
MW-17/ MW-17R	Oct-00	NS		<1		<1		<1		<1		<1		<1		<2	
	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	<5		<5		<5		<2		<10		<5		<5		<5	
	Jul-04	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-04	<5		<5		<5		<2		<10		5		<5		<5	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	<5		<5		<5		<2		<10		<5		<5		<5	
	Oct-06	<5		<5		<5		<2		<10		8		<5		<5	
	Dec-06	<2		<2		<2		<2		<2		<2		7		<5	
	Mar-07	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	<2		<2		<2		<2		<2		<2		4		27	
	Dec-08	<5		<5		<5		<2		<5		<5		<5		<5	
	Apr-09	<5		<5		<5		<2		<5		<5		<5		<5	
	Sep-09	<2		<2		<2		<2		<2		<2		<2		<5	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	<1		<1		0.2	J	<1		0.39	J	<1		0.55	J	<2	
	Jan-12	<1		<1		<1		<1		0.44	J	0.35	J	1.5		0.65	J
	Apr-12	<1		0.13	J	2.8		0.19	J	0.48	J	<1		0.7	J	0.22	J
	Jul-12	1.3		1.2		9.2		<1		0.29	J	<1		0.62	J	0.28	J
	Oct-12	16		5.2		13		<1		<1		<1		1.4		0.5	J
	Jan-13	<1		<1		<1		<1		<1		<1		0.84	J	<2	
	Apr-13	4.1		1.3		1.6		<0.30		0.18	J	<0.15		1.2		0.33	J
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		1.5		<0.20	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		0.83	J	<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		0.95	J	<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.33		0.66	J	<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		0.79	J	<0.23	

Table 4-4: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Terminal Savannah, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-18/ MW18R	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	<1		<1		<1		<1		<1		<1		**2**		**22**	
	Mar-04	<5		<5		<5		<2		<10		<5		<5		<5	
	Jul-04	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-04	<5		<5		<5		<2		<10		<5		<5		<5	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	<5		<5		<5		<2		<10		<5		<5		<5	
	Oct-06	<5		<5		<5		<2		<10		<5		<5		<5	
	Dec-06	<2		<2		<2		<2		<2		<2		<2		<5	
	Mar-07	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	<2		<2		<2		<2		<2		<2		**2**		**16**	
	Dec-08	<5		<5		<5		<2		<5		<5		<5		<5	
	Apr-09	<5		<5		<5		<2		<5		<5		<5		<5	
	Sep-09	<2		<2		<2		<2		<2		<2		<2		<5	
	Apr-10	<5		<5		<5		<2		NS		NS		NS		NS	
	Oct-11	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jul-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Oct-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-13	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-13	<0.22		<0.20		<0.13		<0.30		<0.18		<0.15		<0.097		<0.31	
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	
MW-19	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		NS		NS		NS		NS	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	<5		<5		<5		<2		<5		<5		<5		<5	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	<5		<5		<5		<2		NS		NS		NS		NS	
	Oct-11	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-12	<1		<1		**0.22**	**J**	<1		<1		<1		**1.7**		**12**	
	Jul-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Oct-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-13	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-13	<0.22		<0.20		**0.14**	**J**	<0.30		<0.18		<0.15		**0.21**	**J**	**0.41**	**J**
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	

Table 4-4: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Terminal Savannah, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-20	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	NS		NS		NS		NS		NS		NS		NS		NS	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-15	NL		NL		NL		NL		NL		NL		NL		NL	
MW-21	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	120		**1.8**		<1		<1		<1		<1		**4.2**		**38**	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	<2		<2		<2		<2		<2		<2		<2		<5	
	Aug-05	<5		<5		<5		<2		<5		<5		<5		<5	
	Jun-06	12		<5		<5		<2		<10		<5		<5		<5	
	Oct-06	<2		<5		<2		<2		<2		<2		<2		<5	
	Dec-06	<2		<2		<2		<2		<2		<2		<2		<5	
	Mar-07	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-15	NL		NL		NL		NL		NL		NL		NL		NL	

Table 4-4: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Terminal Savannah, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-22/ MW-22R	Jun-01	8,700		900		3,100		380		<500		<500		600		83	J
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	1,000		480		930		<100		<250		<250		<250		<500	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	7,600		700		2,300		210		<10		<5		2,300		<50	
	Jul-04	7,000		71		310		36		<10		<5		14		<22	
	Sep-04	7,200		<250		610		<100		<500		<250		<250		<250	
	May-05	5,700		220		840		<100		<100		<100		<100		<250	
	Aug-05	2,400		47		240		37		<5		<5		<5		10	
	Jun-06	680		71		3,300		140		<250		<130		150		<130	
	Oct-06	2,600		<130		490		89		<250		<130		<130		<130	
	Dec-06	3,200		60		480		100		<2		<2		20		18	
	Mar-07	3,400		<130		730		100		<250		<130		<130		<130	
	Sep-07	NS		NS		NS		NS		NS		NS		NS		NS	
	May-08	6,900		89		930		270		2		<2		10		26	
	Dec-08	4,400		100		2,100		300		<5		<5		7		12	
	Apr-09	1,900		88		1,700		280		<5		<5		11		22	
	Sep-09	3,000		88		1,000		220		4.1		<2		9.2		12	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	NU		NU		NU		NU		NU		NU		NU		NU	
	Jan-12	NU		NU		NU		NU		NU		NU		NU		NU	
	Apr-12	NU		NU		NU		NU		NU		NU		NU		NU	
	Jul-12	NU		NU		NU		NU		NU		NU		NU		NU	
	Oct-12	NU		NU		NU		NU		NU		NU		NU		NU	
	Jan-13	NU		NU		NU		NU		NU		NU		NU		NU	
	Apr-13	NU		NU		NU		NU		NU		NU		NU		NU	
	Jul-13	NU		NU		NU		NU		NU		NU		NU		NU	
	Oct-13	NU		NU		NU		NU		NU		NU		NU		NU	
	Jan-14	NU		NU		NU		NU		NU		NU		NU		NU	
	Apr-14	NU		NU		NU		NU		NU		NU		NU		NU	
	Oct-14	NU		NU		NU		NU		NU		NU		NU		NU	
	Apr-15	NU		NU		NU		NU		NU		NU		NU		NU	
MW-23	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	760		2,300		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	<2		<2		<5		<2		<5		<5		<5		<5	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	<5		<5		<5		<2		NS		NS		NS		NS	
	Oct-11	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jul-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Oct-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-13	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-13	<0.22		<0.20		<0.13		<0.30		<0.18		<0.15		0.23	J	0.42	J
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	

Table 4-4: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Terminal Savannah, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-24/ MW-24R	Nov-01	400		95		240		50		<12		<12		<12		<25	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	97		51		100		22		52		<10		<10		<20	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	1,300		180		500		49		11		<5		5		28	
	Oct-06	580		150		590		33		<20		<20		<20		<50	
	Dec-06	1,110		680		990		68		13		<2		10		35	
	Mar-07	130		200		770		17		14		<5		<5		12	
	Sep-07	62		37		820		20		12		<2		2		7	
	May-08	130		24		82		9		16		<2		<2		11	
	Dec-08	110		25		340		12		15		<5		<5		<5	
	Apr-09	93		22		240		18		12		<5		<5		<5	
	Sep-09	57		20		120		47		10		<2		<2		<5	
	Apr-10	35		10		150		<2		NS		NS		NS		NS	
	Oct-11	12		5.8		180		25		10		<5		1.4	J	4.2	J
	Jan-12	7.5		3.9		160		16		8.2		0.4	J	0.98	J	11	
	Apr-12	6.8		4.7		230		7.4		11		1.8	J	16		230	
	Jul-12	6.7		3.6		220		9.2		7.6		<2		<2		<4	
	Oct-12	6		3.4	J	320		54		8.1		<5		3.4	J	20	
	Jan-13	3	J	2.1	J	410		71		6.9		<5		4	J	22	
	Apr-13	3.5		2.8		540		64		6.2		0.71	J	4.4		26	
	Jul-13	5.3		5.4		800		140		8.2		1.2		11		58	
	Oct-13	3.3		2.2		450		43		6		0.41	J	0.79	J	6.3	
	Jan-14	2.6		4.4		570		<0.19		6.1		<0.14		<0.19		2.7	
	Apr-14	2		1.8		500		<0.19		5.8		0.48	J	0.45	J	2	
	Oct-14	1.7	J	<0.65		360		38		5.6		<1.7		1.3	J	<1.0	
	Apr-15	<3.7		<2.4		300		16		3.9	J	<2.4		<1.7		<1.2	
MW-25	Nov-01	<5		<5		<5		<10		<5		<5		<5		<10	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	<5		<2		<5		<5		<5		<5		<5		<5	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	<5		<5		<5		<2		NS		NS		NS		NS	
	Oct-11	<1		<1		<1		<1		<1		<1		0.72	J	8.7	
	Jan-12	<1		<1		0.21	J	<1		<1		<1		<1		<2	
	Apr-12	0.27	J	<1		0.57	J	<1		<1		<1		3.2		20	
	Jul-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Oct-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-13	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-13	<0.22		<0.20		<0.13		<0.30		<0.18		<0.15		<0.097		<0.31	
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	

Table 4-4: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Terminal Savannah, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-26/ MW-26R	Nov-01	2,400		100		1,100		210		<100		<100		<100		<200	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	300		14		180		38		NS		NS		NS		NS	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	120		8		120		28		17		<2		<2		<5	
	Aug-05	420		22		210		47		35		<5		<5		6	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	<2		2		2,800		330		16		45		380		2,700	
	Dec-06	6		4		5,100		560		20		83		1,500		13,000	
	Mar-07	<5		<5		2,600		580		17		45		1,100		6,900	
	Sep-07	<2		<2		240		240		9		4		71		250	
	May-08	5		<2		410		83		12		10		260		1,300	
	Dec-08	<5		<5		14		19		<5		5		23		120	
	Apr-09	<5		<5		200		76		14		21		310		2,700	
	Sep-09	<2.		<2		150		62		4.4		3.8		63		380	
	Apr-10	<5		<5		93		48		NS		NS		NS		NS	
	Oct-11	<1		0.89	J	43		34		7.2		1.4		35		110	
	Jan-12	<25		5	J	390		130		29		59		650		6,100	
	Apr-12	<25		5.5	J	350		140		22	J	54		610		7,200	
	Jul-12	<5		<5		43		40		21		15		270		2,000	
	Oct-12	<50		<50		210		63		35	J	37	J	390		4,200	
	Jan-13	27	J	21	J	1,500		220		64		140		2,000		2,400	
	Apr-13	5	J	3.2	J	340		94		56		40		650		8,300	
	Jul-13	<1.6		<1.9		19		12		75		18		450		5,500	
	Oct-13	<1.6		<1.9		150		53		33		10	J	160		2,300	
	Jan-14	<1.6		<1.9		68		<1.9		110		11		200		7,200	
	Apr-14	44		<1.9		16		11		110		<1.4		64		5,600	
	Oct-14	<0.75		4.1	J	7.2		7.3		19		<1.1		25		400	
	Apr-15	<74		<48		<41		<50		180		63	J	760		11,000	
MW-27	Nov-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	3		2		350		5		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	<5		<5		40		22		<5		<5		<5		<5	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	<5		<5		<5		92		NS		NS		NS		NS	
	Oct-11	0.86	J	1.6	J	8.3		200		0.63	J	<2		0.29	J	3.4	J
	Jan-12	0.17	J	0.42	J	1.8		19		<1		<1		<1		<2	
	Apr-12	0.26	J	0.4	J	1.7		15		<1		<1		<1		<2	
	Jul-12	<1		0.26	J	1.4		21		<1		<1		<1		<2	
	Oct-12	<1		0.33	J	1.1		16		<1		<1		<1		<2	
	Jan-13	0.36	J	0.88	J	2.1		20		<1		<1		<1		<2	
	Apr-13	<0.22		0.33	J	1	J	6.5		<0.18		<0.15		0.35	J	3.9	
	Jul-13	<0.16		0.8	J	2.6		18		<0.16		<0.14		<0.19		<0.20	
	Oct-13	<0.16		<0.19		<0.21		2.9		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		2.1		13		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		1.9		9.7		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		2.2		12		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		0.79	J	4.7		<0.43		<0.48		<0.33		<0.23	

Table 4-4: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Terminal Savannah, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-28	Oct-02	<5		<5		<5		<2		<5		<5		<5		<10	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	NS		NS		NS		NS		NS		NS		NS		NS	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-14	2.3		**0.44**	**J**	**14**		3.4		**0.82**	**J**	<0.33		**0.27**	**J**	**2.2**	
	Apr-15	5.8		**1.1**		**33**		8.1		**1.6**		<0.48		<0.33		<0.23	
MW-29	Oct-06	1,500		340		1,500		24		**2**		<2		**67**		**51**	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	2,300		320		1,700		64		**3**		<2		**63**		**57**	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	1,100		320		2,100		74		<5		<5		**35**		**98**	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	500		300		3,200		150		NS		NS		NS		NS	
	Oct-11	180		72		2,300		220		<20		<20		1,300		2,800	
	Jan-12	200		77		2,500		280		<20		<20		1,100		2,500	
	Apr-12	100		62		1,900		200		**6.3**	**J**	**7.6**	**J**	950		2,100	
	Jul-12	110		54		1,900		230		**6.8**	**J**	<20		**510**		1,000	
	Oct-12	71		44		1,600		110		<20		<20		**200**		**370**	
	Jan-13	110		41		1,300		140		**6**	**J**	**6.7**	**J**	1,300		2,900	
	Apr-13	130		76		2,500		490		11		**4.1**		750		1,500	
	Jul-13	120		69		2,800		460		15		**5.4**	**J**	800		1,700	
	Oct-13	140		66		6,100		760		20		**10**	**J**	1,200		2,500	
	Jan-14	330		110		5,900		790		23		**20**		3,100		6,600	
	Apr-14	200		150		8,400		880		25		**21**		1,900		4,000	
	Oct-14	74		55		4,300		660		<13		**21**	**J**	1,800		4,300	
	Apr-15	160		90		5,900		790		<22		**25**	**J**	3,300		7,300	
MW-30	Oct-11	0.51	**J**	**0.55**	**J**	**13**		**2.9**		**0.55**	**J**	<1		<1		<2	
	Jan-12	0.18	**J**	**0.46**	**J**	**13**		3.1		**0.47**	**J**	<1		<1		**0.58**	**J**
	Apr-12	0.19	**J**	**0.43**	**J**	**9.4**		**2.6**		**0.44**	**J**	<1		<1		<2	
	Jul-12	0.45	**J**	**0.45**	**J**	**7.7**		**2.4**		**0.43**	**J**	<1		<1		<2	
	Oct-12	<1		**0.4**	**J**	**11**		3.6		**0.54**	**J**	<1		<1		<2	
	Jan-13	0.2	**J**	**0.38**	**J**	**9.4**		3.1		**0.54**	**J**	<1		<1		<2	
	Apr-13	0.32	**J**	**0.32**	**J**	**7.8**		4.5		**0.85**	**J**	<0.15		<0.097		<0.31	
	Jul-13	<0.16		<0.19		**11**		<0.19		**1.8**		<0.14		<0.19		**2.6**	
	Oct-13	<0.16		<0.19		**6.2**		**2.5**		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		**5.6**		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	0.4	**J**	**0.4**	**J**	**5**		<0.19		**0.48**	**J**	<0.14		**1**	**J**	**2.2**	
	Oct-14	0.39	**J**	<0.13		**2.3**		**1.2**		**0.35**	**J**	<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		**1.7**		**0.88**	**J**	<0.43		<0.48		<0.33		**1.3**	
MW-31	Oct-11	<1		<1		<1		<1		<1		<1		<1		**0.24**	**J**
	Jan-12	<1		<1		<1		<1		<1		<1		<1		**0.21**	**J**
	Apr-12	<1		<1		<1		<1		<1		<1		**0.33**	**J**	**2.4**	
	Jul-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Oct-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-13	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-13	<0.22		<0.20		<0.13		<0.30		<0.18		<0.15		<0.097		<0.31	
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-13	NA		NA		NA		NA		NA		NA		NA		NA	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		**0.43**	**J**	<0.18		<0.25		<0.33		**0.33**	**J**	<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	

Table 4-4: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Terminal Savannah, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-32	Oct-11	7.2	J	11		1,500		35		<10		<10		31		35	
	Jan-12	130		61		2,100		53		<20		<20		45		56	
	Apr-12	210		100		2,000		54		<20		<20		28		22	J
	Jul-12	200		140		1,100		40		<10		<10		17		16	J
	Oct-12	1,700		470		1,700		110		<10		<10		54		26	
	Jan-13	2,800		530		940		93		<20		<20		61		27	J
	Apr-13	2,800		520		980		120		0.94	J	2.8		75		42	
	Jul-13	2,200		570		750		96		<1.6		<1.4		66		40	
	Oct-13	6,200		1,300		1,600		220		<1.6		7.2	J	160		110	
	Jan-14	6,500		1,300		1,600		230		<1.6		<1.4		180		170	
	Apr-14	6,000		1,500		2,200		230		<1.6		<1.4		200		130	
	Oct-14	1,900		680		1,100		100		8.3	J	<6.6		36		29	J
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.42		<0.33		<0.23	
MW-33	Oct-11	5,200		3,200		16,000		840		<200		<200		370		2,200	
	Jan-12	1,100		190		4,100		370		<50		<50		94		450	
	Apr-12	13		11		1,800		390		12		9.3	J	46		390	
	Jul-12	40	J	35	J	3,000		290		<50		<50		34	J	88	J
	Oct-12	37		35		2,300		330		<20		<20		28		70	
	Jan-13	5.9		9.9		390		130		1.7	J	2.3		7.3		15	
	Apr-13	1.2		4.7		380		130		1.3		1.5		5.3		12	
	Jul-13	15		5.1	J	500		220		<1.6		<1.4		8.9	J	24	
	Oct-13	1.2		4.8		800		480		1.8		2		9		26	
	Jan-14	<1.6		<1.9		340		300		<1.6		<1.4		16		40	
	Apr-14	<1.6		8.4	J	360		140		<1.6		<1.4		7	J	25	
	Oct-14	1.2	J	9.7		390		440		<1.3		3.5	J	9.4		37	
	Apr-15	<0.74		2.8		150		100		1.7		1.7		3.1		11	
MW-34	Oct-11	2.2		1.7		44		14		1.6		<1		<1		<2	
	Jan-12	13		4.4		80		8.8		3.6		<1		<1		<2	
	Apr-12	4.3		2.2		64		16		2.3		<1		<1		<2	
	Jul-12	2.3		1.3		35		7.8		1.3		<1		<1		<2	
	Oct-12	4.9		1.8		45		8.6		1.8		<1		<1		<2	
	Jan-13	8.6		2.5		43		8.4		1.9		<1		<1		<2	
	Apr-13	2.7		0.91	J	19		5.7		0.76	J	<0.15		<0.097		<0.31	
	Jul-13	3		1	J	24		0.19		1.1		<0.14		<0.19		<0.20	
	Oct-13	6.1		3.1		36		9.8		1.3		<0.14		<0.19		<0.20	
	Jan-14	2.4		<0.19		14		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	0.51	J	<0.19		4.2		<0.19		0.26	J	<0.14		<0.19		<0.20	
	Oct-14	1.1		0.23	J	5.1		1.8		<0.25		<0.33		0.17	J	<0.20	
	Apr-15	2.7		0.52	J	9.9		2.6		0.47	J	<0.48		<0.33		<0.23	
MW-35	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		0.16	J	<0.18		<0.25		<0.33		0.11	J	<.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	
MW-36	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		0.33	J	<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		0.6	J	<0.18		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		0.59	J	<0.50		<0.43		<0.48		<0.33		<0.23	
MW-37	Jan-14	30		16		860		130		14		<0.14		<0.19		1.9	
	Apr-14	22		11		690		<0.19		16		<0.14		1.8		3.8	
	Oct-14	36		12		370		93		10		0.91	J	0.83	J	2.4	J
	Apr-15	19		8.5		350		65		6.4		<0.96		<0.66		0.77	J

Table 4-4: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Terminal Savannah, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
PAN-MW-9	Feb-91	14,000		350		< 5		< 30		NS		NS		NS		NS	
	Jul-91	9,200		430		< 5		< 30		NS		NS		NS		NS	
	Jun-96	3,040		< 2500		< 2,500		< 2500		NS		NS		NS		NS	
	Sep-97	8,100		NR		NR		< 500		NS		NS		NS		NS	
	Dec-98	7,400		NR		NR		< 250		< 250		< 250		2,400		5,200	
	Dec-99	9,100		< 1000		< 400		< 400		NS		NS		NS		NS	
	Oct-00	8,000		360		130		< 100		< 100		< 100		3,900		8,600	
	Jun-01	9,800		260	J	100	J	< 200		< 500		< 500		3,700		8,500	
	Aug-03	2,400		< 500		< 500		< 200		< 500		< 500		1,100		2,000	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	6,900		440		300		35		< 50		< 25		3,100		7,300	
	Jul-04	3,200		270		170		14		< 10		< 5		8,400		22,000	
	Sep-04	6,000		360		< 250		< 100		< 500		< 250		2,200		5,100	
	May-05	1,100		320		220		< 100		< 100		< 100		6,000		16,000	
	Aug-05	80		9		5		< 2		<2		< 5		60		150	
	Jun-06	1,600		480		550		< 40		< 200		< 100		730		1,800	
	Oct-06	1,500		300		990		< 40		< 200		< 100		990		2,600	
	Dec-06	1,900		640		600		23		< 2		< 2		1,800		4,900	
	Mar-07	600		370		680		< 40		< 200		< 100		4,500		12,000	
	Sep-07	1,500		450		880		< 40		< 40		< 40		1,900		5,400	
	May-08	510		190		590		18		< 2		3		8,800		24,000	
	Dec-08	540		150		500		25		< 5		< 5		3,900		11,000	
	Apr-09	460		150		780		< 40		< 100		< 100		2,400		6,300	
	Sep-09	440		150		730		49		< 10		< 10		2,300		6,100	
	Apr-10	710		140		530		93		NS		NS		NS		NS	
	Oct-11	350		1,100		780		62		< 50		< 50		1,900		4,200	
	Jan-12	690		770		820		55		< 20		< 20		2,000		5,800	
	Apr-12	280		1,300		1,100		45		< 20		< 20		1,900		5,500	
	Jul-12	37		1,200		1,300		65		< 25		< 25		890		2,600	
	Oct-12	210		1,200		1,800		110		< 25		< 25		1,800		4,900	
	Jan-13	540		480		1,200		69		< 25		< 25		1,100		3,500	
	Apr-13	240		500		1,400		120		2.8	J	3.4	J	1,000		3,700	
	Jul-13	55		790		1,200		88		< 1.6		< 1.4		760		2,200	
	Oct-13	29		440		2,500		76		1.1		1.5		1,000		2,600	
	Jan-14	17		300		2,100		190		< 1.6		< 1.4		1,100		2,700	
	Apr-14	22		190		2,000		140		<1.6		<1.4		960		2,400	
	Oct-14	17		35		1,900		130		4.4	J	<3.3		650		1,800	
	Apr-15	<7.4		4.9	J	2,000		130		5.2	J	<4.8		580		1,400	
PAN-MW-10	Feb-91	37		< 5		< 5		< 30		NS		NS		NS		NS	
	Sep-97	10		NR		NR		< 5		NS		NS		NS		NS	
	Dec-98	< 1		NR		NR		< 1		< 1		< 1		< 1		< 1	
	Nov-99	< 5		< 5		< 2		< 2		NS		NS		NS		NS	
	Oct-00	< 1		< 1		< 1		< 1		< 1		< 1		< 1		< 2	
	Jun-01	< 5		< 5		< 5		< 2		< 5		< 5		< 5		< 10	
	Aug-03	< 5		< 5		< 5		< 2		< 5		< 5		< 5		< 10	
	Sep-07	< 2		< 2		< 2		< 2		< 2		< 2		< 2		< 5	
	Apr-09	< 5		< 5		< 5		< 2		< 5		< 5		< 5		< 5	
	Apr-10	< 5		< 5		< 5		< 2		NS		NS		NS		NS	
	Oct-11	0.79	J	2.6		1.3		< 1		< 1		3.7		< 1		9.9	
	Jan-12	< 1		0.21	J	3.7		0.2	J	0.28	J	1.2		< 1		17	
	Apr-12	< 1		< 1		0.71	J	< 1		< 1		< 1		< 1		< 2	
	Jul-12	< 1		< 1		0.29	J	< 1		< 1		< 1		< 1		< 2	
	Oct-12	< 1		< 1		1.4		< 1		< 1		< 1		< 1		< 2	
	Jan-13	< 1		< 1		1.2		< 1		< 1		< 1		< 1		< 2	
	Apr-13	< 0.22		< 0.20		0.82	J	< 0.30		< 0.18		<0.097		< 0.15		< 0.31	
	Jul-13	< 0.16		< 0.19		< 0.21		< 0.19		< 0.16		<0.19		< 0.14		< 0.20	
	Oct-13	< 0.16		< 0.19		0.76		< 0.19		< 0.16		<0.19		< 0.14		< 0.20	
	Jan-14	< 0.16		< 0.19		1.3		< 0.19		< 0.16		<0.19		< 0.14		< 0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.19		<0.14		<0.20	
	Oct-14	<0.15		<0.13		0.34	J	<0.18		<0.25		<0.11		<0.33		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	

Notes:
0.79 = Concentration above Minimum Detection Limit (MDL)
39 = Concentration above RRS
NR = Not Reported by Laboratory
NS = Not Sampled
NL = Not Located
NU = Not Useable due to siltation
NA = Not Avaliable
All data prior to October 2011 tabulated by ERM

Table 4-5: Historical Groundwater Elevation Table
VOPAK Terminal Savannah, Savannah, Georgia

Well ID # (Well Diameter, in.)	Groundwater Potentiometric Surface Elevation (ft.)													MW Min.*	MW Max.*	MW Range*	MW Avg.*	MW Var.*
	Oct-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Jan-14	Apr-14	Oct-14	Apr-15					
IW-1R (1)	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NS	NS	NS	NA	NA	NA	NA	NA
IW-18 (1)	7.15	6.36	5.52	6.39	6.30	6.22	7.28	7.44	6.77	6.73	7.20	7.02	6.89	5.52	7.44	1.92	6.71	0.29
LAW-PZ-8R (1)	7.75	7.08	7.36	7.65	6.79	6.78	7.83	8.22	7.10	7.63	7.15	6.17	7.69	6.17	8.22	2.05	7.32	0.30
MW-14 (2)**[2]	NL	NL	NL	NL	NL	NL	NL	NL	3.65	2.14	2.27	2.80	2.38	2.14	3.65	1.51	2.65	0.37
MW-16 (1)	5.67	4.36	4.31	5.24	4.34	4.04	4.72	4.91	5.15	4.40	5.09	4.70	4.98	4.04	5.67	1.63	4.76	0.22
MW-17R (1)	3.93	2.49	3.59	4.34	4.86	4.79	5.15	5.32	5.21	5.32	5.95	4.58	4.96	2.49	5.95	3.46	4.65	0.81
MW-18R (1)	7.65	6.81	7.32	7.58	6.92	6.76	7.80	8.03	7.15	7.55	8.02	7.58	7.94	6.76	8.03	1.27	7.47	0.20
MW-19 (1)	8.11	7.29	7.91	7.98	7.78	7.17	7.97	8.12	7.53	7.86	8.55	7.95	8.22	7.17	8.55	1.38	7.88	0.14
MW-23 (1)	6.39	5.65	6.51	6.25	6.18	5.71	6.34	5.63	6.19	6.19	7.43	5.63	6.97	5.63	7.43	1.80	6.24	0.29
MW-24R (1)	5.86	5.30	5.80	5.60	5.39	5.22	5.92	5.00	5.49	5.91	6.44	6.16	6.36	5.00	6.44	1.44	5.73	0.20
MW-25 (1)	7.91	7.14	7.81	7.93	7.64	7.12	8.05	8.20	7.41	7.84	8.43	7.96	8.25	7.12	8.43	1.31	7.82	0.16
MW-26R (1)	7.39	6.48	7.17	7.21	6.58	6.41	7.44	8.09	7.88	7.48	8.00	7.67	7.47	6.41	8.09	1.68	7.33	0.31
MW-27 (1)	5.06	4.10	4.89	4.77	4.42	4.30	4.66	4.47	4.58	4.61	5.66	5.45	5.30	4.10	5.66	1.56	4.79	0.22
MW-28 (2)	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NS	NS	NA	NA	NA	NA	NA
MW-29 (0.75)	5.71	5.01	5.38	5.27	4.91	4.67	5.48	5.12	5.21	5.43	5.83	5.91	5.69	4.67	5.91	1.24	5.36	0.14
MW-30 (2)	6.28	5.60	5.99	6.09	5.75	5.29	6.18	6.27	6.76	6.23	6.63	6.28	6.18	5.29	6.76	1.47	6.12	0.16
MW-31 (2)	4.41	3.94	4.17	4.48	4.26	3.92	4.42	4.32	NG	4.47	5.05	5.11	5.19	3.92	5.19	1.27	4.48	0.18
MW-32 (2)	5.23	4.53	5.24	5.49	5.00	4.75	5.32	5.15	5.04	5.23	5.73	5.60	6.21	4.53	6.21	1.68	5.27	0.18
MW-33 (2)	6.54	5.67	6.17	5.90	5.05	5.07	6.60	6.41	7.07	6.24	7.02	6.48	6.58	5.05	7.07	2.02	6.22	0.41
MW-34 (2)	7.40	6.81	7.00	7.29	6.53	6.53	7.52	7.73	6.86	7.41	7.94	7.69	7.53	6.53	7.94	1.41	7.25	0.21
MW-35 (2)	NI	NI	NI	NI	NI	NI	NI	NI	NI	4.77	4.73	4.91	4.93	4.73	4.93	0.20	4.84	0.01
MW-36 (2)	NI	NI	NI	NI	NI	NI	NI	NI	NI	1.89	3.44	3.71	3.94	1.89	3.94	2.05	3.25	0.86
MW-37 (2)	NI	NI	NI	NI	NI	NI	NI	NI	NI	7.42	7.88	7.77	7.60	7.42	7.88	0.46	7.67	0.04
PAN-MW-10 (2)	3.45	2.47	2.94	3.51	3.19	3.35	3.43	3.82	3.53	3.50	4.13	4.37	6.10	2.47	6.10	3.63	3.68	0.76
PAN-MW-9 (2)	6.24	5.39	5.74	5.98	5.54	5.32	6.07	5.86	5.93	6.23	6.57	6.41	5.57	5.32	6.57	1.25	5.91	0.15
Event Min.*[3]	3.45	2.47	2.94	3.51	3.19	3.35	3.43	3.82	3.53	1.89	3.44	3.71	3.94	**Global Min.*[4]**		1.89		
Event Max.*[3]	8.11	7.29	7.91	7.98	7.78	7.17	8.05	8.22	7.88	7.86	8.55	7.96	8.25	**Global Max.*[4]**		8.55		
Event Range*[3]	4.66	4.82	4.97	4.47	4.59	3.82	4.62	4.40	4.35	5.97	5.11	4.25	4.31	**Global Range*[4]**		6.66		
Event Avg.*[3]	6.22	5.39	5.83	6.05	5.65	5.44	6.22	6.22	6.16	5.92	6.49	6.14	6.39	**Global Avg.*[4]**		6.01		
Event Var.*[3]	1.88	2.14	2.03	1.69	1.50	1.32	1.90	2.30	1.43	2.46	2.04	1.63	1.50	**Global Var.*[4]**		2.04		

Notes:

NI - Not Installed

NS - Not Surveyed, TOC elevation information is not available for well

NL - Not Located

NA - Not Applicable

NG - Not Gauged

*** = Event Min, Max, Range, Avg., and Var.** - are the minimum, maximum, range, average, and total variance for each respective groundwater gauging event.

*[2] = MW-14 is considered a deep well at the Site and is not considered for the shallow potentiometric surface at the Site

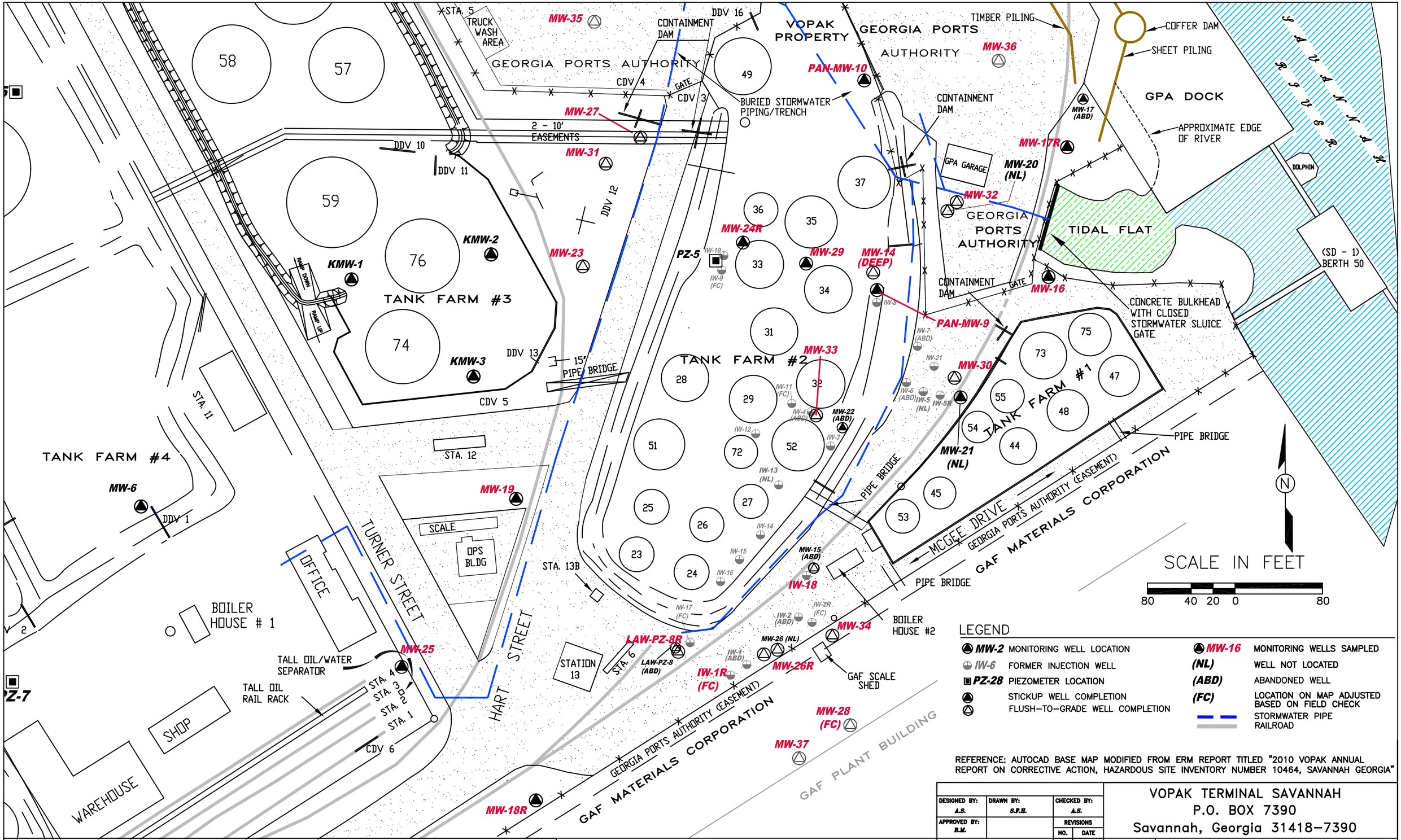
***[3] = MW Min., Max., Range, Avg., and Var.** - are the minimum, maximum, range, average, and total variance for each monitoring well throughout all gauging events from October 2011 to April 2015 where available.

***[4]= Global Min., Max., Range, Avg., and Var.** - are the minimum, maximum, range, average, and total variance for all monitoring wells throughout all events from October 2011 to April 2015

VOPAK TERMINAL SAVANNAH, SAVANNAH, GEORGIA

EIGHTH SEMI-ANNUAL PROGRESS REPORT

FIGURES



LEGEND

MW-2	MONITORING WELL LOCATION	MW-16	MONITORING WELLS SAMPLED
IW-6	FORMER INJECTION WELL	(NL)	WELL NOT LOCATED
PZ-28	PIEZOMETER LOCATION	(ABD)	ABANDONED WELL
	STICKUP WELL COMPLETION	(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
	FLUSH-TO-GRADE WELL COMPLETION		STORMWATER PIPE
			RAILROAD

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA"

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

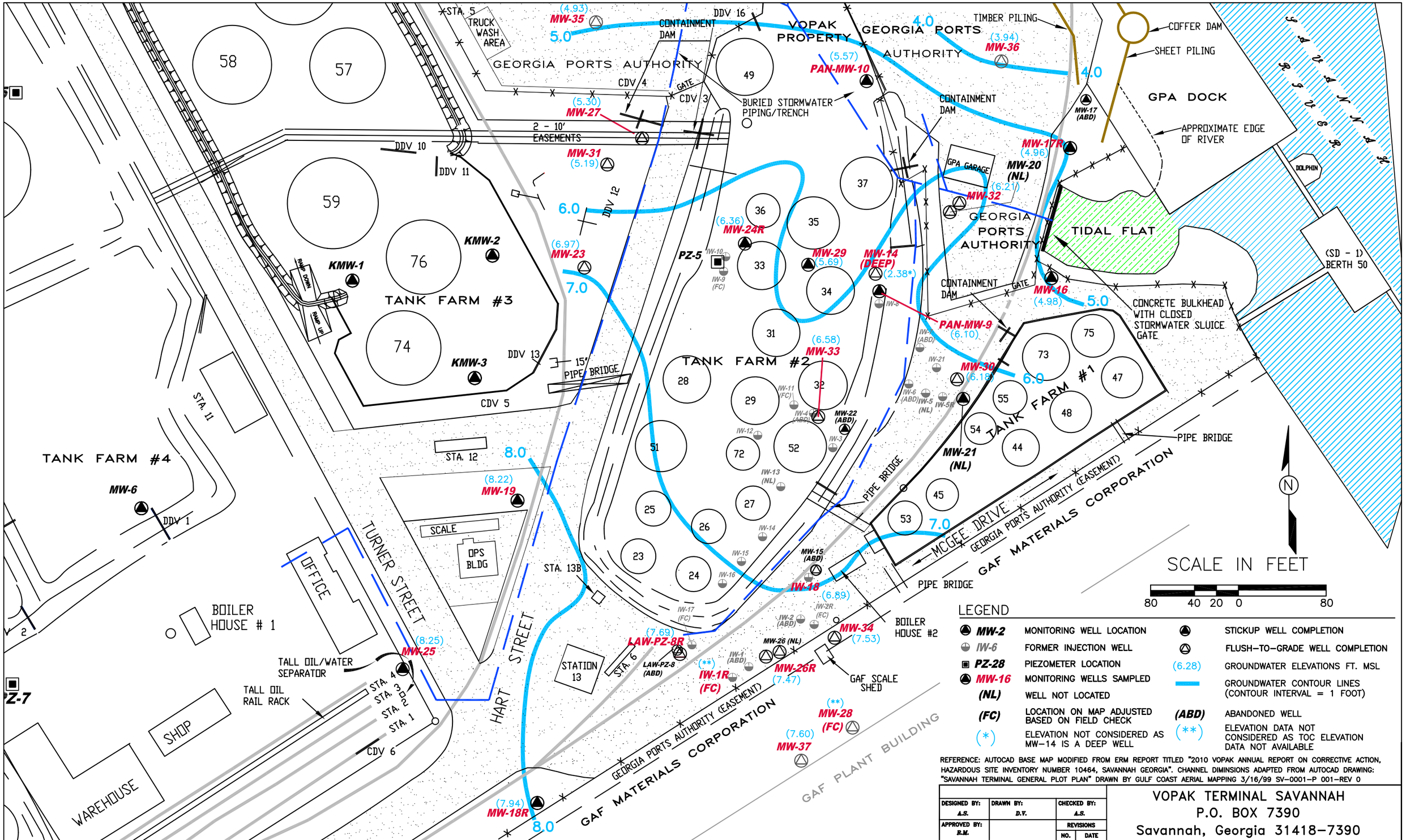
FIGURE 4-1:
MARCH 30 – APRIL 2 2015
SITE MAP

DESIGNED BY: A.S.	DRAWN BY: S.P.H.	CHECKED BY: A.S.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
SEAL:			

VOPAK TERMINAL SAVANNAH
P.O. BOX 7390
Savannah, Georgia 31418-7390

ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/06/2015	390020- GW MONITORING	



LEGEND

MW-2	MONITORING WELL LOCATION		STICKUP WELL COMPLETION
IW-6	FORMER INJECTION WELL		FLUSH-TO-GRADE WELL COMPLETION
PZ-28	PIEZOMETER LOCATION	(6.28)	GROUNDWATER ELEVATIONS FT. MSL
MW-16	MONITORING WELLS SAMPLED		GROUNDWATER CONTOUR LINES (CONTOUR INTERVAL = 1 FOOT)
(NL)	WELL NOT LOCATED	(ABD)	ABANDONED WELL
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK	(**)	ELEVATION DATA NOT CONSIDERED AS TOC ELEVATION DATA NOT AVAILABLE
(*)	ELEVATION NOT CONSIDERED AS MW-14 IS A DEEP WELL		

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.
GROUNDWATER POTENTIOMETRIC SUREFACE ELEVATIONS ARE IN NGVD29 DATUM

FIGURE 4-2
GROUNDWATER POTENTIOMETRIC SURFACE MAP
MARCH 30-APRIL 3, 2015

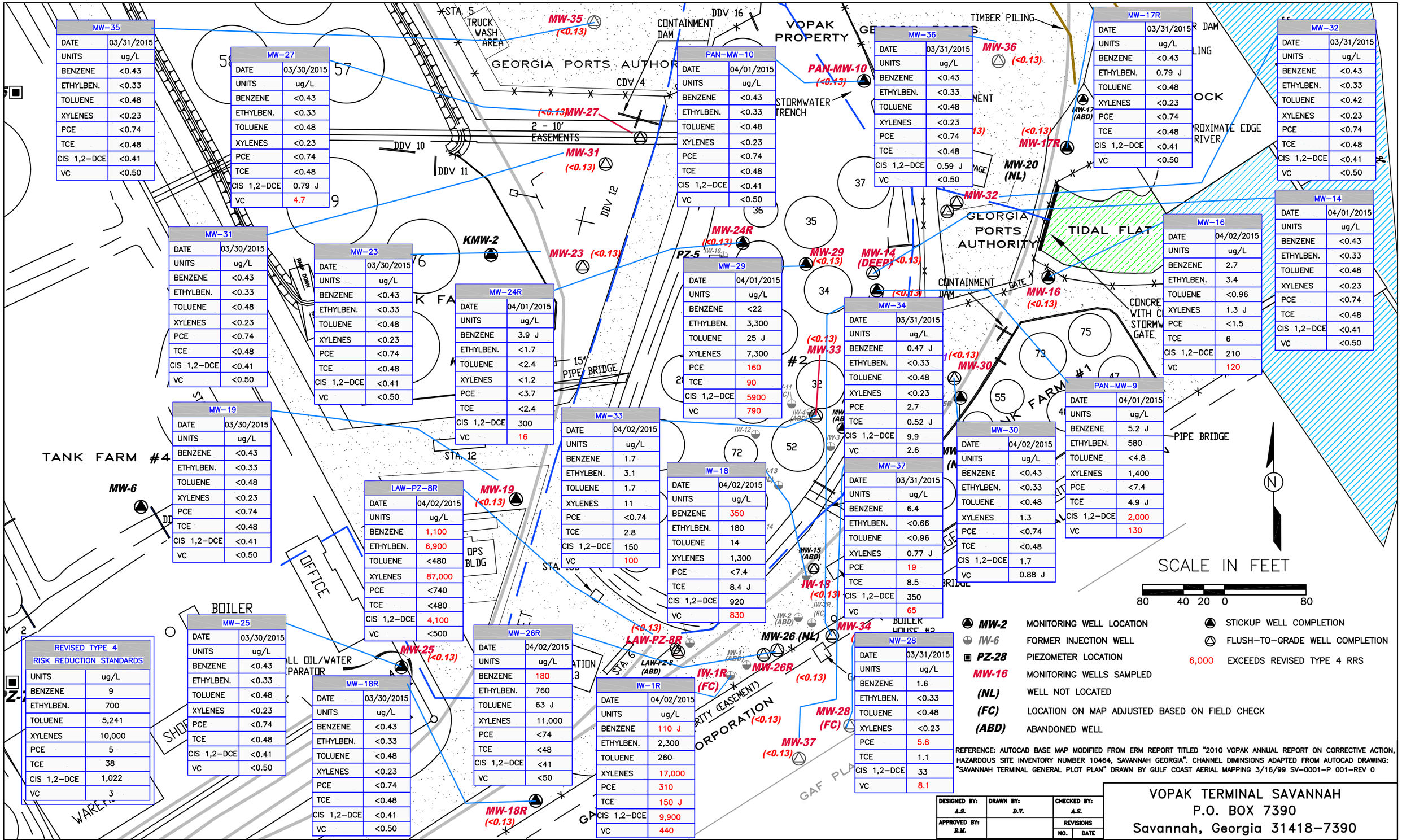
DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: A.S.
APPROVED BY: R.M.		REVISIONS NO. / DATE

SEAL:

VOPAK TERMINAL SAVANNAH
P.O. BOX 7390
Savannah, Georgia 31418-7390

ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE: SEE BAR SCALE | DATE: 4/7/2015 | FILE: 390020 - 7TH SEMI-ANNUAL RPT | SHEET NO.:



MW-35	
DATE	03/31/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	<0.41
VC	<0.50

MW-27	
DATE	03/30/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	0.79 J
VC	4.7

MW-31	
DATE	03/30/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	<0.41
VC	<0.50

MW-23	
DATE	03/30/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	<0.41
VC	<0.50

MW-24R	
DATE	04/01/2015
UNITS	ug/L
BENZENE	3.9 J
ETHYLBEN.	<1.7
TOLUENE	<2.4
XYLENES	<1.2
PCE	<3.7
TCE	<2.4
CIS 1,2-DCE	300
VC	16

PAN-MW-10	
DATE	04/01/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	<0.41
VC	<0.50

MW-29	
DATE	04/01/2015
UNITS	ug/L
BENZENE	<22
ETHYLBEN.	3,300
TOLUENE	25 J
XYLENES	7,300
PCE	160
TCE	90
CIS 1,2-DCE	5900
VC	790

MW-36	
DATE	03/31/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	0.59 J
VC	<0.50

MW-17R	
DATE	03/31/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	0.79 J
TOLUENE	<0.48
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	<0.41
VC	<0.50

MW-32	
DATE	03/31/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.42
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	<0.41
VC	<0.50

MW-14	
DATE	04/01/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	<0.41
VC	<0.50

MW-16	
DATE	04/02/2015
UNITS	ug/L
BENZENE	2.7
ETHYLBEN.	3.4
TOLUENE	<0.96
XYLENES	1.3 J
PCE	<1.5
TCE	6
CIS 1,2-DCE	210
VC	120

MW-34	
DATE	03/31/2015
UNITS	ug/L
BENZENE	0.47 J
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	2.7
TCE	0.52 J
CIS 1,2-DCE	9.9
VC	2.6

MW-37	
DATE	03/31/2015
UNITS	ug/L
BENZENE	6.4
ETHYLBEN.	<0.66
TOLUENE	<0.96
XYLENES	0.77 J
PCE	19
TCE	8.5
CIS 1,2-DCE	350
VC	65

MW-30	
DATE	04/02/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	1.3
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	1.7
VC	0.88 J

PAN-MW-9	
DATE	04/01/2015
UNITS	ug/L
BENZENE	5.2 J
ETHYLBEN.	580
TOLUENE	<4.8
XYLENES	1,400
PCE	<7.4
TCE	4.9 J
CIS 1,2-DCE	2,000
VC	130

MW-28	
DATE	03/31/2015
UNITS	ug/L
BENZENE	1.6
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	5.8
TCE	1.1
CIS 1,2-DCE	33
VC	8.1

MW-33	
DATE	04/02/2015
UNITS	ug/L
BENZENE	1.7
ETHYLBEN.	3.1
TOLUENE	1.7
XYLENES	11
PCE	<0.74
TCE	2.8
CIS 1,2-DCE	150
VC	100

IW-18	
DATE	04/02/2015
UNITS	ug/L
BENZENE	350
ETHYLBEN.	180
TOLUENE	14
XYLENES	1,300
PCE	<7.4
TCE	8.4 J
CIS 1,2-DCE	920
VC	830

LAW-PZ-8R	
DATE	04/02/2015
UNITS	ug/L
BENZENE	1,100
ETHYLBEN.	6,900
TOLUENE	<480
XYLENES	87,000
PCE	<740
TCE	<480
CIS 1,2-DCE	4,100
VC	<500

MW-19	
DATE	03/30/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	<0.41
VC	<0.50

MW-25	
DATE	03/30/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	<0.41
VC	<0.50

MW-18R	
DATE	03/30/2015
UNITS	ug/L
BENZENE	<0.43
ETHYLBEN.	<0.33
TOLUENE	<0.48
XYLENES	<0.23
PCE	<0.74
TCE	<0.48
CIS 1,2-DCE	<0.41
VC	<0.50

MW-26R	
DATE	04/02/2015
UNITS	ug/L
BENZENE	180
ETHYLBEN.	760
TOLUENE	63 J
XYLENES	11,000
PCE	<74
TCE	<48
CIS 1,2-DCE	<41
VC	<50

IW-1R	
DATE	04/02/2015
UNITS	ug/L
BENZENE	110 J
ETHYLBEN.	2,300
TOLUENE	260
XYLENES	17,000
PCE	310
TCE	150 J
CIS 1,2-DCE	9,900
VC	440

REVISED TYPE 4 RISK REDUCTION STANDARDS	
UNITS	ug/L
BENZENE	9
ETHYLBEN.	700
TOLUENE	5,241
XYLENES	10,000
PCE	5
TCE	38
CIS 1,2-DCE	1,022
VC	3

- MW-2 — MONITORING WELL LOCATION
- IW-6 — FORMER INJECTION WELL
- PZ-28 — PIEZOMETER LOCATION
- MW-16 — MONITORING WELLS SAMPLED
- (NL) — WELL NOT LOCATED
- (FC) — LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
- (ABD) — ABANDONED WELL
- STICKUP WELL COMPLETION
- FLUSH-TO-GRADE WELL COMPLETION
- 6,000 — EXCEEDS REVISED TYPE 4 RRS

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 4-3:
GROUNDWATER ANALYTICAL RESULTS
MARCH 30-APRIL 2, 2015

DESIGNED BY:	DRAWN BY:	CHECKED BY:
A.S.	D.V.	A.S.
APPROVED BY:		REVISIONS NO. / DATE
R.M.		

SEAL:

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ALPHARETTA GEORGIA 30009

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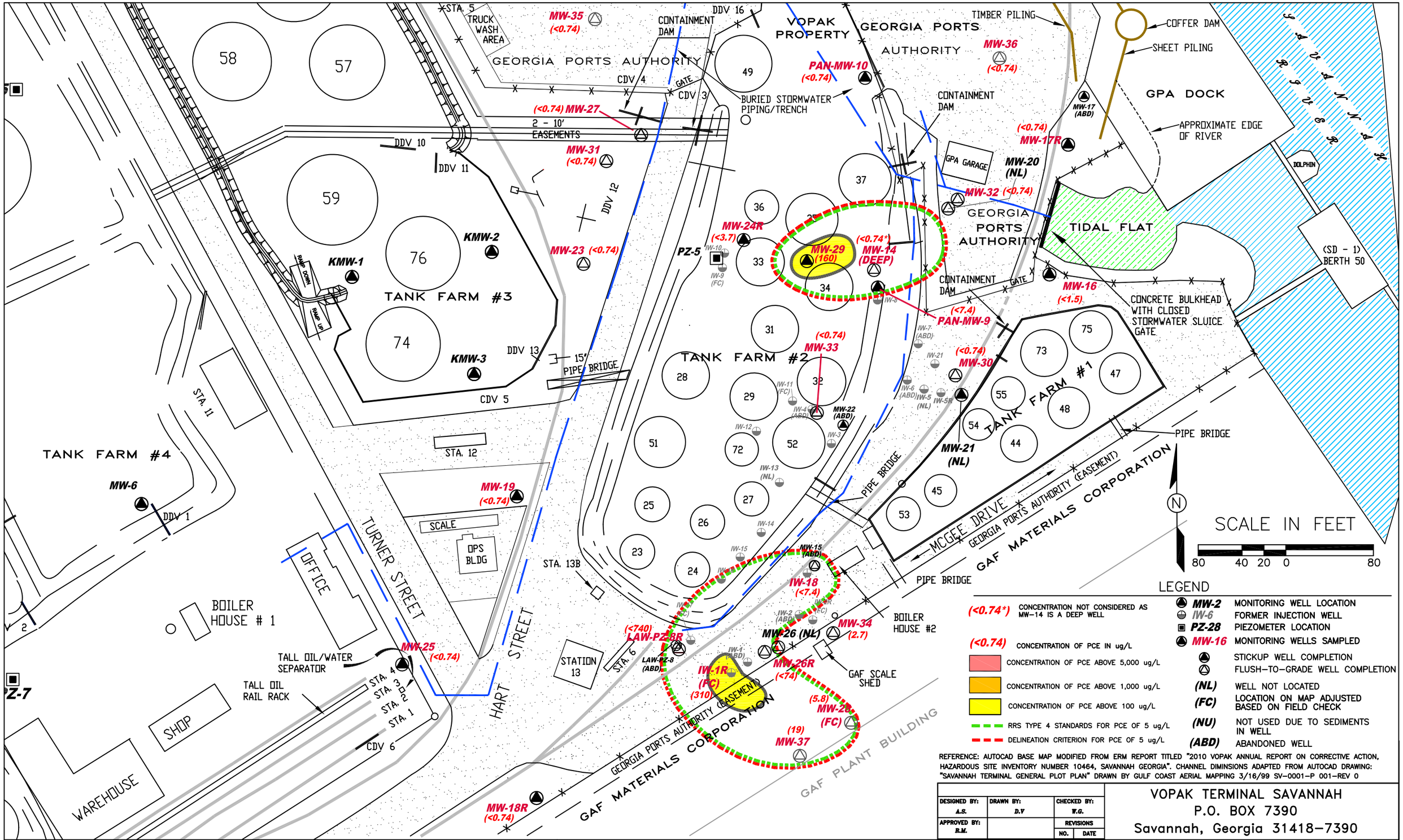

LEGEND

(<0.74*) CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL	MW-2 MONITORING WELL LOCATION
(<0.74) CONCENTRATION OF PCE IN ug/L	IW-6 FORMER INJECTION WELL
CONCENTRATION OF PCE ABOVE 5,000 ug/L	PZ-28 PIEZOMETER LOCATION
CONCENTRATION OF PCE ABOVE 1,000 ug/L	MW-16 MONITORING WELLS SAMPLED
CONCENTRATION OF PCE ABOVE 100 ug/L	STICKUP WELL COMPLETION
RRS TYPE 4 STANDARDS FOR PCE OF 5 ug/L	FLUSH-TO-GRADE WELL COMPLETION
DELINEATION CRITERION FOR PCE OF 5 ug/L	(NL) WELL NOT LOCATED
	(FC) LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
	(NU) NOT USED DUE TO SEDIMENTS IN WELL
	(ABD) ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 4-4:
PCE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
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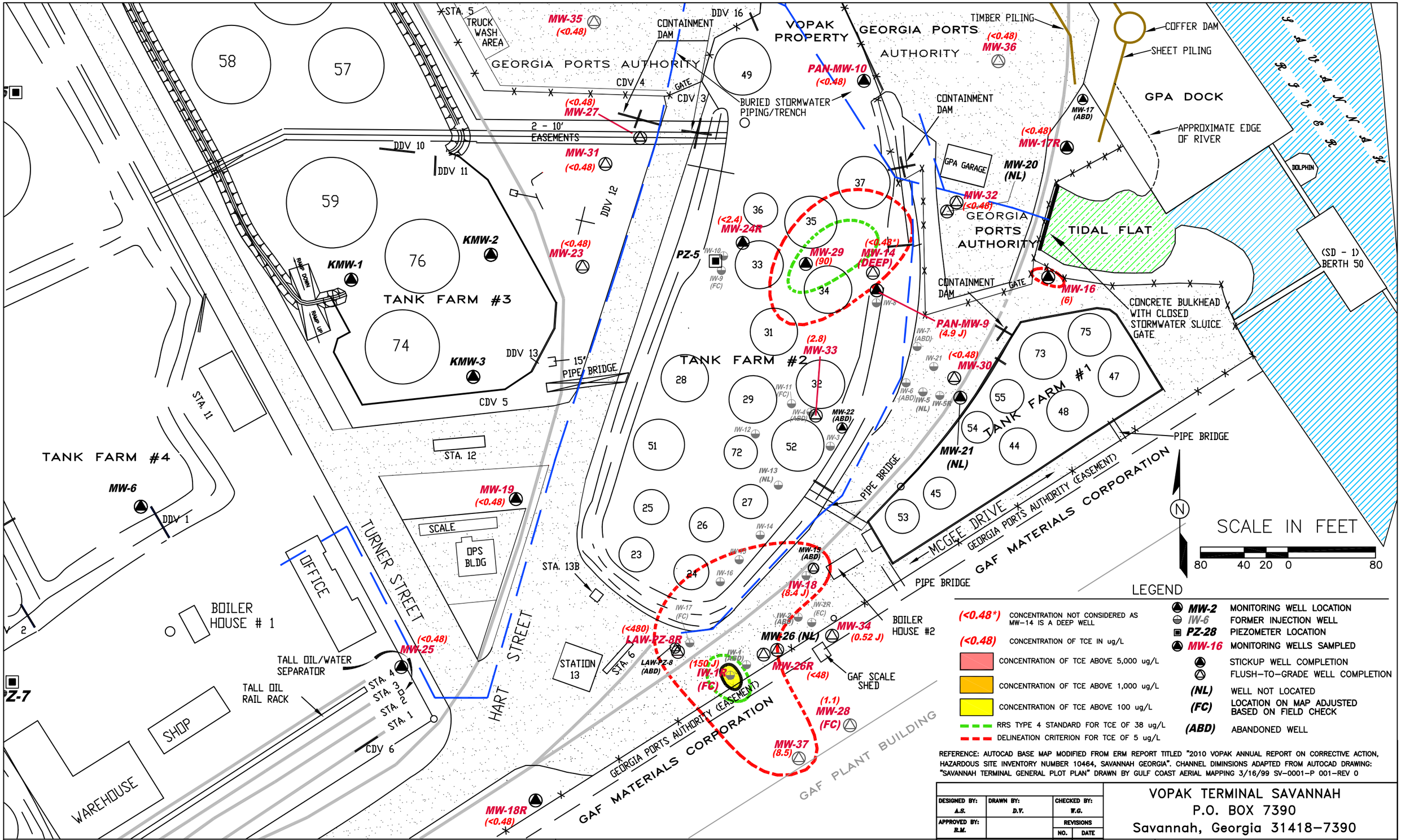
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/16/2015	390020 - 8TH SEMI-ANNUAL RPT	



LEGEND

(<0.48*)	CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL
(<0.48)	CONCENTRATION OF TCE IN ug/L
	CONCENTRATION OF TCE ABOVE 5,000 ug/L
	CONCENTRATION OF TCE ABOVE 1,000 ug/L
	CONCENTRATION OF TCE ABOVE 100 ug/L
	RRS TYPE 4 STANDARD FOR TCE OF 38 ug/L
	DELINEATION CRITERION FOR TCE OF 5 ug/L

MW-2	MONITORING WELL LOCATION
IW-6	FORMER INJECTION WELL
PZ-28	PIEZOMETER LOCATION
MW-16	MONITORING WELLS SAMPLED
	STICKUP WELL COMPLETION
	FLUSH-TO-GRADE WELL COMPLETION
(NL)	WELL NOT LOCATED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
(ABD)	ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 4-5:
TCE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.Y.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
SEAL:			

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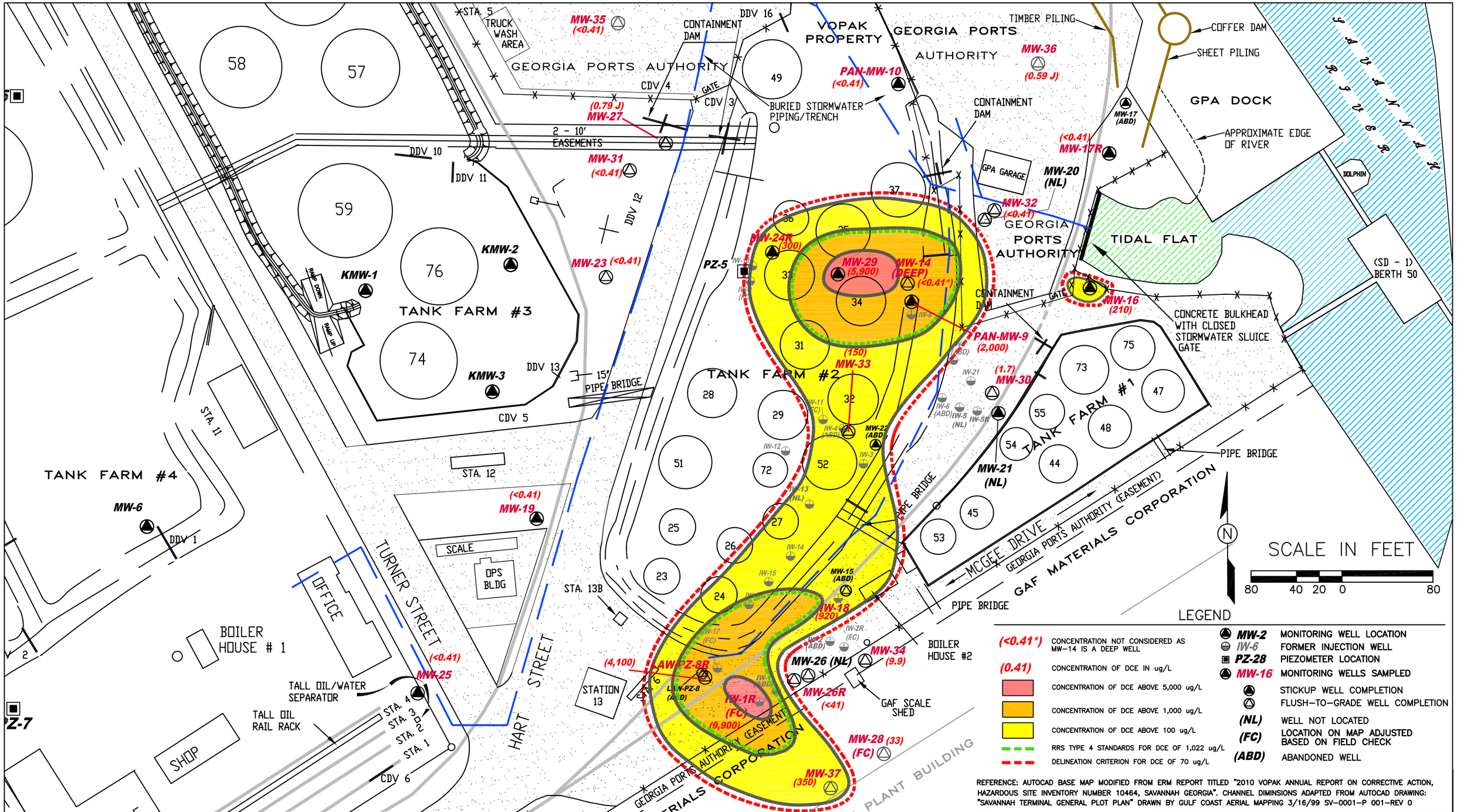

LEGEND

(<0.41*)	CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL
(0.41)	CONCENTRATION OF DCE IN ug/L
	CONCENTRATION OF DCE ABOVE 5,000 ug/L
	CONCENTRATION OF DCE ABOVE 1,000 ug/L
	CONCENTRATION OF DCE ABOVE 100 ug/L
	RRS TYPE 4 STANDARDS FOR DCE OF 1,022 ug/L
	DELINEATION CRITERION FOR DCE OF 70 ug/L
MW-2	MONITORING WELL LOCATION
IW-6	FORMER INJECTION WELL
PZ-28	PIEZOMETER LOCATION
MW-16	MONITORING WELLS SAMPLED
	STICKUP WELL COMPLETION
	FLUSH-TO-GRADE WELL COMPLETION
(NL)	WELL NOT LOCATED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
(ABD)	ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 4-6:
CIS-1, 2 DCE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
SEAL:			

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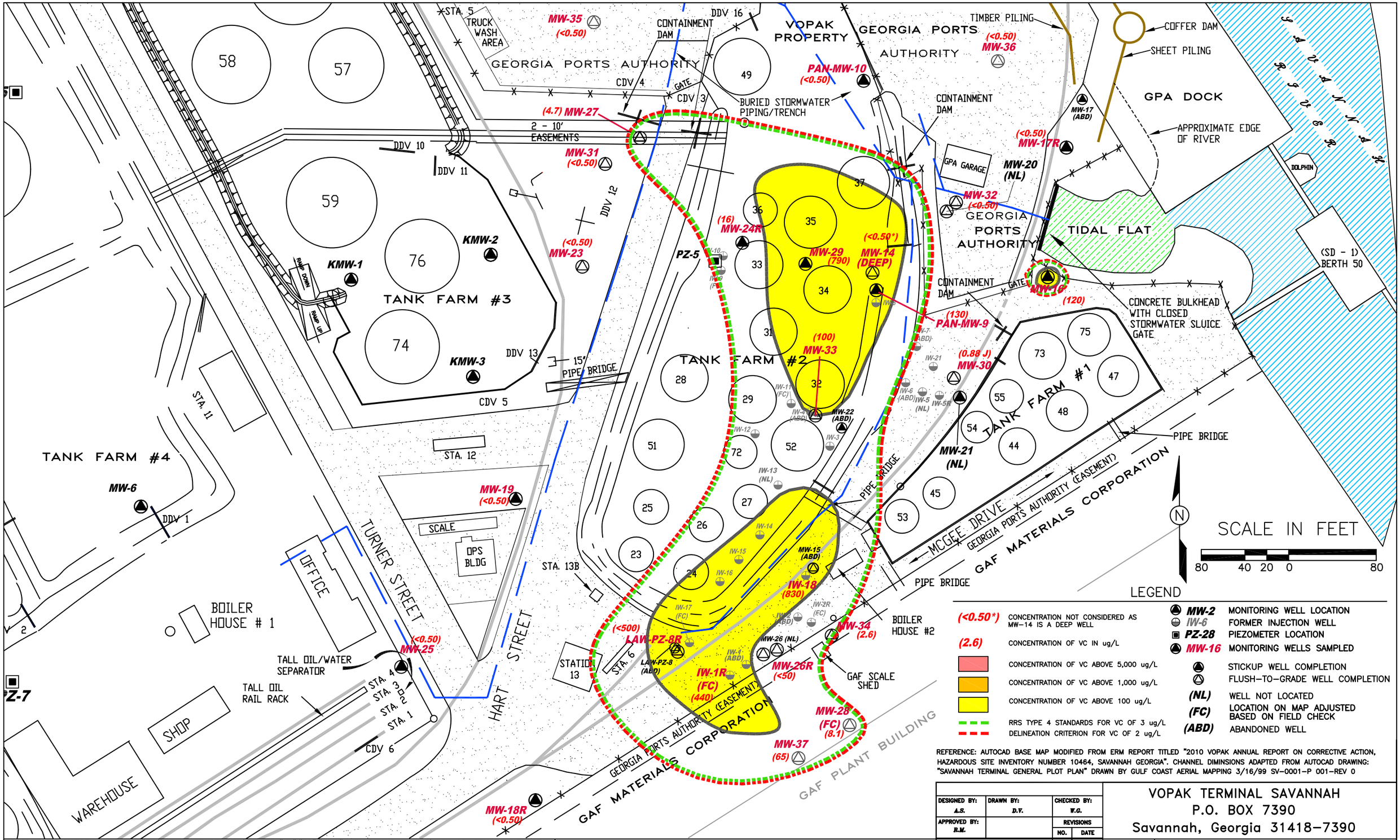
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/16/2015	390020 - 8TH SEMI-ANNUAL RPT	



LEGEND

(<0.50*)	CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL
(2.6)	CONCENTRATION OF VC IN ug/L
	CONCENTRATION OF VC ABOVE 5,000 ug/L
	CONCENTRATION OF VC ABOVE 1,000 ug/L
	CONCENTRATION OF VC ABOVE 100 ug/L
	RRS TYPE 4 STANDARDS FOR VC OF 3 ug/L
	DELINEATION CRITERION FOR VC OF 2 ug/L
MW-2	MONITORING WELL LOCATION
IW-6	FORMER INJECTION WELL
PZ-28	PIEZOMETER LOCATION
MW-16	MONITORING WELLS SAMPLED
	STICKUP WELL COMPLETION
	FLUSH-TO-GRADE WELL COMPLETION
(NL)	WELL NOT LOCATED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
(ABD)	ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 4-7:
VINYL CHLORIDE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE

SEAL:

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ALPHARETTA GEORGIA 30009

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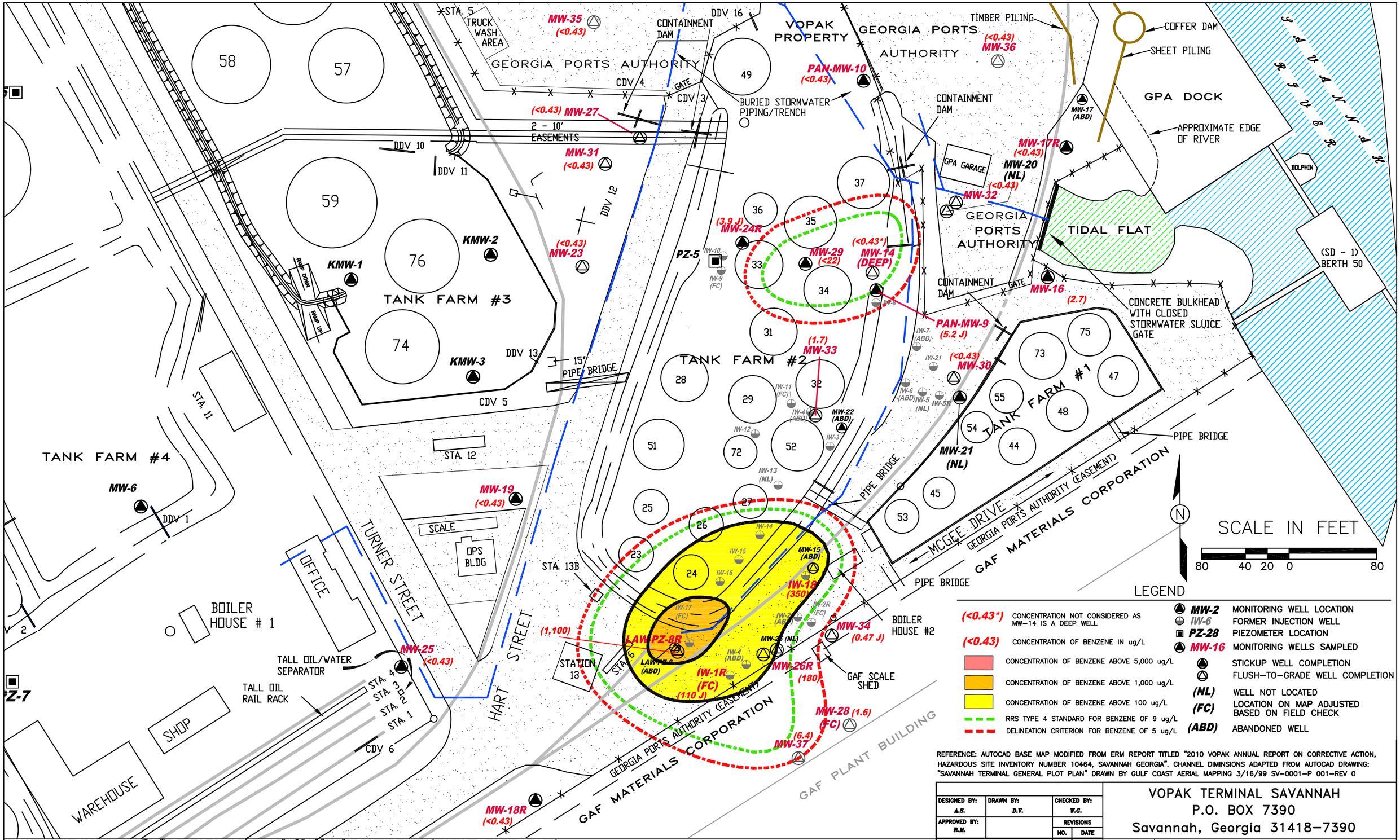

LEGEND

(<0.43*)	CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL
(<0.43)	CONCENTRATION OF BENZENE IN ug/L
	CONCENTRATION OF BENZENE ABOVE 5,000 ug/L
	CONCENTRATION OF BENZENE ABOVE 1,000 ug/L
	CONCENTRATION OF BENZENE ABOVE 100 ug/L
	RRS TYPE 4 STANDARD FOR BENZENE OF 9 ug/L
	DELINEATION CRITERION FOR BENZENE OF 5 ug/L
MW-2	MONITORING WELL LOCATION
IW-6	FORMER INJECTION WELL
PZ-28	PIEZOMETER LOCATION
MW-16	MONITORING WELLS SAMPLED
	STICKUP WELL COMPLETION
	FLUSH-TO-GRADE WELL COMPLETION
(NL)	WELL NOT LOCATED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
(ABD)	ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 4-8:
BENZENE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
SEAL:			

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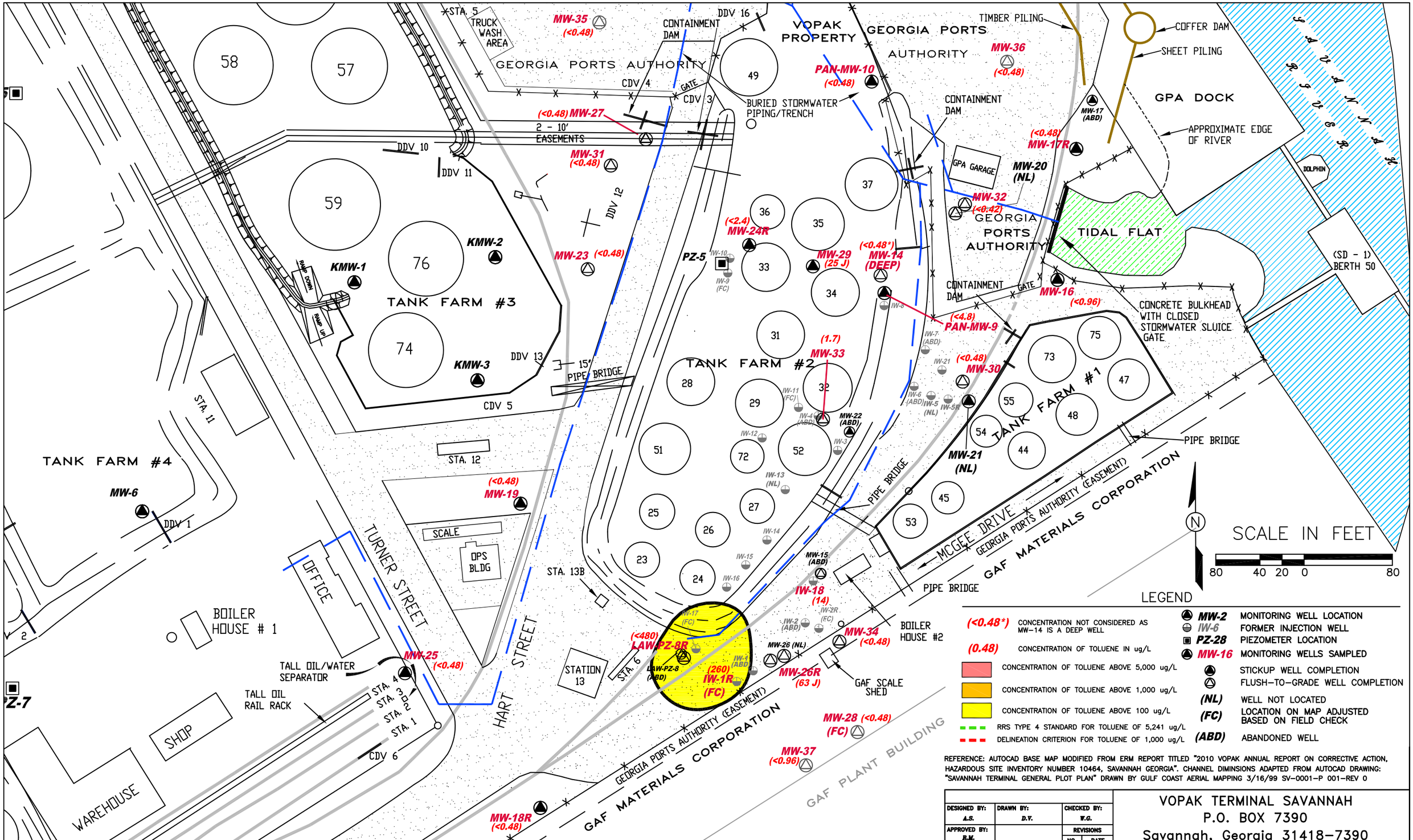
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE: SEE BAR SCALE | DATE: 04/16/2015 | FILE: 390020 - 8TH SEMI-ANNUAL RPT | SHEET NO.:



LEGEND

(<0.48*)	CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL
(0.48)	CONCENTRATION OF TOLUENE IN ug/L
	CONCENTRATION OF TOLUENE ABOVE 5,000 ug/L
	CONCENTRATION OF TOLUENE ABOVE 1,000 ug/L
	CONCENTRATION OF TOLUENE ABOVE 100 ug/L
	RRS TYPE 4 STANDARD FOR TOLUENE OF 5,241 ug/L
	DELINEATION CRITERION FOR TOLUENE OF 1,000 ug/L
MW-2	MONITORING WELL LOCATION
IW-6	FORMER INJECTION WELL
PZ-28	PIEZOMETER LOCATION
MW-16	MONITORING WELLS SAMPLED
	STICKUP WELL COMPLETION
	FLUSH-TO-GRADE WELL COMPLETION
(NL)	WELL NOT LOCATED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
(ABD)	ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

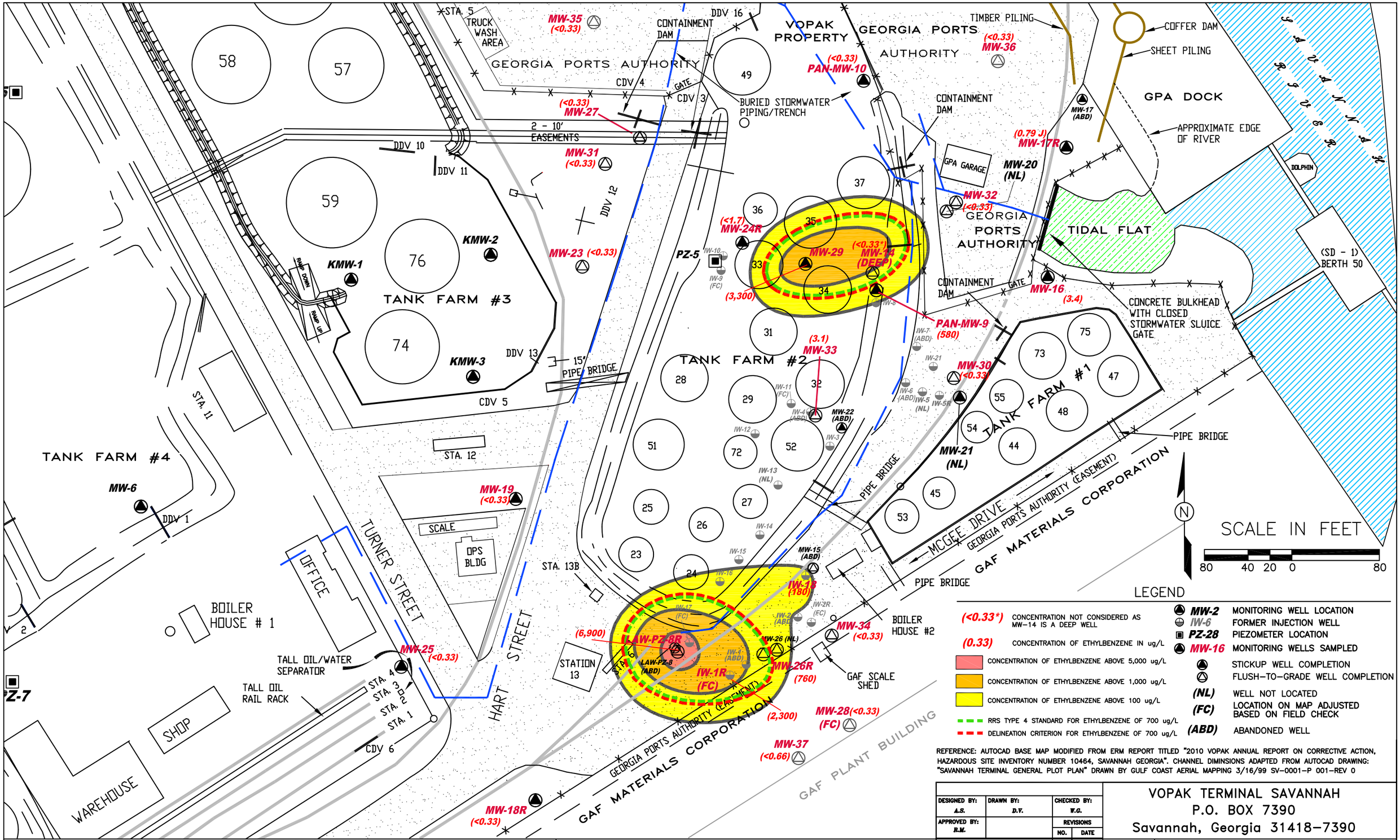
FIGURE 4-9:
TOLUENE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
SEAL:			

VOPAK TERMINAL SAVANNAH
P.O. BOX 7390
Savannah, Georgia 31418-7390

ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/16/2015	390020 - 8TH SEMI-ANNUAL RPT	



LEGEND

(<0.33*)	CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL
(0.33)	CONCENTRATION OF ETHYLBENZENE IN ug/L
	CONCENTRATION OF ETHYLBENZENE ABOVE 5,000 ug/L
	CONCENTRATION OF ETHYLBENZENE ABOVE 1,000 ug/L
	CONCENTRATION OF ETHYLBENZENE ABOVE 100 ug/L
	RRS TYPE 4 STANDARD FOR ETHYLBENZENE OF 700 ug/L
	DELINEATION CRITERION FOR ETHYLBENZENE OF 700 ug/L

MW-2	MONITORING WELL LOCATION
IW-6	FORMER INJECTION WELL
PZ-28	PIEZOMETER LOCATION
MW-16	MONITORING WELLS SAMPLED
	STICKUP WELL COMPLETION
	FLUSH-TO-GRADE WELL COMPLETION
(NL)	WELL NOT LOCATED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
(ABD)	ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 4-10:
ETHYLBENZENE ISOCONCENTTRAION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE

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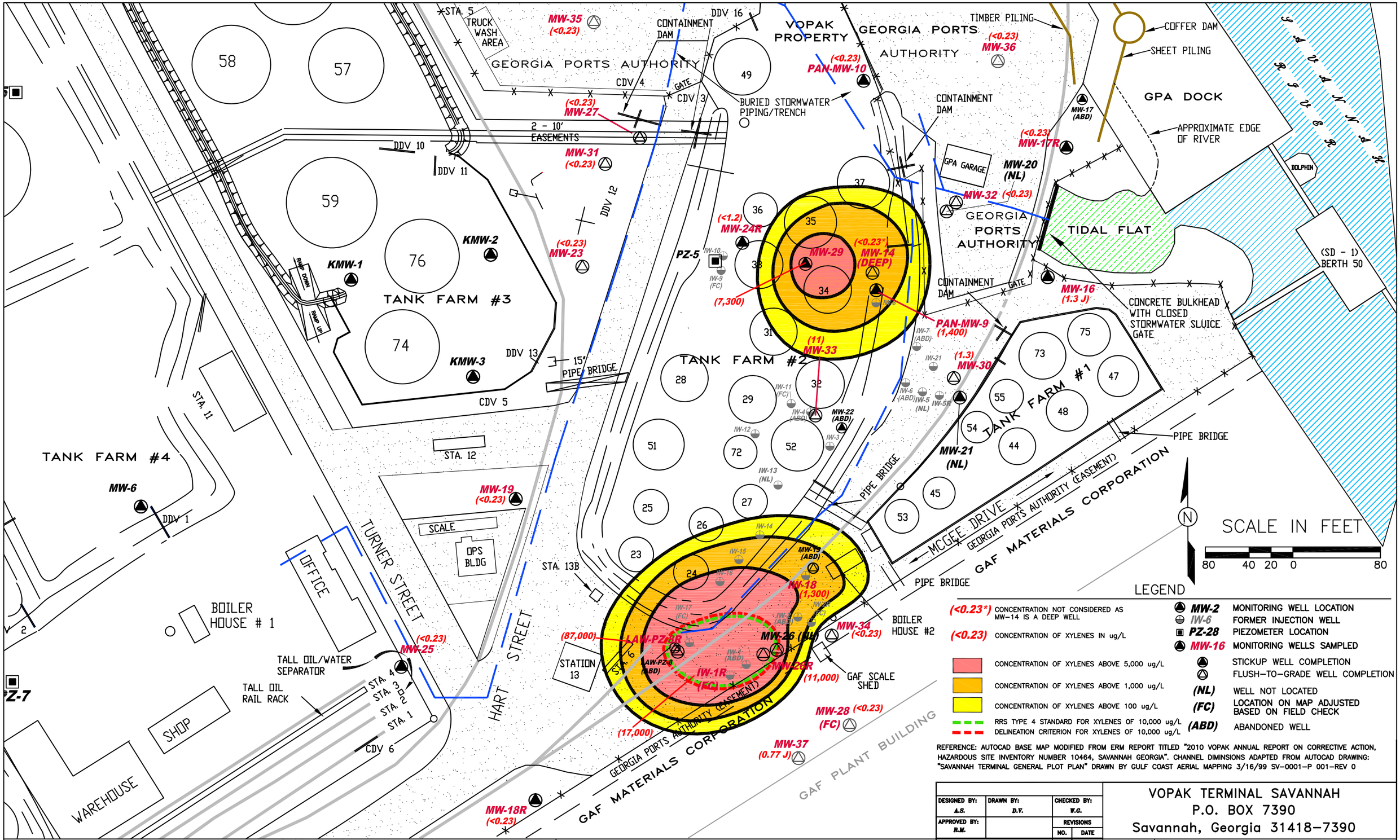
SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/16/2015	390020 - 8TH SEMI-ANNUAL RPT	



REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 4-11:
TOTAL XYLENES ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE

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161 KIMBALL BRIDGE ROAD
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SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/16/2015	390020 - 8TH SEMI-ANNUAL RPT	

Figure 5-1: IW-1R COC Trend Graph

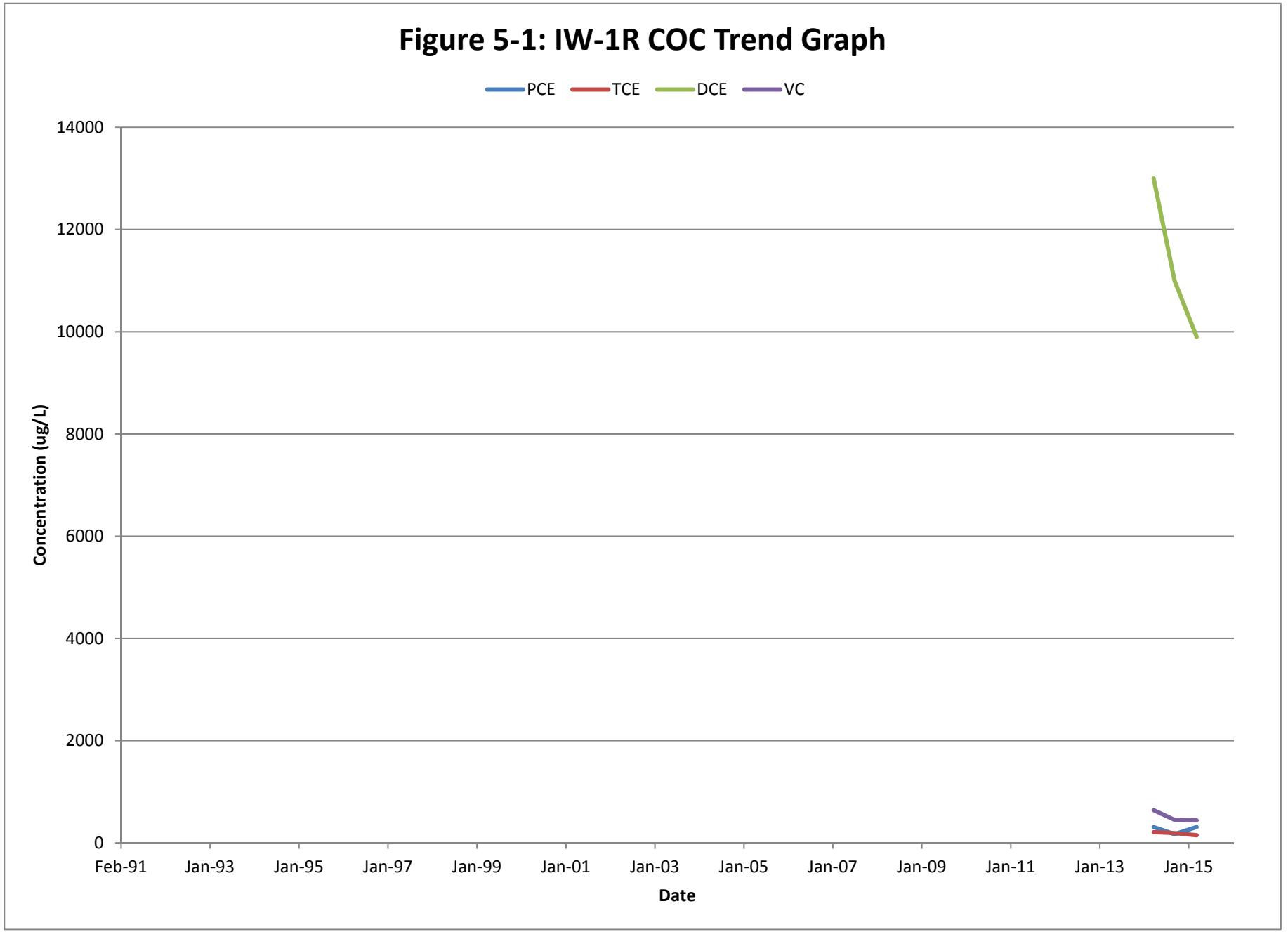


Figure 5-2: IW-18 COC Trend Graph

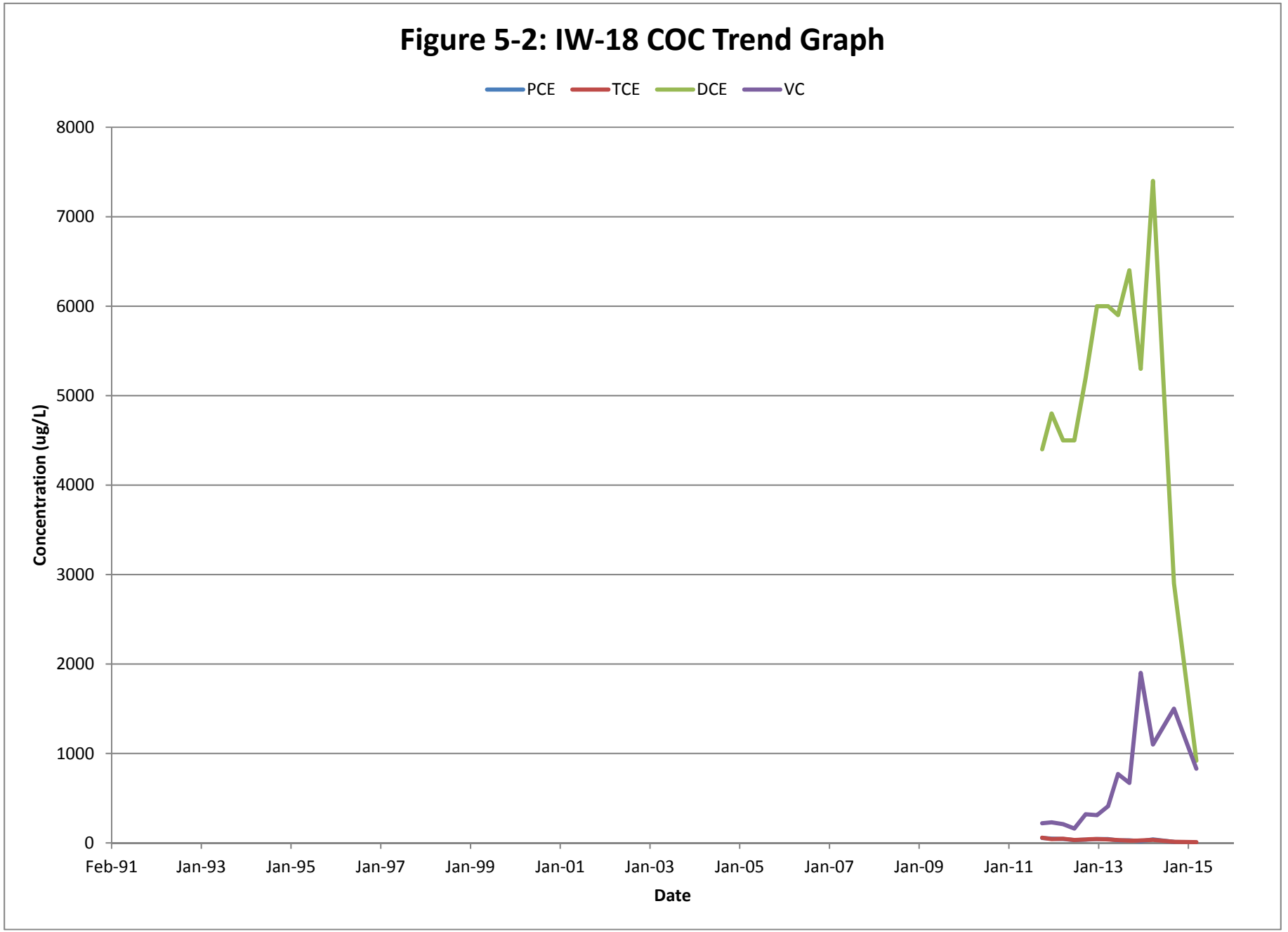


Figure 5-3: LAW-PZ-8R COC Trend Graph

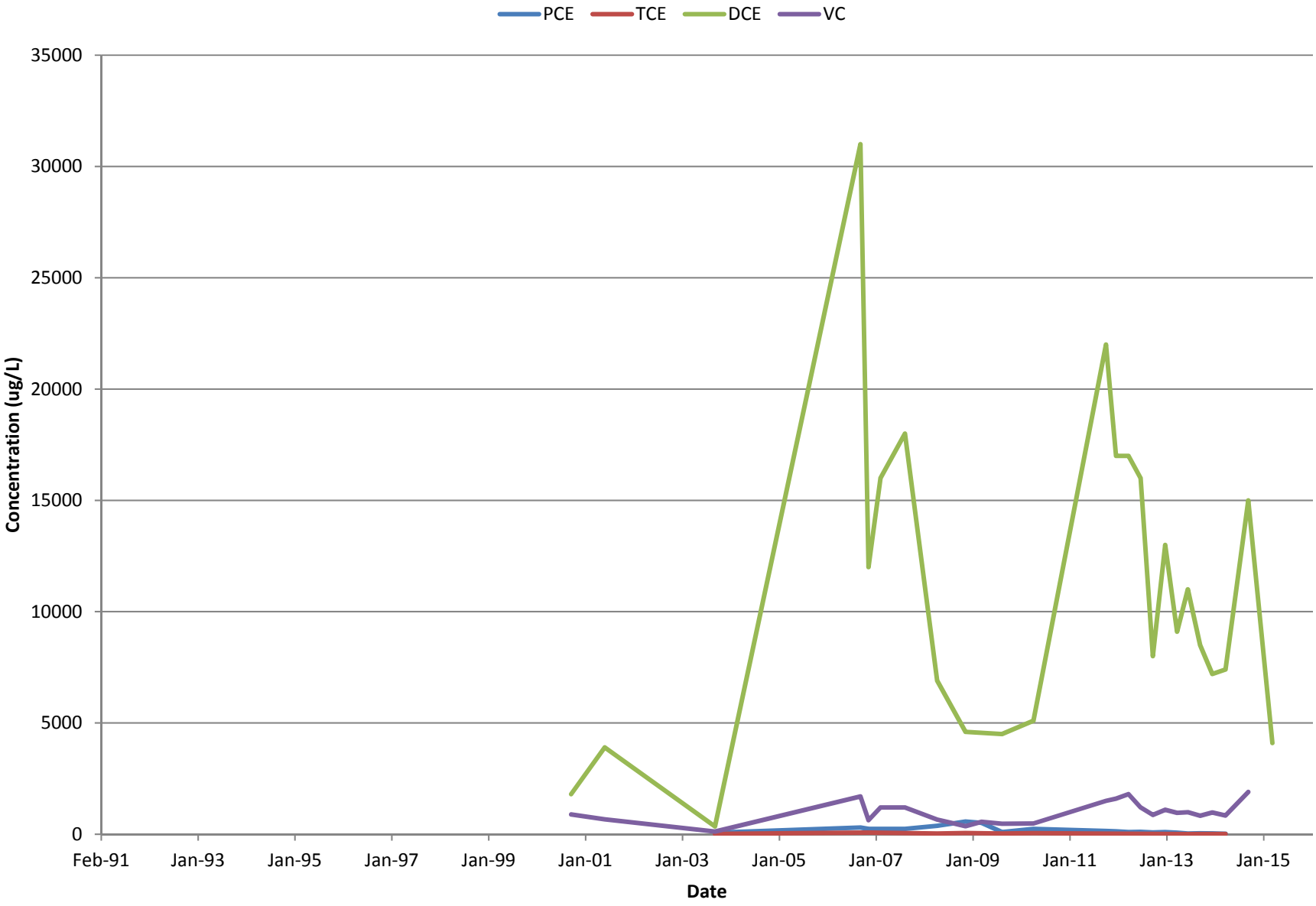


Figure 5-4: MW-16 COC Trend Graph

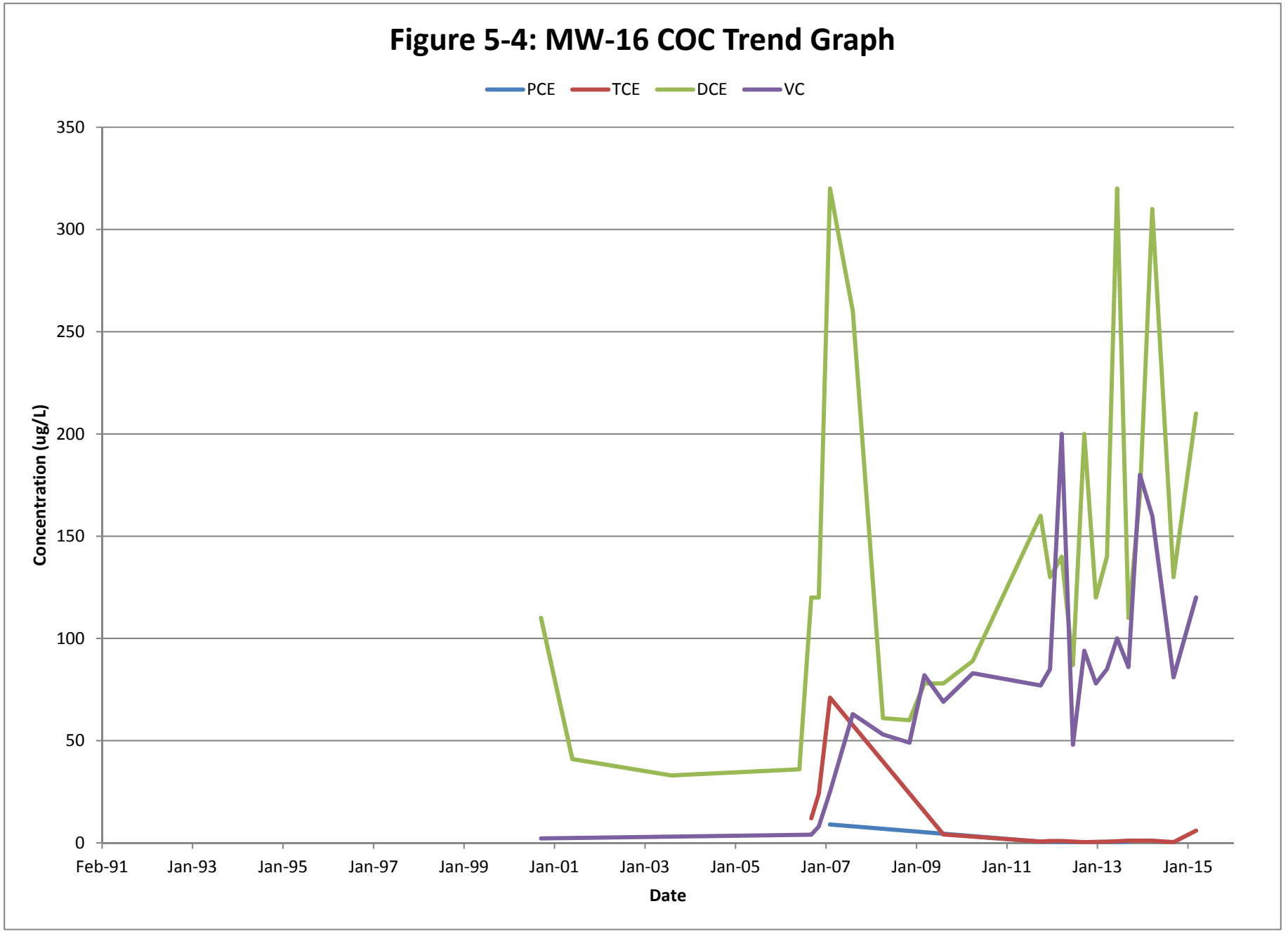


Figure 5-5: MW-22/22R/33 COC Trend Graph

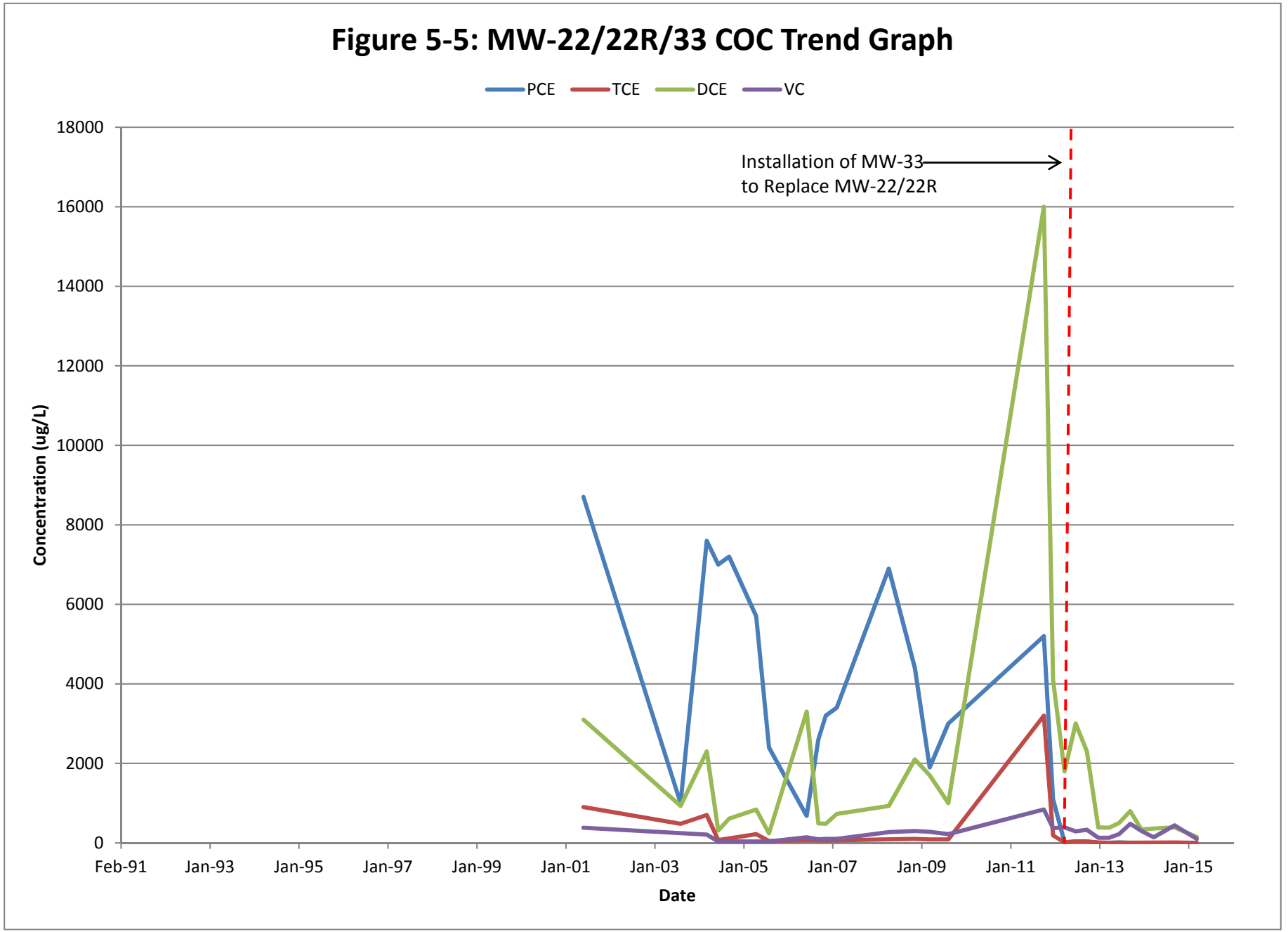


Figure 5-6: MW-24/24R COC Trend Graph

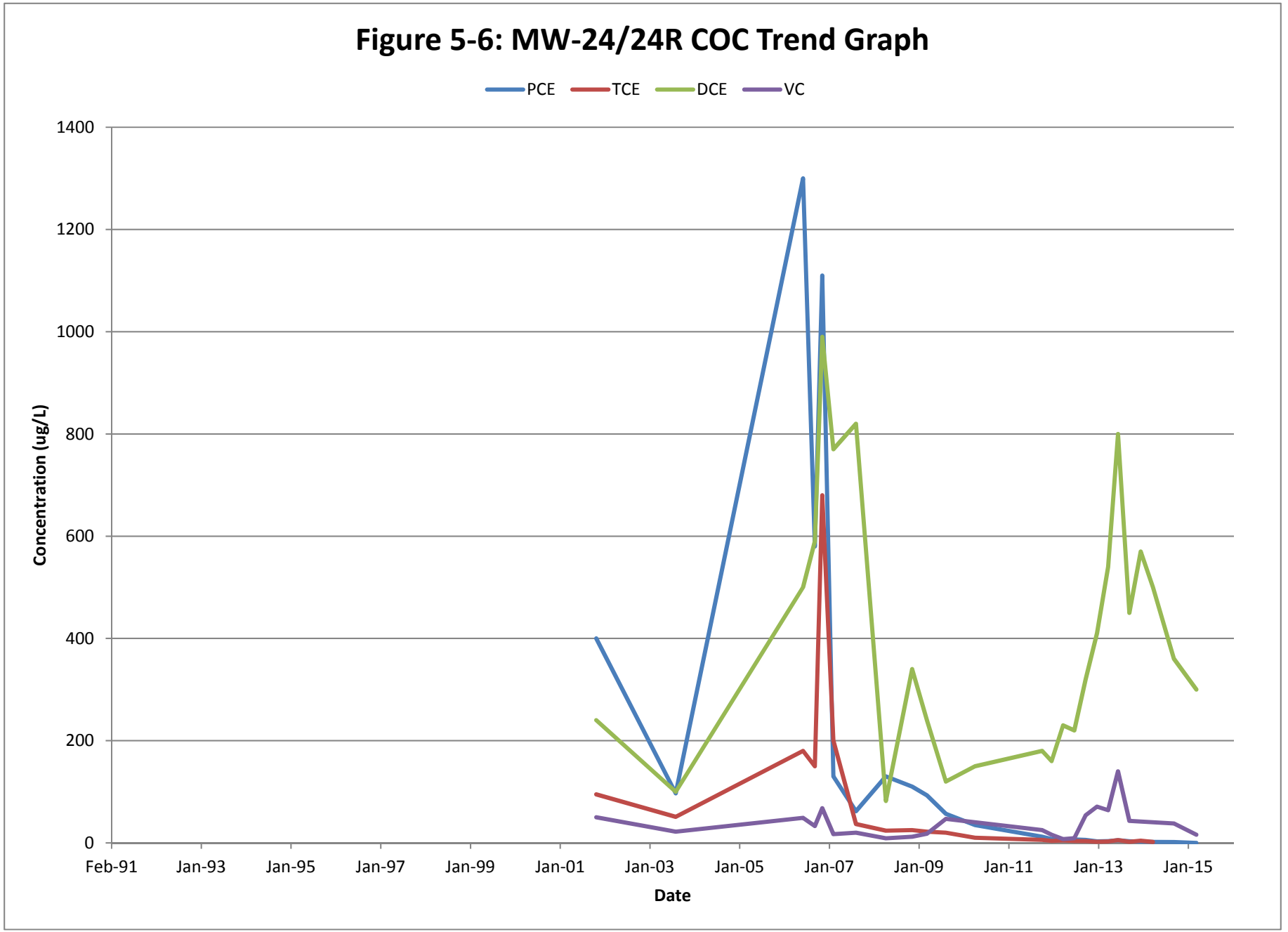


Figure 5-7: MW-26/26R COC Trend Graph

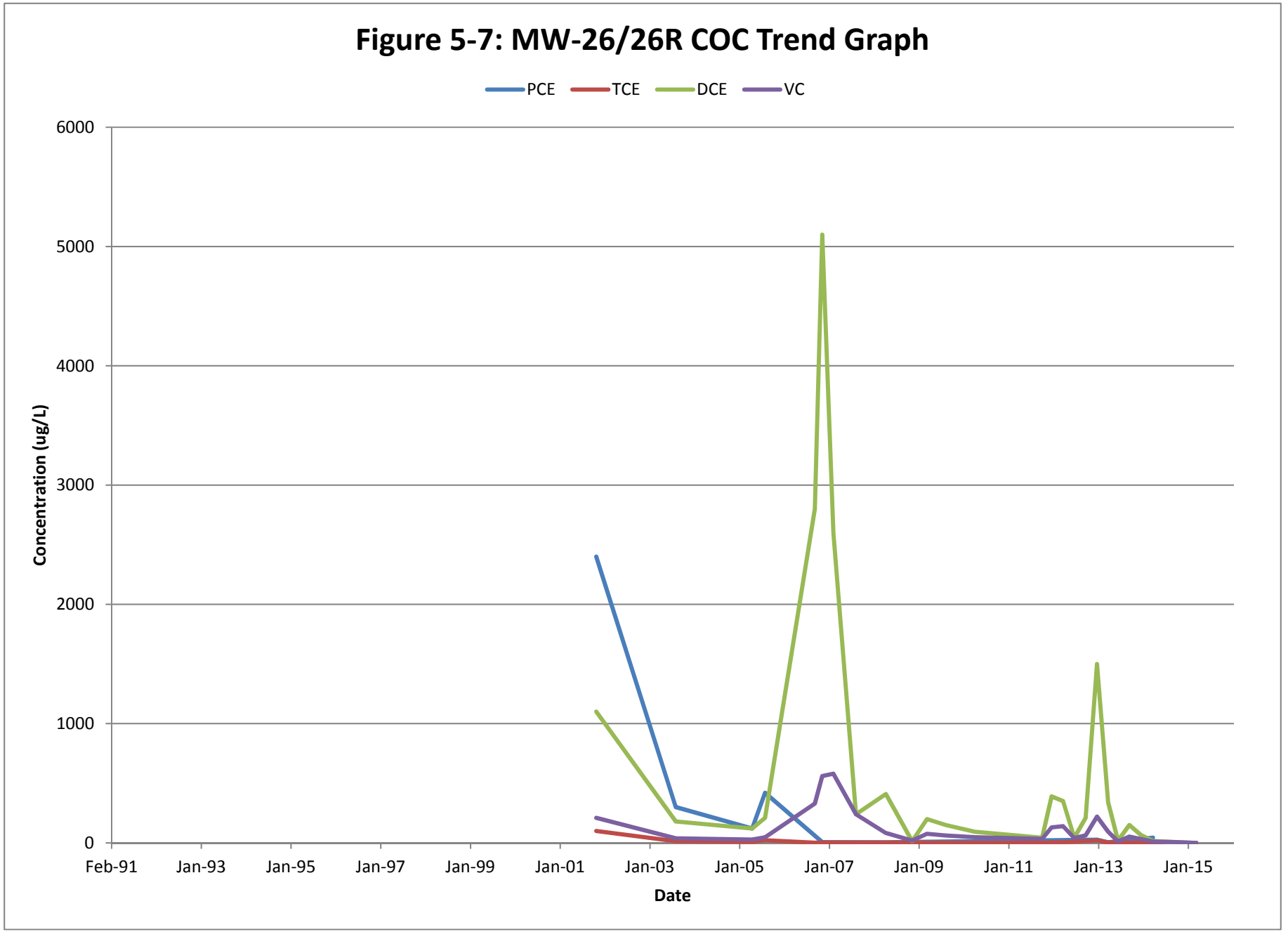


Figure 5-8: MW-27 COC Trend Graph

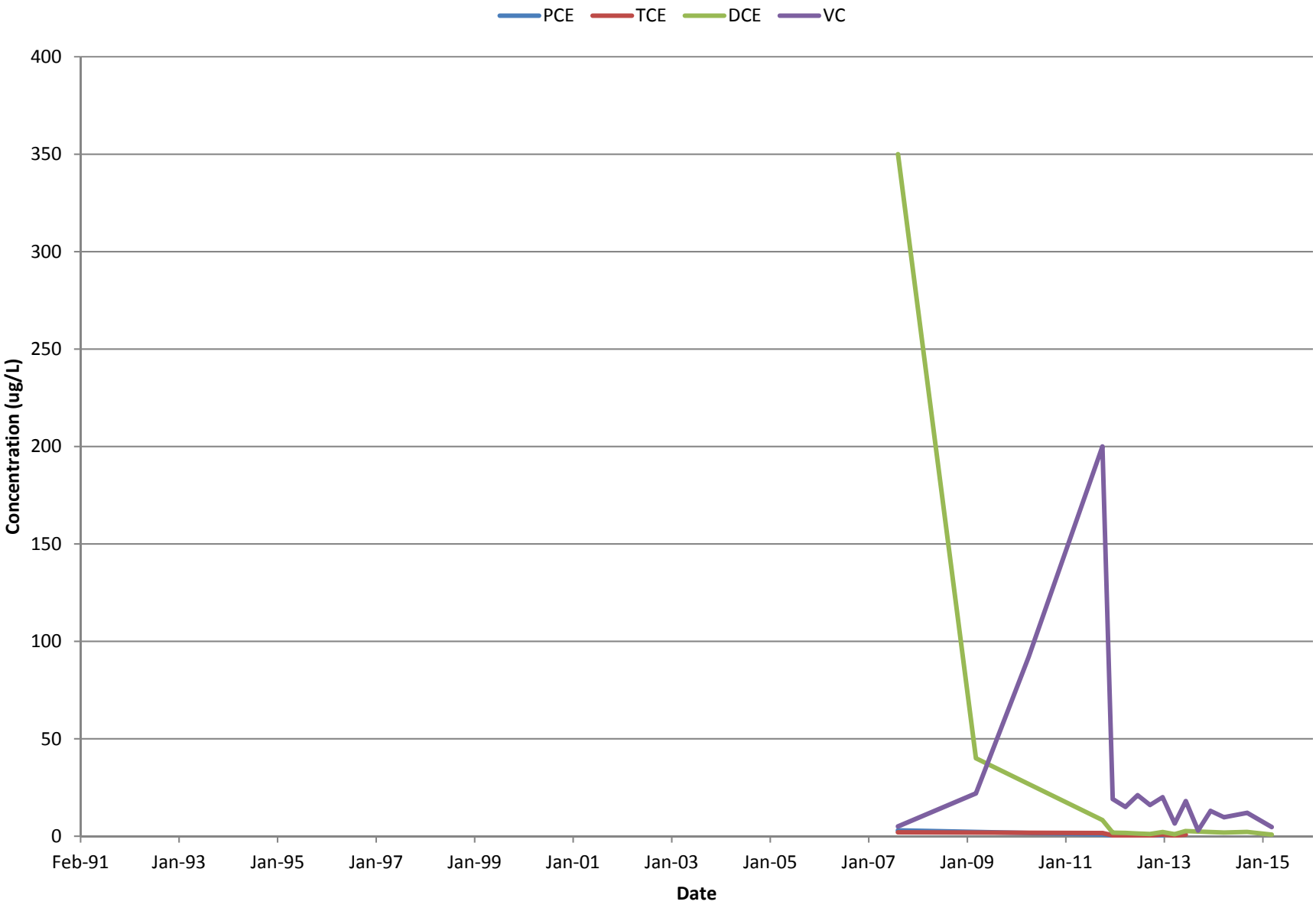


Figure 5-9: MW-29 COC Trend Graph

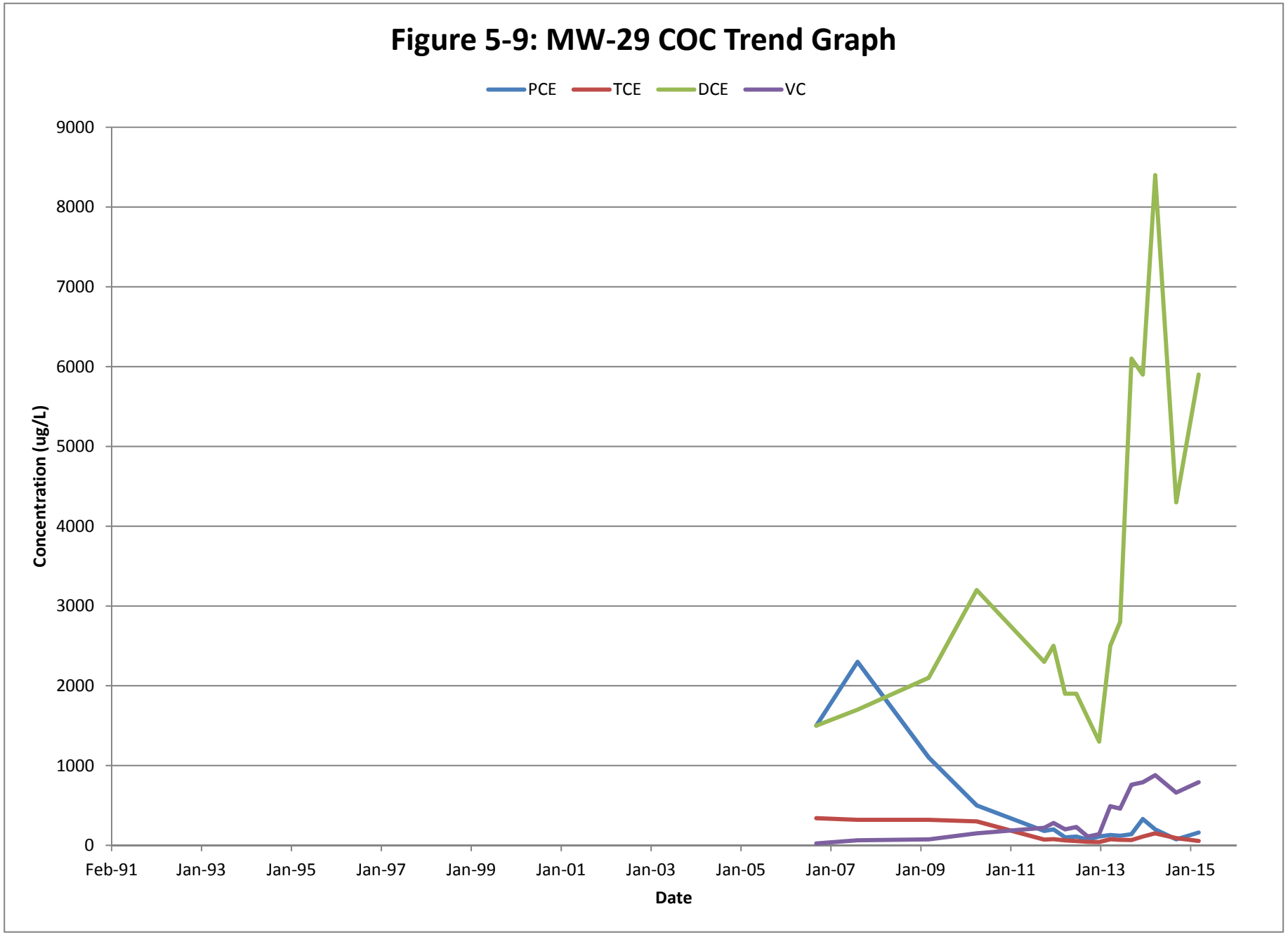


Figure 5-10: MW-32 COC Trend Graph

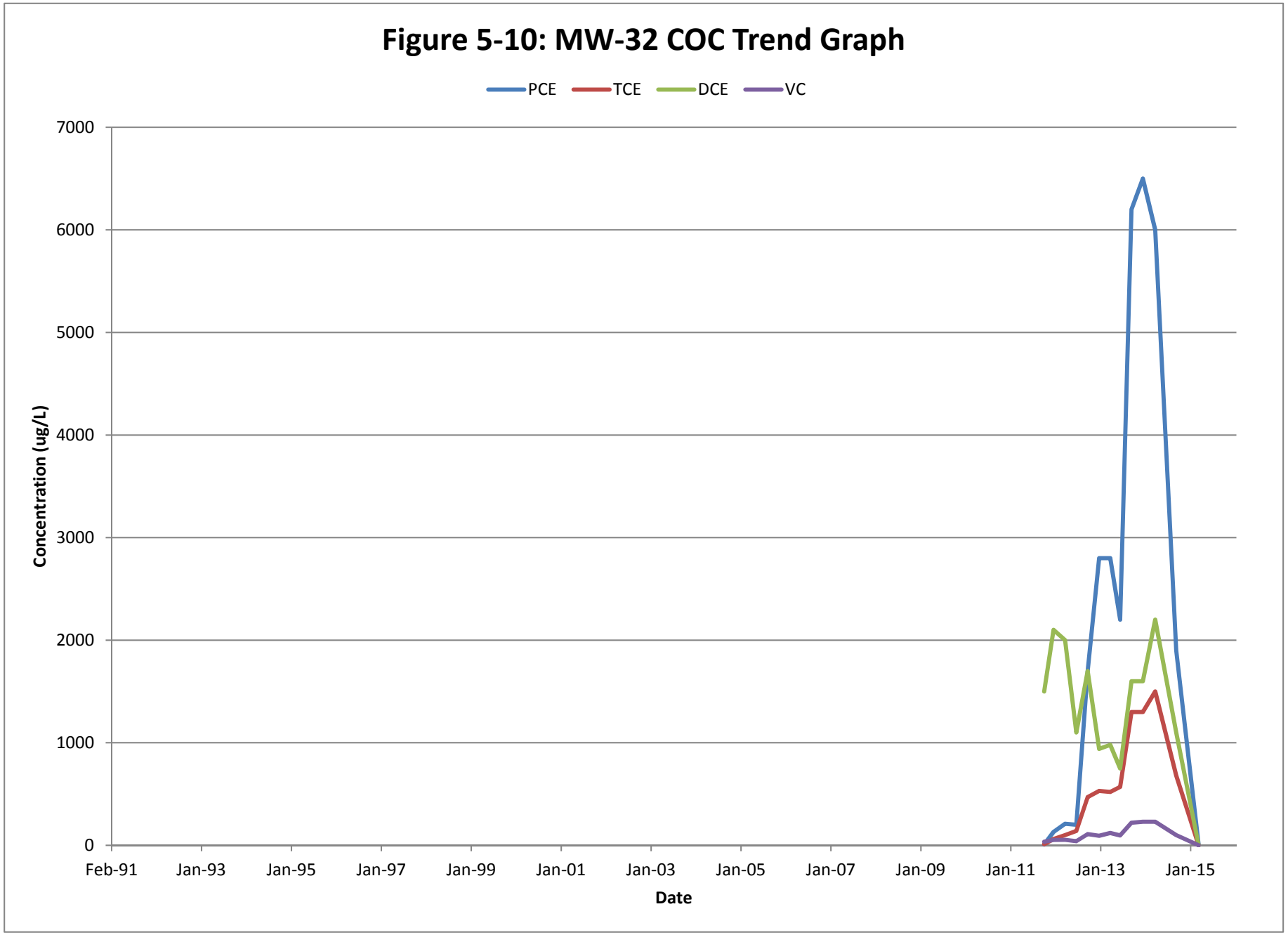


Figure 5-11: MW-34 COC Trend Graph

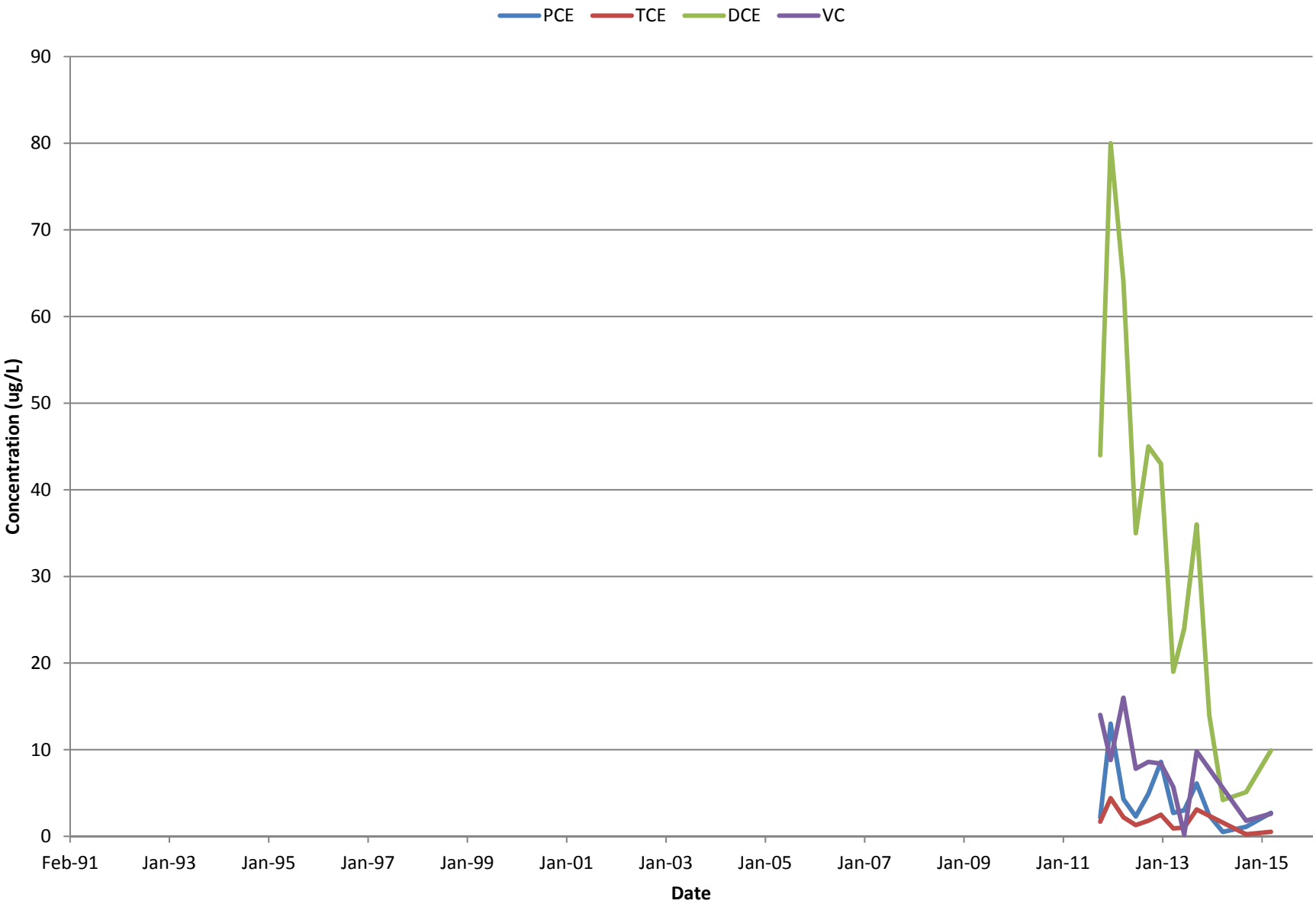


Figure 5-12: MW-37 COC Trend Graph

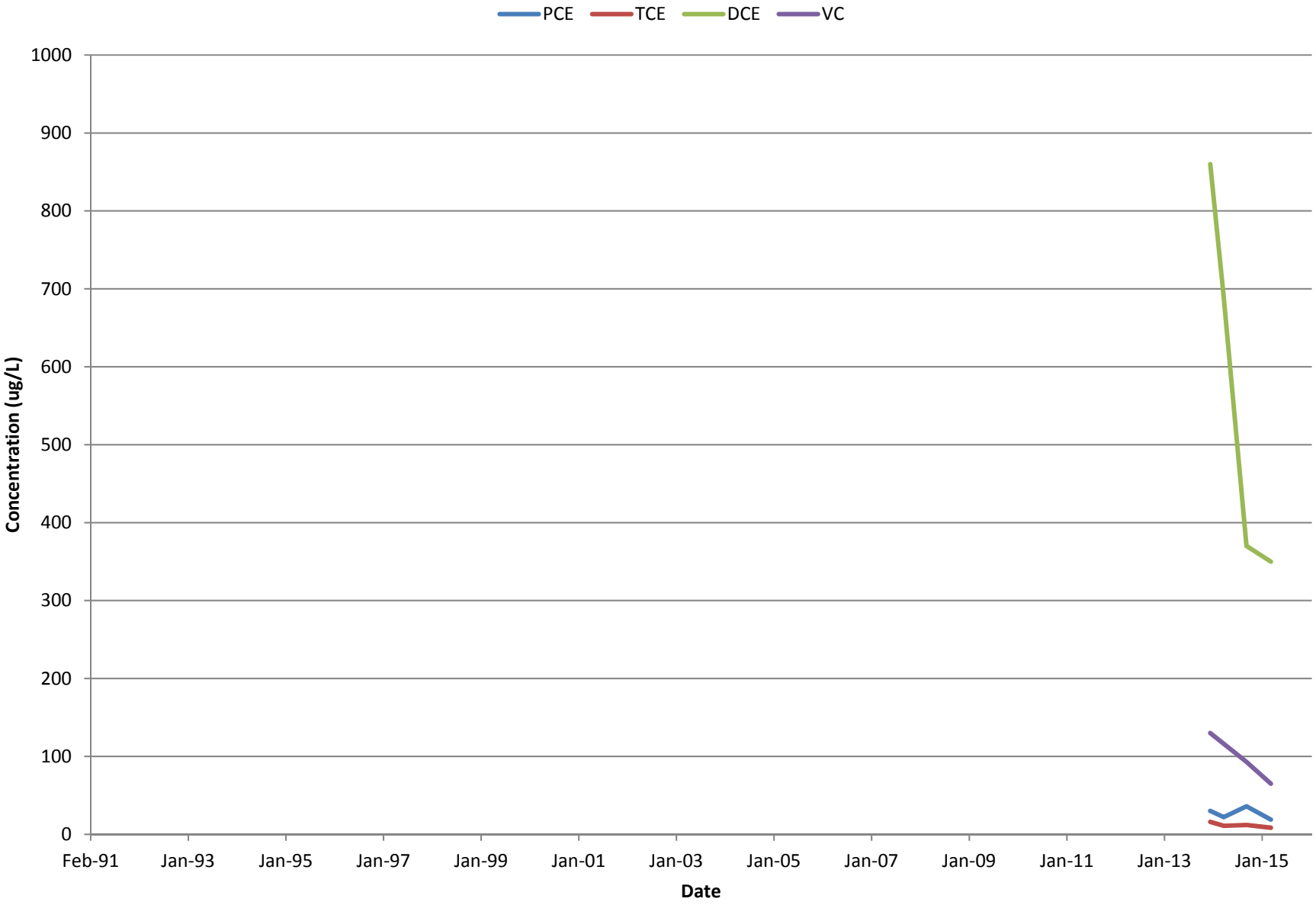
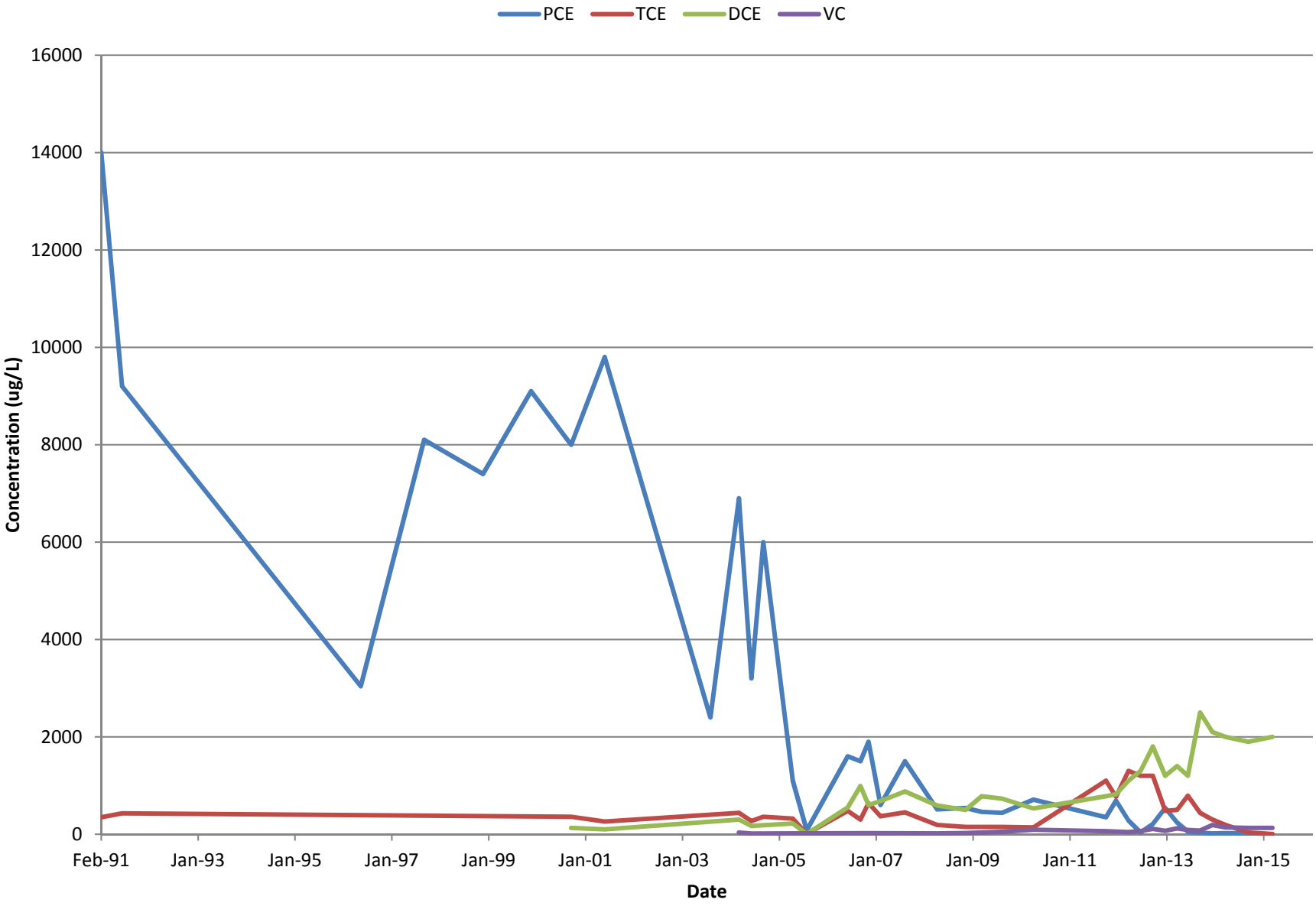


Figure 5-13: PAN-MW-9 COC Trend Graph



VOPAK TERMINAL SAVANNAH, SAVANNAH, GEORGIA

EIGHTH SEMI-ANNUAL PROGRESS REPORT

ATTACHMENT A

ENVIRONMENTAL INTERNATIONAL CORPORATION

PAGE 1 OF 1

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: IW-1R

DATE: 4/2/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 70°F Partly Cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 9.90 FT. to 19.90 FT.

INITIAL WATER LEVEL (BTOC): 3.35 FT. | TIME: 15:01 | BTOC WELL SCREEN INTERVAL: 8.90 FT. to 18.90 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 18.9 FT. | MEASURED TOTAL WELL DEPTH (BTOC FT. | HEIGHT OF STICK-UP: -1 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: 0.0 BENEATH OUTER CAP: 0.0 BENEATH INNER CAP: 171 → 2.5

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
15:20	0	26.91	4.03	131	0.493	14.5	0.70	NA	
15:25	380	26.22	4.12	113	0.504	11.4	0.49	NA	
15:30	720	25.23	4.14	107	0.515	10.8	0.42	NA	
15:35	1120	25.20	4.14	102	0.520	7.6	0.39	NA	
15:39								4.70	

COMMENTS:

SAMPLE COLLECTION TIME: 15:37

PREPARED BY:

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant.

Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	14
Final tubing depth (ft.) BTOC	14
Initial pump speed	2.18
Time pump speed was initialized	15:13
Pump speed at flow into cylinder	2.18
Started new roll of tubing at	—
Three well volume (mL)	—

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks: Contact w/ Oil Product w/ gauging. Used mini bailer 3X

Approximate Initial water level recalculated after 3 at 18:37 at 3.40 ft

ENVIRONMENTAL INTERNATIONAL CORPORATION

PAGE 1 OF 1

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: IW-18

DATE: 4/2/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 65°F Partly Cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 10.00 FT. to 20.00 FT.

INITIAL WATER LEVEL (BTOC): 3.18 FT. | TIME: 1202 | BTOC WELL SCREEN INTERVAL: 9.67 FT. to 19.67 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 19.3 FT. | MEASURED TOTAL WELL DEPTH (BTOC 19.28 FT. | HEIGHT OF STICK-UP: 0.33 FT. BGS

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: 0.0 BENEATH OUTER CAP: 0-0 BENEATH INNER CAP: 7-0 dropped to 1.8

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
12:11	0	24.58	5.19	48	0.677	156	2.94	NA	clear on 1st pull
12:17	360	24.56	5.21	23	0.687	140	1.63	NA	
12:22	630	24.61	5.22	6	0.716	148	1.02	NA	
12:27	960	24.90	5.21	-1	0.722	146	0.70	NA	yellow/brown coloring on tube
12:32	1480	25.03	5.14	-3	0.736	157	0.61	NA	
								4.31	

COMMENTS:

SAMPLE COLLECTION TIME: 12:36

PREPARED BY: Daniel Lavigne

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	23
Initial tubing depth (ft.) BTOC	17
Final tubing depth (ft.) BTOC	15
Initial pump speed	2.0 ↓
Time pump speed was initialized	12:03
Pump speed at flow into cylinder	2.0 ↓
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks: water in vault ~½ in above TOC. Air pressure under cap. VOC meter alarm went off & backed up for ventilation

PAGE 1 OF 1

ENVIRONMENTAL INTERNATIONAL CORPORATION
WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: LAW-PZ-8R

DATE: 4/21/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 65°F Partly cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 1.80 FT. to 11.80 FT.

INITIAL WATER LEVEL (BTOC): 1.53 FT. | TIME: 16:07 | BTOC WELL SCREEN INTERVAL: 1.32 FT. to 11.32 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 11.1 FT. | MEASURED TOTAL WELL DEPTH (BTO FT. | HEIGHT OF STICK-UP: -0.476 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: 0 | BENEATH OUTER CAP: 0.7 | BENEATH INNER CAP: ~~7327~~ → 16

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B, 9060A, 310.1, 9056A, SM 3500 FE D, 6010C, 9034, AM20GAX

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
16:19	0	26.42	5.34	63	0.695	660	0.69	NA	clear/light brown 1st RU
16:24	560	24.30	5.43	29	0.736	608	0.45	NA	Dark Brown color in
16:29	980	23.85	5.43	11	0.749	516	0.38	NA	cylinder
16:34	1400	23.61	5.46	-4	0.764	368	0.35	NA	
16:39	1860	23.47	5.43	-18	0.784	231	0.33	NA	
16:44	2300	23.51	5.52	-24	0.801	170	0.32	NA	
16:49	2720	23.48	5.53	-31	0.808	136	0.31	NA	
16:54	3140	23.36	5.53	-36	0.813	116	0.31	NA	
16:55								2.29	

COMMENTS:

SAMPLE COLLECTION TIME: 16:57

PREPARED BY: Dave Vargo

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	30
Initial tubing depth (ft.) BTOC	6.0
Final tubing depth (ft.) BTOC	6.0
Initial pump speed	2.50
Time pump speed was initialized	16:12
Pump speed at flow into cylinder	2.24
Started new roll of tubing at	—
Three well volume (mL)	—

2,000 mL volume poured into bucket:

Time	1640							
Cummulative Volume (mL)	2000							

Additional remarks: _____

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-14

DATE: 4/11/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 58° F Light rain Partly cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 39.44 FT. to 49.57 FT.

INITIAL WATER LEVEL (BTOC): 6.48 FT. | TIME: 1614 | BTOC WELL SCREEN INTERVAL: 39.44 FT. to 49.57 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): FT. | MEASURED TOTAL WELL DEPTH (BTOC 49.57 FT. | HEIGHT OF STICK-UP: 0 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: NM BENEATH OUTER CAP: NM BENEATH INNER CAP: NM

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
18:00	0	20.01	5.94	0	0.355	0.0	4.33	6.73	Clear
18:05	340	19.93	6.75	-66	0.383	0.0	3.51	6.81	
18:10	640	19.79	6.41	-69	0.421	0.0	3.02	6.84	
18:15	980	19.60	6.98	-74	0.460	0.0	2.66	6.86	
18:20	1280	19.43	7.01	-76	0.477	0.0	1.62	6.89	

COMMENTS:

SAMPLE COLLECTION TIME: 18:23

PREPARED BY: S Helwig

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant.

Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	47
Initial tubing depth (ft.) BTOC	45
Final tubing depth (ft.) BTOC	45
Initial pump speed	2.17
Time pump speed was initialized	17:52
Pump speed at flow into cylinder	2.18
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks: _____

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-16

DATE: 7/2/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 65°F Partly cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 4.95 FT. to 14.95 FT.

INITIAL WATER LEVEL (BTOC): 12.03 FT. | TIME: 10:38 | BTOC WELL SCREEN INTERVAL: 8.13 FT. to 18.13 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 13.98 FT. | MEASURED TOTAL WELL DEPTH (BTOC 14.02 FT. | HEIGHT OF STICK-UP: 3.18 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: 0.2 BENEATH OUTER CAP: 0.3 BENEATH INNER CAP: 0.8

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
10:59 ~~10:49~~	0	23.47	5.55	55	0.454	0.0	1.59	NA	1st pull is clear
11:04	200	22.91	5.60	34	0.463	0.0	0.79	NA	
11:09	420	22.14	5.56	21	0.479	0.0	0.71	NA	
11:14	630	21.67	5.55	11	0.487	0.0	0.65	NA	
11:19	840	21.50	5.55	5	0.489	0.0	0.64	NA	
								12.5	

COMMENTS:

SAMPLE COLLECTION TIME: 11:21

PREPARED BY: Dawn Vinyard

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	13
Final tubing depth (ft.) BTOC	13
Initial pump speed	~~100~~ 1.68
Time pump speed was initialized	10:47
Pump speed at flow into cylinder	1.68
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks: Tubing hit refusal multiple times when inserted into well/ small Bubbles in tubing

ENVIRONMENTAL INTERNATIONAL CORPORATION
WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-17 R

DATE: 3-31-15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: Windy Partly Cloudy 77°F

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 5.60 FT. to 20.60 FT.

INITIAL WATER LEVEL (BTOC): 10.93 FT. | TIME: 16:17 | BTOC WELL SCREEN INTERVAL: 9.12 FT. to 24.12 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 23.99 FT. | MEASURED TOTAL WELL DEPTH (BTOC 23.96 FT. | HEIGHT OF STICK-UP: 3.52 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: NM | BENEATH OUTER CAP: NM | BENEATH INNER CAP: NM

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
16:39	0	28.78	6.06	-27	0.402	0.0	2.87	N/A	
16:44	360	28.97	5.93	-44	0.400	0.0	0.95	N/A	
16:49	540	29.06	5.93	-52	0.404	0.0	0.76	N/A	
16:54	890	28.74	5.93	-56	0.405	7.3	0.76	N/A	
								10.02	

COMMENTS:

SAMPLE COLLECTION TIME: 16:59

PREPARED BY: S Hellwig

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	25
Initial tubing depth (ft.) BTOC	17.5
Final tubing depth (ft.) BTOC	17.5
Initial pump speed	1.87
Time pump speed was initialized	15:29
Pump speed at flow into cylinder	1.98
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks: Note: Water in Tidal flat channel up to top of slurry gate

ENVIRONMENTAL INTERNATIONAL CORPORATION
WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-18R

DATE: 3/30/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 50's Wind Overcast

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 3.00 FT. to 13.00 FT.

INITIAL WATER LEVEL (BTOC): 6.18 FT. | TIME: 8:52 | BTOC WELL SCREEN INTERVAL: 6.66 FT. to 16.66 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 16.61 FT. | MEASURED TOTAL WELL DEPTH (BTOC 16.55 FT. | HEIGHT OF STICK-UP: 3.66 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: NM | BENEATH OUTER CAP: NM | BENEATH INNER CAP: NM

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B, ~~9060A, 310.1, 9056A, SM 3500 FE-D, 6010C, 9034, AM20GAX~~

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
9:15	0	15.34	4.81	187	0.319	46.1	4.33	NA	
9:20	900	16.22	3.86	261	0.309	47.1	2.48	NA	
9:25	1540	16.47	3.97	262	0.305	33.0	1.81	NA	
9:30	2100	16.57	4.12	259	0.305	23.2	1.49	NA	
9:35	2700	16.82	3.94	274	0.304	22.3	2.20	NA	
9:40	3280	16.27	3.88	280	0.301	67.1	2.04	NA	
9:45	4260	16.71	3.91	291	0.300	24.8	1.98	NA	
								6.45	

COMMENTS:

SAMPLE COLLECTION TIME: 9:49

PREPARED BY: SHP/mlj

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant.
Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	12
Final tubing depth (ft.) BTOC	12
Initial pump speed	3.70
Time pump speed was initialized	9:11
Pump speed at flow into cylinder	3.71
Started new roll of tubing at	—
Three well volume (mL)	—

2,000 mL volume poured into bucket:

Time	9:29							
Cummulative Volume (mL)	2007							

Additional remarks: PID malfunction led to no measurement. Turbidity could not be lowered below 10 NTU

1 sample bottle broke

ENVIRONMENTAL INTERNATIONAL CORPORATION

PAGE 1 OF

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-19

DATE: 3/30/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 50°F Cloudy Light rain (Scattered)

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 3.38 FT. to 13.38 FT.

INITIAL WATER LEVEL (BTOC): 6.69 FT. | TIME: 11:50 | BTOC WELL SCREEN INTERVAL: 7.58 FT. to 17.58 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 17.97 FT. | MEASURED TOTAL WELL DEPTH (BTOC 17.96 FT. | HEIGHT OF STICK-UP: 4.2 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: ~ BENEATH OUTER CAP: ~ BENEATH INNER CAP: ~

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
12:01	0	17.34	6.46	-18	1.11	230	3.58		Orange/Brown water pumped Rm
12:06	~~460~~ 820	17.42	6.47	-34	1.12	25	1.89	NA	well; Volume 820
12:11	1500	17.39	6.40	-34	1.10	11.5	1.30	NA	
12:16	2260	17.35	6.35	-31	1.06	0.0	1.05	NA	
12:21	2980	17.38	6.33	-28	1.06	0.0	0.90	NA	
								7.05	

COMMENTS:

SAMPLE COLLECTION TIME: 12:23

PREPARED BY: David Vargo

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	13
Final tubing depth (ft.) BTOC	13
Initial pump speed	3.75
Time pump speed was initialized	11:56
Pump speed at flow into cylinder	3.75
Started new roll of tubing at	—
Three well volume (mL)	—

2,000 mL volume poured into bucket:

Time	12:14							
Cummulative Volume (mL)	2000							

Additional remarks: PID was malfunctioning

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-23

DATE: 3/30/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 50°F Cloud little no rain

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 6.15 FT. to 11.15 FT.

INITIAL WATER LEVEL (BTOC): 3.42 FT. | TIME: 13:45 | BTOC WELL SCREEN INTERVAL: 5.90 FT. to 10.90 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 11.72 FT. | MEASURED TOTAL WELL DEPTH (BTOC 11.68 FT. | HEIGHT OF STICK-UP: 0.25 FT. BGS

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: — BENEATH OUTER CAP: — BENEATH INNER CAP: —

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
13:57	0	17.71	6.48	40	0.993	0.0	2.26	NA	Dark gray water
14:02	520	17.65	6.36	33	1.03	14.4	1.56		
14:07	1000	17.64	6.30	37	1.06	32.5	1.22	NA	
14:12	1520	17.80	6.32	34	1.07	74.2	1.05	NA	
14:17	~~2000~~ 2000 DV	17.98	6.38	32	1.07	35.9	0.41	NA	volume 2000
14:22	2540	18.31	6.38	30	1.07	40.7	0.81	NA	
14:27	3020	18.61	6.33	35	1.04	41.9	0.75	NA	
								4.66	

COMMENTS:

SAMPLE COLLECTION TIME: 14:29

PREPARED BY: David Vargas

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant.

Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	8.5
Final tubing depth (ft.) BTOC	8.5
Initial pump speed	3.06
Time pump speed was initialized	13:51
Pump speed at flow into cylinder	3.06
Started new roll of tubing at	—
Three well volume (mL)	—

2,000 mL volume poured into bucket:

Time	14:17							
Cummulative Volume (mL)	2000							

Additional remarks: Well missing 2 bolts off well vault. Added 1 DV PID malfunct. ~~Added 1 bolt but other hole is obstructed~~ DV

ENVIRONMENTAL INTERNATIONAL CORPORATION

PAGE 1 OF 1

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-24 R

DATE: 4/1/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 60 55°F Rainy/Cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 4.95 FT. to 14.95 FT.

INITIAL WATER LEVEL (BTOC): 5.45 FT. | TIME: 9:43 | BTOC WELL SCREEN INTERVAL: 8.68 FT. to 18.68 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 18.15 FT. | MEASURED TOTAL WELL DEPTH (BTOC 18.4 FT. | HEIGHT OF STICK-UP: 3.73 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: — BENEATH OUTER CAP: — BENEATH INNER CAP: —

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B, 9060A, 310.1, 9056A, SM 3500 FE D, 6010C, 9034, AM20GAX

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
9:55	0	17.65	4.51	60	0.530	0.9	3.66	NA	Slight Tan Particulate in 1st Purge
10:00	400	16.64	4.42	57	0.546	6.4	2.48	NA	
10:05	800	16.45	4.53	44	0.539	9.7	1.68	NA	
10:10	1220	16.41	4.48	53	0.539	15.2	1.24	NA	
10:15	1620	16.42	4.52	54	0.517	12.0	1.02	NA	
10:20	2000	16.35	4.62	50	0.497	0.0	0.92	NA	
10:25	2420	16.35	4.58	56	0.479	0.0	0.88	NA	
10:30	2830	16.43	4.60	56	0.464	0.0	0.90	6.50	

COMMENTS:

SAMPLE COLLECTION TIME: 10:33

PREPARED BY: David Vargas

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	14
Final tubing depth (ft.) BTOC	14
Initial pump speed	2.5
Time pump speed was initialized	9:48
Pump speed at flow into cylinder	2.54
Started new roll of tubing at	—
Three well volume (mL)	—

2,000 mL volume poured into bucket:

Time	10:30							
Cummulative Volume (mL)	2000							

Additional remarks: Measure Stick up TOC - WOM = 42 7/8"

WOM - GLS = 2.25 inches

ENVIRONMENTAL INTERNATIONAL CORPORATION
WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-25

DATE: 3/30/15	PROJECT NAME: VOPAK Savannah	PROJECT NO: 390020
WEATHER CONDITIONS: Overcast 55°F light wind		
SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER		
WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER	BGS WELL SCREEN INTERVAL: 6.40 FT. to 16.40 FT.	
INITIAL WATER LEVEL (BTOC): 6.51 FT. TIME: 10:33	BTOC WELL SCREEN INTERVAL: 9.67 FT. to 19.67 FT.	
HISTORICAL TOTAL WELL DEPTH (BTOC): 17.93 FT.	MEASURED TOTAL WELL DEPTH (BTOC 17.91 FT.	HEIGHT OF STICK-UP: 3.27 FT.
PURGING DEVICE: Pegasus Alexis Peristaltic Pump	[ ] DEDICATED	[ ] DISPOSABLE [ ] DECONTAMINATED
SAMPLING DEVICE: 1/4" Teflon lined tubing	[ ] DEDICATED	[X] DISPOSABLE [ ] DECONTAMINATED
EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY		
[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE		
PID/FID READINGS (ppm): BACKGROUND: NM	BENEATH OUTER CAP: NM	BENEATH INNER CAP: NM
CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED		
ANALYTICAL PARAMETERS: 8260 B		
LABORATORY PERFORMING ANALYSIS: Test America	WATER ANALYZER MODEL: Horiba U-52	SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
10:44	0	17.79	5.45	66	0.635	50.3	2.76	NA	Tan color in water
10:49	780	18.95	5.84	-27	0.677	90.4	1.24	NA	
10:54	1430	19.15	5.88	-51	0.686	155	0.89	NA	
10:59	2100	19.17	5.97	-68	0.695	56.6	0.76	NA	
11:04	2810	19.32	5.95	-74	0.693	23.8	0.68	NA	
11:09	3480	19.40	5.96	-78	0.694	17.8	0.64	NA	Pump reversed flow direction
~~11:14~~									
11:16	4100	19.24	6.00	-79	0.693	10.1	0.70	6.98	

COMMENTS:

SAMPLE COLLECTION TIME: 11:23

PREPARED BY: Dave Vasquez

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant.
Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	14
Final tubing depth (ft.) BTOC	14
Initial pump speed	3.70
Time pump speed was initialized	10:40
Pump speed at flow into cylinder	3.70
Started new roll of tubing at	—
Three well volume (mL)	—

2,000 mL volume poured into bucket:

Time	10:58	11:13						
Cummulative Volume (mL)	2000	4000						

Additional remarks: At 11:14 Pump flow was reversed & corrected immediately waited for parameters to restabalize before reading

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-26R

DATE: 4/2/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 60°F Light Breezy Sunny w/ few clouds

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 5.10 FT. to 15.10 FT.

INITIAL WATER LEVEL (BTOC): 3.12 FT. | TIME: 9:36 | BTOC WELL SCREEN INTERVAL: 4.80 FT. to 14.80 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 14.51 FT. | MEASURED TOTAL WELL DEPTH (BTOC 14.51 FT. | HEIGHT OF STICK-UP: 0.3 FT. BGS

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: 0.1 | BENEATH OUTER CAP: 0.1 | BENEATH INNER CAP: 0.7 (0.7)

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
9:49	0	20.44	5.67	51	0.610	26.0	1.55	NA	1st Pull w/ Brown Particles
9:53	320	21.48	5.61	36	0.600	25.1	1.23	NA	but clear
9:58	600	21.75	5.61	15	0.611	19.5	0.95	NA	
10:03	1180	21.84	5.57	7	0.601	15.7	0.83	NA	
								3.15	

COMMENTS:

SAMPLE COLLECTION TIME: 10:05

PREPARED BY: David Vargas

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant.

Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	9.5
Final tubing depth (ft.) BTOC	9.5
Initial pump speed	2.54
Time pump speed was initialized	9:47
Pump speed at flow into cylinder	2.54
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks:

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-27

DATE: 3/30/16 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 60°F Partly Cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 7.79 FT. to 17.79 FT.

INITIAL WATER LEVEL (BTOC): 4.08 FT. | TIME: 15:47 | BTOC WELL SCREEN INTERVAL: 7.52 FT. to 17.52 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 13.85 FT. | MEASURED TOTAL WELL DEPTH (BTOC 13.84 FT. | HEIGHT OF STICK-UP: -0.27 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: — BENEATH OUTER CAP: — BENEATH INNER CAP: —

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
1601	0	23.28	6.20	57	0.341	0.0	1.28	NA	Orange/Brown color
1606	3.20	23.19	6.20	50	0.354	0.0	1.08	NA	
1611	600	23.05	6.19	49	0.377	0.0	1.09	NA	
1616	880	21.93	6.15	51	0.391	0.0	1.00	6.50	

COMMENTS:

SAMPLE COLLECTION TIME: 16:18

PREPARED BY: David Vaughn

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	10.5
Final tubing depth (ft.) BTOC	10.5
Initial pump speed	1.9
Time pump speed was initialized	15:51
Pump speed at flow into cylinder	1.9
Started new roll of tubing at	—
Three well volume (mL)	—

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks: PID Malfunct.

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-28

DATE: 3/31/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 60° F Clear & Dry

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 3.71 FT. to 13.71 FT.

INITIAL WATER LEVEL (BTOC): 4.12 FT. | TIME: 9:32 | BTOC WELL SCREEN INTERVAL: FT. to FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 16.0 FT. | MEASURED TOTAL WELL DEPTH (BTOC 14.05 FT. | HEIGHT OF STICK-UP: -0.125 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: 0.0 BENEATH OUTER CAP: 0.0 BENEATH INNER CAP: 0.0

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
10:03	0	19.43	6.70	194	0.431	0.0	2.59	N/A	Tan Color
10:08	280	18.94	6.90	201	0.415	0.0	2.10	N/A	
10:13	520	18.51	6.91	203	0.402	0.0	1.95	N/A	
10:18	780	18.22	6.90	203	0.399	0.0	1.83	N/A	
								5.08	

COMMENTS:

SAMPLE COLLECTION TIME: 10:20

PREPARED BY: SHelwig

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	2.0
Initial tubing depth (ft.) BTOC	9
Final tubing depth (ft.) BTOC	9
Initial pump speed	1.95
Time pump speed was initialized	9:51
Pump speed at flow into cylinder	1.97
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks:

ENVIRONMENTAL INTERNATIONAL CORPORATION
WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-29

DATE: 4/1/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 69°F Windy Partly Cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [ ] 2 [ ] 4 [ ] 6 [X] OTHER (3/4") | BGS WELL SCREEN INTERVAL: 10.00 FT. to 20.00 FT.

INITIAL WATER LEVEL (BTOC): 6.04 FT. | TIME: 16:42 | BTOC WELL SCREEN INTERVAL: 13.55 FT. to 23.55 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 23.26 FT. | MEASURED TOTAL WELL DEPTH (BTOC 23.15 FT. | HEIGHT OF STICK-UP: 3.55 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: NA BENEATH OUTER CAP: NA BENEATH INNER CAP: NA

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
16:57	0	25.66	4.53	57	0.924	0.0	1.83	NA	Clear
17:04	250	24.33	4.44	48	0.774	29.9	0.96	NA	
17:09	500	23.85	4.46	45	1.01	32.1	0.32	NA	
17:14	800	23.34	4.52	43	1.05	36.5	0.77	NA	
17:19	1000	22.91	4.53	42	1.10	25.1	0.76	NA	
17:24	1260	22.32	4.54	41	1.15	44.4	0.69	NA	
17:30	1510	21.80	4.54	41	1.20	87.8	0.66	NA	
17:35	1790	21.57	4.50	43	1.23	69.8	0.65	NA	
17:40	2040	21.22	4.49	43	1.24	78.0	0.62	NA	
								10.5	

COMMENTS:

SAMPLE COLLECTION TIME: 17:43

PREPARED BY: Will Sr JHenn

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant.
Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	24
Initial tubing depth (ft.) BTOC	18
Final tubing depth (ft.) BTOC	18
Initial pump speed	1.78
Time pump speed was initialized	16:46
Pump speed at flow into cylinder	1.79
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks: Measure stick up, TOC - CCP1 = 42 15/16"
CCP1 - GS = 3.25"

3.80

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-30

DATE: 4/3/13 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 65°F Partly cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 5.25 FT. to 15.25 FT.

INITIAL WATER LEVEL (BTOC): 5.05 FT. | TIME: 17:24 | BTOC WELL SCREEN INTERVAL: 4.97 FT. to 14.97 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 15.07 FT. | MEASURED TOTAL WELL DEPTH (BTOC 15.05 FT. | HEIGHT OF STICK-UP: 0.28 FT. BGS

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: 0 | BENEATH OUTER CAP: 0 | BENEATH INNER CAP: 0

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
17:41	0	24.40	4.95	98	0.280	0.0	1.33	5.11	
17:46	600	24.25	4.13	117	0.281	0.0	0.79	5.15	
17:51	1200	23.80	4.12	115	0.284	0.0	0.64	5.15	
17:56	1900	23.49	4.02	120	0.287	0.0	0.55	5.15	
18:01	2480	23.26	4.01	108	0.286	0.0	0.49	5.15	
18:06	3040	23.03	4.24	106	0.284	0.0	0.46	5.15	
18:11	3500	22.87	4.14	111	0.286	0.0	0.43	5.15	

COMMENTS:

SAMPLE COLLECTION TIME: 18:13

PREPARED BY: [signature]

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant.

Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	10
Final tubing depth (ft.) BTOC	10
Initial pump speed	3.50
Time pump speed was initialized	17:37
Pump speed at flow into cylinder	3.50
Started new roll of tubing at	—
Three well volume (mL)	—

2,000 mL volume poured into bucket:

Time	17:57							
Cummulative Volume (mL)	2000							

Additional remarks:

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

DATE: 3/30/15	PROJECT NAME: VOPAK Savannah	WELL/SAMPLE NO: MW-31
WEATHER CONDITIONS: 65°F clear by (Partly) no precip		PROJECT NO: 390020

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] OTHER

BGS WELL SCREEN INTERVAL: 10.50 FT. to 20.50 FT.

INITIAL WATER LEVEL (BTOC): 4.48 FT. TIME: 15:09

BTOC WELL SCREEN INTERVAL: 10.08 FT. to 20.08 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 20.48 FT. MEASURED TOTAL WELL DEPTH (BTOC FT. HEIGHT OF STICK-UP: 0.42 FT. BGS

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: — BENEATH OUTER CAP: — BENEATH INNER CAP: —

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America WATER ANALYZER MODEL: Horiba U-52 SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
15:19	0	22.22	6.57	48	0.844	59.2	1.71	-	Grey color
15:24	720	21.96	6.48	41	0.854	0.0	0.92		
15:29	1500	21.60	6.45	38	0.867	0.0	0.72	4.96	
15:34	2000	21.51	6.52	33	0.864	0.0	0.63	4.96	

COMMENTS:

SAMPLE COLLECTION TIME: 15:35

PREPARED BY: Daniel Vaughn

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	15
Final tubing depth (ft.) BTOC	15
Initial pump speed	3.7
Time pump speed was initialized	15:15
Pump speed at flow into cylinder	
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time	15:33							
Cummulative Volume (mL)	2000							

Additional remarks: PID Malfunct

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-32

DATE: 3-31-15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: Windy Partly Cloudy 70° F

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 6.50 FT. to 16.50 FT.

INITIAL WATER LEVEL (BTOC): 5.49 FT. | TIME: 1715 | BTOC WELL SCREEN INTERVAL: 6.08 FT. to 16.08 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 16.43 FT. | MEASURED TOTAL WELL DEPTH (BTOC 16.41 FT. | HEIGHT OF STICK-UP: 0.42 FT. BGS

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: _____ BENEATH OUTER CAP: _____ BENEATH INNER CAP: _____

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B, 9060A, 310.1, 9056A, SM 3500 FE D, 6010C, 9034, AM20GAX

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
17:30	0	29.78	6.86	-36	0.736	0.0	2.70	5.75	
17:35	800	29.35	7.00	-43	0.742	0.0	1.99	6.00	
17:40	1390	28.94	6.97	-40	0.740	19.3	1.99	5.96	
17:46	2000	28.49	6.97	-38	0.719	22.5	1.97	6.04	

COMMENTS:

SAMPLE COLLECTION TIME: 17:50

PREPARED BY: SHelms

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	11
Final tubing depth (ft.) BTOC	11
Initial pump speed	3.01
Time pump speed was initialized	17:22
Pump speed at flow into cylinder	3.01
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time	17:46							
Cummulative Volume (mL)	2000							

Additional remarks: _____

ENVIRONMENTAL INTERNATIONAL CORPORATION

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WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-33

DATE: 4/2/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 70°F Partly cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 5.50 FT. to 15.50 FT.

INITIAL WATER LEVEL (BTOC): 3.38 FT. | TIME: 12:50 | BTOC WELL SCREEN INTERVAL: 5.50 FT. to 15.50 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 14.42 FT. | MEASURED TOTAL WELL DEPTH (BTOC 14.35 FT. | HEIGHT OF STICK-UP: 0 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: 0.0 BENEATH OUTER CAP: 0.0 BENEATH INNER CAP: 4.7 → 0.3

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B, ~~8660A, 310.1, 9056A, SM 3500 FE D, 6010C, 9034, AM20GAX~~

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
13:09	0	26.01	5.18	48	0.374	0.0	1.62	2.77	Yellow color in cylinder
13:14	686	25.44	5.05	49	0.389	0.0	0.73	2.81	
13:19	1320	24.09	5.05	44	0.397	6.2	0.56	2.84	
13:24	1980	23.61	4.97	45	0.399	41.1	0.48	2.81	

COMMENTS:

SAMPLE COLLECTION TIME: 13:27

PREPARED BY:

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant.
Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	10.5
Final tubing depth (ft.) BTOC	10.5
Initial pump speed	3.55
Time pump speed was initialized	13:03
Pump speed at flow into cylinder	3.55
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time	13:24							
Cummulative Volume (mL)	2000							

Additional remarks: Yellow color in test tube box

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-34

DATE: 3-31-15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: Clear / Rain with 70°F

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 6.50 FT. to 16.50 FT.

INITIAL WATER LEVEL (BTOC): 3.28 FT. | TIME: 10:40 | BTOC WELL SCREEN INTERVAL: 6.02 FT. to 16.02 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 16.34 FT. | MEASURED TOTAL WELL DEPTH (BTOC 16.34 FT. | HEIGHT OF STICK-UP: 0.48 FT. BGS

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: 0.0 BENEATH OUTER CAP: 0.0 BENEATH INNER CAP: ~~0.0~~ 0.4

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
11:00	0	18.93	4.96	172	0.174	2.6	2.50	3.34	Clear, Brown to Amber
11:05	780	19.74	4.31	186	0.177	0.0	1.40	3.40	
11:10	1400	19.92	4.30	198	0.176	0.0	1.16	3.40	
11:15	2100	20.11	4.33	201	0.178	0.0	1.03	3.40	

COMMENTS:

SAMPLE COLLECTION TIME: 11:17

PREPARED BY: S Hollady

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	11
Final tubing depth (ft.) BTOC	11
Initial pump speed	3.00
Time pump speed was initialized	10:56
Pump speed at flow into cylinder	3.81
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time	11:14							
Cummulative Volume (mL)	2000							

Additional remarks: water in vault to 1.5 inches above TOC. Bailed dry for upcoming well

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-35

DATE: 3-31-15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: Windy Clear 75°F

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 5.63 FT. to 15.63 FT.

INITIAL WATER LEVEL (BTOC): 5.47 FT. | TIME: | BTOC WELL SCREEN INTERVAL: 5.32 FT. to 15.32 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 15.32 FT. | MEASURED TOTAL WELL DEPTH (BTOC FT. | HEIGHT OF STICK-UP: -0.31 FT. BGS

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: NM | BENEATH OUTER CAP: NM | BENEATH INNER CAP: NM

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
14:53	0	24.65	6.26	-1	0.605	40.6	1.67	5.64	
14:59	600	23.63	6.58	-107	0.612	0.0	1.09	5.54	
15:04	1160	23.10	6.56	-123	0.617	0.0	0.84	5.54	
15:09	1740	23.39	6.58	-132	0.616	0.0	0.73	5.54	

COMMENTS: | SAMPLE COLLECTION TIME: 15:12 | PREPARED BY: SHenry

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	10
Final tubing depth (ft.) BTOC	10
Initial pump speed	3.12
Time pump speed was initialized	14:45
Pump speed at flow into cylinder	3.12
Started new roll of tubing at	yes
Three well volume (mL)	

Diverter Swan plug on drain bottom, recovered at 14:48

- 011 450 comes roll

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks: Retrieve Bolt From Well - unable to retrieve.

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-36

DATE: 3-31-15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: W Mostly 76°F Partly Cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 5.55 FT. to 15.55 FT.

INITIAL WATER LEVEL (BTOC): 6.48 FT. | TIME: 15:35 | BTOC WELL SCREEN INTERVAL: 5.43 FT. to 15.43 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 15.425 FT. | MEASURED TOTAL WELL DEPTH (BTOC FT. | HEIGHT OF STICK-UP: -0.125 FT. BGS

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: — BENEATH OUTER CAP: — BENEATH INNER CAP: —

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
15:47	0	26.30	6.34	-94	1.34	0.0	1.78	6.69	1st Pull is clear in tubing
15:52	600	25.10	6.38	-117	1.37	0.0	1.23	6.74	
15:57	1010	24.91	6.38	-124	1.37	0.0	0.98	6.78	
16:02	1540	24.91	6.38	-128	1.37	0.0	0.79	6.80	

COMMENTS:

SAMPLE COLLECTION TIME: 1605

PREPARED BY: SHB/mm

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant.

Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	11
Final tubing depth (ft.) BTOC	11
Initial pump speed	3.01
Time pump speed was initialized	15:41
Pump speed at flow into cylinder	3.01
Started new roll of tubing at	—
Three well volume (mL)	—

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks: _____

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: MW-37

DATE: 3-31-15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 65°F clear skies

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 5.15 FT. to 15.15 FT.

INITIAL WATER LEVEL (BTOC): 11.42 FT. TIME: 3:07 | BTOC WELL SCREEN INTERVAL: 5.15 FT. to 15.15 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 15.15 FT. | MEASURED TOTAL WELL DEPTH (BTOC FT. | HEIGHT OF STICK-UP: 0 FT. BGS

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: 0.0 BENEATH OUTER CAP: 2.0 BENEATH INNER CAP: 1.2

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
11:48	0	18.73	5.39	85	0.314	0.0	1.95	4.08	
11:53	700	17.93	5.28	53	0.324	0.0	1.19	4.08	
11:58	1400	17.84	5.24	47	0.324	0.0	0.84	4.08	
12:03	2150	17.92	5.31	40	0.324	0.0	0.71	4.08	

COMMENTS:

SAMPLE COLLECTION TIME: 12:05

PREPARED BY: STACm

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	28
Initial tubing depth (ft.) BTOC	10
Final tubing depth (ft.) BTOC	10
Initial pump speed	4.10
Time pump speed was initialized	11:44
Pump speed at flow into cylinder	4.10
Started new roll of tubing at	—
Three well volume (mL)	—

End of 184ft roll of tubing

2,000 mL volume poured into bucket:

Time	12:02							
Cummulative Volume (mL)	2000							

Additional remarks:

ENVIRONMENTAL INTERNATIONAL CORPORATION

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: PAN-MW-9

DATE: 4/1/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 65°F Windy Partly Cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 3.00 FT. to 13.00 FT.

INITIAL WATER LEVEL (BTOC): 6.48 FT. | TIME: 1616 | BTOC WELL SCREEN INTERVAL: 6.25 FT. to 16.25 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 14.78 FT. | MEASURED TOTAL WELL DEPTH (BTOC 14.77 FT. | HEIGHT OF STICK-UP: 3.25 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: NM BENEATH OUTER CAP: NM BENEATH INNER CAP: NA

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B, ~~9060A, 310.1, 9056A, SM 9500 FE D, 6010C, 9034, AM20GAX~~

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
13:40	0	18.19	5.00	32	0.615	7.6	1.23	6.45	
13:45	300	17.67	4.76	35	0.624	0.7	0.90	7.04	
13:50	600	17.61	4.72	32	0.613	1.3	0.80	7.15	
13:55	900	17.52	4.75	29	0.602	5.4	0.75	7.23	

COMMENTS:

SAMPLE COLLECTION TIME: 13:53

PREPARED BY: S Helms

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	10
Final tubing depth (ft.) BTOC	10
Initial pump speed	2.00
Time pump speed was initialized	13:21
Pump speed at flow into cylinder	2.01
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time								
Cummulative Volume (mL)								

Additional remarks: Measure Stick Up. TOC - Clear 36 7/8"
TOC - S.S 39.5"

ENVIRONMENTAL INTERNATIONAL CORPORATION

PAGE 1 OF 1

WELL PURGING AND SAMPLING DATA LOG

WELL/SAMPLE NO: PAN-MW-10

DATE: 4/1/15 | PROJECT NAME: VOPAK Savannah | PROJECT NO: 390020

WEATHER CONDITIONS: 60°F Cloudy

SAMPLE TYPE: [X] GROUNDWATER [ ] WASTEWATER [ ] SURFACE WATER [ ] OTHER

WELL DIAMETER (IN.) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] OTHER | BGS WELL SCREEN INTERVAL: 3.00 FT. to 13.00 FT.

INITIAL WATER LEVEL (BTOC): 8.24 FT. | TIME: 8:47 | BTOC WELL SCREEN INTERVAL: 6.68 FT. to 16.68 FT.

HISTORICAL TOTAL WELL DEPTH (BTOC): 15.93 FT. | MEASURED TOTAL WELL DEPTH (BTOC 15.9 FT. | HEIGHT OF STICK-UP: 3.68 FT.

PURGING DEVICE: Pegasus Alexis Peristaltic Pump [ ] DEDICATED [ ] DISPOSABLE [ ] DECONTAMINATED

SAMPLING DEVICE: 1/4" Teflon lined tubing [ ] DEDICATED [X] DISPOSABLE [ ] DECONTAMINATED

EQUIP. DECON. [X] ALCONOX WASH [ ] ISOPROPANOL [X] DIST/DEION 1 RINSE [ ] DIST/DEION FINAL RINSE [X] AIR DRY

[ ] LIQUINOX WASH [ ] DIST/DEION 2 RINSE [ ] OTHER SOLVENT [ ] TAP WATER WASH [ ] TAP WATER FINAL RINSE

PID/FID READINGS (ppm): BACKGROUND: _____ BENEATH OUTER CAP: _____ BENEATH INNER CAP: _____

CONTAINER PRESERVATION: [X] LAB PRESERVED [ ] FIELD PRESERVED

ANALYTICAL PARAMETERS: 8260 B

LABORATORY PERFORMING ANALYSIS: Test America | WATER ANALYZER MODEL: Horiba U-52 | SERIAL # UDRU5DA9

TIME	VOLUME PURGED (mL)	TEMP (°C)	pH	ORP (mV)	SPEC. COND. (mS/cm)	TURBIDITY (NTU)	DISS. OXYGEN. (mg/L)	DTW (FT)	REMARKS (COLOR, ODOR, ETC.)
9:01	0	19.06	6.13	140	0.531	0.0	5.70	8.33	1st Purl Clear water
9:07	420	18.66	5.68	144	0.540	0.0	3.30	8.35	
9:12	1480	18.50	5.65	145	0.543	0.0	2.73	8.36	
9:17	2200	18.42	5.68	143	0.541	0.0	2.33	8.36	

COMMENTS:

SAMPLE COLLECTION TIME: 9:20

PREPARED BY: David Vargas

* Parameters are stabilized when 3 consecutive readings are within ± 0.1 FOR pH and ± 5% for specific conductivity is constant. Reasonable attempts must be made to reach a 0.2 mg/L dissolved oxygen reading and a turbidity reading below 10 NTU as per the Groundwater Sampling Operating Procedure, US EPA, Region 4, # SESDPROC-301-R3.

Length of tubing cut (ft.)	20
Initial tubing depth (ft.) BTOC	12.5
Final tubing depth (ft.) BTOC	12.5
Initial pump speed	3.85
Time pump speed was initialized	8:58
Pump speed at flow into cylinder	3.85
Started new roll of tubing at	
Three well volume (mL)	

2,000 mL volume poured into bucket:

Time	9:15							
Cummulative Volume (mL)	2000							

Additional remarks: _____

VOPAK TERMINAL SAVANNAH, SAVANNAH, GEORGIA

EIGHTH SEMI-ANNUAL PROGRESS REPORT

ATTACHMENT B

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-111248-1
Client Project/Site: VoPak, Savannah/390020

For:
Environmental International Corporation
161 Kimball Bridge Road
Suite 100
Alpharetta, Georgia 30009

Attn: Stephen Helmly

Sheila Hoffman

Authorized for release by:
4/10/2015 5:45:05 PM

Sheila Hoffman, Project Manager II
(912)354-7858 e.3004
sheila.hoffman@testamericainc.com

Sample Summary

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-111248-1	IW-1R	Water	04/02/15 15:37	04/03/15 08:30
680-111248-2	IW-18	Water	04/02/15 12:36	04/03/15 08:30
680-111248-3	LAW-PZ-8R	Water	04/02/15 16:57	04/03/15 08:30
680-111248-4	MW-14	Water	04/01/15 18:23	04/03/15 08:30
680-111248-5	MW-16	Water	04/02/15 11:21	04/03/15 08:30
680-111248-6	MW-17R	Water	03/31/15 16:58	04/03/15 08:30
680-111248-7	MW-18R	Water	03/30/15 09:49	04/03/15 08:30
680-111248-8	MW-19	Water	03/30/15 12:23	04/03/15 08:30
680-111248-9	MW-23	Water	03/30/15 14:29	04/03/15 08:30
680-111248-10	MW-24R	Water	04/01/15 10:33	04/03/15 08:30
680-111248-11	MW-25	Water	03/30/15 11:23	04/03/15 08:30
680-111248-12	MW-26R	Water	04/02/15 10:05	04/03/15 08:30
680-111248-13	MW-27	Water	03/30/15 16:18	04/03/15 08:30
680-111248-14	MW-28	Water	03/31/15 10:20	04/03/15 08:30
680-111248-15	MW-29	Water	04/01/15 17:43	04/03/15 08:30
680-111248-16	MW-30	Water	04/02/15 18:13	04/03/15 08:30
680-111248-17	MW-31	Water	03/30/15 15:35	04/03/15 08:30
680-111248-18	MW-32	Water	03/31/15 17:50	04/03/15 08:30
680-111248-19	MW-33	Water	04/02/15 13:27	04/03/15 08:30
680-111248-20	MW-34	Water	03/31/15 11:17	04/03/15 08:30
680-111248-21	MW-35	Water	03/31/15 15:12	04/03/15 08:30
680-111248-22	MW-36	Water	03/31/15 16:05	04/03/15 08:30
680-111248-23	MW-37	Water	03/31/15 12:05	04/03/15 08:30
680-111248-24	PAN-MW-9	Water	04/01/15 18:58	04/03/15 08:30
680-111248-25	PAN-MW-10	Water	04/01/15 09:20	04/03/15 08:30
680-111248-26	Trip Blank	Water	03/30/15 00:00	04/03/15 08:30

Method Summary

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 680-111248-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Environmental International Corporation

Project: VoPak, Savannah/390020

Report Number: 680-111248-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 04/03/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 6.6 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples IW-1R (680-111248-1), IW-18 (680-111248-2), LAW-PZ-8R (680-111248-3), MW-14 (680-111248-4), MW-16 (680-111248-5), MW-17R (680-111248-6), MW-18R (680-111248-7), MW-19 (680-111248-8), MW-23 (680-111248-9), MW-24R (680-111248-10), MW-25 (680-111248-11), MW-26R (680-111248-12), MW-27 (680-111248-13), MW-28 (680-111248-14), MW-29 (680-111248-15), MW-30 (680-111248-16), MW-31 (680-111248-17), MW-32 (680-111248-18), MW-33 (680-111248-19), MW-34 (680-111248-20), MW-35 (680-111248-21), MW-36 (680-111248-22), MW-37 (680-111248-23), PAN-MW-9 (680-111248-24), PAN-MW-10 (680-111248-25) and Trip Blank (680-111248-26) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/09/2015 and 04/10/2015.

Samples IW-1R (680-111248-1)[200X], IW-18 (680-111248-2)[10X], LAW-PZ-8R (680-111248-3)[1000X], MW-16 (680-111248-5)[2X], MW-24R (680-111248-10)[5X], MW-26R (680-111248-12)[100X], MW-29 (680-111248-15)[50X], MW-37 (680-111248-23)[2X] and PAN-MW-9 (680-111248-24)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: IW-1R — Lab Sample ID: 680-111248-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	440		200	100	ug/L	200		8260B	Total/NA
cis-1,2-Dichloroethene	9900		200	82	ug/L	200		8260B	Total/NA
Benzene	110	J	200	86	ug/L	200		8260B	Total/NA
Trichloroethene	150	J	200	96	ug/L	200		8260B	Total/NA
Toluene	260		200	96	ug/L	200		8260B	Total/NA
Tetrachloroethene	310		200	150	ug/L	200		8260B	Total/NA
Chlorobenzene	920		200	52	ug/L	200		8260B	Total/NA
Ethylbenzene	2300		200	66	ug/L	200		8260B	Total/NA
Xylenes, Total	17000		200	46	ug/L	200		8260B	Total/NA
1,3-Dichlorobenzene	110	J	200	86	ug/L	200		8260B	Total/NA
1,4-Dichlorobenzene	820		200	92	ug/L	200		8260B	Total/NA
1,2-Dichlorobenzene	200		200	74	ug/L	200		8260B	Total/NA
1,2,4-Trichlorobenzene	1000		1000	500	ug/L	200		8260B	Total/NA

Client Sample ID: IW-18 — Lab Sample ID: 680-111248-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	830		10	5.0	ug/L	10		8260B	Total/NA
trans-1,2-Dichloroethene	4.4	J	10	3.7	ug/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	920		10	4.1	ug/L	10		8260B	Total/NA
Benzene	350		10	4.3	ug/L	10		8260B	Total/NA
Trichloroethene	8.4	J	10	4.8	ug/L	10		8260B	Total/NA
Toluene	14		10	4.8	ug/L	10		8260B	Total/NA
Chlorobenzene	960		10	2.6	ug/L	10		8260B	Total/NA
Ethylbenzene	180		10	3.3	ug/L	10		8260B	Total/NA
Xylenes, Total	1300		10	2.3	ug/L	10		8260B	Total/NA
Isopropylbenzene	4.5	J	10	3.5	ug/L	10		8260B	Total/NA
1,3-Dichlorobenzene	7.4	J	10	4.3	ug/L	10		8260B	Total/NA
1,4-Dichlorobenzene	31		10	4.6	ug/L	10		8260B	Total/NA
1,2-Dichlorobenzene	7.0	J	10	3.7	ug/L	10		8260B	Total/NA

Client Sample ID: LAW-PZ-8R — Lab Sample ID: 680-111248-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4100		1000	410	ug/L	1000		8260B	Total/NA
Benzene	1100		1000	430	ug/L	1000		8260B	Total/NA
Chlorobenzene	3700		1000	260	ug/L	1000		8260B	Total/NA
Ethylbenzene	6900		1000	330	ug/L	1000		8260B	Total/NA
Xylenes, Total	87000		1000	230	ug/L	1000		8260B	Total/NA
1,4-Dichlorobenzene	960	J	1000	460	ug/L	1000		8260B	Total/NA

Client Sample ID: MW-14 — Lab Sample ID: 680-111248-4

No Detections.

Client Sample ID: MW-16 — Lab Sample ID: 680-111248-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	120		2.0	1.0	ug/L	2		8260B	Total/NA
1,1-Dichloroethene	0.90	J	2.0	0.72	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	1.0	J	2.0	0.74	ug/L	2		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample ID: MW-16 (Continued) — Lab Sample ID: 680-111248-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	210		2.0	0.82	ug/L	2		8260B	Total/NA
Benzene	2.7		2.0	0.86	ug/L	2		8260B	Total/NA
Trichloroethene	6.0		2.0	0.96	ug/L	2		8260B	Total/NA
Chlorobenzene	17		2.0	0.52	ug/L	2		8260B	Total/NA
Ethylbenzene	3.4		2.0	0.66	ug/L	2		8260B	Total/NA
Xylenes, Total	1.3	J	2.0	0.46	ug/L	2		8260B	Total/NA
1,3-Dichlorobenzene	3.9		2.0	0.86	ug/L	2		8260B	Total/NA
1,4-Dichlorobenzene	8.3		2.0	0.92	ug/L	2		8260B	Total/NA
1,2-Dichlorobenzene	1.1	J	2.0	0.74	ug/L	2		8260B	Total/NA

Client Sample ID: MW-17R — Lab Sample ID: 680-111248-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.1	J	10	7.0	ug/L	1		8260B	Total/NA
Ethylbenzene	0.79	J	1.0	0.33	ug/L	1		8260B	Total/NA
Isopropylbenzene	57		1.0	0.35	ug/L	1		8260B	Total/NA

Client Sample ID: MW-18R — Lab Sample ID: 680-111248-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.48	J	1.0	0.36	ug/L	1		8260B	Total/NA

Client Sample ID: MW-19 — Lab Sample ID: 680-111248-8

No Detections.

Client Sample ID: MW-23 — Lab Sample ID: 680-111248-9

No Detections.

Client Sample ID: MW-24R — Lab Sample ID: 680-111248-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	16		5.0	2.5	ug/L	5		8260B	Total/NA
Methyl tert-butyl ether	130		50	1.5	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	300		5.0	2.1	ug/L	5		8260B	Total/NA
2-Butanone	23	J	50	17	ug/L	5		8260B	Total/NA
Benzene	3.9	J	5.0	2.2	ug/L	5		8260B	Total/NA

Client Sample ID: MW-25 — Lab Sample ID: 680-111248-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyclohexane	0.42	J	1.0	0.39	ug/L	1		8260B	Total/NA
Isopropylbenzene	1.0		1.0	0.35	ug/L	1		8260B	Total/NA

Client Sample ID: MW-26R — Lab Sample ID: 680-111248-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	180		100	43	ug/L	100		8260B	Total/NA
Toluene	63	J	100	48	ug/L	100		8260B	Total/NA
Chlorobenzene	490		100	26	ug/L	100		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-26R (Continued) — Lab Sample ID: 680-111248-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	760		100	33	ug/L	100		8260B	Total/NA
Xylenes, Total	11000		100	23	ug/L	100		8260B	Total/NA

Client Sample ID: MW-27 — Lab Sample ID: 680-111248-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	4.7		1.0	0.50	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.40	J	10	0.30	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.79	J	1.0	0.41	ug/L	1		8260B	Total/NA
Chlorobenzene	3.0		1.0	0.26	ug/L	1		8260B	Total/NA

Client Sample ID: MW-28 — Lab Sample ID: 680-111248-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	8.1		1.0	0.50	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	33		1.0	0.41	ug/L	1		8260B	Total/NA
Benzene	1.6		1.0	0.43	ug/L	1		8260B	Total/NA
Trichloroethene	1.1		1.0	0.48	ug/L	1		8260B	Total/NA
Tetrachloroethene	5.8		1.0	0.74	ug/L	1		8260B	Total/NA
Chlorobenzene	8.2		1.0	0.26	ug/L	1		8260B	Total/NA
1,4-Dichlorobenzene	1.8		1.0	0.46	ug/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.39	J	1.0	0.37	ug/L	1		8260B	Total/NA

Client Sample ID: MW-29 — Lab Sample ID: 680-111248-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	790		50	25	ug/L	50		8260B	Total/NA
1,1-Dichloroethene	18	J	50	18	ug/L	50		8260B	Total/NA
cis-1,2-Dichloroethene	5900		50	21	ug/L	50		8260B	Total/NA
Trichloroethene	90		50	24	ug/L	50		8260B	Total/NA
Toluene	25	J	50	24	ug/L	50		8260B	Total/NA
Tetrachloroethene	160		50	37	ug/L	50		8260B	Total/NA
Chlorobenzene	170		50	13	ug/L	50		8260B	Total/NA
Ethylbenzene	3300		50	17	ug/L	50		8260B	Total/NA
Xylenes, Total	7300		50	12	ug/L	50		8260B	Total/NA
Isopropylbenzene	100		50	18	ug/L	50		8260B	Total/NA
1,3-Dichlorobenzene	58		50	22	ug/L	50		8260B	Total/NA
1,4-Dichlorobenzene	180		50	23	ug/L	50		8260B	Total/NA
1,2-Dichlorobenzene	35	J	50	19	ug/L	50		8260B	Total/NA
1,2,4-Trichlorobenzene	160	J	250	130	ug/L	50		8260B	Total/NA

Client Sample ID: MW-30 — Lab Sample ID: 680-111248-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.88	J	1.0	0.50	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.7		1.0	0.41	ug/L	1		8260B	Total/NA
Chlorobenzene	0.72	J	1.0	0.26	ug/L	1		8260B	Total/NA
Xylenes, Total	1.3		1.0	0.23	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: MW-31 — Lab Sample ID: 680-111248-17

No Detections.

Client Sample ID: MW-32 — Lab Sample ID: 680-111248-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichlorofluoromethane	0.73	J	1.0	0.42	ug/L	1		8260B	Total/NA

Client Sample ID: MW-33 — Lab Sample ID: 680-111248-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	100		1.0	0.50	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.60	J	1.0	0.36	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	2.2		1.0	0.37	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	150		1.0	0.41	ug/L	1		8260B	Total/NA
Benzene	1.7		1.0	0.43	ug/L	1		8260B	Total/NA
Trichloroethene	2.8		1.0	0.48	ug/L	1		8260B	Total/NA
Toluene	1.7		1.0	0.48	ug/L	1		8260B	Total/NA
Chlorobenzene	47		1.0	0.26	ug/L	1		8260B	Total/NA
Ethylbenzene	3.1		1.0	0.33	ug/L	1		8260B	Total/NA
Xylenes, Total	11		1.0	0.23	ug/L	1		8260B	Total/NA
1,3-Dichlorobenzene	22		1.0	0.43	ug/L	1		8260B	Total/NA
1,4-Dichlorobenzene	93		1.0	0.46	ug/L	1		8260B	Total/NA
1,2-Dichlorobenzene	9.2		1.0	0.37	ug/L	1		8260B	Total/NA
1,2,4-Trichlorobenzene	36		5.0	2.5	ug/L	1		8260B	Total/NA

Client Sample ID: MW-34 — Lab Sample ID: 680-111248-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	2.6		1.0	0.50	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	9.9		1.0	0.41	ug/L	1		8260B	Total/NA
Benzene	0.47	J	1.0	0.43	ug/L	1		8260B	Total/NA
Trichloroethene	0.52	J	1.0	0.48	ug/L	1		8260B	Total/NA
Tetrachloroethene	2.7		1.0	0.74	ug/L	1		8260B	Total/NA
Chlorobenzene	2.3		1.0	0.26	ug/L	1		8260B	Total/NA
1,4-Dichlorobenzene	0.67	J	1.0	0.46	ug/L	1		8260B	Total/NA

Client Sample ID: MW-35 — Lab Sample ID: 680-111248-21

No Detections.

Client Sample ID: MW-36 — Lab Sample ID: 680-111248-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.59	J	1.0	0.41	ug/L	1		8260B	Total/NA

Client Sample ID: MW-37 — Lab Sample ID: 680-111248-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	65		2.0	1.0	ug/L	2		8260B	Total/NA
1,1-Dichloroethene	1.8	J	2.0	0.72	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	1.0	J	2.0	0.74	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	350		2.0	0.82	ug/L	2		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample ID: MW-37 (Continued) — Lab Sample ID: 680-111248-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.4		2.0	0.86	ug/L	2		8260B	Total/NA
Trichloroethene	8.5		2.0	0.96	ug/L	2		8260B	Total/NA
Tetrachloroethene	19		2.0	1.5	ug/L	2		8260B	Total/NA
Chlorobenzene	68		2.0	0.52	ug/L	2		8260B	Total/NA
Xylenes, Total	0.77	J	2.0	0.46	ug/L	2		8260B	Total/NA
Isopropylbenzene	1.1	J	2.0	0.70	ug/L	2		8260B	Total/NA
1,3-Dichlorobenzene	7.4		2.0	0.86	ug/L	2		8260B	Total/NA
1,4-Dichlorobenzene	46		2.0	0.92	ug/L	2		8260B	Total/NA
1,2-Dichlorobenzene	13		2.0	0.74	ug/L	2		8260B	Total/NA
1,2,4-Trichlorobenzene	56		10	5.0	ug/L	2		8260B	Total/NA

Client Sample ID: PAN-MW-9 — Lab Sample ID: 680-111248-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	130		10	5.0	ug/L	10		8260B	Total/NA
1,1-Dichloroethene	6.7	J	10	3.6	ug/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	2000		10	4.1	ug/L	10		8260B	Total/NA
Benzene	5.2	J	10	4.3	ug/L	10		8260B	Total/NA
Trichloroethene	4.9	J	10	4.8	ug/L	10		8260B	Total/NA
Chlorobenzene	33		10	2.6	ug/L	10		8260B	Total/NA
Ethylbenzene	580		10	3.3	ug/L	10		8260B	Total/NA
Xylenes, Total	1400		10	2.3	ug/L	10		8260B	Total/NA
Isopropylbenzene	32		10	3.5	ug/L	10		8260B	Total/NA
1,3-Dichlorobenzene	8.5	J	10	4.3	ug/L	10		8260B	Total/NA
1,4-Dichlorobenzene	28		10	4.6	ug/L	10		8260B	Total/NA
1,2-Dichlorobenzene	5.3	J	10	3.7	ug/L	10		8260B	Total/NA

Client Sample ID: PAN-MW-10 — Lab Sample ID: 680-111248-25

No Detections.

Client Sample ID: Trip Blank — Lab Sample ID: 680-111248-26

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: IW-1R
Date Collected: 04/02/15 15:37
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<120		200	120	ug/L			04/09/15 17:00	200
Chloromethane	<80		200	80	ug/L			04/09/15 17:00	200
Vinyl chloride	**440**		200	100	ug/L			04/09/15 17:00	200
Bromomethane	<500		1000	500	ug/L			04/09/15 17:00	200
Chloroethane	<500		1000	500	ug/L			04/09/15 17:00	200
Trichlorofluoromethane	<84		200	84	ug/L			04/09/15 17:00	200
1,1-Dichloroethene	<72		200	72	ug/L			04/09/15 17:00	200
1,1,2-Trichloro-1,2,2-trifluoroethane	<72		200	72	ug/L			04/09/15 17:00	200
Acetone	<1400		2000	1400	ug/L			04/09/15 17:00	200
Carbon disulfide	<200		400	200	ug/L			04/09/15 17:00	200
Methyl acetate	<360		1000	360	ug/L			04/09/15 17:00	200
Methylene Chloride	<500		1000	500	ug/L			04/09/15 17:00	200
trans-1,2-Dichloroethene	<74		200	74	ug/L			04/09/15 17:00	200
Methyl tert-butyl ether	<60		2000	60	ug/L			04/09/15 17:00	200
1,1-Dichloroethane	<76		200	76	ug/L			04/09/15 17:00	200
cis-1,2-Dichloroethene	**9900**		200	82	ug/L			04/09/15 17:00	200
2-Butanone	<680		2000	680	ug/L			04/09/15 17:00	200
Chloroform	<100		200	100	ug/L			04/09/15 17:00	200
1,1,1-Trichloroethane	<74		200	74	ug/L			04/09/15 17:00	200
Cyclohexane	<78		200	78	ug/L			04/09/15 17:00	200
Carbon tetrachloride	<66		200	66	ug/L			04/09/15 17:00	200
Benzene	**110**	**J**	200	86	ug/L			04/09/15 17:00	200
1,2-Dichloroethane	<100		200	100	ug/L			04/09/15 17:00	200
Trichloroethene	**150**	**J**	200	96	ug/L			04/09/15 17:00	200
Methylcyclohexane	<86		200	86	ug/L			04/09/15 17:00	200
1,2-Dichloropropane	<130		200	130	ug/L			04/09/15 17:00	200
Bromodichloromethane	<88		200	88	ug/L			04/09/15 17:00	200
cis-1,3-Dichloropropene	<80		200	80	ug/L			04/09/15 17:00	200
4-Methyl-2-pentanone	<420		2000	420	ug/L			04/09/15 17:00	200
Toluene	**260**		200	96	ug/L			04/09/15 17:00	200
trans-1,3-Dichloropropene	<84		200	84	ug/L			04/09/15 17:00	200
1,1,2-Trichloroethane	<66		200	66	ug/L			04/09/15 17:00	200
Tetrachloroethene	**310**		200	150	ug/L			04/09/15 17:00	200
2-Hexanone	<400		2000	400	ug/L			04/09/15 17:00	200
Dibromochloromethane	<64		200	64	ug/L			04/09/15 17:00	200
1,2-Dibromoethane	<88		200	88	ug/L			04/09/15 17:00	200
Chlorobenzene	**920**		200	52	ug/L			04/09/15 17:00	200
Ethylbenzene	**2300**		200	66	ug/L			04/09/15 17:00	200
Xylenes, Total	**17000**		200	46	ug/L			04/09/15 17:00	200
Styrene	<54		200	54	ug/L			04/09/15 17:00	200
Bromoform	<86		200	86	ug/L			04/09/15 17:00	200
Isopropylbenzene	<70		200	70	ug/L			04/09/15 17:00	200
1,1,2,2-Tetrachloroethane	<120		200	120	ug/L			04/09/15 17:00	200
1,3-Dichlorobenzene	**110**	**J**	200	86	ug/L			04/09/15 17:00	200
1,4-Dichlorobenzene	**820**		200	92	ug/L			04/09/15 17:00	200
1,2-Dichlorobenzene	**200**		200	74	ug/L			04/09/15 17:00	200
1,2-Dibromo-3-Chloropropane	<220		1000	220	ug/L			04/09/15 17:00	200
1,2,4-Trichlorobenzene	**1000**		1000	500	ug/L			04/09/15 17:00	200

Client Sample ID: IW-1R

Lab Sample ID: 680-111248-1

Date Collected: 04/02/15 15:37

Matrix: Water

Date Received: 04/03/15 08:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 17:00*	*200*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*04/09/15 17:00*	*200*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*04/09/15 17:00*	*200*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*04/09/15 17:00*	*200*

Client Sample ID: IW-18

Lab Sample ID: 680-111248-2

Date Collected: 04/02/15 12:36

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<6.0		10	6.0	ug/L			04/10/15 12:49	10
Chloromethane	<4.0		10	4.0	ug/L			04/10/15 12:49	10
Vinyl chloride	**830**		10	5.0	ug/L			04/10/15 12:49	10
Bromomethane	<25		50	25	ug/L			04/10/15 12:49	10
Chloroethane	<25		50	25	ug/L			04/10/15 12:49	10
Trichlorofluoromethane	<4.2		10	4.2	ug/L			04/10/15 12:49	10
1,1-Dichloroethene	<3.6		10	3.6	ug/L			04/10/15 12:49	10
1,1,2-Trichloro-1,2,2-trifluoroethane	<3.6		10	3.6	ug/L			04/10/15 12:49	10
Acetone	<70		100	70	ug/L			04/10/15 12:49	10
Carbon disulfide	<10		20	10	ug/L			04/10/15 12:49	10
Methyl acetate	<18		50	18	ug/L			04/10/15 12:49	10
Methylene Chloride	<25		50	25	ug/L			04/10/15 12:49	10
trans-1,2-Dichloroethene	**4.4**	**J**	10	3.7	ug/L			04/10/15 12:49	10
Methyl tert-butyl ether	<3.0		100	3.0	ug/L			04/10/15 12:49	10
1,1-Dichloroethane	<3.8		10	3.8	ug/L			04/10/15 12:49	10
cis-1,2-Dichloroethene	**920**		10	4.1	ug/L			04/10/15 12:49	10
2-Butanone	<34		100	34	ug/L			04/10/15 12:49	10
Chloroform	<5.0		10	5.0	ug/L			04/10/15 12:49	10
1,1,1-Trichloroethane	<3.7		10	3.7	ug/L			04/10/15 12:49	10
Cyclohexane	<3.9		10	3.9	ug/L			04/10/15 12:49	10
Carbon tetrachloride	<3.3		10	3.3	ug/L			04/10/15 12:49	10
Benzene	**350**		10	4.3	ug/L			04/10/15 12:49	10
1,2-Dichloroethane	<5.0		10	5.0	ug/L			04/10/15 12:49	10
Trichloroethene	**8.4**	**J**	10	4.8	ug/L			04/10/15 12:49	10
Methylcyclohexane	<4.3		10	4.3	ug/L			04/10/15 12:49	10
1,2-Dichloropropane	<6.7		10	6.7	ug/L			04/10/15 12:49	10
Bromodichloromethane	<4.4		10	4.4	ug/L			04/10/15 12:49	10
cis-1,3-Dichloropropene	<4.0		10	4.0	ug/L			04/10/15 12:49	10
4-Methyl-2-pentanone	<21		100	21	ug/L			04/10/15 12:49	10
Toluene	**14**		10	4.8	ug/L			04/10/15 12:49	10
trans-1,3-Dichloropropene	<4.2		10	4.2	ug/L			04/10/15 12:49	10
1,1,2-Trichloroethane	<3.3		10	3.3	ug/L			04/10/15 12:49	10
Tetrachloroethene	<7.4		10	7.4	ug/L			04/10/15 12:49	10
2-Hexanone	<20		100	20	ug/L			04/10/15 12:49	10
Dibromochloromethane	<3.2		10	3.2	ug/L			04/10/15 12:49	10
1,2-Dibromoethane	<4.4		10	4.4	ug/L			04/10/15 12:49	10
Chlorobenzene	**960**		10	2.6	ug/L			04/10/15 12:49	10
Ethylbenzene	**180**		10	3.3	ug/L			04/10/15 12:49	10
Xylenes, Total	**1300**		10	2.3	ug/L			04/10/15 12:49	10

Client Sample ID: IW-18

Lab Sample ID: 680-111248-2

Date Collected: 04/02/15 12:36

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<2.7		10	2.7	ug/L			04/10/15 12:49	10
Bromoform	<4.3		10	4.3	ug/L			04/10/15 12:49	10
Isopropylbenzene	**4.5**	**J**	10	3.5	ug/L			04/10/15 12:49	10
1,1,2,2-Tetrachloroethane	<6.2		10	6.2	ug/L			04/10/15 12:49	10
1,3-Dichlorobenzene	**7.4**	**J**	10	4.3	ug/L			04/10/15 12:49	10
1,4-Dichlorobenzene	**31**		10	4.6	ug/L			04/10/15 12:49	10
1,2-Dichlorobenzene	**7.0**	**J**	10	3.7	ug/L			04/10/15 12:49	10
1,2-Dibromo-3-Chloropropane	<11		50	11	ug/L			04/10/15 12:49	10
1,2,4-Trichlorobenzene	<25		50	25	ug/L			04/10/15 12:49	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*04/10/15 12:49*	*10*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*04/10/15 12:49*	*10*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*04/10/15 12:49*	*10*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*04/10/15 12:49*	*10*

Client Sample ID: LAW-PZ-8R

Lab Sample ID: 680-111248-3

Date Collected: 04/02/15 16:57

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<600		1000	600	ug/L			04/09/15 17:22	1000
Chloromethane	<400		1000	400	ug/L			04/09/15 17:22	1000
Vinyl chloride	<500		1000	500	ug/L			04/09/15 17:22	1000
Bromomethane	<2500		5000	2500	ug/L			04/09/15 17:22	1000
Chloroethane	<2500		5000	2500	ug/L			04/09/15 17:22	1000
Trichlorofluoromethane	<420		1000	420	ug/L			04/09/15 17:22	1000
1,1-Dichloroethene	<360		1000	360	ug/L			04/09/15 17:22	1000
1,1,2-Trichloro-1,2,2-trifluoroethane	<360		1000	360	ug/L			04/09/15 17:22	1000
Acetone	<7000		10000	7000	ug/L			04/09/15 17:22	1000
Carbon disulfide	<1000		2000	1000	ug/L			04/09/15 17:22	1000
Methyl acetate	<1800		5000	1800	ug/L			04/09/15 17:22	1000
Methylene Chloride	<2500		5000	2500	ug/L			04/09/15 17:22	1000
trans-1,2-Dichloroethene	<370		1000	370	ug/L			04/09/15 17:22	1000
Methyl tert-butyl ether	<300		10000	300	ug/L			04/09/15 17:22	1000
1,1-Dichloroethane	<380		1000	380	ug/L			04/09/15 17:22	1000
cis-1,2-Dichloroethene	**4100**		1000	410	ug/L			04/09/15 17:22	1000
2-Butanone	<3400		10000	3400	ug/L			04/09/15 17:22	1000
Chloroform	<500		1000	500	ug/L			04/09/15 17:22	1000
1,1,1-Trichloroethane	<370		1000	370	ug/L			04/09/15 17:22	1000
Cyclohexane	<390		1000	390	ug/L			04/09/15 17:22	1000
Carbon tetrachloride	<330		1000	330	ug/L			04/09/15 17:22	1000
Benzene	**1100**		1000	430	ug/L			04/09/15 17:22	1000
1,2-Dichloroethane	<500		1000	500	ug/L			04/09/15 17:22	1000
Trichloroethene	<480		1000	480	ug/L			04/09/15 17:22	1000
Methylcyclohexane	<430		1000	430	ug/L			04/09/15 17:22	1000
1,2-Dichloropropane	<670		1000	670	ug/L			04/09/15 17:22	1000
Bromodichloromethane	<440		1000	440	ug/L			04/09/15 17:22	1000
cis-1,3-Dichloropropene	<400		1000	400	ug/L			04/09/15 17:22	1000

Client Sample ID: LAW-PZ-8R

Lab Sample ID: 680-111248-3

Date Collected: 04/02/15 16:57

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	<2100		10000	2100	ug/L			04/09/15 17:22	1000
Toluene	<480		1000	480	ug/L			04/09/15 17:22	1000
trans-1,3-Dichloropropene	<420		1000	420	ug/L			04/09/15 17:22	1000
1,1,2-Trichloroethane	<330		1000	330	ug/L			04/09/15 17:22	1000
Tetrachloroethene	<740		1000	740	ug/L			04/09/15 17:22	1000
2-Hexanone	<2000		10000	2000	ug/L			04/09/15 17:22	1000
Dibromochloromethane	<320		1000	320	ug/L			04/09/15 17:22	1000
1,2-Dibromoethane	<440		1000	440	ug/L			04/09/15 17:22	1000
Chlorobenzene	**3700**		1000	260	ug/L			04/09/15 17:22	1000
Ethylbenzene	**6900**		1000	330	ug/L			04/09/15 17:22	1000
Xylenes, Total	**87000**		1000	230	ug/L			04/09/15 17:22	1000
Styrene	<270		1000	270	ug/L			04/09/15 17:22	1000
Bromoform	<430		1000	430	ug/L			04/09/15 17:22	1000
Isopropylbenzene	<350		1000	350	ug/L			04/09/15 17:22	1000
1,1,2,2-Tetrachloroethane	<620		1000	620	ug/L			04/09/15 17:22	1000
1,3-Dichlorobenzene	<430		1000	430	ug/L			04/09/15 17:22	1000
1,4-Dichlorobenzene	**960**	**J**	1000	460	ug/L			04/09/15 17:22	1000
1,2-Dichlorobenzene	<370		1000	370	ug/L			04/09/15 17:22	1000
1,2-Dibromo-3-Chloropropane	<1100		5000	1100	ug/L			04/09/15 17:22	1000
1,2,4-Trichlorobenzene	<2500		5000	2500	ug/L			04/09/15 17:22	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 17:22*	*1000*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*04/09/15 17:22*	*1000*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*04/09/15 17:22*	*1000*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*04/09/15 17:22*	*1000*

Client Sample ID: MW-14

Lab Sample ID: 680-111248-4

Date Collected: 04/01/15 18:23

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 11:38	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 11:38	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 11:38	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 11:38	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 11:38	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 11:38	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 11:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 11:38	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 11:38	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 11:38	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 11:38	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 11:38	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 11:38	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 11:38	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 11:38	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 11:38	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 11:38	1

Client Sample ID: MW-14 — **Lab Sample ID: 680-111248-4**
Date Collected: 04/01/15 18:23 — **Matrix: Water**
Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 11:38	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 11:38	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 11:38	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 11:38	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 11:38	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 11:38	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 11:38	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 11:38	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 11:38	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 11:38	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 11:38	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 11:38	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 11:38	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 11:38	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 11:38	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 11:38	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 11:38	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 11:38	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 11:38	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 11:38	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 11:38	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 11:38	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 11:38	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 11:38	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 11:38	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 11:38	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 11:38	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 11:38	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 11:38	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 11:38	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 11:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*04/09/15 11:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*04/09/15 11:38*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*04/09/15 11:38*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*04/09/15 11:38*	*1*

Client Sample ID: MW-16 — **Lab Sample ID: 680-111248-5**
Date Collected: 04/02/15 11:21 — **Matrix: Water**
Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<1.2		2.0	1.2	ug/L			04/10/15 11:46	2
Chloromethane	<0.80		2.0	0.80	ug/L			04/10/15 11:46	2
Vinyl chloride	**120**		2.0	1.0	ug/L			04/10/15 11:46	2
Bromomethane	<5.0		10	5.0	ug/L			04/10/15 11:46	2
Chloroethane	<5.0		10	5.0	ug/L			04/10/15 11:46	2
Trichlorofluoromethane	<0.84		2.0	0.84	ug/L			04/10/15 11:46	2

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: MW-16
Date Collected: 04/02/15 11:21
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**0.90**	**J**	2.0	0.72	ug/L			04/10/15 11:46	2
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.72		2.0	0.72	ug/L			04/10/15 11:46	2
Acetone	<14		20	14	ug/L			04/10/15 11:46	2
Carbon disulfide	<2.0		4.0	2.0	ug/L			04/10/15 11:46	2
Methyl acetate	<3.6		10	3.6	ug/L			04/10/15 11:46	2
Methylene Chloride	<5.0		10	5.0	ug/L			04/10/15 11:46	2
trans-1,2-Dichloroethene	**1.0**	**J**	2.0	0.74	ug/L			04/10/15 11:46	2
Methyl tert-butyl ether	<0.60		20	0.60	ug/L			04/10/15 11:46	2
1,1-Dichloroethane	<0.76		2.0	0.76	ug/L			04/10/15 11:46	2
cis-1,2-Dichloroethene	**210**		2.0	0.82	ug/L			04/10/15 11:46	2
2-Butanone	<6.8		20	6.8	ug/L			04/10/15 11:46	2
Chloroform	<1.0		2.0	1.0	ug/L			04/10/15 11:46	2
1,1,1-Trichloroethane	<0.74		2.0	0.74	ug/L			04/10/15 11:46	2
Cyclohexane	<0.78		2.0	0.78	ug/L			04/10/15 11:46	2
Carbon tetrachloride	<0.66		2.0	0.66	ug/L			04/10/15 11:46	2
Benzene	**2.7**		2.0	0.86	ug/L			04/10/15 11:46	2
1,2-Dichloroethane	<1.0		2.0	1.0	ug/L			04/10/15 11:46	2
Trichloroethene	**6.0**		2.0	0.96	ug/L			04/10/15 11:46	2
Methylcyclohexane	<0.86		2.0	0.86	ug/L			04/10/15 11:46	2
1,2-Dichloropropane	<1.3		2.0	1.3	ug/L			04/10/15 11:46	2
Bromodichloromethane	<0.88		2.0	0.88	ug/L			04/10/15 11:46	2
cis-1,3-Dichloropropene	<0.80		2.0	0.80	ug/L			04/10/15 11:46	2
4-Methyl-2-pentanone	<4.2		20	4.2	ug/L			04/10/15 11:46	2
Toluene	<0.96		2.0	0.96	ug/L			04/10/15 11:46	2
trans-1,3-Dichloropropene	<0.84		2.0	0.84	ug/L			04/10/15 11:46	2
1,1,2-Trichloroethane	<0.66		2.0	0.66	ug/L			04/10/15 11:46	2
Tetrachloroethene	<1.5		2.0	1.5	ug/L			04/10/15 11:46	2
2-Hexanone	<4.0		20	4.0	ug/L			04/10/15 11:46	2
Dibromochloromethane	<0.64		2.0	0.64	ug/L			04/10/15 11:46	2
1,2-Dibromoethane	<0.88		2.0	0.88	ug/L			04/10/15 11:46	2
Chlorobenzene	**17**		2.0	0.52	ug/L			04/10/15 11:46	2
Ethylbenzene	**3.4**		2.0	0.66	ug/L			04/10/15 11:46	2
Xylenes, Total	**1.3**	**J**	2.0	0.46	ug/L			04/10/15 11:46	2
Styrene	<0.54		2.0	0.54	ug/L			04/10/15 11:46	2
Bromoform	<0.86		2.0	0.86	ug/L			04/10/15 11:46	2
Isopropylbenzene	<0.70		2.0	0.70	ug/L			04/10/15 11:46	2
1,1,2,2-Tetrachloroethane	<1.2		2.0	1.2	ug/L			04/10/15 11:46	2
1,3-Dichlorobenzene	**3.9**		2.0	0.86	ug/L			04/10/15 11:46	2
1,4-Dichlorobenzene	**8.3**		2.0	0.92	ug/L			04/10/15 11:46	2
1,2-Dichlorobenzene	**1.1**	**J**	2.0	0.74	ug/L			04/10/15 11:46	2
1,2-Dibromo-3-Chloropropane	<2.2		10	2.2	ug/L			04/10/15 11:46	2
1,2,4-Trichlorobenzene	<5.0		10	5.0	ug/L			04/10/15 11:46	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*04/10/15 11:46*	*2*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*04/10/15 11:46*	*2*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*04/10/15 11:46*	*2*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*04/10/15 11:46*	*2*

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: MW-17R
Date Collected: 03/31/15 16:58
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 12:21	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 12:21	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 12:21	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 12:21	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 12:21	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 12:21	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 12:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 12:21	1
Acetone	**8.1**	**J**	10	7.0	ug/L			04/09/15 12:21	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 12:21	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 12:21	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 12:21	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 12:21	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 12:21	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 12:21	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 12:21	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 12:21	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 12:21	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 12:21	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 12:21	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 12:21	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 12:21	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 12:21	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 12:21	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 12:21	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 12:21	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 12:21	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 12:21	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 12:21	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 12:21	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 12:21	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 12:21	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 12:21	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 12:21	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 12:21	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 12:21	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 12:21	1
Ethylbenzene	**0.79**	**J**	1.0	0.33	ug/L			04/09/15 12:21	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 12:21	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 12:21	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 12:21	1
Isopropylbenzene	**57**		1.0	0.35	ug/L			04/09/15 12:21	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 12:21	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 12:21	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 12:21	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 12:21	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 12:21	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 12:21	1

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: MW-17R

Lab Sample ID: 680-111248-6

Date Collected: 03/31/15 16:58

Matrix: Water

Date Received: 04/03/15 08:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 12:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*04/09/15 12:21*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*04/09/15 12:21*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*04/09/15 12:21*	*1*

Client Sample ID: MW-18R

Lab Sample ID: 680-111248-7

Date Collected: 03/30/15 09:49

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 12:42	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 12:42	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 12:42	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 12:42	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 12:42	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 12:42	1
1,1-Dichloroethene	**0.48**	**J**	1.0	0.36	ug/L			04/09/15 12:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 12:42	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 12:42	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 12:42	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 12:42	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 12:42	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 12:42	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 12:42	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 12:42	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 12:42	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 12:42	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 12:42	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 12:42	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 12:42	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 12:42	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 12:42	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 12:42	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 12:42	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 12:42	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 12:42	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 12:42	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 12:42	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 12:42	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 12:42	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 12:42	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 12:42	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 12:42	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 12:42	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 12:42	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 12:42	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 12:42	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 12:42	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 12:42	1

Client Sample ID: MW-18R
Lab Sample ID: 680-111248-7
Date Collected: 03/30/15 09:49
Matrix: Water
Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 12:42	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 12:42	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 12:42	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 12:42	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 12:42	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 12:42	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 12:42	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 12:42	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 12:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*04/09/15 12:42*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*04/09/15 12:42*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*04/09/15 12:42*	*1*

Client Sample ID: MW-19
Lab Sample ID: 680-111248-8
Date Collected: 03/30/15 12:23
Matrix: Water
Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 13:04	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 13:04	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 13:04	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 13:04	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 13:04	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 13:04	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 13:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 13:04	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 13:04	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 13:04	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 13:04	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 13:04	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 13:04	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 13:04	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 13:04	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 13:04	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 13:04	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 13:04	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 13:04	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 13:04	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 13:04	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 13:04	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 13:04	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 13:04	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 13:04	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 13:04	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 13:04	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 13:04	1

Client Sample ID: MW-19
Date Collected: 03/30/15 12:23
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 13:04	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 13:04	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 13:04	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 13:04	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 13:04	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 13:04	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 13:04	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 13:04	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 13:04	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 13:04	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 13:04	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 13:04	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 13:04	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 13:04	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 13:04	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 13:04	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 13:04	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 13:04	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 13:04	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 13:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*04/09/15 13:04*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*04/09/15 13:04*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*04/09/15 13:04*	*1*

Client Sample ID: MW-23
Date Collected: 03/30/15 14:29
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 13:25	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 13:25	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 13:25	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 13:25	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 13:25	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 13:25	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 13:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 13:25	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 13:25	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 13:25	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 13:25	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 13:25	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 13:25	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 13:25	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 13:25	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 13:25	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 13:25	1

Client Sample ID: MW-23
Date Collected: 03/30/15 14:29
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 13:25	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 13:25	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 13:25	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 13:25	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 13:25	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 13:25	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 13:25	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 13:25	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 13:25	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 13:25	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 13:25	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 13:25	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 13:25	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 13:25	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 13:25	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 13:25	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 13:25	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 13:25	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 13:25	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 13:25	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 13:25	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 13:25	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 13:25	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 13:25	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 13:25	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 13:25	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 13:25	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 13:25	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 13:25	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 13:25	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 13:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*04/09/15 13:25*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*04/09/15 13:25*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*04/09/15 13:25*	*1*

Client Sample ID: MW-24R
Date Collected: 04/01/15 10:33
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<3.0		5.0	3.0	ug/L			04/10/15 12:28	5
Chloromethane	<2.0		5.0	2.0	ug/L			04/10/15 12:28	5
Vinyl chloride	**16**		5.0	2.5	ug/L			04/10/15 12:28	5
Bromomethane	<13		25	13	ug/L			04/10/15 12:28	5
Chloroethane	<13		25	13	ug/L			04/10/15 12:28	5
Trichlorofluoromethane	<2.1		5.0	2.1	ug/L			04/10/15 12:28	5

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: MW-24R
Date Collected: 04/01/15 10:33
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<1.8		5.0	1.8	ug/L			04/10/15 12:28	5
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.8		5.0	1.8	ug/L			04/10/15 12:28	5
Acetone	<35		50	35	ug/L			04/10/15 12:28	5
Carbon disulfide	<5.0		10	5.0	ug/L			04/10/15 12:28	5
Methyl acetate	<9.0		25	9.0	ug/L			04/10/15 12:28	5
Methylene Chloride	<13		25	13	ug/L			04/10/15 12:28	5
trans-1,2-Dichloroethene	<1.9		5.0	1.9	ug/L			04/10/15 12:28	5
Methyl tert-butyl ether	**130**		50	1.5	ug/L			04/10/15 12:28	5
1,1-Dichloroethane	<1.9		5.0	1.9	ug/L			04/10/15 12:28	5
cis-1,2-Dichloroethene	**300**		5.0	2.1	ug/L			04/10/15 12:28	5
2-Butanone	**23**	**J**	50	17	ug/L			04/10/15 12:28	5
Chloroform	<2.5		5.0	2.5	ug/L			04/10/15 12:28	5
1,1,1-Trichloroethane	<1.9		5.0	1.9	ug/L			04/10/15 12:28	5
Cyclohexane	<2.0		5.0	2.0	ug/L			04/10/15 12:28	5
Carbon tetrachloride	<1.7		5.0	1.7	ug/L			04/10/15 12:28	5
Benzene	**3.9**	**J**	5.0	2.2	ug/L			04/10/15 12:28	5
1,2-Dichloroethane	<2.5		5.0	2.5	ug/L			04/10/15 12:28	5
Trichloroethene	<2.4		5.0	2.4	ug/L			04/10/15 12:28	5
Methylcyclohexane	<2.2		5.0	2.2	ug/L			04/10/15 12:28	5
1,2-Dichloropropane	<3.4		5.0	3.4	ug/L			04/10/15 12:28	5
Bromodichloromethane	<2.2		5.0	2.2	ug/L			04/10/15 12:28	5
cis-1,3-Dichloropropene	<2.0		5.0	2.0	ug/L			04/10/15 12:28	5
4-Methyl-2-pentanone	<11		50	11	ug/L			04/10/15 12:28	5
Toluene	<2.4		5.0	2.4	ug/L			04/10/15 12:28	5
trans-1,3-Dichloropropene	<2.1		5.0	2.1	ug/L			04/10/15 12:28	5
1,1,2-Trichloroethane	<1.7		5.0	1.7	ug/L			04/10/15 12:28	5
Tetrachloroethene	<3.7		5.0	3.7	ug/L			04/10/15 12:28	5
2-Hexanone	<10		50	10	ug/L			04/10/15 12:28	5
Dibromochloromethane	<1.6		5.0	1.6	ug/L			04/10/15 12:28	5
1,2-Dibromoethane	<2.2		5.0	2.2	ug/L			04/10/15 12:28	5
Chlorobenzene	<1.3		5.0	1.3	ug/L			04/10/15 12:28	5
Ethylbenzene	<1.7		5.0	1.7	ug/L			04/10/15 12:28	5
Xylenes, Total	<1.2		5.0	1.2	ug/L			04/10/15 12:28	5
Styrene	<1.4		5.0	1.4	ug/L			04/10/15 12:28	5
Bromoform	<2.2		5.0	2.2	ug/L			04/10/15 12:28	5
Isopropylbenzene	<1.8		5.0	1.8	ug/L			04/10/15 12:28	5
1,1,2,2-Tetrachloroethane	<3.1		5.0	3.1	ug/L			04/10/15 12:28	5
1,3-Dichlorobenzene	<2.2		5.0	2.2	ug/L			04/10/15 12:28	5
1,4-Dichlorobenzene	<2.3		5.0	2.3	ug/L			04/10/15 12:28	5
1,2-Dichlorobenzene	<1.9		5.0	1.9	ug/L			04/10/15 12:28	5
1,2-Dibromo-3-Chloropropane	<5.5		25	5.5	ug/L			04/10/15 12:28	5
1,2,4-Trichlorobenzene	<13		25	13	ug/L			04/10/15 12:28	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*70 - 130*		*04/10/15 12:28*	*5*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*04/10/15 12:28*	*5*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*04/10/15 12:28*	*5*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*04/10/15 12:28*	*5*

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: MW-25
Date Collected: 03/30/15 11:23
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 13:47	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 13:47	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 13:47	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 13:47	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 13:47	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 13:47	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 13:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 13:47	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 13:47	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 13:47	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 13:47	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 13:47	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 13:47	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 13:47	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 13:47	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 13:47	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 13:47	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 13:47	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 13:47	1
Cyclohexane	**0.42**	**J**	1.0	0.39	ug/L			04/09/15 13:47	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 13:47	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 13:47	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 13:47	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 13:47	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 13:47	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 13:47	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 13:47	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 13:47	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 13:47	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 13:47	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 13:47	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 13:47	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 13:47	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 13:47	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 13:47	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 13:47	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 13:47	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 13:47	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 13:47	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 13:47	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 13:47	1
Isopropylbenzene	**1.0**		1.0	0.35	ug/L			04/09/15 13:47	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 13:47	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 13:47	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 13:47	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 13:47	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 13:47	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 13:47	1

Client Sample ID: MW-25

Lab Sample ID: 680-111248-11

Date Collected: 03/30/15 11:23

Matrix: Water

Date Received: 04/03/15 08:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*100*		*70 - 130*		*04/09/15 13:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*04/09/15 13:47*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*04/09/15 13:47*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*04/09/15 13:47*	*1*

Client Sample ID: MW-26R

Lab Sample ID: 680-111248-12

Date Collected: 04/02/15 10:05

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<60		100	60	ug/L			04/10/15 13:31	100
Chloromethane	<40		100	40	ug/L			04/10/15 13:31	100
Vinyl chloride	<50		100	50	ug/L			04/10/15 13:31	100
Bromomethane	<250		500	250	ug/L			04/10/15 13:31	100
Chloroethane	<250		500	250	ug/L			04/10/15 13:31	100
Trichlorofluoromethane	<42		100	42	ug/L			04/10/15 13:31	100
1,1-Dichloroethene	<36		100	36	ug/L			04/10/15 13:31	100
1,1,2-Trichloro-1,2,2-trifluoroethane	<36		100	36	ug/L			04/10/15 13:31	100
Acetone	<700		1000	700	ug/L			04/10/15 13:31	100
Carbon disulfide	<100		200	100	ug/L			04/10/15 13:31	100
Methyl acetate	<180		500	180	ug/L			04/10/15 13:31	100
Methylene Chloride	<250		500	250	ug/L			04/10/15 13:31	100
trans-1,2-Dichloroethene	<37		100	37	ug/L			04/10/15 13:31	100
Methyl tert-butyl ether	<30		1000	30	ug/L			04/10/15 13:31	100
1,1-Dichloroethane	<38		100	38	ug/L			04/10/15 13:31	100
cis-1,2-Dichloroethene	<41		100	41	ug/L			04/10/15 13:31	100
2-Butanone	<340		1000	340	ug/L			04/10/15 13:31	100
Chloroform	<50		100	50	ug/L			04/10/15 13:31	100
1,1,1-Trichloroethane	<37		100	37	ug/L			04/10/15 13:31	100
Cyclohexane	<39		100	39	ug/L			04/10/15 13:31	100
Carbon tetrachloride	<33		100	33	ug/L			04/10/15 13:31	100
Benzene	**180**		100	43	ug/L			04/10/15 13:31	100
1,2-Dichloroethane	<50		100	50	ug/L			04/10/15 13:31	100
Trichloroethene	<48		100	48	ug/L			04/10/15 13:31	100
Methylcyclohexane	<43		100	43	ug/L			04/10/15 13:31	100
1,2-Dichloropropane	<67		100	67	ug/L			04/10/15 13:31	100
Bromodichloromethane	<44		100	44	ug/L			04/10/15 13:31	100
cis-1,3-Dichloropropene	<40		100	40	ug/L			04/10/15 13:31	100
4-Methyl-2-pentanone	<210		1000	210	ug/L			04/10/15 13:31	100
Toluene	**63**	**J**	100	48	ug/L			04/10/15 13:31	100
trans-1,3-Dichloropropene	<42		100	42	ug/L			04/10/15 13:31	100
1,1,2-Trichloroethane	<33		100	33	ug/L			04/10/15 13:31	100
Tetrachloroethene	<74		100	74	ug/L			04/10/15 13:31	100
2-Hexanone	<200		1000	200	ug/L			04/10/15 13:31	100
Dibromochloromethane	<32		100	32	ug/L			04/10/15 13:31	100
1,2-Dibromoethane	<44		100	44	ug/L			04/10/15 13:31	100
Chlorobenzene	**490**		100	26	ug/L			04/10/15 13:31	100
Ethylbenzene	**760**		100	33	ug/L			04/10/15 13:31	100
Xylenes, Total	**11000**		100	23	ug/L			04/10/15 13:31	100

Client Sample ID: MW-26R

Lab Sample ID: 680-111248-12

Date Collected: 04/02/15 10:05

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<27		100	27	ug/L			04/10/15 13:31	100
Bromoform	<43		100	43	ug/L			04/10/15 13:31	100
Isopropylbenzene	<35		100	35	ug/L			04/10/15 13:31	100
1,1,2,2-Tetrachloroethane	<62		100	62	ug/L			04/10/15 13:31	100
1,3-Dichlorobenzene	<43		100	43	ug/L			04/10/15 13:31	100
1,4-Dichlorobenzene	<46		100	46	ug/L			04/10/15 13:31	100
1,2-Dichlorobenzene	<37		100	37	ug/L			04/10/15 13:31	100
1,2-Dibromo-3-Chloropropane	<110		500	110	ug/L			04/10/15 13:31	100
1,2,4-Trichlorobenzene	<250		500	250	ug/L			04/10/15 13:31	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*70 - 130*		*04/10/15 13:31*	*100*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*04/10/15 13:31*	*100*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*04/10/15 13:31*	*100*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*04/10/15 13:31*	*100*

Client Sample ID: MW-27

Lab Sample ID: 680-111248-13

Date Collected: 03/30/15 16:18

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 14:08	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 14:08	1
Vinyl chloride	**4.7**		1.0	0.50	ug/L			04/09/15 14:08	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 14:08	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 14:08	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 14:08	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 14:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 14:08	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 14:08	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 14:08	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 14:08	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 14:08	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 14:08	1
Methyl tert-butyl ether	**0.40**	**J**	10	0.30	ug/L			04/09/15 14:08	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 14:08	1
cis-1,2-Dichloroethene	**0.79**	**J**	1.0	0.41	ug/L			04/09/15 14:08	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 14:08	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 14:08	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 14:08	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 14:08	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 14:08	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 14:08	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 14:08	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 14:08	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 14:08	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 14:08	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 14:08	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 14:08	1

Client Sample ID: MW-27

Lab Sample ID: 680-111248-13

Date Collected: 03/30/15 16:18

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 14:08	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 14:08	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 14:08	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 14:08	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 14:08	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 14:08	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 14:08	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 14:08	1
Chlorobenzene	**3.0**		1.0	0.26	ug/L			04/09/15 14:08	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 14:08	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 14:08	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 14:08	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 14:08	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 14:08	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 14:08	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 14:08	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 14:08	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 14:08	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 14:08	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 14:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*04/09/15 14:08*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*04/09/15 14:08*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*04/09/15 14:08*	*1*

Client Sample ID: MW-28

Lab Sample ID: 680-111248-14

Date Collected: 03/31/15 10:20

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 14:30	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 14:30	1
Vinyl chloride	**8.1**		1.0	0.50	ug/L			04/09/15 14:30	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 14:30	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 14:30	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 14:30	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 14:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 14:30	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 14:30	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 14:30	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 14:30	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 14:30	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 14:30	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 14:30	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 14:30	1
cis-1,2-Dichloroethene	**33**		1.0	0.41	ug/L			04/09/15 14:30	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 14:30	1

Client Sample ID: MW-28

Lab Sample ID: 680-111248-14

Date Collected: 03/31/15 10:20

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 14:30	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 14:30	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 14:30	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 14:30	1
Benzene	**1.6**		1.0	0.43	ug/L			04/09/15 14:30	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 14:30	1
Trichloroethene	**1.1**		1.0	0.48	ug/L			04/09/15 14:30	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 14:30	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 14:30	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 14:30	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 14:30	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 14:30	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 14:30	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 14:30	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 14:30	1
Tetrachloroethene	**5.8**		1.0	0.74	ug/L			04/09/15 14:30	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 14:30	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 14:30	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 14:30	1
Chlorobenzene	**8.2**		1.0	0.26	ug/L			04/09/15 14:30	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 14:30	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 14:30	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 14:30	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 14:30	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 14:30	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 14:30	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 14:30	1
1,4-Dichlorobenzene	**1.8**		1.0	0.46	ug/L			04/09/15 14:30	1
1,2-Dichlorobenzene	**0.39**	**J**	1.0	0.37	ug/L			04/09/15 14:30	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 14:30	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*04/09/15 14:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*04/09/15 14:30*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*04/09/15 14:30*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*04/09/15 14:30*	*1*

Client Sample ID: MW-29

Lab Sample ID: 680-111248-15

Date Collected: 04/01/15 17:43

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<30		50	30	ug/L			04/09/15 17:43	50
Chloromethane	<20		50	20	ug/L			04/09/15 17:43	50
Vinyl chloride	**790**		50	25	ug/L			04/09/15 17:43	50
Bromomethane	<130		250	130	ug/L			04/09/15 17:43	50
Chloroethane	<130		250	130	ug/L			04/09/15 17:43	50
Trichlorofluoromethane	<21		50	21	ug/L			04/09/15 17:43	50

Client Sample ID: MW-29
Date Collected: 04/01/15 17:43
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**18**	**J**	50	18	ug/L			04/09/15 17:43	50
1,1,2-Trichloro-1,2,2-trifluoroethane	<18		50	18	ug/L			04/09/15 17:43	50
Acetone	<350		500	350	ug/L			04/09/15 17:43	50
Carbon disulfide	<50		100	50	ug/L			04/09/15 17:43	50
Methyl acetate	<90		250	90	ug/L			04/09/15 17:43	50
Methylene Chloride	<130		250	130	ug/L			04/09/15 17:43	50
trans-1,2-Dichloroethene	<19		50	19	ug/L			04/09/15 17:43	50
Methyl tert-butyl ether	<15		500	15	ug/L			04/09/15 17:43	50
1,1-Dichloroethane	<19		50	19	ug/L			04/09/15 17:43	50
cis-1,2-Dichloroethene	**5900**		50	21	ug/L			04/09/15 17:43	50
2-Butanone	<170		500	170	ug/L			04/09/15 17:43	50
Chloroform	<25		50	25	ug/L			04/09/15 17:43	50
1,1,1-Trichloroethane	<19		50	19	ug/L			04/09/15 17:43	50
Cyclohexane	<20		50	20	ug/L			04/09/15 17:43	50
Carbon tetrachloride	<17		50	17	ug/L			04/09/15 17:43	50
Benzene	<22		50	22	ug/L			04/09/15 17:43	50
1,2-Dichloroethane	<25		50	25	ug/L			04/09/15 17:43	50
Trichloroethene	**90**		50	24	ug/L			04/09/15 17:43	50
Methylcyclohexane	<22		50	22	ug/L			04/09/15 17:43	50
1,2-Dichloropropane	<34		50	34	ug/L			04/09/15 17:43	50
Bromodichloromethane	<22		50	22	ug/L			04/09/15 17:43	50
cis-1,3-Dichloropropene	<20		50	20	ug/L			04/09/15 17:43	50
4-Methyl-2-pentanone	<110		500	110	ug/L			04/09/15 17:43	50
Toluene	**25**	**J**	50	24	ug/L			04/09/15 17:43	50
trans-1,3-Dichloropropene	<21		50	21	ug/L			04/09/15 17:43	50
1,1,2-Trichloroethane	<17		50	17	ug/L			04/09/15 17:43	50
Tetrachloroethene	**160**		50	37	ug/L			04/09/15 17:43	50
2-Hexanone	<100		500	100	ug/L			04/09/15 17:43	50
Dibromochloromethane	<16		50	16	ug/L			04/09/15 17:43	50
1,2-Dibromoethane	<22		50	22	ug/L			04/09/15 17:43	50
Chlorobenzene	**170**		50	13	ug/L			04/09/15 17:43	50
Ethylbenzene	**3300**		50	17	ug/L			04/09/15 17:43	50
Xylenes, Total	**7300**		50	12	ug/L			04/09/15 17:43	50
Styrene	<14		50	14	ug/L			04/09/15 17:43	50
Bromoform	<22		50	22	ug/L			04/09/15 17:43	50
Isopropylbenzene	**100**		50	18	ug/L			04/09/15 17:43	50
1,1,2,2-Tetrachloroethane	<31		50	31	ug/L			04/09/15 17:43	50
1,3-Dichlorobenzene	**58**		50	22	ug/L			04/09/15 17:43	50
1,4-Dichlorobenzene	**180**		50	23	ug/L			04/09/15 17:43	50
1,2-Dichlorobenzene	**35**	**J**	50	19	ug/L			04/09/15 17:43	50
1,2-Dibromo-3-Chloropropane	<55		250	55	ug/L			04/09/15 17:43	50
1,2,4-Trichlorobenzene	**160**	**J**	250	130	ug/L			04/09/15 17:43	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*04/09/15 17:43*	*50*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*04/09/15 17:43*	*50*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*04/09/15 17:43*	*50*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*04/09/15 17:43*	*50*

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: MW-30
Date Collected: 04/02/15 18:13
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 14:51	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 14:51	1
Vinyl chloride	**0.88**	**J**	1.0	0.50	ug/L			04/09/15 14:51	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 14:51	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 14:51	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 14:51	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 14:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 14:51	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 14:51	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 14:51	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 14:51	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 14:51	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 14:51	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 14:51	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 14:51	1
cis-1,2-Dichloroethene	**1.7**		1.0	0.41	ug/L			04/09/15 14:51	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 14:51	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 14:51	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 14:51	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 14:51	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 14:51	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 14:51	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 14:51	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 14:51	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 14:51	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 14:51	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 14:51	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 14:51	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 14:51	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 14:51	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 14:51	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 14:51	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 14:51	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 14:51	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 14:51	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 14:51	1
Chlorobenzene	**0.72**	**J**	1.0	0.26	ug/L			04/09/15 14:51	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 14:51	1
Xylenes, Total	**1.3**		1.0	0.23	ug/L			04/09/15 14:51	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 14:51	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 14:51	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 14:51	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 14:51	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 14:51	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 14:51	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 14:51	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 14:51	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 14:51	1

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: MW-30

Lab Sample ID: 680-111248-16

Date Collected: 04/02/15 18:13

Matrix: Water

Date Received: 04/03/15 08:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 14:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*04/09/15 14:51*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*04/09/15 14:51*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*04/09/15 14:51*	*1*

Client Sample ID: MW-31

Lab Sample ID: 680-111248-17

Date Collected: 03/30/15 15:35

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 15:13	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 15:13	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 15:13	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 15:13	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 15:13	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 15:13	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 15:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 15:13	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 15:13	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 15:13	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 15:13	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 15:13	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 15:13	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 15:13	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 15:13	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 15:13	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 15:13	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 15:13	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 15:13	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 15:13	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 15:13	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 15:13	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 15:13	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 15:13	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 15:13	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 15:13	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 15:13	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 15:13	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 15:13	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 15:13	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 15:13	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 15:13	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 15:13	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 15:13	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 15:13	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 15:13	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 15:13	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 15:13	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 15:13	1

Client Sample ID: MW-31

Lab Sample ID: 680-111248-17

Date Collected: 03/30/15 15:35

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 15:13	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 15:13	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 15:13	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 15:13	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 15:13	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 15:13	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 15:13	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 15:13	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 15:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*04/09/15 15:13*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*04/09/15 15:13*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*04/09/15 15:13*	*1*

Client Sample ID: MW-32

Lab Sample ID: 680-111248-18

Date Collected: 03/31/15 17:50

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 16:38	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 16:38	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 16:38	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 16:38	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 16:38	1
Trichlorofluoromethane	**0.73**	**J**	1.0	0.42	ug/L			04/09/15 16:38	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 16:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 16:38	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 16:38	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 16:38	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 16:38	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 16:38	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 16:38	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 16:38	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 16:38	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 16:38	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 16:38	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 16:38	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 16:38	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 16:38	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 16:38	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 16:38	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 16:38	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 16:38	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 16:38	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 16:38	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 16:38	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 16:38	1

Client Sample ID: MW-32

Lab Sample ID: 680-111248-18

Date Collected: 03/31/15 17:50

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 16:38	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 16:38	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 16:38	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 16:38	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 16:38	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 16:38	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 16:38	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 16:38	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 16:38	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 16:38	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 16:38	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 16:38	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 16:38	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 16:38	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 16:38	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 16:38	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 16:38	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 16:38	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 16:38	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*70 - 130*		*04/09/15 16:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*04/09/15 16:38*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*04/09/15 16:38*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*04/09/15 16:38*	*1*

Client Sample ID: MW-33

Lab Sample ID: 680-111248-19

Date Collected: 04/02/15 13:27

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 16:59	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 16:59	1
Vinyl chloride	**100**		1.0	0.50	ug/L			04/09/15 16:59	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 16:59	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 16:59	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 16:59	1
1,1-Dichloroethene	**0.60**	**J**	1.0	0.36	ug/L			04/09/15 16:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 16:59	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 16:59	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 16:59	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 16:59	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 16:59	1
trans-1,2-Dichloroethene	**2.2**		1.0	0.37	ug/L			04/09/15 16:59	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 16:59	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 16:59	1
cis-1,2-Dichloroethene	**150**		1.0	0.41	ug/L			04/09/15 16:59	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 16:59	1

Client Sample ID: MW-33

Lab Sample ID: 680-111248-19

Date Collected: 04/02/15 13:27

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 16:59	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 16:59	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 16:59	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 16:59	1
Benzene	**1.7**		1.0	0.43	ug/L			04/09/15 16:59	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 16:59	1
Trichloroethene	**2.8**		1.0	0.48	ug/L			04/09/15 16:59	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 16:59	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 16:59	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 16:59	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 16:59	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 16:59	1
Toluene	**1.7**		1.0	0.48	ug/L			04/09/15 16:59	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 16:59	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 16:59	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 16:59	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 16:59	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 16:59	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 16:59	1
Chlorobenzene	**47**		1.0	0.26	ug/L			04/09/15 16:59	1
Ethylbenzene	**3.1**		1.0	0.33	ug/L			04/09/15 16:59	1
Xylenes, Total	**11**		1.0	0.23	ug/L			04/09/15 16:59	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 16:59	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 16:59	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 16:59	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 16:59	1
1,3-Dichlorobenzene	**22**		1.0	0.43	ug/L			04/09/15 16:59	1
1,4-Dichlorobenzene	**93**		1.0	0.46	ug/L			04/09/15 16:59	1
1,2-Dichlorobenzene	**9.2**		1.0	0.37	ug/L			04/09/15 16:59	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 16:59	1
1,2,4-Trichlorobenzene	**36**		5.0	2.5	ug/L			04/09/15 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*04/09/15 16:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*04/09/15 16:59*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*04/09/15 16:59*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*04/09/15 16:59*	*1*

Client Sample ID: MW-34

Lab Sample ID: 680-111248-20

Date Collected: 03/31/15 11:17

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 15:34	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 15:34	1
Vinyl chloride	**2.6**		1.0	0.50	ug/L			04/09/15 15:34	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 15:34	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 15:34	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 15:34	1

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: MW-34
Date Collected: 03/31/15 11:17
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 15:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 15:34	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 15:34	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 15:34	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 15:34	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 15:34	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 15:34	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 15:34	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 15:34	1
cis-1,2-Dichloroethene	**9.9**		1.0	0.41	ug/L			04/09/15 15:34	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 15:34	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 15:34	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 15:34	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 15:34	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 15:34	1
Benzene	**0.47**	**J**	1.0	0.43	ug/L			04/09/15 15:34	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 15:34	1
Trichloroethene	**0.52**	**J**	1.0	0.48	ug/L			04/09/15 15:34	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 15:34	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 15:34	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 15:34	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 15:34	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 15:34	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 15:34	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 15:34	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 15:34	1
Tetrachloroethene	**2.7**		1.0	0.74	ug/L			04/09/15 15:34	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 15:34	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 15:34	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 15:34	1
Chlorobenzene	**2.3**		1.0	0.26	ug/L			04/09/15 15:34	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 15:34	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 15:34	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 15:34	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 15:34	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 15:34	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 15:34	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 15:34	1
1,4-Dichlorobenzene	**0.67**	**J**	1.0	0.46	ug/L			04/09/15 15:34	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 15:34	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 15:34	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 15:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*04/09/15 15:34*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*04/09/15 15:34*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*04/09/15 15:34*	*1*

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: MW-35
Date Collected: 03/31/15 15:12
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 15:56	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 15:56	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 15:56	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 15:56	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 15:56	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 15:56	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 15:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 15:56	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 15:56	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 15:56	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 15:56	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 15:56	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 15:56	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 15:56	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 15:56	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 15:56	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 15:56	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 15:56	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 15:56	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 15:56	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 15:56	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 15:56	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 15:56	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 15:56	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 15:56	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 15:56	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 15:56	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 15:56	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 15:56	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 15:56	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 15:56	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 15:56	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 15:56	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 15:56	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 15:56	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 15:56	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 15:56	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 15:56	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 15:56	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 15:56	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 15:56	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 15:56	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 15:56	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 15:56	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 15:56	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 15:56	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 15:56	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 15:56	1

Client Sample ID: MW-35

Lab Sample ID: 680-111248-21

Date Collected: 03/31/15 15:12

Matrix: Water

Date Received: 04/03/15 08:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 15:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*04/09/15 15:56*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*04/09/15 15:56*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*04/09/15 15:56*	*1*

Client Sample ID: MW-36

Lab Sample ID: 680-111248-22

Date Collected: 03/31/15 16:05

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 16:17	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 16:17	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 16:17	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 16:17	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 16:17	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 16:17	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 16:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 16:17	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 16:17	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 16:17	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 16:17	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 16:17	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 16:17	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 16:17	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 16:17	1
cis-1,2-Dichloroethene	**0.59**	**J**	1.0	0.41	ug/L			04/09/15 16:17	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 16:17	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 16:17	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 16:17	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 16:17	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 16:17	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 16:17	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 16:17	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 16:17	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 16:17	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 16:17	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 16:17	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 16:17	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 16:17	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 16:17	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 16:17	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 16:17	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 16:17	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 16:17	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 16:17	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 16:17	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 16:17	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 16:17	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 16:17	1

Client Sample ID: MW-36

Date Collected: 03/31/15 16:05
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 16:17	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 16:17	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 16:17	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 16:17	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 16:17	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 16:17	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 16:17	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 16:17	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 16:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*04/09/15 16:17*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*04/09/15 16:17*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*04/09/15 16:17*	*1*

Client Sample ID: MW-37

Date Collected: 03/31/15 12:05
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-23
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<1.2		2.0	1.2	ug/L			04/09/15 13:48	2
Chloromethane	<0.80		2.0	0.80	ug/L			04/09/15 13:48	2
Vinyl chloride	**65**		2.0	1.0	ug/L			04/09/15 13:48	2
Bromomethane	<5.0		10	5.0	ug/L			04/09/15 13:48	2
Chloroethane	<5.0		10	5.0	ug/L			04/09/15 13:48	2
Trichlorofluoromethane	<0.84		2.0	0.84	ug/L			04/09/15 13:48	2
1,1-Dichloroethene	**1.8**	**J**	2.0	0.72	ug/L			04/09/15 13:48	2
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.72		2.0	0.72	ug/L			04/09/15 13:48	2
Acetone	<14		20	14	ug/L			04/09/15 13:48	2
Carbon disulfide	<2.0		4.0	2.0	ug/L			04/09/15 13:48	2
Methyl acetate	<3.6		10	3.6	ug/L			04/09/15 13:48	2
Methylene Chloride	<5.0		10	5.0	ug/L			04/09/15 13:48	2
trans-1,2-Dichloroethene	**1.0**	**J**	2.0	0.74	ug/L			04/09/15 13:48	2
Methyl tert-butyl ether	<0.60		20	0.60	ug/L			04/09/15 13:48	2
1,1-Dichloroethane	<0.76		2.0	0.76	ug/L			04/09/15 13:48	2
cis-1,2-Dichloroethene	**350**		2.0	0.82	ug/L			04/09/15 13:48	2
2-Butanone	<6.8		20	6.8	ug/L			04/09/15 13:48	2
Chloroform	<1.0		2.0	1.0	ug/L			04/09/15 13:48	2
1,1,1-Trichloroethane	<0.74		2.0	0.74	ug/L			04/09/15 13:48	2
Cyclohexane	<0.78		2.0	0.78	ug/L			04/09/15 13:48	2
Carbon tetrachloride	<0.66		2.0	0.66	ug/L			04/09/15 13:48	2
Benzene	**6.4**		2.0	0.86	ug/L			04/09/15 13:48	2
1,2-Dichloroethane	<1.0		2.0	1.0	ug/L			04/09/15 13:48	2
Trichloroethene	**8.5**		2.0	0.96	ug/L			04/09/15 13:48	2
Methylcyclohexane	<0.86		2.0	0.86	ug/L			04/09/15 13:48	2
1,2-Dichloropropane	<1.3		2.0	1.3	ug/L			04/09/15 13:48	2
Bromodichloromethane	<0.88		2.0	0.88	ug/L			04/09/15 13:48	2
cis-1,3-Dichloropropene	<0.80		2.0	0.80	ug/L			04/09/15 13:48	2

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: MW-37

Lab Sample ID: 680-111248-23

Date Collected: 03/31/15 12:05

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	<4.2		20	4.2	ug/L			04/09/15 13:48	2
Toluene	<0.96		2.0	0.96	ug/L			04/09/15 13:48	2
trans-1,3-Dichloropropene	<0.84		2.0	0.84	ug/L			04/09/15 13:48	2
1,1,2-Trichloroethane	<0.66		2.0	0.66	ug/L			04/09/15 13:48	2
Tetrachloroethene	**19**		2.0	1.5	ug/L			04/09/15 13:48	2
2-Hexanone	<4.0		20	4.0	ug/L			04/09/15 13:48	2
Dibromochloromethane	<0.64		2.0	0.64	ug/L			04/09/15 13:48	2
1,2-Dibromoethane	<0.88		2.0	0.88	ug/L			04/09/15 13:48	2
Chlorobenzene	**68**		2.0	0.52	ug/L			04/09/15 13:48	2
Ethylbenzene	<0.66		2.0	0.66	ug/L			04/09/15 13:48	2
Xylenes, Total	**0.77**	**J**	2.0	0.46	ug/L			04/09/15 13:48	2
Styrene	<0.54		2.0	0.54	ug/L			04/09/15 13:48	2
Bromoform	<0.86		2.0	0.86	ug/L			04/09/15 13:48	2
Isopropylbenzene	**1.1**	**J**	2.0	0.70	ug/L			04/09/15 13:48	2
1,1,2,2-Tetrachloroethane	<1.2		2.0	1.2	ug/L			04/09/15 13:48	2
1,3-Dichlorobenzene	**7.4**		2.0	0.86	ug/L			04/09/15 13:48	2
1,4-Dichlorobenzene	**46**		2.0	0.92	ug/L			04/09/15 13:48	2
1,2-Dichlorobenzene	**13**		2.0	0.74	ug/L			04/09/15 13:48	2
1,2-Dibromo-3-Chloropropane	<2.2		10	2.2	ug/L			04/09/15 13:48	2
1,2,4-Trichlorobenzene	**56**		10	5.0	ug/L			04/09/15 13:48	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*04/09/15 13:48*	*2*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*04/09/15 13:48*	*2*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*04/09/15 13:48*	*2*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*04/09/15 13:48*	*2*

Client Sample ID: PAN-MW-9

Lab Sample ID: 680-111248-24

Date Collected: 04/01/15 18:58

Matrix: Water

Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<6.0		10	6.0	ug/L			04/09/15 13:25	10
Chloromethane	<4.0		10	4.0	ug/L			04/09/15 13:25	10
Vinyl chloride	**130**		10	5.0	ug/L			04/09/15 13:25	10
Bromomethane	<25		50	25	ug/L			04/09/15 13:25	10
Chloroethane	<25		50	25	ug/L			04/09/15 13:25	10
Trichlorofluoromethane	<4.2		10	4.2	ug/L			04/09/15 13:25	10
1,1-Dichloroethene	**6.7**	**J**	10	3.6	ug/L			04/09/15 13:25	10
1,1,2-Trichloro-1,2,2-trifluoroethane	<3.6		10	3.6	ug/L			04/09/15 13:25	10
Acetone	<70		100	70	ug/L			04/09/15 13:25	10
Carbon disulfide	<10		20	10	ug/L			04/09/15 13:25	10
Methyl acetate	<18		50	18	ug/L			04/09/15 13:25	10
Methylene Chloride	<25		50	25	ug/L			04/09/15 13:25	10
trans-1,2-Dichloroethene	<3.7		10	3.7	ug/L			04/09/15 13:25	10
Methyl tert-butyl ether	<3.0		100	3.0	ug/L			04/09/15 13:25	10
1,1-Dichloroethane	<3.8		10	3.8	ug/L			04/09/15 13:25	10
cis-1,2-Dichloroethene	**2000**		10	4.1	ug/L			04/09/15 13:25	10
2-Butanone	<34		100	34	ug/L			04/09/15 13:25	10

Client Sample ID: PAN-MW-9 — **Lab Sample ID: 680-111248-24**
Date Collected: 04/01/15 18:58 — **Matrix: Water**
Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<5.0		10	5.0	ug/L			04/09/15 13:25	10
1,1,1-Trichloroethane	<3.7		10	3.7	ug/L			04/09/15 13:25	10
Cyclohexane	<3.9		10	3.9	ug/L			04/09/15 13:25	10
Carbon tetrachloride	<3.3		10	3.3	ug/L			04/09/15 13:25	10
Benzene	**5.2**	**J**	10	4.3	ug/L			04/09/15 13:25	10
1,2-Dichloroethane	<5.0		10	5.0	ug/L			04/09/15 13:25	10
Trichloroethene	**4.9**	**J**	10	4.8	ug/L			04/09/15 13:25	10
Methylcyclohexane	<4.3		10	4.3	ug/L			04/09/15 13:25	10
1,2-Dichloropropane	<6.7		10	6.7	ug/L			04/09/15 13:25	10
Bromodichloromethane	<4.4		10	4.4	ug/L			04/09/15 13:25	10
cis-1,3-Dichloropropene	<4.0		10	4.0	ug/L			04/09/15 13:25	10
4-Methyl-2-pentanone	<21		100	21	ug/L			04/09/15 13:25	10
Toluene	<4.8		10	4.8	ug/L			04/09/15 13:25	10
trans-1,3-Dichloropropene	<4.2		10	4.2	ug/L			04/09/15 13:25	10
1,1,2-Trichloroethane	<3.3		10	3.3	ug/L			04/09/15 13:25	10
Tetrachloroethene	<7.4		10	7.4	ug/L			04/09/15 13:25	10
2-Hexanone	<20		100	20	ug/L			04/09/15 13:25	10
Dibromochloromethane	<3.2		10	3.2	ug/L			04/09/15 13:25	10
1,2-Dibromoethane	<4.4		10	4.4	ug/L			04/09/15 13:25	10
Chlorobenzene	**33**		10	2.6	ug/L			04/09/15 13:25	10
Ethylbenzene	**580**		10	3.3	ug/L			04/09/15 13:25	10
Xylenes, Total	**1400**		10	2.3	ug/L			04/09/15 13:25	10
Styrene	<2.7		10	2.7	ug/L			04/09/15 13:25	10
Bromoform	<4.3		10	4.3	ug/L			04/09/15 13:25	10
Isopropylbenzene	**32**		10	3.5	ug/L			04/09/15 13:25	10
1,1,2,2-Tetrachloroethane	<6.2		10	6.2	ug/L			04/09/15 13:25	10
1,3-Dichlorobenzene	**8.5**	**J**	10	4.3	ug/L			04/09/15 13:25	10
1,4-Dichlorobenzene	**28**		10	4.6	ug/L			04/09/15 13:25	10
1,2-Dichlorobenzene	**5.3**	**J**	10	3.7	ug/L			04/09/15 13:25	10
1,2-Dibromo-3-Chloropropane	<11		50	11	ug/L			04/09/15 13:25	10
1,2,4-Trichlorobenzene	<25		50	25	ug/L			04/09/15 13:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*04/09/15 13:25*	*10*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*04/09/15 13:25*	*10*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*04/09/15 13:25*	*10*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*04/09/15 13:25*	*10*

Client Sample ID: PAN-MW-10 — **Lab Sample ID: 680-111248-25**
Date Collected: 04/01/15 09:20 — **Matrix: Water**
Date Received: 04/03/15 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 16:39	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 16:39	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 16:39	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 16:39	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 16:39	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 16:39	1

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: PAN-MW-10
Date Collected: 04/01/15 09:20
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-25
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 16:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 16:39	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 16:39	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 16:39	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 16:39	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 16:39	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 16:39	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 16:39	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 16:39	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 16:39	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 16:39	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 16:39	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 16:39	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 16:39	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 16:39	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 16:39	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 16:39	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 16:39	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 16:39	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 16:39	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 16:39	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 16:39	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 16:39	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 16:39	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 16:39	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 16:39	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 16:39	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 16:39	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 16:39	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 16:39	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 16:39	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 16:39	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 16:39	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 16:39	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 16:39	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 16:39	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 16:39	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 16:39	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 16:39	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 16:39	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 16:39	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*04/09/15 16:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*04/09/15 16:39*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*04/09/15 16:39*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*04/09/15 16:39*	*1*

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: Trip Blank
Date Collected: 03/30/15 00:00
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-26
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 11:16	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 11:16	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 11:16	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 11:16	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 11:16	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 11:16	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 11:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 11:16	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 11:16	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 11:16	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 11:16	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 11:16	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 11:16	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 11:16	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 11:16	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 11:16	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 11:16	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 11:16	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 11:16	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 11:16	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 11:16	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 11:16	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 11:16	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 11:16	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 11:16	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 11:16	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 11:16	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 11:16	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 11:16	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 11:16	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 11:16	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 11:16	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 11:16	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 11:16	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 11:16	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 11:16	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 11:16	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 11:16	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 11:16	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 11:16	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 11:16	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 11:16	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 11:16	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 11:16	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 11:16	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 11:16	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 11:16	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 11:16	1

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: Trip Blank
Date Collected: 03/30/15 00:00
Date Received: 04/03/15 08:30

Lab Sample ID: 680-111248-26
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		04/09/15 11:16	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 130		04/09/15 11:16	1
Dibromofluoromethane (Surr)	98		70 - 130		04/09/15 11:16	1
4-Bromofluorobenzene (Surr)	93		70 - 130		04/09/15 11:16	1

Surrogate Summary

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	12DCE	DBFM	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
680-111248-1	IW-1R	101	93	98	92
680-111248-2	IW-18	103	93	106	99
680-111248-3	LAW-PZ-8R	101	93	98	92
680-111248-4	MW-14	102	91	98	94
680-111248-5	MW-16	103	95	106	96
680-111248-6	MW-17R	101	91	99	95
680-111248-7	MW-18R	101	93	98	92
680-111248-8	MW-19	101	91	99	95
680-111248-9	MW-23	101	93	99	93
680-111248-10	MW-24R	105	93	105	98
680-111248-11	MW-25	100	93	100	93
680-111248-12	MW-26R	105	93	106	96
680-111248-13	MW-27	101	92	99	93
680-111248-14	MW-28	102	92	98	92
680-111248-15	MW-29	100	93	99	91
680-111248-16	MW-30	101	91	98	95
680-111248-17	MW-31	101	93	99	93
680-111248-18	MW-32	105	96	106	100
680-111248-19	MW-33	103	94	104	99
680-111248-20	MW-34	101	92	97	93
680-111248-21	MW-35	101	94	99	92
680-111248-22	MW-36	101	94	99	93
680-111248-23	MW-37	102	96	101	94
680-111248-24	PAN-MW-9	103	96	104	93
680-111248-25	PAN-MW-10	100	92	98	92
680-111248-26	Trip Blank	100	92	98	93
LCS 680-378017/4	Lab Control Sample	95	98	102	94
LCS 680-378019/4	Lab Control Sample	104	96	104	97
LCS 680-378022/4	Lab Control Sample	98	95	99	97
LCS 680-378174/4	Lab Control Sample	103	99	105	97
LCSD 680-378017/5	Lab Control Sample Dup	95	100	103	95
LCSD 680-378019/5	Lab Control Sample Dup	107	96	108	98
LCSD 680-378022/5	Lab Control Sample Dup	100	94	100	97
LCSD 680-378174/5	Lab Control Sample Dup	107	94	104	98
MB 680-378017/9	Method Blank	103	97	104	95
MB 680-378019/9	Method Blank	106	97	106	100
MB 680-378022/9	Method Blank	101	93	99	94
MB 680-378174/9	Method Blank	106	94	106	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-378017/9
Matrix: Water
Analysis Batch: 378017

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 11:09	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 11:09	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 11:09	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 11:09	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 11:09	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 11:09	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 11:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 11:09	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 11:09	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 11:09	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 11:09	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 11:09	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 11:09	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 11:09	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 11:09	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 11:09	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 11:09	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 11:09	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 11:09	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 11:09	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 11:09	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 11:09	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 11:09	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 11:09	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 11:09	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 11:09	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 11:09	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 11:09	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 11:09	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 11:09	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 11:09	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 11:09	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 11:09	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 11:09	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 11:09	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 11:09	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 11:09	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 11:09	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 11:09	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 11:09	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 11:09	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 11:09	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 11:09	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 11:09	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 11:09	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 11:09	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 11:09	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 11:09	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-378017/9
Matrix: Water
Analysis Batch: 378017

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*103*		*70 - 130*		*04/09/15 11:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*04/09/15 11:09*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*04/09/15 11:09*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*04/09/15 11:09*	*1*

Lab Sample ID: LCS 680-378017/4
Matrix: Water
Analysis Batch: 378017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	50.0	45.9		ug/L		92	51 - 140
Chloromethane	50.0	45.0		ug/L		90	63 - 126
Vinyl chloride	50.0	40.3		ug/L		81	68 - 132
Bromomethane	50.0	44.2		ug/L		88	20 - 180
Chloroethane	50.0	40.6		ug/L		81	50 - 151
Trichlorofluoromethane	50.0	48.0		ug/L		96	58 - 145
1,1-Dichloroethene	50.0	42.4		ug/L		85	74 - 125
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	47.0		ug/L		94	65 - 131
Acetone	250	223		ug/L		89	60 - 154
Carbon disulfide	50.0	41.6		ug/L		83	73 - 127
Methyl acetate	250	276		ug/L		111	66 - 134
Methylene Chloride	50.0	46.4		ug/L		93	76 - 129
trans-1,2-Dichloroethene	50.0	46.5		ug/L		93	78 - 123
Methyl tert-butyl ether	50.0	47.4		ug/L		95	74 - 135
1,1-Dichloroethane	50.0	46.1		ug/L		92	80 - 120
cis-1,2-Dichloroethene	50.0	49.2		ug/L		98	80 - 122
2-Butanone	250	269		ug/L		107	75 - 133
Chloroform	50.0	48.7		ug/L		97	79 - 122
1,1,1-Trichloroethane	50.0	45.3		ug/L		91	74 - 128
Cyclohexane	50.0	43.5		ug/L		87	69 - 130
Carbon tetrachloride	50.0	44.8		ug/L		90	75 - 130
Benzene	50.0	47.2		ug/L		94	73 - 131
1,2-Dichloroethane	50.0	48.4		ug/L		97	75 - 130
Trichloroethene	50.0	46.7		ug/L		93	80 - 123
Methylcyclohexane	50.0	43.9		ug/L		88	75 - 127
1,2-Dichloropropane	50.0	50.5		ug/L		101	80 - 123
Bromodichloromethane	50.0	49.2		ug/L		98	77 - 129
cis-1,3-Dichloropropene	50.0	51.0		ug/L		102	80 - 133
4-Methyl-2-pentanone	250	252		ug/L		101	75 - 135
Toluene	50.0	44.9		ug/L		90	80 - 122
trans-1,3-Dichloropropene	50.0	53.2		ug/L		106	74 - 140
1,1,2-Trichloroethane	50.0	50.3		ug/L		101	79 - 125
Tetrachloroethene	50.0	46.8		ug/L		94	77 - 123
2-Hexanone	250	235		ug/L		94	70 - 141
Dibromochloromethane	50.0	52.2		ug/L		104	71 - 136
1,2-Dibromoethane	50.0	50.7		ug/L		101	77 - 131
Chlorobenzene	50.0	49.6		ug/L		99	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-378017/4
Matrix: Water
Analysis Batch: 378017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylbenzene			50.0	48.2		ug/L		96	80 - 120		
Xylenes, Total			100	94.0		ug/L		94	80 - 120		
Styrene			50.0	47.3		ug/L		95	80 - 122		
Bromoform			50.0	55.1		ug/L		110	69 - 135		
Isopropylbenzene			50.0	48.3		ug/L		97	80 - 120		
1,1,2,2-Tetrachloroethane			50.0	55.0		ug/L		110	72 - 128		
1,3-Dichlorobenzene			50.0	47.4		ug/L		95	80 - 120		
1,4-Dichlorobenzene			50.0	47.8		ug/L		96	80 - 120		
1,2-Dichlorobenzene			50.0	48.4		ug/L		97	80 - 120		
1,2-Dibromo-3-Chloropropane			50.0	51.4		ug/L		103	59 - 141		
1,2,4-Trichlorobenzene			50.0	47.7		ug/L		95	77 - 131		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 680-378017/5
Matrix: Water
Analysis Batch: 378017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			50.0	45.1		ug/L		90	51 - 140	2	40
Chloromethane			50.0	45.4		ug/L		91	63 - 126	1	30
Vinyl chloride			50.0	40.0		ug/L		80	68 - 132	1	30
Bromomethane			50.0	43.4		ug/L		87	20 - 180	2	40
Chloroethane			50.0	39.8		ug/L		80	50 - 151	2	30
Trichlorofluoromethane			50.0	47.5		ug/L		95	58 - 145	1	30
1,1-Dichloroethene			50.0	41.8		ug/L		84	74 - 125	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	46.4		ug/L		93	65 - 131	1	30
Acetone			250	231		ug/L		92	60 - 154	4	40
Carbon disulfide			50.0	41.6		ug/L		83	73 - 127	0	20
Methyl acetate			250	287		ug/L		115	66 - 134	4	30
Methylene Chloride			50.0	46.9		ug/L		94	76 - 129	1	20
trans-1,2-Dichloroethene			50.0	46.6		ug/L		93	78 - 123	0	20
Methyl tert-butyl ether			50.0	48.0		ug/L		96	74 - 135	1	20
1,1-Dichloroethane			50.0	45.8		ug/L		92	80 - 120	1	20
cis-1,2-Dichloroethene			50.0	48.8		ug/L		98	80 - 122	1	20
2-Butanone			250	271		ug/L		108	75 - 133	1	30
Chloroform			50.0	47.6		ug/L		95	79 - 122	2	20
1,1,1-Trichloroethane			50.0	45.1		ug/L		90	74 - 128	0	20
Cyclohexane			50.0	43.4		ug/L		87	69 - 130	0	30
Carbon tetrachloride			50.0	44.1		ug/L		88	75 - 130	2	20
Benzene			50.0	47.5		ug/L		95	73 - 131	1	30
1,2-Dichloroethane			50.0	49.4		ug/L		99	75 - 130	2	20
Trichloroethene			50.0	46.2		ug/L		92	80 - 123	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-378017/5
Matrix: Water
Analysis Batch: 378017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylcyclohexane			50.0	43.6		ug/L		87	75 - 127	1	30
1,2-Dichloropropane			50.0	51.4		ug/L		103	80 - 123	2	20
Bromodichloromethane			50.0	49.8		ug/L		100	77 - 129	1	20
cis-1,3-Dichloropropene			50.0	51.7		ug/L		103	80 - 133	1	20
4-Methyl-2-pentanone			250	259		ug/L		104	75 - 135	3	30
Toluene			50.0	45.3		ug/L		91	80 - 122	1	20
trans-1,3-Dichloropropene			50.0	53.7		ug/L		107	74 - 140	1	20
1,1,2-Trichloroethane			50.0	51.1		ug/L		102	79 - 125	2	20
Tetrachloroethene			50.0	46.4		ug/L		93	77 - 123	1	20
2-Hexanone			250	240		ug/L		96	70 - 141	2	40
Dibromochloromethane			50.0	52.5		ug/L		105	71 - 136	1	20
1,2-Dibromoethane			50.0	52.1		ug/L		104	77 - 131	3	30
Chlorobenzene			50.0	49.3		ug/L		99	80 - 120	1	20
Ethylbenzene			50.0	47.5		ug/L		95	80 - 120	1	20
Xylenes, Total			100	93.4		ug/L		93	80 - 120	1	20
Styrene			50.0	47.2		ug/L		94	80 - 122	0	20
Bromoform			50.0	55.5		ug/L		111	69 - 135	1	20
Isopropylbenzene			50.0	48.2		ug/L		96	80 - 120	0	20
1,1,2,2-Tetrachloroethane			50.0	55.7		ug/L		111	72 - 128	1	20
1,3-Dichlorobenzene			50.0	48.3		ug/L		97	80 - 120	2	20
1,4-Dichlorobenzene			50.0	48.1		ug/L		96	80 - 120	0	20
1,2-Dichlorobenzene			50.0	48.8		ug/L		98	80 - 120	1	20
1,2-Dibromo-3-Chloropropane			50.0	52.9		ug/L		106	59 - 141	3	30
1,2,4-Trichlorobenzene			50.0	48.6		ug/L		97	77 - 131	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 680-378019/9
Matrix: Water
Analysis Batch: 378019

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 10:42	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 10:42	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 10:42	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 10:42	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 10:42	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 10:42	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 10:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 10:42	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 10:42	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 10:42	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 10:42	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 10:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-378019/9
Matrix: Water
Analysis Batch: 378019

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 10:42	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 10:42	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 10:42	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 10:42	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 10:42	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 10:42	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 10:42	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 10:42	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 10:42	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 10:42	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 10:42	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 10:42	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 10:42	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 10:42	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 10:42	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 10:42	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 10:42	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 10:42	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 10:42	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 10:42	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 10:42	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 10:42	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 10:42	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 10:42	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 10:42	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 10:42	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 10:42	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 10:42	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 10:42	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 10:42	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 10:42	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 10:42	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 10:42	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 10:42	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 10:42	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 10:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*		*04/09/15 10:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*04/09/15 10:42*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*04/09/15 10:42*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*04/09/15 10:42*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-378019/4
Matrix: Water
Analysis Batch: 378019

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	50.0	49.1		ug/L		98	51 - 140
Chloromethane	50.0	47.3		ug/L		95	63 - 126
Vinyl chloride	50.0	58.4		ug/L		117	68 - 132
Bromomethane	50.0	48.2		ug/L		96	20 - 180
Chloroethane	50.0	53.1		ug/L		106	50 - 151
Trichlorofluoromethane	50.0	51.9		ug/L		104	58 - 145
1,1-Dichloroethene	50.0	53.2		ug/L		106	74 - 125
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.6		ug/L		111	65 - 131
Acetone	250	249		ug/L		99	60 - 154
Carbon disulfide	50.0	52.8		ug/L		106	73 - 127
Methyl acetate	250	251		ug/L		100	66 - 134
Methylene Chloride	50.0	53.7		ug/L		107	76 - 129
trans-1,2-Dichloroethene	50.0	51.6		ug/L		103	78 - 123
Methyl tert-butyl ether	50.0	50.7		ug/L		101	74 - 135
1,1-Dichloroethane	50.0	53.3		ug/L		107	80 - 120
cis-1,2-Dichloroethene	50.0	50.9		ug/L		102	80 - 122
2-Butanone	250	240		ug/L		96	75 - 133
Chloroform	50.0	52.0		ug/L		104	79 - 122
1,1,1-Trichloroethane	50.0	52.1		ug/L		104	74 - 128
Cyclohexane	50.0	52.7		ug/L		105	69 - 130
Carbon tetrachloride	50.0	52.8		ug/L		106	75 - 130
Benzene	50.0	51.4		ug/L		103	73 - 131
1,2-Dichloroethane	50.0	49.5		ug/L		99	75 - 130
Trichloroethene	50.0	50.4		ug/L		101	80 - 123
Methylcyclohexane	50.0	55.0		ug/L		110	75 - 127
1,2-Dichloropropane	50.0	51.5		ug/L		103	80 - 123
Bromodichloromethane	50.0	51.0		ug/L		102	77 - 129
cis-1,3-Dichloropropene	50.0	53.0		ug/L		106	80 - 133
4-Methyl-2-pentanone	250	247		ug/L		99	75 - 135
Toluene	50.0	50.7		ug/L		101	80 - 122
trans-1,3-Dichloropropene	50.0	52.3		ug/L		105	74 - 140
1,1,2-Trichloroethane	50.0	52.5		ug/L		105	79 - 125
Tetrachloroethene	50.0	52.2		ug/L		104	77 - 123
2-Hexanone	250	248		ug/L		99	70 - 141
Dibromochloromethane	50.0	52.3		ug/L		105	71 - 136
1,2-Dibromoethane	50.0	49.7		ug/L		99	77 - 131
Chlorobenzene	50.0	51.4		ug/L		103	80 - 120
Ethylbenzene	50.0	52.1		ug/L		104	80 - 120
Xylenes, Total	100	103		ug/L		103	80 - 120
Styrene	50.0	52.4		ug/L		105	80 - 122
Bromoform	50.0	54.1		ug/L		108	69 - 135
Isopropylbenzene	50.0	52.8		ug/L		106	80 - 120
1,1,2,2-Tetrachloroethane	50.0	50.0		ug/L		100	72 - 128
1,3-Dichlorobenzene	50.0	50.6		ug/L		101	80 - 120
1,4-Dichlorobenzene	50.0	50.3		ug/L		101	80 - 120
1,2-Dichlorobenzene	50.0	49.1		ug/L		98	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	49.6		ug/L		99	59 - 141

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-378019/4
Matrix: Water
Analysis Batch: 378019

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,4-Trichlorobenzene			50.0	52.1		ug/L		104	77 - 131		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 680-378019/5
Matrix: Water
Analysis Batch: 378019

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			50.0	54.3		ug/L		109	51 - 140	10	40
Chloromethane			50.0	51.2		ug/L		102	63 - 126	8	30
Vinyl chloride			50.0	60.1		ug/L		120	68 - 132	3	30
Bromomethane			50.0	55.6		ug/L		111	20 - 180	14	40
Chloroethane			50.0	51.0		ug/L		102	50 - 151	4	30
Trichlorofluoromethane			50.0	53.4		ug/L		107	58 - 145	3	30
1,1-Dichloroethene			50.0	55.0		ug/L		110	74 - 125	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	55.6		ug/L		111	65 - 131	0	30
Acetone			250	216		ug/L		86	60 - 154	14	40
Carbon disulfide			50.0	53.2		ug/L		106	73 - 127	1	20
Methyl acetate			250	264		ug/L		106	66 - 134	5	30
Methylene Chloride			50.0	53.9		ug/L		108	76 - 129	0	20
trans-1,2-Dichloroethene			50.0	51.9		ug/L		104	78 - 123	1	20
Methyl tert-butyl ether			50.0	50.2		ug/L		100	74 - 135	1	20
1,1-Dichloroethane			50.0	52.8		ug/L		106	80 - 120	1	20
cis-1,2-Dichloroethene			50.0	51.2		ug/L		102	80 - 122	1	20
2-Butanone			250	227		ug/L		91	75 - 133	6	30
Chloroform			50.0	53.2		ug/L		106	79 - 122	2	20
1,1,1-Trichloroethane			50.0	52.2		ug/L		104	74 - 128	0	20
Cyclohexane			50.0	53.1		ug/L		106	69 - 130	1	30
Carbon tetrachloride			50.0	52.5		ug/L		105	75 - 130	1	20
Benzene			50.0	51.6		ug/L		103	73 - 131	0	30
1,2-Dichloroethane			50.0	49.6		ug/L		99	75 - 130	0	20
Trichloroethene			50.0	51.9		ug/L		104	80 - 123	3	20
Methylcyclohexane			50.0	55.0		ug/L		110	75 - 127	0	30
1,2-Dichloropropane			50.0	52.4		ug/L		105	80 - 123	2	20
Bromodichloromethane			50.0	52.1		ug/L		104	77 - 129	2	20
cis-1,3-Dichloropropene			50.0	52.7		ug/L		105	80 - 133	1	20
4-Methyl-2-pentanone			250	242		ug/L		97	75 - 135	2	30
Toluene			50.0	51.1		ug/L		102	80 - 122	1	20
trans-1,3-Dichloropropene			50.0	52.9		ug/L		106	74 - 140	1	20
1,1,2-Trichloroethane			50.0	52.5		ug/L		105	79 - 125	0	20
Tetrachloroethene			50.0	53.8		ug/L		108	77 - 123	3	20
2-Hexanone			250	245		ug/L		98	70 - 141	1	40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-378019/5
Matrix: Water
Analysis Batch: 378019

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibromochloromethane			50.0	52.3		ug/L		105	71 - 136	0	20
1,2-Dibromoethane			50.0	50.7		ug/L		101	77 - 131	2	30
Chlorobenzene			50.0	52.9		ug/L		106	80 - 120	3	20
Ethylbenzene			50.0	53.6		ug/L		107	80 - 120	3	20
Xylenes, Total			100	107		ug/L		107	80 - 120	4	20
Styrene			50.0	53.1		ug/L		106	80 - 122	1	20
Bromoform			50.0	56.5		ug/L		113	69 - 135	4	20
Isopropylbenzene			50.0	55.1		ug/L		110	80 - 120	4	20
1,1,2,2-Tetrachloroethane			50.0	50.7		ug/L		101	72 - 128	1	20
1,3-Dichlorobenzene			50.0	51.8		ug/L		104	80 - 120	2	20
1,4-Dichlorobenzene			50.0	51.8		ug/L		104	80 - 120	3	20
1,2-Dichlorobenzene			50.0	50.4		ug/L		101	80 - 120	2	20
1,2-Dibromo-3-Chloropropane			50.0	48.8		ug/L		98	59 - 141	2	30
1,2,4-Trichlorobenzene			50.0	53.6		ug/L		107	77 - 131	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*107*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 680-378022/9
Matrix: Water
Analysis Batch: 378022

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/09/15 10:45	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/09/15 10:45	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/09/15 10:45	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/09/15 10:45	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/09/15 10:45	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/09/15 10:45	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/09/15 10:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/09/15 10:45	1
Acetone	<7.0		10	7.0	ug/L			04/09/15 10:45	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/09/15 10:45	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/09/15 10:45	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/09/15 10:45	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/09/15 10:45	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/09/15 10:45	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/09/15 10:45	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/09/15 10:45	1
2-Butanone	<3.4		10	3.4	ug/L			04/09/15 10:45	1
Chloroform	<0.50		1.0	0.50	ug/L			04/09/15 10:45	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/09/15 10:45	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/09/15 10:45	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/09/15 10:45	1
Benzene	<0.43		1.0	0.43	ug/L			04/09/15 10:45	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-378022/9
Matrix: Water
Analysis Batch: 378022

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/09/15 10:45	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/09/15 10:45	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/09/15 10:45	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/09/15 10:45	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/09/15 10:45	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/09/15 10:45	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/09/15 10:45	1
Toluene	<0.48		1.0	0.48	ug/L			04/09/15 10:45	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/09/15 10:45	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/09/15 10:45	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/09/15 10:45	1
2-Hexanone	<2.0		10	2.0	ug/L			04/09/15 10:45	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/09/15 10:45	1
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/09/15 10:45	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/09/15 10:45	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/09/15 10:45	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/09/15 10:45	1
Styrene	<0.27		1.0	0.27	ug/L			04/09/15 10:45	1
Bromoform	<0.43		1.0	0.43	ug/L			04/09/15 10:45	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/09/15 10:45	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/09/15 10:45	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/09/15 10:45	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/09/15 10:45	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/09/15 10:45	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/09/15 10:45	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/09/15 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*04/09/15 10:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*04/09/15 10:45*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*04/09/15 10:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*04/09/15 10:45*	*1*

Lab Sample ID: LCS 680-378022/4
Matrix: Water
Analysis Batch: 378022

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	50.0	54.3		ug/L		109	51 - 140
Chloromethane	50.0	45.3		ug/L		91	63 - 126
Vinyl chloride	50.0	50.8		ug/L		102	68 - 132
Bromomethane	50.0	37.3		ug/L		75	20 - 180
Chloroethane	50.0	51.6		ug/L		103	50 - 151
Trichlorofluoromethane	50.0	56.3		ug/L		113	58 - 145
1,1-Dichloroethene	50.0	44.0		ug/L		88	74 - 125
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.2		ug/L		92	65 - 131
Acetone	250	248		ug/L		99	60 - 154

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-378022/4
Matrix: Water
Analysis Batch: 378022

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	50.0	41.4		ug/L		83	73 - 127
Methyl acetate	250	265		ug/L		106	66 - 134
Methylene Chloride	50.0	48.3		ug/L		97	76 - 129
trans-1,2-Dichloroethene	50.0	47.2		ug/L		94	78 - 123
Methyl tert-butyl ether	50.0	48.0		ug/L		96	74 - 135
1,1-Dichloroethane	50.0	48.6		ug/L		97	80 - 120
cis-1,2-Dichloroethene	50.0	47.5		ug/L		95	80 - 122
2-Butanone	250	250		ug/L		100	75 - 133
Chloroform	50.0	49.6		ug/L		99	79 - 122
1,1,1-Trichloroethane	50.0	48.9		ug/L		98	74 - 128
Cyclohexane	50.0	42.9		ug/L		86	69 - 130
Carbon tetrachloride	50.0	50.2		ug/L		100	75 - 130
Benzene	50.0	47.1		ug/L		94	73 - 131
1,2-Dichloroethane	50.0	47.9		ug/L		96	75 - 130
Trichloroethene	50.0	46.7		ug/L		93	80 - 123
Methylcyclohexane	50.0	44.4		ug/L		89	75 - 127
1,2-Dichloropropane	50.0	48.0		ug/L		96	80 - 123
Bromodichloromethane	50.0	50.4		ug/L		101	77 - 129
cis-1,3-Dichloropropene	50.0	51.7		ug/L		103	80 - 133
4-Methyl-2-pentanone	250	244		ug/L		98	75 - 135
Toluene	50.0	48.1		ug/L		96	80 - 122
trans-1,3-Dichloropropene	50.0	54.5		ug/L		109	74 - 140
1,1,2-Trichloroethane	50.0	49.1		ug/L		98	79 - 125
Tetrachloroethene	50.0	46.2		ug/L		92	77 - 123
2-Hexanone	250	242		ug/L		97	70 - 141
Dibromochloromethane	50.0	51.7		ug/L		103	71 - 136
1,2-Dibromoethane	50.0	48.2		ug/L		96	77 - 131
Chlorobenzene	50.0	47.8		ug/L		96	80 - 120
Ethylbenzene	50.0	47.1		ug/L		94	80 - 120
Xylenes, Total	100	95.6		ug/L		96	80 - 120
Styrene	50.0	47.1		ug/L		94	80 - 122
Bromoform	50.0	51.8		ug/L		104	69 - 135
Isopropylbenzene	50.0	48.4		ug/L		97	80 - 120
1,1,2,2-Tetrachloroethane	50.0	50.5		ug/L		101	72 - 128
1,3-Dichlorobenzene	50.0	48.1		ug/L		96	80 - 120
1,4-Dichlorobenzene	50.0	48.0		ug/L		96	80 - 120
1,2-Dichlorobenzene	50.0	48.2		ug/L		96	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	53.9		ug/L		108	59 - 141
1,2,4-Trichlorobenzene	50.0	45.7		ug/L		91	77 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-378022/5
Matrix: Water
Analysis Batch: 378022

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	50.0	54.5		ug/L		109	51 - 140	0	40
Chloromethane	50.0	46.3		ug/L		93	63 - 126	2	30
Vinyl chloride	50.0	51.8		ug/L		104	68 - 132	2	30
Bromomethane	50.0	39.5		ug/L		79	20 - 180	6	40
Chloroethane	50.0	52.3		ug/L		105	50 - 151	1	30
Trichlorofluoromethane	50.0	56.3		ug/L		113	58 - 145	0	30
1,1-Dichloroethene	50.0	44.3		ug/L		89	74 - 125	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.2		ug/L		94	65 - 131	2	30
Acetone	250	247		ug/L		99	60 - 154	0	40
Carbon disulfide	50.0	42.8		ug/L		86	73 - 127	3	20
Methyl acetate	250	265		ug/L		106	66 - 134	0	30
Methylene Chloride	50.0	48.9		ug/L		98	76 - 129	1	20
trans-1,2-Dichloroethene	50.0	47.3		ug/L		95	78 - 123	0	20
Methyl tert-butyl ether	50.0	48.5		ug/L		97	74 - 135	1	20
1,1-Dichloroethane	50.0	48.8		ug/L		98	80 - 120	0	20
cis-1,2-Dichloroethene	50.0	47.5		ug/L		95	80 - 122	0	20
2-Butanone	250	250		ug/L		100	75 - 133	0	30
Chloroform	50.0	50.4		ug/L		101	79 - 122	2	20
1,1,1-Trichloroethane	50.0	49.4		ug/L		99	74 - 128	1	20
Cyclohexane	50.0	43.2		ug/L		86	69 - 130	1	30
Carbon tetrachloride	50.0	50.6		ug/L		101	75 - 130	1	20
Benzene	50.0	47.3		ug/L		95	73 - 131	0	30
1,2-Dichloroethane	50.0	46.9		ug/L		94	75 - 130	2	20
Trichloroethene	50.0	47.2		ug/L		94	80 - 123	1	20
Methylcyclohexane	50.0	45.1		ug/L		90	75 - 127	1	30
1,2-Dichloropropane	50.0	49.1		ug/L		98	80 - 123	2	20
Bromodichloromethane	50.0	50.5		ug/L		101	77 - 129	0	20
cis-1,3-Dichloropropene	50.0	52.2		ug/L		104	80 - 133	1	20
4-Methyl-2-pentanone	250	243		ug/L		97	75 - 135	1	30
Toluene	50.0	48.3		ug/L		97	80 - 122	0	20
trans-1,3-Dichloropropene	50.0	55.2		ug/L		110	74 - 140	1	20
1,1,2-Trichloroethane	50.0	49.6		ug/L		99	79 - 125	1	20
Tetrachloroethene	50.0	46.2		ug/L		92	77 - 123	0	20
2-Hexanone	250	242		ug/L		97	70 - 141	0	40
Dibromochloromethane	50.0	52.2		ug/L		104	71 - 136	1	20
1,2-Dibromoethane	50.0	48.7		ug/L		97	77 - 131	1	30
Chlorobenzene	50.0	48.6		ug/L		97	80 - 120	2	20
Ethylbenzene	50.0	47.8		ug/L		96	80 - 120	1	20
Xylenes, Total	100	96.4		ug/L		96	80 - 120	1	20
Styrene	50.0	47.6		ug/L		95	80 - 122	1	20
Bromoform	50.0	52.6		ug/L		105	69 - 135	2	20
Isopropylbenzene	50.0	48.9		ug/L		98	80 - 120	1	20
1,1,2,2-Tetrachloroethane	50.0	50.9		ug/L		102	72 - 128	1	20
1,3-Dichlorobenzene	50.0	48.4		ug/L		97	80 - 120	1	20
1,4-Dichlorobenzene	50.0	47.4		ug/L		95	80 - 120	1	20
1,2-Dichlorobenzene	50.0	48.9		ug/L		98	80 - 120	1	20
1,2-Dibromo-3-Chloropropane	50.0	54.3		ug/L		109	59 - 141	1	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-378022/5
Matrix: Water
Analysis Batch: 378022

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene			50.0	46.3		ug/L		93	77 - 131	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 680-378174/9
Matrix: Water
Analysis Batch: 378174

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.60		1.0	0.60	ug/L			04/10/15 10:44	1
Chloromethane	<0.40		1.0	0.40	ug/L			04/10/15 10:44	1
Vinyl chloride	<0.50		1.0	0.50	ug/L			04/10/15 10:44	1
Bromomethane	<2.5		5.0	2.5	ug/L			04/10/15 10:44	1
Chloroethane	<2.5		5.0	2.5	ug/L			04/10/15 10:44	1
Trichlorofluoromethane	<0.42		1.0	0.42	ug/L			04/10/15 10:44	1
1,1-Dichloroethene	<0.36		1.0	0.36	ug/L			04/10/15 10:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.36		1.0	0.36	ug/L			04/10/15 10:44	1
Acetone	<7.0		10	7.0	ug/L			04/10/15 10:44	1
Carbon disulfide	<1.0		2.0	1.0	ug/L			04/10/15 10:44	1
Methyl acetate	<1.8		5.0	1.8	ug/L			04/10/15 10:44	1
Methylene Chloride	<2.5		5.0	2.5	ug/L			04/10/15 10:44	1
trans-1,2-Dichloroethene	<0.37		1.0	0.37	ug/L			04/10/15 10:44	1
Methyl tert-butyl ether	<0.30		10	0.30	ug/L			04/10/15 10:44	1
1,1-Dichloroethane	<0.38		1.0	0.38	ug/L			04/10/15 10:44	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/10/15 10:44	1
2-Butanone	<3.4		10	3.4	ug/L			04/10/15 10:44	1
Chloroform	<0.50		1.0	0.50	ug/L			04/10/15 10:44	1
1,1,1-Trichloroethane	<0.37		1.0	0.37	ug/L			04/10/15 10:44	1
Cyclohexane	<0.39		1.0	0.39	ug/L			04/10/15 10:44	1
Carbon tetrachloride	<0.33		1.0	0.33	ug/L			04/10/15 10:44	1
Benzene	<0.43		1.0	0.43	ug/L			04/10/15 10:44	1
1,2-Dichloroethane	<0.50		1.0	0.50	ug/L			04/10/15 10:44	1
Trichloroethene	<0.48		1.0	0.48	ug/L			04/10/15 10:44	1
Methylcyclohexane	<0.43		1.0	0.43	ug/L			04/10/15 10:44	1
1,2-Dichloropropane	<0.67		1.0	0.67	ug/L			04/10/15 10:44	1
Bromodichloromethane	<0.44		1.0	0.44	ug/L			04/10/15 10:44	1
cis-1,3-Dichloropropene	<0.40		1.0	0.40	ug/L			04/10/15 10:44	1
4-Methyl-2-pentanone	<2.1		10	2.1	ug/L			04/10/15 10:44	1
Toluene	<0.48		1.0	0.48	ug/L			04/10/15 10:44	1
trans-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/10/15 10:44	1
1,1,2-Trichloroethane	<0.33		1.0	0.33	ug/L			04/10/15 10:44	1
Tetrachloroethene	<0.74		1.0	0.74	ug/L			04/10/15 10:44	1
2-Hexanone	<2.0		10	2.0	ug/L			04/10/15 10:44	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			04/10/15 10:44	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-378174/9
Matrix: Water
Analysis Batch: 378174

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	<0.44		1.0	0.44	ug/L			04/10/15 10:44	1
Chlorobenzene	<0.26		1.0	0.26	ug/L			04/10/15 10:44	1
Ethylbenzene	<0.33		1.0	0.33	ug/L			04/10/15 10:44	1
Xylenes, Total	<0.23		1.0	0.23	ug/L			04/10/15 10:44	1
Styrene	<0.27		1.0	0.27	ug/L			04/10/15 10:44	1
Bromoform	<0.43		1.0	0.43	ug/L			04/10/15 10:44	1
Isopropylbenzene	<0.35		1.0	0.35	ug/L			04/10/15 10:44	1
1,1,2,2-Tetrachloroethane	<0.62		1.0	0.62	ug/L			04/10/15 10:44	1
1,3-Dichlorobenzene	<0.43		1.0	0.43	ug/L			04/10/15 10:44	1
1,4-Dichlorobenzene	<0.46		1.0	0.46	ug/L			04/10/15 10:44	1
1,2-Dichlorobenzene	<0.37		1.0	0.37	ug/L			04/10/15 10:44	1
1,2-Dibromo-3-Chloropropane	<1.1		5.0	1.1	ug/L			04/10/15 10:44	1
1,2,4-Trichlorobenzene	<2.5		5.0	2.5	ug/L			04/10/15 10:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*		*04/10/15 10:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*04/10/15 10:44*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*04/10/15 10:44*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*04/10/15 10:44*	*1*

Lab Sample ID: LCS 680-378174/4
Matrix: Water
Analysis Batch: 378174

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	50.0	45.4		ug/L		91	51 - 140
Chloromethane	50.0	45.3		ug/L		91	63 - 126
Vinyl chloride	50.0	48.6		ug/L		97	68 - 132
Bromomethane	50.0	49.3		ug/L		99	20 - 180
Chloroethane	50.0	50.9		ug/L		102	50 - 151
Trichlorofluoromethane	50.0	48.6		ug/L		97	58 - 145
1,1-Dichloroethene	50.0	50.3		ug/L		101	74 - 125
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.7		ug/L		101	65 - 131
Acetone	250	256		ug/L		102	60 - 154
Carbon disulfide	50.0	50.4		ug/L		101	73 - 127
Methyl acetate	250	271		ug/L		109	66 - 134
Methylene Chloride	50.0	55.7		ug/L		111	76 - 129
trans-1,2-Dichloroethene	50.0	49.8		ug/L		100	78 - 123
Methyl tert-butyl ether	50.0	52.3		ug/L		105	74 - 135
1,1-Dichloroethane	50.0	53.0		ug/L		106	80 - 120
cis-1,2-Dichloroethene	50.0	50.5		ug/L		101	80 - 122
2-Butanone	250	243		ug/L		97	75 - 133
Chloroform	50.0	52.5		ug/L		105	79 - 122
1,1,1-Trichloroethane	50.0	49.0		ug/L		98	74 - 128
Cyclohexane	50.0	48.9		ug/L		98	69 - 130
Carbon tetrachloride	50.0	50.0		ug/L		100	75 - 130
Benzene	50.0	49.9		ug/L		100	73 - 131

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-378174/4
Matrix: Water
Analysis Batch: 378174

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	51.3		ug/L		103	75 - 130
Trichloroethene	50.0	49.7		ug/L		99	80 - 123
Methylcyclohexane	50.0	49.7		ug/L		99	75 - 127
1,2-Dichloropropane	50.0	51.8		ug/L		104	80 - 123
Bromodichloromethane	50.0	51.5		ug/L		103	77 - 129
cis-1,3-Dichloropropene	50.0	52.6		ug/L		105	80 - 133
4-Methyl-2-pentanone	250	246		ug/L		99	75 - 135
Toluene	50.0	50.0		ug/L		100	80 - 122
trans-1,3-Dichloropropene	50.0	52.4		ug/L		105	74 - 140
1,1,2-Trichloroethane	50.0	53.2		ug/L		106	79 - 125
Tetrachloroethene	50.0	50.5		ug/L		101	77 - 123
2-Hexanone	250	242		ug/L		97	70 - 141
Dibromochloromethane	50.0	53.4		ug/L		107	71 - 136
1,2-Dibromoethane	50.0	52.2		ug/L		104	77 - 131
Chlorobenzene	50.0	52.2		ug/L		104	80 - 120
Ethylbenzene	50.0	50.7		ug/L		101	80 - 120
Xylenes, Total	100	102		ug/L		102	80 - 120
Styrene	50.0	52.3		ug/L		105	80 - 122
Bromoform	50.0	57.5		ug/L		115	69 - 135
Isopropylbenzene	50.0	52.3		ug/L		105	80 - 120
1,1,2,2-Tetrachloroethane	50.0	51.1		ug/L		102	72 - 128
1,3-Dichlorobenzene	50.0	50.5		ug/L		101	80 - 120
1,4-Dichlorobenzene	50.0	49.8		ug/L		100	80 - 120
1,2-Dichlorobenzene	50.0	50.0		ug/L		100	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	49.6		ug/L		99	59 - 141
1,2,4-Trichlorobenzene	50.0	51.7		ug/L		103	77 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 680-378174/5
Matrix: Water
Analysis Batch: 378174

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	50.0	46.3		ug/L		93	51 - 140	2	40
Chloromethane	50.0	44.9		ug/L		90	63 - 126	1	30
Vinyl chloride	50.0	54.7		ug/L		109	68 - 132	12	30
Bromomethane	50.0	48.7		ug/L		97	20 - 180	1	40
Chloroethane	50.0	54.9		ug/L		110	50 - 151	8	30
Trichlorofluoromethane	50.0	50.6		ug/L		101	58 - 145	4	30
1,1-Dichloroethene	50.0	52.8		ug/L		106	74 - 125	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	54.6		ug/L		109	65 - 131	7	30
Acetone	250	238		ug/L		95	60 - 154	7	40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-378174/5
Matrix: Water
Analysis Batch: 378174

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon disulfide			50.0	53.5		ug/L		107	73 - 127	6	20
Methyl acetate			250	253		ug/L		101	66 - 134	7	30
Methylene Chloride			50.0	53.5		ug/L		107	76 - 129	4	20
trans-1,2-Dichloroethene			50.0	50.4		ug/L		101	78 - 123	1	20
Methyl tert-butyl ether			50.0	50.0		ug/L		100	74 - 135	4	20
1,1-Dichloroethane			50.0	52.3		ug/L		105	80 - 120	1	20
cis-1,2-Dichloroethene			50.0	50.8		ug/L		102	80 - 122	1	20
2-Butanone			250	239		ug/L		96	75 - 133	1	30
Chloroform			50.0	52.0		ug/L		104	79 - 122	1	20
1,1,1-Trichloroethane			50.0	51.3		ug/L		103	74 - 128	5	20
Cyclohexane			50.0	52.0		ug/L		104	69 - 130	6	30
Carbon tetrachloride			50.0	52.4		ug/L		105	75 - 130	5	20
Benzene			50.0	50.5		ug/L		101	73 - 131	1	30
1,2-Dichloroethane			50.0	48.2		ug/L		96	75 - 130	6	20
Trichloroethene			50.0	52.9		ug/L		106	80 - 123	6	20
Methylcyclohexane			50.0	53.4		ug/L		107	75 - 127	7	30
1,2-Dichloropropane			50.0	50.3		ug/L		101	80 - 123	3	20
Bromodichloromethane			50.0	50.4		ug/L		101	77 - 129	2	20
cis-1,3-Dichloropropene			50.0	51.5		ug/L		103	80 - 133	2	20
4-Methyl-2-pentanone			250	238		ug/L		95	75 - 135	4	30
Toluene			50.0	50.9		ug/L		102	80 - 122	2	20
trans-1,3-Dichloropropene			50.0	51.7		ug/L		103	74 - 140	1	20
1,1,2-Trichloroethane			50.0	50.7		ug/L		101	79 - 125	5	20
Tetrachloroethene			50.0	53.0		ug/L		106	77 - 123	5	20
2-Hexanone			250	238		ug/L		95	70 - 141	2	40
Dibromochloromethane			50.0	52.5		ug/L		105	71 - 136	2	20
1,2-Dibromoethane			50.0	51.3		ug/L		103	77 - 131	2	30
Chlorobenzene			50.0	52.4		ug/L		105	80 - 120	0	20
Ethylbenzene			50.0	53.6		ug/L		107	80 - 120	5	20
Xylenes, Total			100	106		ug/L		106	80 - 120	4	20
Styrene			50.0	53.8		ug/L		108	80 - 122	3	20
Bromoform			50.0	57.4		ug/L		115	69 - 135	0	20
Isopropylbenzene			50.0	54.9		ug/L		110	80 - 120	5	20
1,1,2,2-Tetrachloroethane			50.0	50.4		ug/L		101	72 - 128	1	20
1,3-Dichlorobenzene			50.0	50.8		ug/L		102	80 - 120	1	20
1,4-Dichlorobenzene			50.0	50.8		ug/L		102	80 - 120	2	20
1,2-Dichlorobenzene			50.0	49.8		ug/L		100	80 - 120	1	20
1,2-Dibromo-3-Chloropropane			50.0	50.8		ug/L		102	59 - 141	2	30
1,2,4-Trichlorobenzene			50.0	52.1		ug/L		104	77 - 131	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*107*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*

GC/MS VOA

Analysis Batch: 378017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111248-23	MW-37	Total/NA	Water	8260B	
680-111248-24	PAN-MW-9	Total/NA	Water	8260B	
LCS 680-378017/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-378017/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-378017/9	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 378019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111248-18	MW-32	Total/NA	Water	8260B	
680-111248-19	MW-33	Total/NA	Water	8260B	
LCS 680-378019/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-378019/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-378019/9	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 378022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111248-1	IW-1R	Total/NA	Water	8260B	
680-111248-3	LAW-PZ-8R	Total/NA	Water	8260B	
680-111248-4	MW-14	Total/NA	Water	8260B	
680-111248-6	MW-17R	Total/NA	Water	8260B	
680-111248-7	MW-18R	Total/NA	Water	8260B	
680-111248-8	MW-19	Total/NA	Water	8260B	
680-111248-9	MW-23	Total/NA	Water	8260B	
680-111248-11	MW-25	Total/NA	Water	8260B	
680-111248-13	MW-27	Total/NA	Water	8260B	
680-111248-14	MW-28	Total/NA	Water	8260B	
680-111248-15	MW-29	Total/NA	Water	8260B	
680-111248-16	MW-30	Total/NA	Water	8260B	
680-111248-17	MW-31	Total/NA	Water	8260B	
680-111248-20	MW-34	Total/NA	Water	8260B	
680-111248-21	MW-35	Total/NA	Water	8260B	
680-111248-22	MW-36	Total/NA	Water	8260B	
680-111248-25	PAN-MW-10	Total/NA	Water	8260B	
680-111248-26	Trip Blank	Total/NA	Water	8260B	
LCS 680-378022/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-378022/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-378022/9	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 378174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111248-2	IW-18	Total/NA	Water	8260B	
680-111248-5	MW-16	Total/NA	Water	8260B	
680-111248-10	MW-24R	Total/NA	Water	8260B	
680-111248-12	MW-26R	Total/NA	Water	8260B	
LCS 680-378174/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-378174/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-378174/9	Method Blank	Total/NA	Water	8260B	

Client Sample ID: IW-1R — **Lab Sample ID: 680-111248-1**
Date Collected: 04/02/15 15:37 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	5 mL	5 mL	378022	04/09/15 17:00	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: IW-18 — **Lab Sample ID: 680-111248-2**
Date Collected: 04/02/15 12:36 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	5 mL	5 mL	378174	04/10/15 12:49	MMT	TAL SAV
	Instrument ID: CMSO2									

Client Sample ID: LAW-PZ-8R — **Lab Sample ID: 680-111248-3**
Date Collected: 04/02/15 16:57 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	5 mL	5 mL	378022	04/09/15 17:22	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-14 — **Lab Sample ID: 680-111248-4**
Date Collected: 04/01/15 18:23 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 11:38	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-16 — **Lab Sample ID: 680-111248-5**
Date Collected: 04/02/15 11:21 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	378174	04/10/15 11:46	MMT	TAL SAV
	Instrument ID: CMSO2									

Client Sample ID: MW-17R — **Lab Sample ID: 680-111248-6**
Date Collected: 03/31/15 16:58 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 12:21	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-18R — **Lab Sample ID: 680-111248-7**
Date Collected: 03/30/15 09:49 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 12:42	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-19 — **Lab Sample ID: 680-111248-8**
Date Collected: 03/30/15 12:23 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 13:04	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-23 — **Lab Sample ID: 680-111248-9**
Date Collected: 03/30/15 14:29 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 13:25	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-24R — **Lab Sample ID: 680-111248-10**
Date Collected: 04/01/15 10:33 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	378174	04/10/15 12:28	MMT	TAL SAV
	Instrument ID: CMSO2									

Client Sample ID: MW-25 — **Lab Sample ID: 680-111248-11**
Date Collected: 03/30/15 11:23 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 13:47	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-26R — **Lab Sample ID: 680-111248-12**
Date Collected: 04/02/15 10:05 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	5 mL	5 mL	378174	04/10/15 13:31	MMT	TAL SAV
	Instrument ID: CMSO2									

Client Sample ID: MW-27 — **Lab Sample ID: 680-111248-13**
Date Collected: 03/30/15 16:18 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 14:08	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-28 — **Lab Sample ID: 680-111248-14**
Date Collected: 03/31/15 10:20 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 14:30	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-29 — **Lab Sample ID: 680-111248-15**
Date Collected: 04/01/15 17:43 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	5 mL	5 mL	378022	04/09/15 17:43	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-30 — **Lab Sample ID: 680-111248-16**
Date Collected: 04/02/15 18:13 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 14:51	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-31 — **Lab Sample ID: 680-111248-17**
Date Collected: 03/30/15 15:35 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 15:13	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-32 — **Lab Sample ID: 680-111248-18**
Date Collected: 03/31/15 17:50 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378019	04/09/15 16:38	MMT	TAL SAV
	Instrument ID: CMSO2									

Client Sample ID: MW-33 — **Lab Sample ID: 680-111248-19**
Date Collected: 04/02/15 13:27 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378019	04/09/15 16:59	MMT	TAL SAV
	Instrument ID: CMSO2									

Client Sample ID: MW-34 — **Lab Sample ID: 680-111248-20**
Date Collected: 03/31/15 11:17 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 15:34	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-35 — **Lab Sample ID: 680-111248-21**
Date Collected: 03/31/15 15:12 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 15:56	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-36 — **Lab Sample ID: 680-111248-22**
Date Collected: 03/31/15 16:05 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 16:17	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-37 — **Lab Sample ID: 680-111248-23**
Date Collected: 03/31/15 12:05 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	378017	04/09/15 13:48	MMT	TAL SAV
	Instrument ID: CMSAC									

Client Sample ID: PAN-MW-9 — **Lab Sample ID: 680-111248-24**
Date Collected: 04/01/15 18:58 — **Matrix: Water**
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	5 mL	5 mL	378017	04/09/15 13:25	MMT	TAL SAV
	Instrument ID: CMSAC									

Lab Chronicle

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Client Sample ID: PAN-MW-10

Lab Sample ID: 680-111248-25

Date Collected: 04/01/15 09:20
Matrix: Water
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 16:39	MMT	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: Trip Blank

Lab Sample ID: 680-111248-26

Date Collected: 03/30/15 00:00
Matrix: Water
Date Received: 04/03/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	378022	04/09/15 11:16	MMT	TAL SAV
	Instrument ID: CMSP2									

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number 93976

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE: VAPAK, Savannah	PROJECT NO.: 39002.0	PROJECT LOCATION (STATE): GA	
TAL (LAB) PROJECT MANAGER: Sheila Hoffman	P.O. NUMBER: 901342	CONTRACT NO.	
CLIENT (SITE) PM: Alan Sanders	CLIENT PHONE: 770 772 7100	CLIENT FAX	
CLIENT NAME: EIC	CLIENT E-MAIL: asanders@eicusa.com		
CLIENT ADDRESS: 161 Kimball Bridge Rd Alpharetta GA 30009			
COMPANY CONTRACTING THIS WORK (if applicable)			

PAGE 1 OF 3

STANDARD REPORT DELIVERY ✓
DATE DUE 4/17/15

EXPEDITED REPORT DELIVERY (SURCHARGE) ○
DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 1

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: 8260B	REQUIRED ANALYSIS: HCl	NUMBER OF CONTAINERS SUBMITTED	REMARKS
4/2/15	15:37	IW-1R	G	X						3	
4/2/15	12:36	IW-18	G	X						3	
4/2/15	16:57	LAW-P2-8R	G	X						3	
4/1/15	18:23	MW-14	G	X						3	
4/2/15	11:21	MW-16	G	X						3	
3/31/15	16:58	MW-17R	G	X						3	
3/30/15	9:49	MW-18R	G	X						2	
3/30/15	12:23	MW-19	G	X						3	
3/30/15	14:29	MW-23	G	X						3	
4/1/15	10:33	MW-24R	G	X						3	
3/30/15	11:23	MW-25	G	X						3	
4/2/15	10:05	MW-26R	G	X						3	

680-111248 Chain of Custody

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	4/3/15	8:30						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	4/3/15	8:30	YES ○ NO ○			6.2 / 6.6

TAL8240-680 (1008)

Serial Number 93977

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

✓ TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

○ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO	PROJECT LOCATION (STATE)
VOPAK, Savannah	390020	GA

TAL (LAB) PROJECT MANAGER	PO NUMBER	CONTRACT NO
Sheila Hoffman	901343	

CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Alan Sanders	770-772-7100	

CLIENT NAME	CLIENT E-MAIL
EIC	asanders@eicusa.com

CLIENT ADDRESS: 161 Kimball Bridge Rd Alpharetta GA 30009

COMPANY CONTRACTING THIS WORK (if applicable):

PAGE 2 OF 3

STANDARD REPORT DELIVERY ✓ DATE DUE 4/17/15

EXPEDITED REPORT DELIVERY (SURCHARGE) ○ DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 1

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX TYPE: COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: 8260B	REQUIRED ANALYSIS: HU	NUMBER OF CONTAINERS SUBMITTED	REMARKS
3/30/15	16:18	MW-27	G	X						3	
3/31/15	10:20	MW-28	G	X						3	
4/1/15	17:43	MW-29	G	X						3	
4/2/15	18:13	MW-30	G	X						3	
3/30/15	15:35	MW-31	G	X						3	
3/31/15	17:50	MW-32	G	X						3	
4/2/15	13:27	MW-33	G	X						3	
3/31/15	11:17	MW-34	G	X						3	
3/31/15	15:12	MW-35	G	X						3	
3/31/15	16:05	MW-36	G	X						3	
3/31/15	12:05	MW-37	G	X						3	
4/1/15	18:58	PAN-MW-9	G	X						3	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	4/3/15	8:30						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	4/3/15	830	YES ○ NO ○			0.2/0.6 680-111248

TAL8240-680 (1008)

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4/10/2015

Serial Number 93979

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

(✓) TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

( ) Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE: VOPAK Savannah	PROJECT NO.: 390020	PROJECT LOCATION (STATE): GA	
TAL (LAB) PROJECT MANAGER: Sheila Hoffman	P.O. NUMBER: 901341	CONTRACT NO.	
CLIENT (SITE) PM: Alan Sanders	CLIENT PHONE: 770-771-7100	CLIENT FAX	
CLIENT NAME: EIC	CLIENT E-MAIL: asanders@eicusa.com		
CLIENT ADDRESS: 161 Kimball Bridge Rd Alpharetta GA 30009			
COMPANY CONTRACTING THIS WORK (if applicable)			

PAGE 3 OF 3

STANDARD REPORT DELIVERY (✓)
DATE DUE 4/17/15

EXPEDITED REPORT DELIVERY (SURCHARGE) ( )
DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 1

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: 8260B	REQUIRED ANALYSIS: HV	NUMBER OF CONTAINERS SUBMITTED	REMARKS
4/1/15	9:20	PAN-MW-10	G	X				3		3	
—	—	Trip Blanks		X				2		2	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Sam Idun	4/3/15	8:30						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	4/3/15	8:30	YES ( ) NO ( )			602/6.6 1680-111248

TAL 8240-680 (1008)

Page 67 of 70

4/10/2015

Login Sample Receipt Checklist

Client: Environmental International Corporation

Job Number: 680-111248-1

Login Number: 111248

List Source: TestAmerica Savannah

List Number: 1

Creator: White, Menica R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	RECEIVED ON ICE, BUT GOT A TEMP OF 6.2 WITH A CF OF 6.6
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Georgia	State Program	4	N/A	06-30-15
Georgia	State Program	4	803	06-30-15

Client: Environmental International Corporation
Project/Site: VoPak, Savannah/390020

TestAmerica Job ID: 680-111248-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

VOPAK TERMINAL SAVANNAH, SAVANNAH, GEORGIA

EIGHTH SEMI-ANNUAL PROGRESS REPORT

ATTACHMENT C

Environmental International Corporation
Time by Job Summary
March through August 22, 2015

TASKS	Mar 15	Apr 15	May 15	Jun 15	Jul 15	Aug 1 - 22, 15	TOTAL
390000- VOPAK:390020 - VTSI Quarterly MNA GW Sampling	90	109	0	2	7	0	207
390000- VOPAK:390025 - Semi-annual report for VTSI	3	3	0	0	8	89	102
390000- VOPAK:390031 - Site Conceptual Model	26	6	4	56	4	14	109
TOTAL	**118**	**118**	**4**	**58**	**19**	**102**	**418**

VOPAK TERMINAL SAVANNAH, SAVANNAH, GEORGIA

EIGHTH SEMI-ANNUAL PROGRESS REPORT

APPENDIX A

PCE REMEDIATION, HSI SITE 10464, VOPAK TERMINAL SAVANNAH, SAVANNAH, GEORGIA

2015 SITE CONCEPTUAL MODEL REPORT

August 28, 2015

EIC Project No. 390031

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1

1.0 INTRODUCTION

VOPAK Terminal Savannah, Inc. (VOPAK) submitted a preliminary site conceptual model (SCM) of the area affected by a tetrachloroethene/perchloroethene (PCE) plume as a part of their Voluntary Investigation and Remediation Plan (VIRP) that was approved by the Georgia Environmental Protection Division on August 31, 2011. Subsequently, VOPAK submitted an updated SCM report with the Sixth VIRP Semi-annual Progress Report submitted on August 29, 2014 (Environmental International Corporation (EIC), 2014). Following the updated 2014 SCM report, data has been obtained which further defines site characteristics and contaminant fate and transport mechanisms. Therefore, VOPAK has retained EIC to prepare a 2015 update to the VOPAK SCM.

The PCE plume at the site is the result of a release that occurred during the 1970s. Since the release, the PCE has degraded into other dissolved chlorinated volatile organic compounds (CVOCs). Additionally, certain VOCs, consisting of benzene, toluene, ethylbenzene, and xylenes (BTEX), have been consistently detected within the area of the CVOCs.

Typically, the SCM defines release sources, extent of contaminant plumes, fate and transport mechanisms, potential exposure pathways, and potential receptors that could be impacted. This information serves as an important tool in developing site remedies or in implementing certain measures designed to reach remedial end points. The sections within this report provide an updated SCM based on historical site data and data collected by EIC since the SCM was previously updated in August 2014.

1.1 SITE LOCATION AND PHYSICAL SETTING

It is important to note that VOPAK utilizes the subject property as a storage terminal based on a long-term lease with the Georgia Ports Authority (GPA). The physical site address is 280 Brampton Road, Savannah, Georgia (also known as the Georgia Ports Authority Gate No. 2 on Turner and Hart Street, Garden City, Georgia). The site, located in Chatham County, has operated as a bulk storage facility since 1951. Historically the terminal has stored various fuels and chemicals. The area surrounding the site consists of the Savannah River to the east; an

asphalt roofing materials manufacturing facility (GAF Materials Corporation), Brampton Road, and a rail yard to the south; and the GPA container storage facility to the west and north. Figure 1-1 illustrates the facility layout, wells utilized in the VIRP program, and other significant site features.

1.2 SITE BACKGROUND

As stated in EIC's SCM section of the 2011 revised VRP application (EIC, 2011), in 1996 a PCE release was discovered at the VOPAK Savannah site in the vicinity of Tank 24 within a tank farm designated as Tank Farm No. 2. Based on a historic tank inventory, PCE was stored at the site during the period from December 1972 to April 1975. Since no PCE has been stored at the site since 1975, the release was attributed to previous terminal operations. Subsequently, the previous owners of the site and VOPAK have conducted various investigatory and remedial activities per the EPD, including source removal.

In addition to the PCE release, benzene, toluene, ethylbenzene, and xylenes (BTEX) have been detected at the site above established risk reduction standards (RRS) in the underlying groundwater matrix. As discussed in EIC's previous SCM, there are three distinct BTEX plumes at the site (EIC, 2014). Two lie within the western end of Tank Farm #4 west of Tank Farm two and one lies within the CVOC plume in the vicinity of Tank Farm No. 2. The sources of these three plumes, however, are not apparent from the available historical documents (EIC, 2011). Based on the spatial and temporal distribution of the BTEX plumes relative to the groundwater flow direction, it is apparent that the two BTEX releases, located to the west of Tank Farm No. 2, are not hydraulically connected to nor are a source for the BTEX plume that is present within the PCE foot-print.

1.3 HYDROGEOLOGY

EIC has prepared two hydrogeological cross-sections that illustrate the subsurface at the site in the vicinity of the CVOC and VOC plumes. Figure 1-2 depicts a plan view of the cross-section traces. Cross Section A-A' (Figure 1-3) generally extends from south to north and Cross Section B-B' (Figure 1-4) generally extends from the northwest to southeast. These cross-sections are based on well boring logs recorded by EIC and correlate lithological units between adjacent wells. Based on EIC's interpretation of these cross-sections, the site is underlain by a complex inter-bedding of gravel, sand, silt, and clay units. This results in a complex matrix pathway for groundwater flow and is generally considered as anisotropic and non-homogeneous conditions.

Based on historical gauging data, depth to groundwater ranges approximately from 1 to 10 feet below ground surface. Groundwater at the site generally flows from southwest to northeast. Figures 1-5 through 1-7 illustrate variations in the groundwater potentiometric surface and flow direction at the site during three monitoring events.

Estimates of the hydraulic gradient at the site range from 0.0145 to 0.0133. Hydraulic conductivity was determined to range from 3.09 x 10^{-4} cm/sec to 4.31 x 10^{-5} cm/sec, and the estimated seepage velocity was determined to be approximately 21 to 23 feet per year (EIC, 2011).

1.3.1 Stratigraphy

To gain a better understanding of the hydrodynamics of fluid flow, EIC prepared stratigraphic cross-sections along the direction of the projected groundwater flow line (Figure 1-3, A-A') and perpendicular to the flow line (Figure 1-4, B-B') along equipotential lines.

EIC developed detailed lithological and well construction logs for the wells installed by EIC. Majority of the wells installed by previous contractor do not have detailed well construction and lithological logs. Consequently, EIC utilized only those wells that were installed by EIC for illustrating the stratigraphy.

From south to north, Cross Section A-A' includes monitoring wells MW-37, MW-34, MW-33, MW-32, and MW-36. From northwest to southeast, Cross Section B-B' includes monitoring wells MW-35, MW-31, MW-33, and MW-30. From these figures, it is apparent that the groundwater flow intercepts multiple stratigraphic layers which include basic lithological units such as gravel, sand, silt, and clay, as well as complex mixtures of these constituents such as sand with silt and silt with sand. The complex inter-bedding represented in the cross-sections is characteristic of local natural fluvial (river) deposits associated with the nearby Savannah River. No lower confining layers such as bedrock were encountered in any historical well logs at the site.

The flow pattern of groundwater through the complex inter-bedded units at the site would be anisotropic and non-homogeneous. Therefore, calculations based on Darcy's flow equations are rendered impractical for the purposes of modeling groundwater flow throughout the site.

1.3.2 Groundwater Potentiometric Surface Maps

To develop a greater understanding of the groundwater conditions at the site, EIC reviewed three select historical groundwater potentiometric surface maps, Figures 1-5 through 1-7, which illustrate the groundwater potentiometric surface during October 2011, January 2013, and April 2014, respectively. These figures were developed utilizing groundwater gauging and top-of-casing (TOC) elevation data listed in Tables 1-1 through 1-3. From these figures, it is apparent that the predominant groundwater flow direction is from the southwest to the northeast of the site.

From the data compiled from the three gauging events, EIC made the following observations. Referring to Figures 1-5 through 1-7, near the vicinity of Station 13 towards the southern tip of Tank farm No. 2, the groundwater potentiometric surface is relatively horizontal and low, sloping towards the northeast. In the vicinity of the tidal flat, towards the northeast of the site, the groundwater slope increases downward as it nears the Savannah River.

In the vicinity of Tank Farm No. 2, a surficial ridge and valley (or trough) feature has persisted which parallels the groundwater flow direction. These features originate southwest of Tank Farm No. 2, passes under Tank Farm No. 2, continues towards the northeast, and culminates northwest of Tank Farm No. 2 on GPA property. The trough feature generally crosses under the center of Tank Farm No. 2 and the ridge feature lies under and/or near the eastern berm of Tank Farm No. 2. Normally when such site conditions exist, COCs would be expected to migrate along the trough feature and to not extend up-gradient past the ridge feature paralleling the groundwater flow. This appears to be confirmed by historically relatively high COC concentrations detected at well MW-29 located within the trough feature and relatively low COC concentrations detected at well MW-30 east of the ridge feature.

1.3.3 Potential Impact of Substructures on Groundwater Flow

To determine the potential impact of substructures on groundwater flow, EIC has developed apparent depth to groundwater contour maps. Figures 1-8 and 1-9 illustrate the apparent depth to water at the site during the highest (April, 2014) and lowest (January, 2014) groundwater elevations recorded since October 2011, respectively.

From Figures 1-8 and 1-9, it is apparent that during the highest and lowest groundwater levels at the site, the depth to water ranged from zero to two feet near the southern end of Tank Farm No. 2. In addition, the area to the south of and surrounding the southern edge of Tank Farm No. 2 has a depth to water between zero and four feet. This shallow water table allows for the possible influence of subgrade structures and related back-filled trenching on groundwater flow such as stormwater pipes, water supply line pipes, and other below-grade conduits.

A stormwater reinforced concrete pipe, terminating at the bulkhead, is located perpendicular to groundwater flow. Figure 1-10 illustrates the location of this pipe relative to the bulkhead wall at the western end of the tidal flat. Figure 1-11 illustrates a cross sectional view of the pipe near the tidal flat bulkhead. Based on piping as-built drawings and on historical depth to groundwater measurements collected by EIC at well MW-32, the top of the pipe is submerged 1.6 to 2.8 ft. below the water table. The surrounding saturated soil, illustrated in Figure 1-12, which is based on the lithological log of MW-32, lying approximately 10 feet south of the trench, is primarily composed of silt and clay, which has inherently low effective porosity.

Although it is unlikely that the stormwater pipe itself may be inhibiting the bulk movement of contaminants in groundwater, the trench that was excavated for laying the pipe would be backfilled with highly porous material that can intersect the COC plume and prevent the plume from migrating further northward and down-gradient from the trench. Any COCs entering the pipe backfill can potentially migrate along the pipes. Based on the groundwater flow direction, such a plume can potentially migrate along the pipe towards the Savannah River. It is important to note, however, that such migration would be blocked by the concrete bulkhead wall. This is indicated by low or undetectable CVOC concentrations at well MW-17R, lying near the north end of the tidal flat bulkhead and down-gradient of the pipe trench.

It should be noted that EIC was researching additional as-built drawings of the pipe's installation, and data on the type of fill or bedding material utilized for the trench. EIC will assess potential impact of the subgrade storm water features at the site when more information becomes available.

1.4 TIDAL FLAT VERIFICATION

Initially, the area to the east of the bulkhead along the Savannah River was labelled as a tidal flat on site maps. Based on field observations and a cursory review of historical drawings, it appears that the stormwater discharge channel was man-made and does not represent a tidal flat. Currently, EIC is performing a detailed evaluation to verify that finding and is in the process of compiling supporting documents. The results of the evaluation will be submitted in the next semi-annual report. The discussions and figures in current document will continue referring to that area as a tidal flat until the aforementioned evaluation is complete.

SECTION

2

2.0 RELEASE SOURCE(S)

Based on historic data it is apparent that the there are two different release source(s) in the Tank Farm No. 2 area. Both releases are discussed in the following subsections.

2.1 PCE RELEASE

PCE was apparently stored in Tank 24 during the period from December 1972 through April 1975 (EIC, 2011 - VIRP). In 1996, a PCE release was discovered in the subsurface during construction activities in the vicinity of Tank 24. Considering that no PCE has been stored at the site since 1975, the release was attributed to previous terminal operations. Subsequently, the site's previous owners and VOPAK have conducted various investigatory and remedial activities per the EPD, including source removal (EIC, 2011 - VIRP).

Due to natural attenuation, the PCE has degraded into trichloroethene (TCE), cis-1, 2-dichloroethene (DCE), and vinyl chloride (VC). Therefore, both PCE and these daughter products are the primary constituents of concern (COC) at the facility. All four of these chemicals are CVOCs. Table 2-1 lists the analytical results of CVOCs monitored during the period from February 1991 through April 2015. It is noteworthy that certain monitoring wells were installed prior to the 1996 PCE release and were being monitored since February 1991. EIC is uncertain about the events that would have triggered installation and monitoring of those wells.

2.2 HYDROCARBON RELEASE

Based on the data presented in the 2005 corrective action plan (CAP) (ERM, 2005) and subsequent sampling events, it is apparent that certain hydrocarbons comprised of benzene, toluene, ethylbenzene, and xylenes (BTEX) have been consistently detected in certain monitoring wells at the site (EIC, 2011 – VIRP). The BTEX analytical results monitored for the period from December 1998 through April 2015 are presented in Table 2-1.

As discussed in the revised VIRP, EIC determined that three well-defined dissolved BTEX plumes were identified in 1996. The first plume was located within the same foot-print as the

current PCE plume. The second BTEX plume, located to the west of the first plume, was separated by a distance of more than 1,000 feet. A smaller third BTEX plume was located approximately 400 feet to the northwest of the second plume. EIC determined that the sources these plumes were not apparent from the available documents (EIC, 2011).

No documentation is available about the source of the BTEX release in the first plume area located beneath Tank Farm No. 2. EIC also determined that on January 12, 1999 a major diesel release took place from AST 22 in the western end of Tank Farm No. 4 that resulted in light non-aqueous phase liquid (LNAPL) accumulations near the second and third plumes (EIC, 2011). EIC is currently performing remediation of diesel light non-aqueous phase liquid hydrocarbon (LNAPL) within the southern LNAPL plume of this area in compliance with EPD requirements specified by the Watershed Protection Branch. Considering the groundwater flow direction, however, it is apparent that the BTEX plume located within the PCE foot-print is not related to the diesel LNAPL plumes at the site.

2.3 CONSTITUENTS OF CONCERN

As noted in Section 2.1, the COCs, within the area of the CVOC plume is comprised of dissolved phase CVOCs and VOCs. The CVOCs consists of PCE and its daughter products TCE, DCE, and VC. The dissolved-phase VOCs consists of benzene, toluene, ethylbenzene, and xylenes (BTEX).

As the COCs migrate through a multimedia environment, natural attenuation processes sequentially replace chlorine atoms that are attached to the dissolved PCE, with carbon atoms – thereby producing the aforementioned daughter products. As the attenuation processes continue, the daughter products are ultimately transformed to carbon dioxide and water. VOC, comprised of BTEX constituents, also attenuate more readily both aerobically and anaerobically resulting in carbon dioxide and water.

SECTION

3

3.0 COC DELINEATION

Characterizing the extent of a release entails a definition of the horizontal and vertical extent of the COCs in a multimedia environment. Utilizing historical documentation, current sampling records, and plume maps, EIC has compiled the following subsections.

3.1 SOIL DELINEATION

Soil contamination resulting from the PCE release was delineated during the period from 2001 to 2006. A review of the analytical results from this activity indicated that BTEX concentrations were also delineated within the area impacted by PCE release. As discussed in Section 3.1 of the Revised VIRP, sidewall confirmatory soil samples from excavations within the PCE footprint confirmed that RRS standards for both CVOCs and BTEX concentrations in soil were achieved in 2006 (EIC, 2011).

3.2 GROUNDWATER DELINEATION

Both CVOCs and other VOCs have been present at the site for several decades. As discussed in Section 2.3, however, these COCs have undergone natural attenuation processes. Nevertheless, additional pockets of COCs discovered after the VIRP implementation has expanded the view port of the original COC foot print. The following sections define the horizontal and vertical extent of the plumes.

3.2.1 CVOC

Prior to the initiation of the VIRP, EIC observed that a number of monitoring wells were historically not sampled since they were either destroyed or were not located. Since initiating the VIRP, EIC has gradually rehabilitated or replaced a number of monitoring wells. The analytical data from subsequent sampling of these additional wells in conjunction with data from routinely sampled wells has further expanded the baseline CVOC foot-print. Table 2-1 tabulates the current and historical analytical groundwater data for each well. Figures 3-1 through 3-4 illustrate

the horizontal extent of the dissolved CVOC plumes, from the latest sampling event of April 2015.

Relative to the baseline CVOC footprint defined in the VIRP, it is apparent that the horizontal extent of the CVOC plume is well defined in all directions except to the south beyond the VOPAK property line. This was substantiated by the EPD in the April 2014 comments letter to the VOPAK Savannah Terminal in line item number five.

The property beyond the VOPAK southeastern fence-line is currently occupied by GAF Materials Corporation (GAF). During December 2013, EIC installed a new monitoring well, MW-37, on GAF property to delineate the southern extent of the CVOC plume. From subsequent groundwater sampling EIC performed at MW-37, however, EIC determined that the extent of the CVOC plume extended further southward than had previously been determined prior to the installation of MW-37.

As further discussed in Section 6.3, EIC has determined that CVOC concentrations at MW-37 have been decreasing or stable since EIC began sampling this well in January 2014. This indicates that natural attenuation is progressively occurring near the trailing up-gradient edge of the CVOC plume.

It is noteworthy, that there are reported PCE releases at off-site locations along Brampton Road - up-gradient of the VOPAK terminal - which may contribute to the concentrations found in MW-37. The shallow water table present in the GAF-VOPAK site boundary may intersect utility lines that may act as a preferential pathway for groundwater flow from hydraulically up-gradient sources. EIC is currently conducting research into the effect of utilities and stormwater features on groundwater flow towards the site along Brampton Road. In addition to this research, EIC will continue to monitor the trend of CVOC concentrations near the vicinity of MW-37.

As of April 2015, the dissolved CVOC concentrations of PCE, TCE, 1,2-DCE, and VC currently meet the established RRSs specified in the 2011 Revised VIRP Application in all but twelve monitoring wells: IW-1R, IW-18, LAW-PZ-8R, PAN-MW-9, MW-16, MW-24R, MW-26R, MW-27, MW-29, MW-32, MW-33, and MW-37. Referring to the analytical results table, Table 2-1, the following observations of groundwater RRS exceedances that occurred during the last sampling event in April 2015 are noted:

- Concentrations in 8 wells (IW-1R, IW-18, LAW-PZ-8R, MW-26R, MW-28, MW-29, MW-37, and PAN-MW-9) currently exceed the RRS for PCE. The PCE concentration at IW-1R was the highest of the sampled wells at 310 ppb.
- Concentrations in 2 wells (IW-1R and MW-29) currently exceed the RRS for TCE. The TCE concentration at IW-1R is the highest of the wells sampled at 150 ppb.

- Concentrations in 4 wells (IW-1R, LAW-PZ-8R, MW-29, and PAN MW-9) currently exceed the RRS for DCE. The DCE concentration at IW-1R is the highest of the sampled wells at 9,900 ppb.
- Concentrations in 12 wells (IW-1R, IW-18, LAW-PZ-8R, MW-16, MW-24R, MW-26R, MW-27, MW-28, MW-29, MW-33, MW-37, and PAN-MW-9) currently exceed the RRS for VC. The highest VC concentration was found at IW-18 at 830 ppb.

3.2.2 VOC

Figures 3-5 through 3-8 illustrate the current horizontal extent of the BTEX COC concentrations as of the April 2015 sampling event based on the groundwater delineation concentrations listed in Table 2-1. Similarly to the dissolved CVOCs, the dissolved BTEX plume has substantially reduced in size, particularly near the vicinity of MW-33, since the implementation of the VIRP at the site. VOPAK is continuing to evaluate the horizontal extent of the dissolved BTEX plumes, in the area to the west of the PCE plume, under a separate program regulated by the EPD's Watershed Protection Branch.

As of April 2015, it is apparent that the BTEX plume appears to be fully delineated and is reducing at steady rates over time in both the south and north plume areas. In particular, toluene concentrations have remained below RRS at the site since October 2011 and below delineation standards since April 2012. Referring to the analytical results table, Table 2-1, the following observations of groundwater RRS exceedances are noted:

- Concentrations in 5 wells (IW-1R, IW-18, LAW-PZ-8R, MW-26R, and MW-29) currently exceed the RRS for Benzene. The Benzene concentration at LAW-PZ-8R is the highest of the sampled wells at 1,100 ppb.
- Since the first VIRP sampling event in October 2011, Toluene has not exceeded RRS concentrations at any of the sampled monitoring wells. The Toluene concentration at IW-1R is the highest detected concentration of the sampled wells at 260 ppb.
- Concentrations in 4 wells (IW-1R, LAW-PZ-8R, MW-26R, and MW-29) currently exceed the RRS for Ethylbenzene. The Ethylbenzene concentration in LAW-PZ-8R is the highest of the sampled wells at 6,900 ppb.
- Concentrations in 3 wells (IW-1R, LAW-PZ-8R, and MW-26R) currently exceed the RRS for Total Xylenes. The highest Total Xylene concentration was found at LAW-PZ-8R at 87,000 ppb.

3.2.3 Vertical Delineation

Based on the groundwater sampling data presented in the third, fourth, and fifth VIRP Semi-Annual Progress Reports, EPD concurred that vertical delineation is complete (EPD, 2014).

3.3 SOIL VAPOR

As discussed in Section 3.1, VOPAK removed all contaminated soils to below RRS levels. Also, as the groundwater is relatively shallow and the dissolved COC concentrations are relatively low, VOPAK does not anticipate residual contamination in soils to be persistent at the site. The COC footprint is primarily within a tank farm not designed for continuous human occupancy. Consequently, vapor intrusion into buildings from the COCs is not a potential area of concern. VOPAK, however, is preparing to conduct a vapor exposure survey to determine potential impacts to construction workers.

3.4 SEDIMENT

The original CVOC release was contained within Tank Farm No. 2. As such, VOPAK does not anticipate CVOC contamination in drainage sediments outside the tank farm. VOPAK will, however, conduct sampling in areas where the tank farm spill containment dams discharge into stormwater conveyance systems.

3.5 SURFACE WATER

The Savannah River is the nearest surface water body at the site. Since the original release was contained and soil contamination was removed from the tank farm, the COCs are not known to have impacted surface water. Also, as of April 2015, the COC plume in groundwater within the CVOC footprint is stable and appears to been rapidly attenuating. Furthermore, as indicated by a sharp decrease in COC concentrations at well MW-32 between October 2014 and April 2015, the leading edge of the COC plume appears to be rapidly receding up-gradient and away from the Savannah River. As such, VOPAK does not anticipate potential impact of COCs into the Savannah River.

SECTION

4

4.0 FATE AND TRANSPORT

The main purpose of determining potential exposure pathways is to assess the migration potential of the released COCs in a multimedia setting. Based on such an assessment, it is possible to establish potential exposure levels, critical in establishing risk-based screening and cleanup goals.

Although the COCs migrate through various pathways, they are continually subject to various biotic and abiotic attenuation processes. At a minimum, the COCs will be subject to the following mechanisms:

- Physical separation of released product into gas and other states of matter due to sorption, solubility and other equilibrium reactions.
- Advection, referring to bulk movement of immiscible liquid
- Dispersion, involving horizontal and vertical spreading of partitioned constituents.
- Diffusion, consisting of spreading from concentration gradients.
- Biodegradation by native microorganisms along the migration pathway.
- Other biotic, abiotic, and cometabolic attenuation processes that reduce the concentrations with time and distance.

The PCE release was remediated upon discovery and has not been stored at the site since 1975. According to the 2005 CAP, there are two main transport mechanisms of potential exposure occurring at the site (ERM, 2005). These included leachate from contaminated soils that act as source material and transport of leachate in the groundwater medium as dissolved COCs. However, leachate is no longer a concern at the VOPAK site, because the contaminated soil was excavated in 2006 (EPD, 2006). Since groundwater is relatively shallow, the transport of residual leachate in the form of dissolved COCs is the primary source of concern. During transport through various exposure pathways, the dissolved COCs are also subject to the aforementioned attenuation mechanisms such as advection, dispersion, diffusion, and biodegradation.

4.1 MIGRATION POTENTIAL

As discussed in the preceding subsection and from multiple sampling events, it is apparent that dissolved CVOCs are the primary COCs. The following sections outline both the CVOCs and VOCs that are currently under investigation.

4.1.1 CVOC Migration Potential

Typically, dissolved contaminants tend to move with the groundwater flow. Consequently, the peak plume would be subject to a migration consistent with seepage velocity. Referring to the contoured COC plume maps, it is apparent that the horizontal extent of all COCs have decreased and are confined within the baseline PCE foot-print.

4.1.2 VOC Migration Potential

VOCs primarily composed of BTEX constituents are present within the PCE plume footprint. As such, they would likely be subject to similar hydrodynamic mechanisms as those that affect the PCE plume.

4.2 UTILITY TRENCHES AS MIGRATION PATHWAYS

As discussed in Section 1.3.3, sub-grade structures can influence groundwater flow. Preferential pathways along pipeline utility trenches that extend below the groundwater surface, for example, could potentially allow COC's from up-gradient offsite sources to migrate onto the VOPAK property. Future analysis will determine if these sub-grade structures effect the migration of CVOC and VOC plumes from off-site sources.

Sub-grade structures both on and down-gradient of VOPAK property could also influence groundwater flow. Based on a review of historic as-built drawings and from field observations, EIC has determined that a west-to-east oriented stormwater conveyance pipe is located approximately 10 feet north of MW-32. As discussed in Section 1.3.3, this stormwater conveyance pipe may impede the migration of contaminants to the north of and down-gradient of this feature. EIC will continue to evaluate the effect of this stormwater conveyance pipe regarding contaminant migration.

4.3 OTHER EXPOSURE PATHWAYS

As discussed in Section 4.1, groundwater is the primary pathway for the migration of COCs at this site. Figure 4-1 illustrates potential pathways through which the COCs can migrate. EIC is currently evaluating the potential for migration of COC through other media such as soil vapor from dissolved COCs. In addition, EIC will evaluate the vapor intrusion potential to ensure that

terminal personnel, contactors, or other site visitors are not at risk of exposure. Based on the site background information available, it appears that there are currently no immediate or eminent threats and hazards from the released COCs at the site.

4.4 TIDAL INFLUENCE

Based on a long-term tidal study, presented in the Third VIRP Progress Report (EIC, 2013) EIC concluded that the groundwater within the PCE footprint was not significantly affected by tidal fluctuations within the Savannah River. In addition, EIC determined from a review of historical as-built drawings that a sheet pile wall is located hydraulically down-gradient of the PCE footprint at the Georgia Ports facility perimeter along the Savannah River. This feature appears to serve as an additional barrier for contaminant movement between the land mass and surface water. Furthermore since the COCs concentrations have remained stable and contained within the baseline COCs footprint (refer to Section 3), EIC does not believe that the COC's have a potential to migrate to surface waters.

SECTION

5

5.0 POTENTIAL RECEPTORS

Potential receptors are the most important drivers in establishing cleanup goals for the site. The receptors include human, ecological, natural resources, present and future land use, and down-gradient receptors.

5.1 HUMAN HEALTH RECEPTORS

Since all contaminated soil that exceeded the RRS was excavated in 2006, as discussed in Section 3.1, subsurface soil is neither a concern to VOPAK employees nor to construction workers at the site. Consequently, only groundwater contamination or saturated soils presents potential human exposure at the site. When addressing groundwater exposure receptors, the 2005 CAP states, "Because the site and surrounding area are served by a municipal water supply system, groundwater from the surficial aquifer is not being used for human consumption. VOPAK will also ensure that any construction works conducted within the area covering contaminated groundwater will be limited to the extent of the vadose zone. Therefore, human exposure to contaminated ground water is an unlikely exposure pathway" (ERM, 2005). However, should it become necessary for onsite workers to excavate groundwater saturated soils during construction activities, measures will be taken to monitor and to protect workers from soil vapor, contaminated groundwater, and/or saturated soil resulting from residual COCs. The CAP also states that there are no private wells within a two-mile radius of the VOPAK Terminal site.

5.2 ECOLOGICAL RECEPTORS

According to the 2005 CAP, the VOPAK Savannah site was reviewed by the Georgia Natural Heritage Program (GNHP) to identify potential ecological receptors that may be impacted from contamination levels at VOPAK. GNHP found no rare, imperiled, and critically imperiled plant and animal species at the site. Since the subject property is operated as an industrial facility, VOPAK does not provide habitat for plants or animals. In addition, wetlands are not of concern at the VOPAK site. According to the 2005 CAP, "With the exception of drainage ditches and other man-made depressions, no wetland-like areas were observed on the site."

5.3 NATURAL RESOURCES

There are no known natural resources that are affected by the monitored COCs.

5.4 PRESENT AND FUTURE LAND USE

The subject property is currently utilized as a non-residential facility in a heavily industrialized setting. As stated in the introductory section, VOPAK leased the property on a long-term lease. As such, the property will remain as a terminal for several decades. Upon lease expiration, the site property will continue to be utilized as non-industrial property consistent with GPA's long term plans for site redevelopment, local zoning, and deed restrictions.

5.5 DOWN-GRADIENT RECEPTORS

The GPA Port of Savannah container storage facility is located hydraulically down-gradient of the subject property. Groundwater samples collected from sentinel wells MW-35 and MW-36, located on GPA property and hydraulically down-gradient of the subject property indicates that COCs are well below delineation standards. As discussed in Sections 2 and 3, the COC plume is stable and hydraulically contained within the baseline COC foot-print.

SECTION

6

6.0 PERFORMANCE METRICS

To determine if the prevailing monitored natural attenuation (MNA)-based approach is effective in meeting the VIRP goals, EIC performed an evaluation using multiple lines of evidence. This process included an evaluation of indicator parameters, evidence of degradation products, statistical trend analysis, as well as spatial and temporal plume trends.

Depending on available data, several analytical tools are also available to establish the plume trends. As discussed in Section 1.3, however, the aquifer is anisotropic and non-homogeneous. Therefore, typical analytical tools based on Darcy's flow equations are considered to be impractical for the purposes of modeling groundwater flow and related performance metrics. EIC therefore utilized statistical as well as spatial and temporal analysis to evaluate the plume trends.

6.1 INDICATOR PARAMETERS

As discussed in previous semi-annual VIRP progress reports, EIC collected long-term data on indicator parameters utilizing downhole data loggers in conjunction with a tidal study. An evaluation of these results indicated that favorable site conditions were present for MNA. Downhole pH, ORP, DO, and temperature levels in representative wells were within ideal ranges indicating persistent favorable site conditions for continued attenuation.

6.2 EVIDENCE OF DEGRADATION PRODUCTS

Considering that PCE was the only source of CVOCs released at the site, the presence of PCE daughter products such as TCE, DCE, and Vinyl Chloride are clear evidence of natural attenuation at the site. Although the original source of the BTEX-related spill in the vicinity of Tank Farm No. 2 has not been determined, it is apparent that BTEX constituents are present and degrading over time.

6.3 STATISTICAL TREND ANALYSIS (CVOCS)

To determine the rate of natural attenuation and plume stability at the site for the dissolved CVOC constituents, EIC utilized a statistical trend analysis toolkit as a primary line of evidence. The toolkit was developed by Groundwater Services Inc. as a method to determine plume stability through measured groundwater concentrations of constituents over time (GSI, 2014). The Mann-Kendall trend analysis method is utilized within the toolkit and is widely accepted to be a deterministic method for plume stability analysis.

The Mann-Kendall trend analysis method is a non-parametric trend method that utilizes variance from individual trend means for each monitoring well CVOC concentration over time. Accordingly, plume stability can be analyzed by sector instead of by overall plume stability. Overall, plume stability can then be summarized by the trend analysis of each individual sector. In order to produce these trends, however, at least four independent sampling events must have been completed for each monitoring well utilized for this analysis, which restricts the use of newly installed monitoring wells.

For the purpose of defining current plume trends, EIC utilized analytical data from October 2011 to April 2015. In order to define plume trends throughout the site, EIC selected wells based on the following key factors: their location relative to the current and historical plume center line, the current and historical extent of each plume, well construction data, and available constituent concentration data. For wells where COCs were below the laboratory analysis detection limit, EIC assumed that the concentrations at those wells were at the minimum detection limit reported by the laboratory or the method detection limit (MDL). Figure 6-1a illustrates the wells selected for the CVOC trend analysis and Figure 6-1b illustrates the selected wells for the BTEX trend analysis.

As discussed in Section 2.3, VC is the last chlorinated COC daughter product from the PCE attenuation processes that ultimately transforms to carbon dioxide, water, and chloride ions. EIC therefore previously selected seven monitoring wells based on the 2014 VC plume map for the trend analysis in the 2014 SCM update. At the time of the 2014 SCM update, monitoring well MW-37, located at the trailing edge of the plume, had not been sampled enough times to be utilized in the trend analysis. However, as of the April 2015 sampling event, it now meets the requirements for the Mann-Kendall analysis tool and therefore was utilized in the trend analysis for this 2015 SCM update report.

Therefore, eight monitoring wells were selected along the plume centerline for the statistical analysis; three up-gradient wells (MW-18R, MW-34, and MW-37), three mid-gradient wells (MW-33, MW-29, and PAN-MW-9), and two down-gradient wells (MW-17R and PAN-MW-10). Figure 6-1a illustrates the location of these wells. The selected wells are tabulated from left (up-gradient) to right (down-gradient) within the GSI Mann-Kendall Toolkit table for each COC. Figures 6-2 through 6-5 illustrate the data and the trend analysis for each CVOC constituent (PCE, TCE, DCE, and VC, respectively).

6.3.1 PCE Statistical Trend Analysis

Figure 6-2 illustrates the PCE concentration over time for each of the eight selected wells. From this figure, it is apparent that the plume is either stable or concentrations are decreasing near the leading and trailing edges of the plume. Additionally, concentrations at the mid-gradient portion of the plume is decreasing with no apparent trend at MW-29. In summary, the PCE plume is statistically either stable or decreasing over time in the wells selected for the up-gradient, mid-gradient, and down-gradient portions of the plume.

6.3.2 TCE Statistical Trend Analysis

Figure 6-3 illustrates the TCE concentration over time for each of the eight selected wells. From this figure, it is apparent that the concentrations at the southern trailing edge and northern leading edge of the plume are either decreasing, stable, or have no trend. It is noteworthy, that at MW-17R there is no trend since the TCE concentration fluctuated between July 2012 and April 2013. Following the April 2013 event, however, the concentration at MW-17R has been below detection limits for TCE. Consequently, EIC believes that the TCE concentration is trending to be stable. The mid-gradient portion of the plume is similar to PCE in that the concentrations at both MW-33 and PAN-MW-9 are decreasing with a high probability and that there is no trend at MW-29. In summary the TCE plume is decreasing in concentration and remaining stable within the baseline CVOCs footprint.

6.3.3 DCE Statistical Trend Analysis

Figure 6-4 documents the DCE concentration trend analysis for each of the eight selected wells. From this figure, it is apparent that, much like with PCE and TCE, the leading and trailing edges of the plume are decreasing in concentration over time. Focusing on the mid-gradient portion of the plume, the concentrations at both wells MW-29 and PAN-MW-9 are increasing while they are steadily decreasing over time at MW-33. The increases in concentrations of DCE, noted at MW-29 and at PAN-MW-9, are indicative of natural attenuation at the site. As PCE and TCE degrade, DCE concentrations may continue to increase proportionately and eventually decrease, as the PCE and TCE daughter products reduce over time.

6.3.4 VC Statistical Trend Analysis

Figure 6-5 illustrates the concentration trend analysis for each of the eight selected wells for VC. From this figure, it is apparent that the concentrations at the leading and trailing edges of the plume are decreasing. Within the mid-gradient portion of the plume, the VC concentration at MW-33 is most likely decreasing, whereas at MW-29 and PAN-MW-9 the concentrations are increasing. This trend may continue until PCE and subsequent daughter products are attenuated. VC will eventually transform into carbon dioxide and water. In summary the concentration of the

plume is increasing in the mid-gradient portion of the plume; however, the concentrations at the leading and trailing edges of the plume are decreasing and stable.

6.4 STATISTICAL TREND ANALYSIS (other VOCS)

Similar to the CVOCs, monitored VOCs comprised of BTEX, are also attenuating and stable within the original PCE foot-print. As the BTEX constituents are independent COCs as opposed to daughter products of a primary constituent, such as PCE degrading to TCE, DCE, and VC, each of the BTEX constituents should decrease in concentration over time at each respective monitoring well. Since the first VIRP groundwater sampling event in October 2011, the BTEX constituent plumes have divided into two distinct north and south plumes, further discussed in Section 6.5.2. Due to the two distinct dissolved plumes, EIC has selected monitoring wells for the statistical trend analysis which reflect the center line of the BTEX plume in the up-gradient, mid-gradient, and down-gradient portions of both the north and south plumes. Additionally, some wells serve as both a down-gradient and up-gradient point when analyzing the plumes this way. EIC utilized the most extensive BTEX constituent from the latest April 2015 sampling event, Benzene, to select monitoring wells to represent the aforementioned portions of the south and north BTEX plumes.

In total, EIC has selected eight monitoring wells to represent both plumes in the statistical analysis, as illustrated in Figure 6-1b. For the southern plume EIC selected one up-gradient well (MW-18R), three mid-gradient wells (IW-18, LAW-PZ-8R, and MW-26R), and one down-gradient well (MW-33). For the northern plume, EIC selected one up-gradient well (MW-33), two mid-gradient wells (MW-29 and PAN-MW-9), and one down-gradient well (PAN-MW-10). Each of the eight monitoring wells are listed in the GSI Mann-Kendall toolkit in order from the up-gradient (southern) to the down-gradient (northern) portion of the site.

6.4.1 Benzene Statistical Trend Analysis

Figure 6-6 illustrates the benzene concentration over time for each of the eight selected wells. From this figure, it is apparent that the concentrations at the southern plume are decreasing near the leading and trailing edges of the plume. However, at the mid-gradient portion of the plume, concentrations are increasing at wells IW-18 and MW-26R and decreasing at well LAW-PZ-8R. It is pertinent to note that the concentration at MW-26R had been decreasing on a decreasing trend until January 2014. Additionally, LAW-PZ-8R also had an increase in concentration in October 2014, however, the concentration has since reduced to an all-time low since the beginning of the VIRP sampling program reaching 1,100 µg/L on April 2015. The concentration at IW-18 had remained stable over time throughout the VIRP program until January 2014, when it increased in concentration. It is unclear why concentrations in this area significantly increased during this time period.

From Figure 6-6, the benzene concentrations in the leading and trailing edge of the northern plume have been continuously decreasing over time. At the mid-gradient portion of the plume,

the concentration at MW-29 is likely increasing. However, the concentration near MW-29 has remained relatively stable since the first VIRP sampling event. Additionally, the concentration at PAN-MW-9 has decreased significantly over time and has been consistently below laboratory method detection limits since the first VIRP sampling event.

In summary, the areal extents of both plumes have remained stable with some increase in concentration in the up gradient plume, which may be attributed to offsite contaminants or other factors. EIC will continue to monitor the southern and northern plumes for variations in concentrations over time to confirm a natural attenuation trend for benzene.

6.4.2 Toluene Statistical Trend Analysis

Figure 6-7 illustrates the toluene concentration over time for each of the eight selected wells. From this figure, it is apparent that the concentrations within the southern plume are decreasing near the leading and trailing edges of the plume. The concentrations within the mid-gradient portion of the plume are either decreasing or are stable with no trend at well MW-26R.

From Figure 6-7, the toluene concentrations in the leading and trailing edge of the northern plume have been continuously decreasing over time. The concentrations within the mid-gradient portion of the plume have been decreasing over time at PAN-MW-9 and there has been no apparent trend at MW-29. In summary, both plumes have either decreased or remained stable over time.

6.4.3 Ethylbenzene Statistical Trend Analysis

Figure 6-8 illustrates the ethylbenzene concentration over time for each of the eight selected wells. From this figure, it is apparent that concentrations within the southern plume are decreasing near the leading and trailing edges of the plume. The concentrations within the mid-gradient portion of the plume are probably decreasing at LAW-PZ-8R, increasing at IW-18, and have no trend at MW-26R. As with Benzene, the concentrations of ethylbenzene at IW-18 had remained stable until January 2014, when concentrations in this area began to increase. Additionally, although there has been no apparent trend in concentrations at MW-26R, the concentration of 760 µg/L in April 2015 is significantly less than its peak concentration of 2,000 µg/L in January 2013. In summary, the southern ethylbenzene plume appears to be decreasing or remaining stable over time with the exception of the area of IW-18.

From Figure 6-8, the ethylbenzene concentrations in the leading and trailing edge of the northern plume have been continuously decreasing over time. The concentration within the mid-gradient portion of the plume has been decreasing over time at PAN-MW-9 yet increasing at MW-29. In summary, with the exception of the areas where wells IW-18 and MW-29 are located, both plumes have either decreased or remained stable over time.

6.4.4 Total Xylenes Statistical Trend Analysis

Figure 6-9 illustrates the total xylenes concentration over time for each of the eight selected wells. From this figure, it is apparent that concentrations within the southern plume are decreasing near the leading and trailing edges of the plume. There has been no trend within the mid-gradient portion of the plume, however, concentrations have been increasing at IW-18, as with Benzene and Ethylbenzene. As with Benzene, concentrations of Ethylbenzene at IW-18 had remained stable until January 2014, when concentrations in this area began to increase. In summary, the southern total xylenes plume appears to be decreasing or remaining stable over time with the exception of the area of IW-18.

From Figure 6-8, the total xylenes concentrations in the leading and trailing edge of the northern plume have been continuously decreasing over time. Concentrations within the mid-gradient portion of the plume have been decreasing over time at PAN-MW-9 yet increasing at MW-29. In summary, with the exception of the areas where wells IW-18 and MW-29 are located, both plumes have either decreased or remained stable over time.

6.5 SPATIAL AND TEMPORAL ANALYSIS

Spatial and temporal analysis of sequential plume maps provide a good perspective on the overall fate and transport of the COCs. In reviewing the sequential plume maps, included in the VIRP progress reports, it is apparent that both dissolved CVOCs and VOCs have been since the inception of the VIRP-based remedy.

6.5.1 Dissolved CVOCs

In comparing the CVOC plume maps in Figures 3-1 through 3-4 to those of the historical CVOC plume maps, it is apparent that all four monitored CVOC constituent plumes have degraded significantly in the mid-gradient portion of each constituent plume near MW-33, where their respective peaks were located during the October 2011 baseline conditions. The peak concentrations of these plumes are currently located at varying locations both up-gradient and down-gradient, as described in Section 3.2.1. Additionally, the significant degradation of the mid-gradient portion of the plume has effectively split each of the four monitored CVOC COC plumes into separate north and south plumes.

6.5.2 Dissolved VOCs

As discussed in the preceding sections, it is apparent that the BTEX constituents have decreased in concentration and in areal extent compared to the October 2011 baseline conditions. Additionally, as with the CVOC COCs, each of the four BTEX COCs have divided into separate north and south plumes. EIC attributes this division of the VOC plume to potential co-metabolic

degradation. It is also clear that the BTEX plumes are not migrating and continue to be centered on wells LAW-PZ-8R, PAN-MW-9, and MW-29, demonstrating stability.

SECTION

7

7.0 SUMMARY

The updated 2015 SCM, presented in this report, describes the site conditions based on a progressively increasing knowledgebase gained during the implementation of the VIRP. EIC will continue to calibrate the SCM based on subsequent findings.

In summary, contaminated soils that resulted from a PCE release that took place prior to 1975 have been removed. Some contamination is still present in the groundwater at the site. Dissolved BTEX constituents from an unknown release source of hydrocarbons are also present in the groundwater at the site. The groundwater contamination comprised of COCs are present in a complex anisotropic and nonhomogeneous hydrogeological setting. The horizontal and vertical extent of the COC plumes are well defined except that a small portion of the horizontal extent remains undefined in a hydraulically up-gradient location. There is no evidence of potential human health or ecological receptors that would be exposed to the COCs. Potential health effects to onsite workers from other multimedia pathways such as exposure to soil vapor or to contaminated groundwater during construction-related excavation activities is currently being evaluated.

EIC utilized multiple lines of evidence to evaluate the performance metrics of the MNA-based strategy. An evaluation of the site data indicates that field parameters are favorable for MNA-based remediation and the contaminant matrix indicates clear evidence of degradation products. Both statistical evaluation as well as spatial and temporal analysis indicate that the COC plumes are stable and are shrinking. The contaminant flux from mass reduction is also trending towards remedial goals and is sustainable. Analytical data also indicates that the percent rate of decrease in contaminant mass and areal extent was substantially higher than those of the pre-VIRP reduction rates. A further evaluation of the trends of the target contaminants will be conducted as more information is obtained from future sampling events from newly installed wells in both the up-gradient and down-gradient portions of the site.

Although MNA is clearly established and the COC attenuation rates are substantially high, EIC recognizes that the rate of degradation may still extend the cleanup time beyond the 5-year VIRP deadline. To evaluate other options that would accelerate remedial cleanup time, EIC is

evaluating contingency options based on the analytical results from the next sampling event scheduled in October 2015.

SECTION

8

8.0 REFERENCES

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TABLES

Table 1-1: October 2011 Well Gauging Data, VOPAK Terminal Savannah, Savannah, Georgia

Well ID #	TOC Elevation*	DTP	DTW	Groundwater Surface Elevation	Notes
(Well Diameter, in.)	ft.	ft.	ft.	ft.	
LAW-PZ-8R (1)	14.02	ND	6.27	7.75	
PAN-MW-9 (2)	12.59	ND	6.35	6.24	Well was repaired by EIC on April 6, 2011
PAN-MW-10 (2)	13.81	ND	10.36	3.45	
IW-18 (1)	10.07	ND	2.92	7.15	
MW-16 (1)	17.01	ND	11.34	5.67	Well was repaired by EIC on April 6, 2011
MW-17R (2)	15.89	ND	11.96	3.93	
MW-18R (1)	14.12	ND	6.47	7.65	Well was repaired by EIC on April 6, 2011
MW-19 (1)	14.91	ND	6.80	8.11	Well was repaired by EIC on April 6, 2011
MW-23 (1)	10.39	ND	4.00	6.39	
MW-24R (2)	11.81	ND	5.95	5.86	
MW-25 (1)	14.76	ND	6.85	7.91	Well was repaired by EIC on April 6, 2011
MW-26R (1)	10.61	ND	3.22	7.39	
MW-27 (1)	9.93	ND	4.87	5.06	
MW-29 (0.75)	11.73	ND	6.02	5.71	
MW-30 (2)	11.23	ND	4.95	6.28	Well installed by EIC on April 6, 2011
MW-31 (2)	9.67	ND	5.26	4.41	Well installed by EIC on April 28, 2011
MW-32 (2)	11.70	ND	6.47	5.23	Well installed by EIC on April 25, 2011
MW-33 (2)	11.61	ND	5.07	6.54	Well installed by EIC on April 28, 2011
MW-34 (2)	10.81	ND	3.41	7.40	Well installed by EIC on April 26, 2011

NOTES:

TOC = Top of Casing

DTP = Depth to Product below TOC

DTW = Depth to Water below TOC

ND = Not Detected

* TOC elevations are from well survey conducted by EMC Engineering on June 30, 2011 and is of the NAVD 29 Datum convention

Table 1-2: January 2013 Well Gauging Data, VOPAK Terminal Savannah
Savannah, Georgia

Well ID #	TOC Elevation*	DTP	DTW**	Groundwater Surface Elevation	Notes
(Well Diameter, in.)	ft.	ft.	ft.	ft.	
LAW-PZ-8R (1)	14.02	ND	7.24	6.78	Very strong HC odor and slight sewer odor. Replaced existing rusting lock on outer stick-up casing with new corrosion resistant lock.
PAN-MW-9 (2)	12.59	ND	7.27	5.32	Very strong hydrogen sulfide odor in well casing as well as inside well. Replaced existing rusting lock on outer stick-up casing with new corrosion resistant lock.
PAN-MW-10 (2)	13.81	ND	10.46	3.35	Replaced existing rusting lock on outer stick-up casing with new corrosion resistant lock.
MW-16 (1)	17.01	ND	12.97	4.04	Replaced existing rusting lock on outer stick-up casing with new corrosion resistant lock.
MW-17R (1)	15.89	ND	11.10	4.79	Replaced existing rusting lock on outer stick-up casing with new corrosion resistant lock.
IW-18 (1)	10.07	ND	3.85	6.22	Strong sewer/rotten egg odor in well.
MW-18R (1)	14.12	ND	7.36	6.76	Replaced existing rusting lock on outer stick-up casing with new corrosion resistant lock.
MW-19 (1)	14.91	ND	7.74	7.17	Replaced existing rusting lock on outer stick-up casing with new corrosion resistant lock.
MW-23 (1)	10.39	ND	4.68	5.71	
MW-24R (1)	11.81	ND	6.59	5.22	Strong sewer odor. False LNAPL reading (got one hit but no LNAPL observed on probe). Replaced existing rusting lock on outer stick-up casing with new corrosion resistant lock.
MW-25 (1)	14.76	ND	7.64	7.12	Orange colored bacteria on probe. No odor. Replaced existing rusting lock on outer stick-up casing with new corrosion resistant lock.
MW-26R (1)	10.61	ND	4.20	6.41	Mild chemical odor. Tan colored bacteria on probe.
MW-27 (1)	9.93	ND	5.63	4.30	
MW-29 (0.75)	11.73	ND	7.06	4.67	Replaced existing rusting lock on outer stick-up casing with new corrosion resistant lock.
MW-30 (2)	11.23	ND	5.94	5.29	
MW-31 (2)	9.67	ND	5.75	3.92	
MW-32 (2)	11.70	ND	6.95	4.75	
MW-33 (2)	8.32	ND	3.25	5.07	Installed corrosion resistant lock onto liquid-tight well cap.
MW-34 (2)	10.81	ND	4.28	6.53	

NOTES:

TOC = Top of Casing

DTP = Depth to Product below TOC

DTW = Depth to Water below TOC

ND = Not Detected

*TOC elevations are well surveys conducted by EMC Engineering on June 30, 2011 and January 24, 2013, and are of the NGVD 29 Datum convention except where noted

** DTW measurements are initial prior to pumping

Table 1-3: April 2014 Well Gauging Data
VOPAK Terminal Savannah, Savannah, Georgia

Well ID # (Well Diameter, in.)	TOC Elevation* (ft.)	DTP (ft.)	DTW** (ft.)	Groundwater Surface Elevation (ft.)	Notes
IW-1R (1)[*3]	NA	ND	3.11	NA	DTW measured 24 hours after developing well
LAW-PZ-8R (1)	9.22	ND	2.07	7.15	concrete pad was damaged but casing appeared untouched
PAN-MW-9 (2)	12.59	ND	6.02	6.57	initial withdrawal contained small amount of tan bacteria
PAN-MW-10 (2)	13.81	ND	9.68	4.13	
MW-14 (2)	8.86	ND	6.59	2.27	
MW-16 (1)	17.01	ND	11.92	5.09	large air bubbles present in intial withdrawal
MW-17R (1)	15.89	ND	9.94	5.95	initial withdrawal contained small amount of brown bacteria
IW-18 (1)	10.07	ND	2.87	7.20	1" of standing water in vault above TOC; bailed prior to pumping
MW-18R (1)	14.12	ND	6.10	8.02	rotten odor when cap was removed
MW-19 (1)	14.91	ND	6.36	8.55	initial withdrawal contained small amount of orange bacteria
MW-23 (1)	10.39	ND	2.96	7.43	
MW-24R (1)	11.81	ND	5.37	6.44	initial withdrawal contained small amount of tan bacteria
MW-25 (1)	14.76	ND	6.33	8.43	small amount of orange bacteria on water level probe after initial
MW-26R (1)	10.59	ND	2.59	8.00	initial withdrawal contained large amount of orange bacteria
MW-27 (1)	9.38	ND	3.72	5.66	initial withdrawal contained large amount of orange bacteria
MW-29 (0.75)	11.73	ND	5.90	5.83	
MW-30 (2)	11.23	ND	4.60	6.63	
MW-31 (2)	9.67	ND	4.62	5.05	Initial withdrawal contained large amount of orange bacteria
MW-32 (2)	11.70	ND	5.97	5.73	
MW-33 (2)	8.96	ND	1.94	7.02	
MW-34 (2)	10.81	ND	2.87	7.94	Initial withdrawal contained small amount of red bacteria
MW-35 (2)	10.40	ND	5.67	4.73	1.5" of standing water in vault above TOC; bailed prior to pumping
MW-36 (2)	10.42	ND	6.98	3.44	
MW-37 (2)	11.57	ND	3.69	7.88	Initial withdrawal contained large amounts of orange bacteria

Notes:

ID = Identity

TOC = Top of Casing

NA = Not Applicable

NM = Not Measured

ND = Not Detected

* TOC elevations are based on well surveys conducted by EMC Engineering on June 30, 2011, January 24, 2013, and on January 20, 2014 and are of the NGVD 29 Datum convention.

** DTW measurements were recorded by EIC from 4/15/2014 to 4/17/2014 prior to purging using a Solinst Oil/Water Interface Meter (probe), Model:122.

Table 2-1: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Savannah Terminal, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
IW-1R	Apr-14	310		210		13,000		640		130		300		2,900		25,000	
	Oct-14	170		190		11,000		450		130	J	320		2,200		19,000	
	Apr-15	310		150	J	9,900		440		110	J	260		2,300		17,000	
IW-18	Oct-11	55		58		4,400		220		36		7.3	J	38		93	
	Jan-12	48	J	43	J	4,800		230		29	J	<50		33	J	86	
	Apr-12	44	J	46	J	4,500		210		25	J	<50		24	J	55	J
	Jul-12	31	J	33	J	4,500		160		21	J	<50		29	J	92	J
	Oct-12	36	J	37	J	5,200		320		24	J	<50		31	J	110	
	Jan-13	43	J	44	J	6,000		310		25	J	<50		40	J	170	
	Apr-13	42		37		6,000		410		26		13		49		270	
	Jul-13	27		31		5,900		770		30		21		110		1,000	
	Oct-13	29		26		6,400		670		26		12		56		510	
	Jan-14	19		28		5,300		1,900		60		24		100		810	
	Apr-14	39		34		7,400		1,100		73		35		220		1,900	
	Oct-14	11	J	12	J	2,900		1,500		170		28	J	130		1,100	
	Apr-15	<7.4		8.4	J	920		830		350		14		180		1,300	
LAW-PZ-8 / LAW-PZ-8R	Sep-97	50/500		NR		NR		350/<500		NS		NS		NS		NS	
	Dec-98	<1000		NR		NR		<1,000		<1000		<1000		4,300		5,600	
	Nov-99	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-99	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-00	<250		<250		1,800		890		<250		<250		5,100		59,000	
	Jun-01	<1200		<1200		3,900		670		69	J	220	J	5,700		64,000	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	70	J	18	J	350		120		42	J	<100		3,700		42,000	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	300		<100		31,000		1,700		190		1,200		6,100		84,000	
	Dec-06	240		72		12,000		630		47		410		3,000		41,000	
	Mar-07	<250		<250		16,000		1,200		<500		760		5,000		70,000	
	Sep-07	240		<100		18,000		1,200		310		720		4,400		54,000	
	May-08	380		34		6,900		660		450		330		6,500		94,000	
	Dec-08	570		52		4,600		360		290		290		4,900		55,000	
	Apr-09	510		<250		<250		560		320		280		3,800		48,000	
	Sep-09	99		34		4,500		470		390		260		4,100		47,000	
	Apr-10	240		49		5,100		480		NS		NS		NS		NS	
	Oct-11	150		28	J	22,000		1,500		1,600		1,100		8,000		73,000	
	Jan-12	130	J	<500		17,000		1,600		1,700		930		7,500		88,000	
	Apr-12	99	J	<500		17,000		1,800		2,300		1,100		7,500		110,000	
	Jul-12	110	J	<500		16,000		1,200		2,000		820		7,100		91,000	
	Oct-12	83		<500		8,000		870		1,300		530		7,300		100,000	
	Jan-13	99		<500		13,000		1,100		2,000		800		7,500		100,000	
	Apr-13	71		12		9,100		960		1,400		570		7,200		110,000	
	Jul-13	30		5.6	J	11,000		990		1,900		650		7,600		110,000	
	Oct-13	44		8.5	J	8,500		830		1,500		510		6,800		110,000	
	Jan-14	38		<1.9		7,200		980		1,200		370		4,000		88,000	
	Apr-14	22		8.6	J	7,400		840		1,200		400		4,900		58,000	
	Oct-14	<150		<130		15,000		1,900		3,400		1,100		13,000		180,000	
	Apr-15	<740		<480		4,100		<500		1,100		<480		6,900		87,000	

Table 2-1: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Savannah Terminal, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-14	Feb-91	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-91	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-96	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-97	33		NR		NR		<5		NS		NS		NS		NS	
	Dec-98	<1		NR		NR		<1		<1		<1		2.9		1.4	
	Nov-99	<5		<5		<2		<2		NS		NS		NS		NS	
	Dec-99	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-00	<1		<1		<1		<1		<1		<1		<1		<2	
	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	<5		<5		<5		<2		<10		<5		<5		<5	
	Oct-06	<2		<2		<2		<2		<2		<2		<2		<5	
	Dec-06	<2		<2		<2		<2		<2		<2		<2		<5	
	Mar-07	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	<2		<2		<2		<2		NS		<2		<2		<5	
	Dec-08	<5		<5		<5		<2		<5		<5		<5		<5	
	Apr-09	<5		<5		<5		<2		<5		<5		<5		<5	
	Sep-09	<2		<2		<2		<2		<2		<2		<2		<2	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-13	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-13	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		3.5		<0.19		<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.11		<0.33		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	
MW-15*	Feb-91	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-91	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-96	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-97	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-98	NS		NS		NS		NS		NS		NS		NS		NS	
	Nov-99	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-99	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-00	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	5.3		14		<5		NS		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	<5		<5		<5		<2		<10		<5		<5		<5	
	Oct-06	<2		<2		<2		<2		<2		<2		<2		<5	
	Dec-06	12		12		4		<2		<2		<2		<2		<5	
	Mar-07	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-07	<3		4		3		<2		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	<5		<5		<5		<2		<5		<5		<5		<5	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	<5		<5		<5		17		NS		NS		NS		NS	
	Apr-11	69		39		2,200		150		34		8.3	J	26		86	

Table 2-1: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Savannah Terminal, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-16	Oct-00	NS		<1		110		2.2		<1		<1		<1		<2	
	Jun-01	<5		<5		41		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		33		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	<5		<5		36		<2		<10		<5		<5		<5	
	Oct-06	<2		12		120		4		<2		<2		<2		7	
	Dec-06	<2		24		120		8		<2		<2		<2		<5	
	Mar-07	9		71		320		25		<10		<5		<5		<5	
	Sep-07	<2		<2		260		63		<2		<2		<2		<5	
	May-08	<2		<2		61		53		<2		<2		6		<5	
	Dec-08	<5		<5		60		49		<5		<5		<5		<5	
	Apr-09	<5		<5		78		82		<5		<5		<5		<5	
	Sep-09	<2		4.1		78		69		<2		<2		<2		<5	
	Apr-10	<5		<5		89		83		NS		NS		NS		NS	
	Oct-11	0.57	J	0.66	J	160		77		0.52	J	<1		0.3	J	1.9	J
	Jan-12	0.67	J	0.94	J	130		85		0.44	J	0.42	J	0.12	J	1.3	J
	Apr-12	<1		0.94	J	140		200		0.74	J	0.33	J	1.7		21	
	Jul-12	0.28	J	0.63	J	87		48		0.41	J	<1		0.23	J	1.1	J
	Oct-12	<2		0.37	J	200		94		<2		<2		0.52	J	1.7	J
	Jan-13	<1		<1		120		78		0.27	J	<1		0.49	J	1.4	J
	Apr-13	<0.22		0.6	J	140		85		0.42	J	0.24	J	2.1		8	
	Jul-13	<0.16		<0.19		320		100		<0.16		<0.14		<0.19		<0.20	
	Oct-13	0.58	J	1.1		110		86		0.83		<0.14		1.2		5.6	
	Jan-14	<0.16		<0.19		170		180		1.5		<0.14		<0.19		<0.20	
	Apr-14	<0.16		1.1		310		160		2		<0.14		8.3		4.1	
	Oct-14	<0.15		0.34	J	130		81		1.3		<0.33		<0.11		<0.20	
	Apr-15	<1.5		6		210		120		2.7		<0.96		3.4		1.3	J
MW-17/ MW-17R	Oct-00	NS		<1		<1		<1		<1		<1		<1		<2	
	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	<5		<5		<5		<2		<10		<5		<5		<5	
	Jul-04	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-04	<5		<5		<5		<2		<10		5		<5		<5	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	<5		<5		<5		<2		<10		<5		<5		<5	
	Oct-06	<5		<5		<5		<2		<10		8		<5		<5	
	Dec-06	<2		<2		<2		<2		<2		<2		7		<5	
	Mar-07	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	<2		<2		<2		<2		<2		<2		4		27	
	Dec-08	<5		<5		<5		<2		<5		<5		<5		<5	
	Apr-09	<5		<5		<5		<2		<5		<5		<5		<5	
	Sep-09	<2		<2		<2		<2		<2		<2		<2		<5	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	<1		<1		0.2	J	<1		0.39	J	<1		0.55	J	<2	
	Jan-12	<1		<1		<1		<1		0.44	J	0.35	J	1.5		0.65	J
	Apr-12	<1		0.13	J	2.8		0.19	J	0.48	J	<1		0.7	J	0.22	J
	Jul-12	1.3		1.2		9.2		<1		0.29	J	<1		0.62	J	0.28	J
	Oct-12	16		5.2		13		<1		<1		<1		1.4		0.5	J
	Jan-13	<1		<1		<1		<1		<1		<1		0.84	J	<2	
	Apr-13	4.1		1.3		1.6		<0.30		0.18	J	<0.15		1.2		0.33	J
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		1.5		<0.20	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		0.83	J	<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		0.95	J	<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.33		0.66	J	<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		0.79	J	<0.23	

Table 2-1: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Savannah Terminal, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-18/ MW18R	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	<1		<1		<1		<1		<1		<1		**2**		**22**	
	Mar-04	<5		<5		<5		<2		<10		<5		<5		<5	
	Jul-04	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-04	<5		<5		<5		<2		<10		<5		<5		<5	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	<5		<5		<5		<2		<10		<5		<5		<5	
	Oct-06	<5		<5		<5		<2		<10		<5		<5		<5	
	Dec-06	<2		<2		<2		<2		<2		<2		<2		<5	
	Mar-07	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	<2		<2		<2		<2		<2		<2		**2**		**16**	
	Dec-08	<5		<5		<5		<2		<5		<5		<5		<5	
	Apr-09	<5		<5		<5		<2		<5		<5		<5		<5	
	Sep-09	<2		<2		<2		<2		<2		<2		<2		<5	
	Apr-10	<5		<5		<5		<2		NS		NS		NS		NS	
	Oct-11	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jul-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Oct-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-13	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-13	<0.22		<0.20		<0.13		<0.30		<0.18		<0.15		<0.097		<0.31	
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	
MW-19	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		NS		NS		NS		NS	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	<5		<5		<5		<2		<5		<5		<5		<5	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	<5		<5		<5		<2		NS		NS		NS		NS	
	Oct-11	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-12	<1		<1		**0.22**	**J**	<1		<1		<1		**1.7**		**12**	
	Jul-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Oct-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-13	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-13	<0.22		<0.20		**0.14**	**J**	<0.30		<0.18		<0.15		**0.21**	**J**	**0.41**	**J**
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	

Table 2-1: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Savannah Terminal, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-20	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	NS		NS		NS		NS		NS		NS		NS		NS	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-11	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-15	NL		NL		NL		NL		NL		NL		NL		NL	
MW-21	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	120		**1.8**		<1		<1		<1		<1		**4.2**		**38**	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	<2		<2		<2		<2		<2		<2		<2		<5	
	Aug-05	<5		<5		<5		<2		<5		<5		<5		<5	
	Jun-06	12		<5		<5		<2		<10		<5		<5		<5	
	Oct-06	<2		<5		<2		<2		<2		<2		<2		<5	
	Dec-06	<2		<2		<2		<2		<2		<2		<2		<5	
	Mar-07	<5		<5		<5		<2		<10		<5		<5		<5	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-15	NL		NL		NL		NL		NL		NL		NL		NL	

Table 2-1: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Savannah Terminal, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-22/ MW-22R	Jun-01	8,700		900		3,100		380		<500		<500		600		83	J
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	1,000		480		930		<100		<250		<250		<250		<500	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	7,600		700		2,300		210		<10		<5		2,300		<50	
	Jul-04	7,000		71		310		36		<10		<5		14		<22	
	Sep-04	7,200		<250		610		<100		<500		<250		<250		<250	
	May-05	5,700		220		840		<100		<100		<100		<100		<250	
	Aug-05	2,400		47		240		37		<5		<5		<5		10	
	Jun-06	680		71		3,300		140		<250		<130		150		<130	
	Oct-06	2,600		<130		490		89		<250		<130		<130		<130	
	Dec-06	3,200		60		480		100		<2		<2		20		18	
	Mar-07	3,400		<130		730		100		<250		<130		<130		<130	
	Sep-07	NS		NS		NS		NS		NS		NS		NS		NS	
	May-08	6,900		89		930		270		2		<2		10		26	
	Dec-08	4,400		100		2,100		300		<5		<5		7		12	
	Apr-09	1,900		88		1,700		280		<5		<5		11		22	
	Sep-09	3,000		88		1,000		220		4.1		<2		9.2		12	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	NU		NU		NU		NU		NU		NU		NU		NU	
	Jan-12	NU		NU		NU		NU		NU		NU		NU		NU	
	Apr-12	NU		NU		NU		NU		NU		NU		NU		NU	
	Jul-12	NU		NU		NU		NU		NU		NU		NU		NU	
	Oct-12	NU		NU		NU		NU		NU		NU		NU		NU	
	Jan-13	NU		NU		NU		NU		NU		NU		NU		NU	
	Apr-13	NU		NU		NU		NU		NU		NU		NU		NU	
	Jul-13	NU		NU		NU		NU		NU		NU		NU		NU	
	Oct-13	NU		NU		NU		NU		NU		NU		NU		NU	
	Jan-14	NU		NU		NU		NU		NU		NU		NU		NU	
	Apr-14	NU		NU		NU		NU		NU		NU		NU		NU	
	Oct-14	NU		NU		NU		NU		NU		NU		NU		NU	
	Apr-15	NU		NU		NU		NU		NU		NU		NU		NU	
MW-23	Jun-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Nov-01	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	760		2,300		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	<2		<2		<5		<2		<5		<5		<5		<5	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	<5		<5		<5		<2		NS		NS		NS		NS	
	Oct-11	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jul-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Oct-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-13	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-13	<0.22		<0.20		<0.13		<0.30		<0.18		<0.15		0.23	J	0.42	J
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	

Table 2-1: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Savannah Terminal, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-24/ MW-24R	Nov-01	400		95		240		50		<12		<12		<12		<25	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	97		51		100		22		52		<10		<10		<20	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	1,300		180		500		49		11		<5		5		28	
	Oct-06	580		150		590		33		<20		<20		<20		<50	
	Dec-06	1,110		680		990		68		13		<2		10		35	
	Mar-07	130		200		770		17		14		<5		<5		12	
	Sep-07	62		37		820		20		12		<2		2		7	
	May-08	130		24		82		9		16		<2		<2		11	
	Dec-08	110		25		340		12		15		<5		<5		<5	
	Apr-09	93		22		240		18		12		<5		<5		<5	
	Sep-09	57		20		120		47		10		<2		<2		<5	
	Apr-10	35		10		150		<2		NS		NS		NS		NS	
	Oct-11	12		5.8		180		25		10		<5		1.4	J	4.2	J
	Jan-12	7.5		3.9		160		16		8.2		0.4	J	0.98	J	11	
	Apr-12	6.8		4.7		230		7.4		11		1.8	J	16		230	
	Jul-12	6.7		3.6		220		9.2		7.6		<2		<2		<4	
	Oct-12	6		3.4	J	320		54		8.1		<5		3.4	J	20	
	Jan-13	3	J	2.1	J	410		71		6.9		<5		4	J	22	
	Apr-13	3.5		2.8		540		64		6.2		0.71	J	4.4		26	
	Jul-13	5.3		5.4		800		140		8.2		1.2		11		58	
	Oct-13	3.3		2.2		450		43		6		0.41	J	0.79	J	6.3	
	Jan-14	2.6		4.4		570		<0.19		6.1		<0.14		<0.19		2.7	
	Apr-14	2		1.8		500		<0.19		5.8		0.48	J	0.45	J	2	
	Oct-14	1.7	J	<0.65		360		38		5.6		<1.7		1.3	J	<1.0	
	Apr-15	<3.7		<2.4		300		16		3.9	J	<2.4		<1.7		<1.2	
MW-25	Nov-01	<5		<5		<5		<10		<5		<5		<5		<10	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	<2		<2		<2		<2		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	<5		<2		<5		<5		<5		<5		<5		<5	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	<5		<5		<5		<2		NS		NS		NS		NS	
	Oct-11	<1		<1		<1		<1		<1		<1		0.72	J	8.7	
	Jan-12	<1		<1		0.21	J	<1		<1		<1		<1		<2	
	Apr-12	0.27	J	<1		0.57	J	<1		<1		<1		3.2		20	
	Jul-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Oct-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-13	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-13	<0.22		<0.20		<0.13		<0.30		<0.18		<0.15		<0.097		<0.31	
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		<0.15		<0.18		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	

Table 2-1: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Savannah Terminal, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-26/ MW-26R	Nov-01	2,400		100		1,100		210		<100		<100		<100		<200	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	300		14		180		38		NS		NS		NS		NS	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	120		8		120		28		17		<2		<2		<5	
	Aug-05	420		22		210		47		35		<5		<5		6	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	<2		2		2,800		330		16		45		380		2,700	
	Dec-06	6		4		5,100		560		20		83		1,500		13,000	
	Mar-07	<5		<5		2,600		580		17		45		1,100		6,900	
	Sep-07	<2		<2		240		240		9		4		71		250	
	May-08	5		<2		410		83		12		10		260		1,300	
	Dec-08	<5		<5		14		19		<5		5		23		120	
	Apr-09	<5		<5		200		76		14		21		310		2,700	
	Sep-09	<2.		<2		150		62		4.4		3.8		63		380	
	Apr-10	<5		<5		93		48		NS		NS		NS		NS	
	Oct-11	<1		0.89	J	43		34		7.2		1.4		35		110	
	Jan-12	<25		5	J	390		130		29		59		650		6,100	
	Apr-12	<25		5.5	J	350		140		22	J	54		610		7,200	
	Jul-12	<5		<5		43		40		21		15		270		2,000	
	Oct-12	<50		<50		210		63		35	J	37	J	390		4,200	
	Jan-13	27	J	21	J	1,500		220		64		140		2,000		2,400	
	Apr-13	5	J	3.2	J	340		94		56		40		650		8,300	
	Jul-13	<1.6		<1.9		19		12		75		18		450		5,500	
	Oct-13	<1.6		<1.9		150		53		33		10	J	160		2,300	
	Jan-14	<1.6		<1.9		68		<1.9		110		11		200		7,200	
	Apr-14	44		<1.9		16		11		110		<1.4		64		5,600	
	Oct-14	<0.75		4.1	J	7.2		7.3		19		<1.1		25		400	
	Apr-15	<74		<48		<41		<50		180		63	J	760		11,000	
MW-27	Nov-01	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-02	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-03	<5		<5		<5		<2		<5		<5		<5		<10	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	3		2		350		5		<2		<2		<2		<5	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	<5		<5		40		22		<5		<5		<5		<5	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	<5		<5		<5		92		NS		NS		NS		NS	
	Oct-11	0.86	J	1.6	J	8.3		200		0.63	J	<2		0.29	J	3.4	J
	Jan-12	0.17	J	0.42	J	1.8		19		<1		<1		<1		<2	
	Apr-12	0.26	J	0.4	J	1.7		15		<1		<1		<1		<2	
	Jul-12	<1		0.26	J	1.4		21		<1		<1		<1		<2	
	Oct-12	<1		0.33	J	1.1		16		<1		<1		<1		<2	
	Jan-13	0.36	J	0.88	J	2.1		20		<1		<1		<1		<2	
	Apr-13	<0.22		0.33	J	1	J	6.5		<0.18		<0.15		0.35	J	3.9	
	Jul-13	<0.16		0.8	J	2.6		18		<0.16		<0.14		<0.19		<0.20	
	Oct-13	<0.16		<0.19		<0.21		2.9		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		2.1		13		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		1.9		9.7		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		2.2		12		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		0.79	J	4.7		<0.43		<0.48		<0.33		<0.23	

Table 2-1: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Savannah Terminal, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-28	Oct-02	<5		<5		<5		<2		<5		<5		<5		<10	
	Aug-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Jul-04	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-04	NS		NS		NS		NS		NS		NS		NS		NS	
	May-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Aug-05	NS		NS		NS		NS		NS		NS		NS		NS	
	Jun-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	NS		NS		NS		NS		NS		NS		NS		NS	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	NS		NS		NS		NS		NS		NS		NS		NS	
	Oct-11	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-12	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jul-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-13	NL		NL		NL		NL		NL		NL		NL		NL	
	Jan-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Apr-14	NL		NL		NL		NL		NL		NL		NL		NL	
	Oct-14	2.3		**0.44**	**J**	**14**		3.4		**0.82**	**J**	<0.33		**0.27**	**J**	**2.2**	
	Apr-15	5.8		**1.1**		**33**		8.1		**1.6**		<0.48		<0.33		<0.23	
MW-29	Oct-06	1,500		340		1,500		24		**2**		<2		**67**		**51**	
	Dec-06	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-07	NS		NS		NS		NS		NS		NS		NS		NS	
	Sep-07	2,300		320		1,700		64		**3**		<2		**63**		**57**	
	May-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Dec-08	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-09	1,100		320		2,100		74		<5		<5		**35**		**98**	
	Sep-09	NS		NS		NS		NS		NS		NS		NS		NS	
	Apr-10	500		300		3,200		150		NS		NS		NS		NS	
	Oct-11	180		72		2,300		220		<20		<20		1,300		2,800	
	Jan-12	200		77		2,500		280		<20		<20		1,100		2,500	
	Apr-12	100		62		1,900		200		**6.3**	**J**	**7.6**	**J**	950		2,100	
	Jul-12	110		54		1,900		230		**6.8**	**J**	<20		**510**		1,000	
	Oct-12	71		44		1,600		110		<20		<20		**200**		**370**	
	Jan-13	110		41		1,300		140		**6**	**J**	**6.7**	**J**	1,300		2,900	
	Apr-13	130		76		2,500		490		11		**4.1**		750		1,500	
	Jul-13	120		69		2,800		460		15		**5.4**	**J**	800		1,700	
	Oct-13	140		66		6,100		760		20		**10**	**J**	1,200		2,500	
	Jan-14	330		110		5,900		790		23		**20**		3,100		6,600	
	Apr-14	200		150		8,400		880		25		**21**		1,900		4,000	
	Oct-14	74		55		4,300		660		<13		**21**	**J**	1,800		4,300	
	Apr-15	160		90		5,900		790		<22		**25**	**J**	3,300		7,300	
MW-30	Oct-11	0.51	**J**	**0.55**	**J**	**13**		**2.9**		**0.55**	**J**	<1		<1		<2	
	Jan-12	0.18	**J**	**0.46**	**J**	**13**		3.1		**0.47**	**J**	<1		<1		**0.58**	**J**
	Apr-12	0.19	**J**	**0.43**	**J**	**9.4**		**2.6**		**0.44**	**J**	<1		<1		<2	
	Jul-12	0.45	**J**	**0.45**	**J**	**7.7**		**2.4**		**0.43**	**J**	<1		<1		<2	
	Oct-12	<1		**0.4**	**J**	**11**		3.6		**0.54**	**J**	<1		<1		<2	
	Jan-13	0.2	**J**	**0.38**	**J**	**9.4**		3.1		**0.54**	**J**	<1		<1		<2	
	Apr-13	0.32	**J**	**0.32**	**J**	**7.8**		4.5		**0.85**	**J**	<0.15		<0.097		<0.31	
	Jul-13	<0.16		<0.19		**11**		<0.19		**1.8**		<0.14		<0.19		**2.6**	
	Oct-13	<0.16		<0.19		**6.2**		**2.5**		<0.16		<0.14		<0.19		<0.20	
	Jan-14	<0.16		<0.19		**5.6**		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	0.4	**J**	**0.4**	**J**	**5**		<0.19		**0.48**	**J**	<0.14		**1**	**J**	**2.2**	
	Oct-14	0.39	**J**	<0.13		**2.3**		**1.2**		**0.35**	**J**	<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		**1.7**		**0.88**	**J**	<0.43		<0.48		<0.33		**1.3**	
MW-31	Oct-11	<1		<1		<1		<1		<1		<1		<1		**0.24**	**J**
	Jan-12	<1		<1		<1		<1		<1		<1		<1		**0.21**	**J**
	Apr-12	<1		<1		<1		<1		<1		<1		**0.33**	**J**	**2.4**	
	Jul-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Oct-12	<1		<1		<1		<1		<1		<1		<1		<2	
	Jan-13	<1		<1		<1		<1		<1		<1		<1		<2	
	Apr-13	<0.22		<0.20		<0.13		<0.30		<0.18		<0.15		<0.097		<0.31	
	Jul-13	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-13	NA		NA		NA		NA		NA		NA		NA		NA	
	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		**0.43**	**J**	<0.18		<0.25		<0.33		**0.33**	**J**	<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	

Table 2-1: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Savannah Terminal, Savannah, Georgia

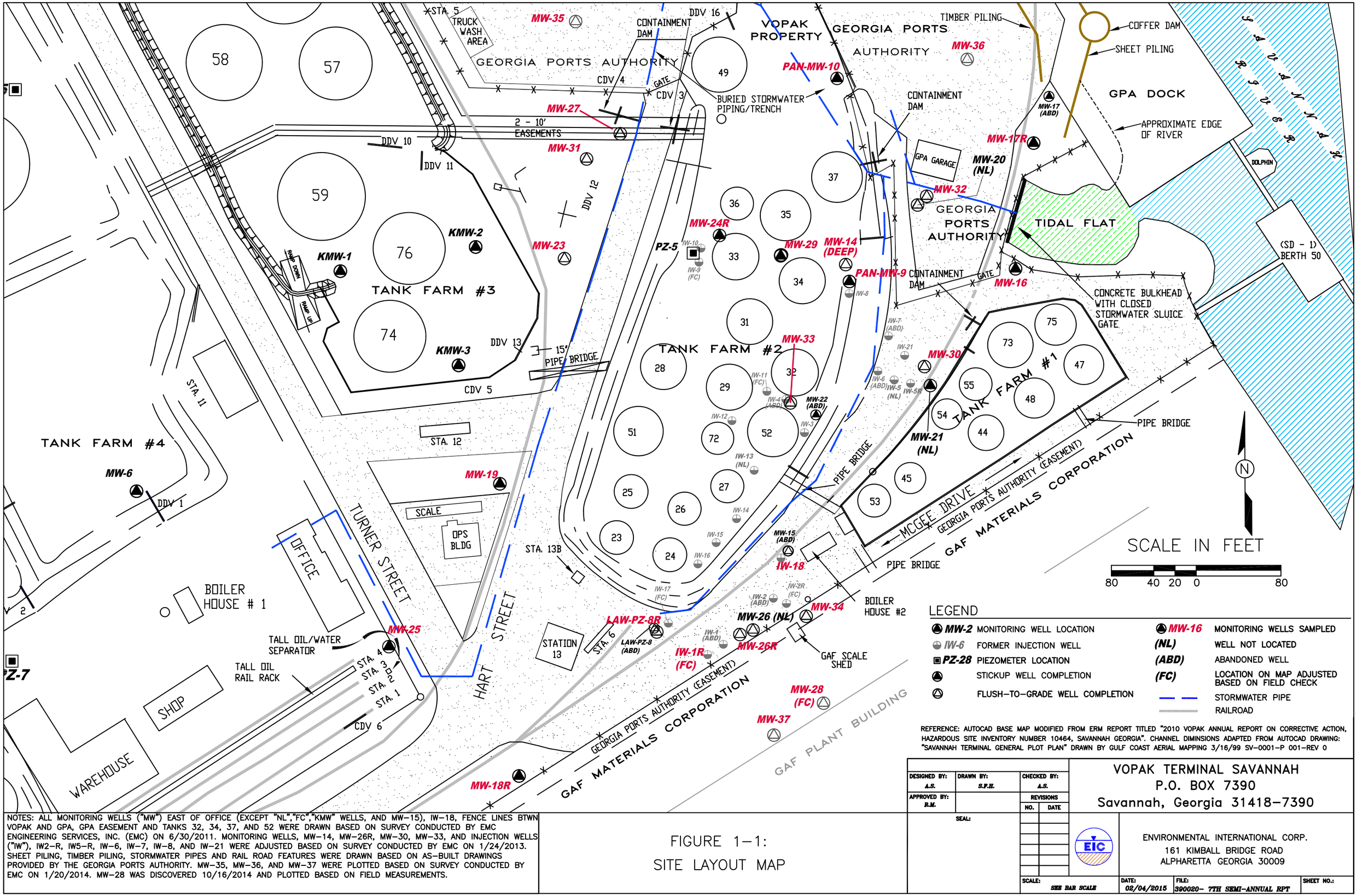
EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
MW-32	Oct-11	7.2	J	11		1,500		35		<10		<10		31		35	
	Jan-12	130		61		2,100		53		<20		<20		45		56	
	Apr-12	210		100		2,000		54		<20		<20		28		22	J
	Jul-12	200		140		1,100		40		<10		<10		17		16	J
	Oct-12	1,700		470		1,700		110		<10		<10		54		26	
	Jan-13	2,800		530		940		93		<20		<20		61		27	J
	Apr-13	2,800		520		980		120		0.94	J	2.8		75		42	
	Jul-13	2,200		570		750		96		<1.6		<1.4		66		40	
	Oct-13	6,200		1,300		1,600		220		<1.6		7.2	J	160		110	
	Jan-14	6,500		1,300		1,600		230		<1.6		<1.4		180		170	
	Apr-14	6,000		1,500		2,200		230		<1.6		<1.4		200		130	
	Oct-14	1,900		680		1,100		100		8.3	J	<6.6		36		29	J
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.42		<0.33		<0.23	
MW-33	Oct-11	5,200		3,200		16,000		840		<200		<200		370		2,200	
	Jan-12	1,100		190		4,100		370		<50		<50		94		450	
	Apr-12	13		11		1,800		390		12		9.3	J	46		390	
	Jul-12	40	J	35	J	3,000		290		<50		<50		34	J	88	J
	Oct-12	37		35		2,300		330		<20		<20		28		70	
	Jan-13	5.9		9.9		390		130		1.7	J	2.3		7.3		15	
	Apr-13	1.2		4.7		380		130		1.3		1.5		5.3		12	
	Jul-13	15		5.1	J	500		220		<1.6		<1.4		8.9	J	24	
	Oct-13	1.2		4.8		800		480		1.8		2		9		26	
	Jan-14	<1.6		<1.9		340		300		<1.6		<1.4		16		40	
	Apr-14	<1.6		8.4	J	360		140		<1.6		<1.4		7	J	25	
	Oct-14	1.2	J	9.7		390		440		<1.3		3.5	J	9.4		37	
	Apr-15	<0.74		2.8		150		100		1.7		1.7		3.1		11	
MW-34	Oct-11	2.2		1.7		44		14		1.6		<1		<1		<2	
	Jan-12	13		4.4		80		8.8		3.6		<1		<1		<2	
	Apr-12	4.3		2.2		64		16		2.3		<1		<1		<2	
	Jul-12	2.3		1.3		35		7.8		1.3		<1		<1		<2	
	Oct-12	4.9		1.8		45		8.6		1.8		<1		<1		<2	
	Jan-13	8.6		2.5		43		8.4		1.9		<1		<1		<2	
	Apr-13	2.7		0.91	J	19		5.7		0.76	J	<0.15		<0.097		<0.31	
	Jul-13	3		1	J	24		0.19		1.1		<0.14		<0.19		<0.20	
	Oct-13	6.1		3.1		36		9.8		1.3		<0.14		<0.19		<0.20	
	Jan-14	2.4		<0.19		14		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	0.51	J	<0.19		4.2		<0.19		0.26	J	<0.14		<0.19		<0.20	
	Oct-14	1.1		0.23	J	5.1		1.8		<0.25		<0.33		0.17	J	<0.20	
	Apr-15	2.7		0.52	J	9.9		2.6		0.47	J	<0.48		<0.33		<0.23	
MW-35	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		0.16	J	<0.18		<0.25		<0.33		0.11	J	<.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	
MW-36	Jan-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.14		<0.19		<0.20	
	Apr-14	<0.16		<0.19		0.33	J	<0.19		<0.16		<0.14		<0.19		<0.20	
	Oct-14	<0.15		<0.13		0.6	J	<0.18		<0.25		<0.33		<0.11		<0.20	
	Apr-15	<0.74		<0.48		0.59	J	<0.50		<0.43		<0.48		<0.33		<0.23	
MW-37	Jan-14	30		16		860		130		14		<0.14		<0.19		1.9	
	Apr-14	22		11		690		<0.19		16		<0.14		1.8		3.8	
	Oct-14	36		12		370		93		10		0.91	J	0.83	J	2.4	J
	Apr-15	19		8.5		350		65		6.4		<0.96		<0.66		0.77	J

Table 2-1: Concentrations of CVOCs and VOCs in Groundwater
VOPAK Savannah Terminal, Savannah, Georgia

EPA Test Method: 8260B		PCE		TCE		DCE		VC		Benzene		Toluene		Ethylbenzene		Xylenes	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Site-Specific Type 4 RRS Values (ug/L)		5		38		1022		3		9		5241		700		10000	
Well ID	Sample Date	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
PAN-MW-9	Feb-91	14,000		350		< 5		< 30		NS		NS		NS		NS	
	Jul-91	9,200		430		< 5		< 30		NS		NS		NS		NS	
	Jun-96	3,040		< 2500		< 2,500		< 2500		NS		NS		NS		NS	
	Sep-97	8,100		NR		NR		< 500		NS		NS		NS		NS	
	Dec-98	7,400		NR		NR		< 250		< 250		< 250		2,400		5,200	
	Dec-99	9,100		< 1000		< 400		< 400		NS		NS		NS		NS	
	Oct-00	8,000		360		130		< 100		< 100		< 100		3,900		8,600	
	Jun-01	9,800		260	J	100	J	< 200		< 500		< 500		3,700		8,500	
	Aug-03	2,400		< 500		< 500		< 200		< 500		< 500		1,100		2,000	
	Oct-03	NS		NS		NS		NS		NS		NS		NS		NS	
	Mar-04	6,900		440		300		35		< 50		< 25		3,100		7,300	
	Jul-04	3,200		270		170		14		< 10		< 5		8,400		22,000	
	Sep-04	6,000		360		< 250		< 100		< 500		< 250		2,200		5,100	
	May-05	1,100		320		220		< 100		< 100		< 100		6,000		16,000	
	Aug-05	80		9		5		< 2		<2		< 5		60		150	
	Jun-06	1,600		480		550		< 40		< 200		< 100		730		1,800	
	Oct-06	1,500		300		990		< 40		< 200		< 100		990		2,600	
	Dec-06	1,900		640		600		23		< 2		< 2		1,800		4,900	
	Mar-07	600		370		680		< 40		< 200		< 100		4,500		12,000	
	Sep-07	1,500		450		880		< 40		< 40		< 40		1,900		5,400	
	May-08	510		190		590		18		< 2		3		8,800		24,000	
	Dec-08	540		150		500		25		< 5		< 5		3,900		11,000	
	Apr-09	460		150		780		< 40		< 100		< 100		2,400		6,300	
	Sep-09	440		150		730		49		< 10		< 10		2,300		6,100	
	Apr-10	710		140		530		93		NS		NS		NS		NS	
	Oct-11	350		1,100		780		62		< 50		< 50		1,900		4,200	
	Jan-12	690		770		820		55		< 20		< 20		2,000		5,800	
	Apr-12	280		1,300		1,100		45		< 20		< 20		1,900		5,500	
	Jul-12	37		1,200		1,300		65		< 25		< 25		890		2,600	
	Oct-12	210		1,200		1,800		110		< 25		< 25		1,800		4,900	
	Jan-13	540		480		1,200		69		< 25		< 25		1,100		3,500	
	Apr-13	240		500		1,400		120		2.8	J	3.4	J	1,000		3,700	
	Jul-13	55		790		1,200		88		< 1.6		< 1.4		760		2,200	
	Oct-13	29		440		2,500		76		1.1		1.5		1,000		2,600	
	Jan-14	17		300		2,100		190		< 1.6		< 1.4		1,100		2,700	
	Apr-14	22		190		2,000		140		<1.6		<1.4		960		2,400	
	Oct-14	17		35		1,900		130		4.4	J	<3.3		650		1,800	
	Apr-15	<7.4		4.9	J	2,000		130		5.2	J	<4.8		580		1,400	
PAN-MW-10	Feb-91	37		< 5		< 5		< 30		NS		NS		NS		NS	
	Sep-97	10		NR		NR		< 5		NS		NS		NS		NS	
	Dec-98	< 1		NR		NR		< 1		< 1		< 1		< 1		< 1	
	Nov-99	< 5		< 5		< 2		< 2		NS		NS		NS		NS	
	Oct-00	< 1		< 1		< 1		< 1		< 1		< 1		< 1		< 2	
	Jun-01	< 5		< 5		< 5		< 2		< 5		< 5		< 5		< 10	
	Aug-03	< 5		< 5		< 5		< 2		< 5		< 5		< 5		< 10	
	Sep-07	< 2		< 2		< 2		< 2		< 2		< 2		< 2		< 5	
	Apr-09	< 5		< 5		< 5		< 2		< 5		< 5		< 5		< 5	
	Apr-10	< 5		< 5		< 5		< 2		NS		NS		NS		NS	
	Oct-11	0.79	J	2.6		1.3		< 1		< 1		3.7		< 1		9.9	
	Jan-12	< 1		0.21	J	3.7		0.2	J	0.28	J	1.2		< 1		17	
	Apr-12	< 1		< 1		0.71	J	< 1		< 1		< 1		< 1		< 2	
	Jul-12	< 1		< 1		0.29	J	< 1		< 1		< 1		< 1		< 2	
	Oct-12	< 1		< 1		1.4		< 1		< 1		< 1		< 1		< 2	
	Jan-13	< 1		< 1		1.2		< 1		< 1		< 1		< 1		< 2	
	Apr-13	< 0.22		< 0.20		0.82	J	< 0.30		< 0.18		<0.097		< 0.15		< 0.31	
	Jul-13	< 0.16		< 0.19		< 0.21		< 0.19		< 0.16		<0.19		< 0.14		< 0.20	
	Oct-13	< 0.16		< 0.19		0.76		< 0.19		< 0.16		<0.19		< 0.14		< 0.20	
	Jan-14	< 0.16		< 0.19		1.3		< 0.19		< 0.16		<0.19		< 0.14		< 0.20	
	Apr-14	<0.16		<0.19		<0.21		<0.19		<0.16		<0.19		<0.14		<0.20	
	Oct-14	<0.15		<0.13		0.34	J	<0.18		<0.25		<0.11		<0.33		<0.20	
	Apr-15	<0.74		<0.48		<0.41		<0.50		<0.43		<0.48		<0.33		<0.23	

Notes:
0.79 = Concentration above Minimum Detection Limit (MDL)
39 = Concentration above RRS
NR = Not Reported by Laboratory
NS = Not Sampled
NL = Not Located
NU = Not Useable due to siltation
NA = Not Avaliable
All data prior to October 2011 tabulated by ERM

FIGURES



LEGEND

MW-2	MONITORING WELL LOCATION	MW-16	MONITORING WELLS SAMPLED
IW-6	FORMER INJECTION WELL	(NL)	WELL NOT LOCATED
PZ-28	PIEZOMETER LOCATION	(ABD)	ABANDONED WELL
	STICKUP WELL COMPLETION	(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
	FLUSH-TO-GRADE WELL COMPLETION		STORMWATER PIPE
			RAILROAD

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

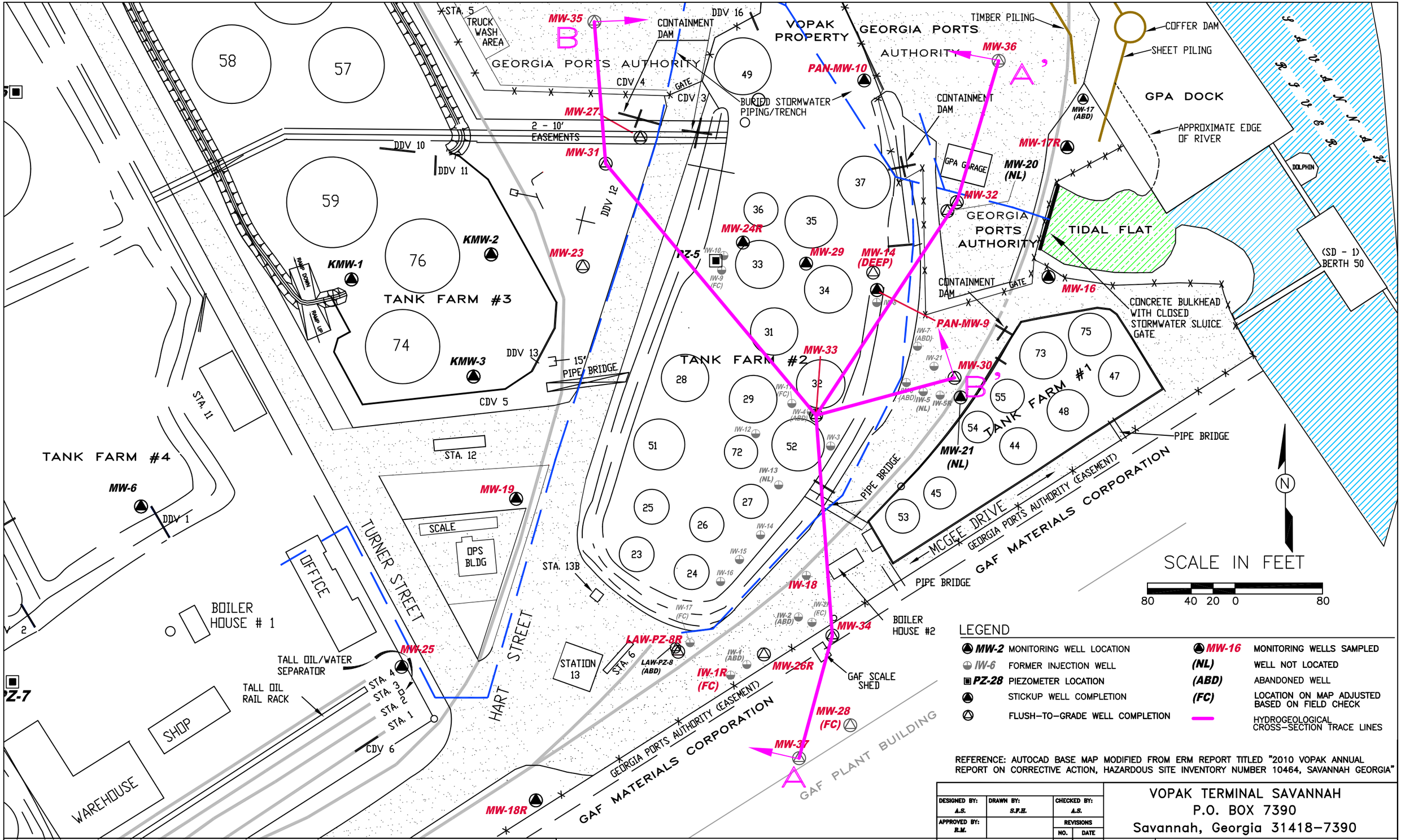
FIGURE 1-1:
SITE LAYOUT MAP

DESIGNED BY: A.S.	DRAWN BY: S.F.H.	CHECKED BY: A.S.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
SEAL:			

VOPAK TERMINAL SAVANNAH
P.O. BOX 7390
Savannah, Georgia 31418-7390

ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	02/04/2015	390020- 7TH SEMI-ANNUAL RPT	



LEGEND

MW-2	MONITORING WELL LOCATION	MW-16	MONITORING WELLS SAMPLED
IW-6	FORMER INJECTION WELL	(NL)	WELL NOT LOCATED
PZ-28	PIEZOMETER LOCATION	(ABD)	ABANDONED WELL
	STICKUP WELL COMPLETION	(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
	FLUSH-TO-GRADE WELL COMPLETION		HYDROGEOLOGICAL CROSS-SECTION TRACE LINES

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA"

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. THE ABONDONMENT OF IW-2 WAS HALTED IN DEC. 2013 AFTER THE DISCOVERY OF A NEARBY RHODIMET PIPELINE. THEREFORE, IW-2 IS CURRENTLY PARTIALLY ABANDONED. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014.

FIGURE 1-2:
HYDROGEOLOGICAL CROSS-SECTION TRACE MAP

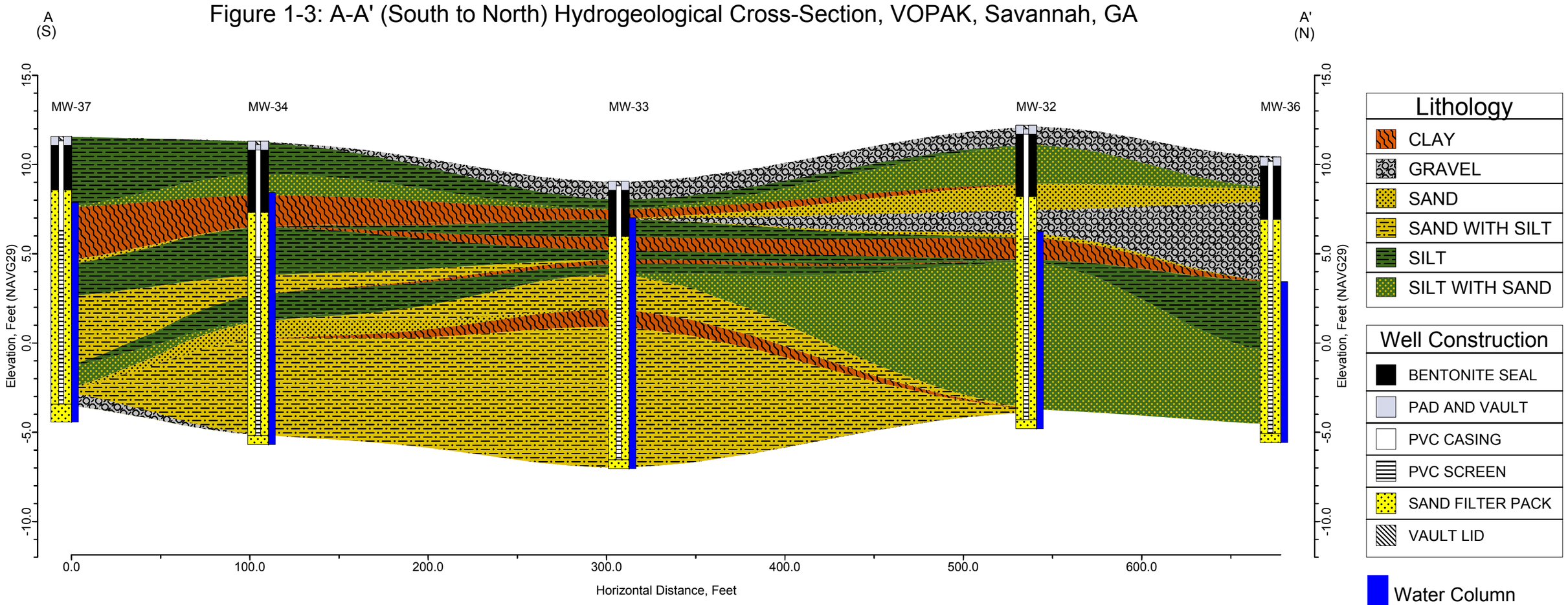
DESIGNED BY: A.S.	DRAWN BY: S.P.H.	CHECKED BY: A.S.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
SEAL:			

VOPAK TERMINAL SAVANNAH
P.O. BOX 7390
Savannah, Georgia 31418-7390

ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	06/23/2015	390031- GEOLOGIC CROSS-SECTION	

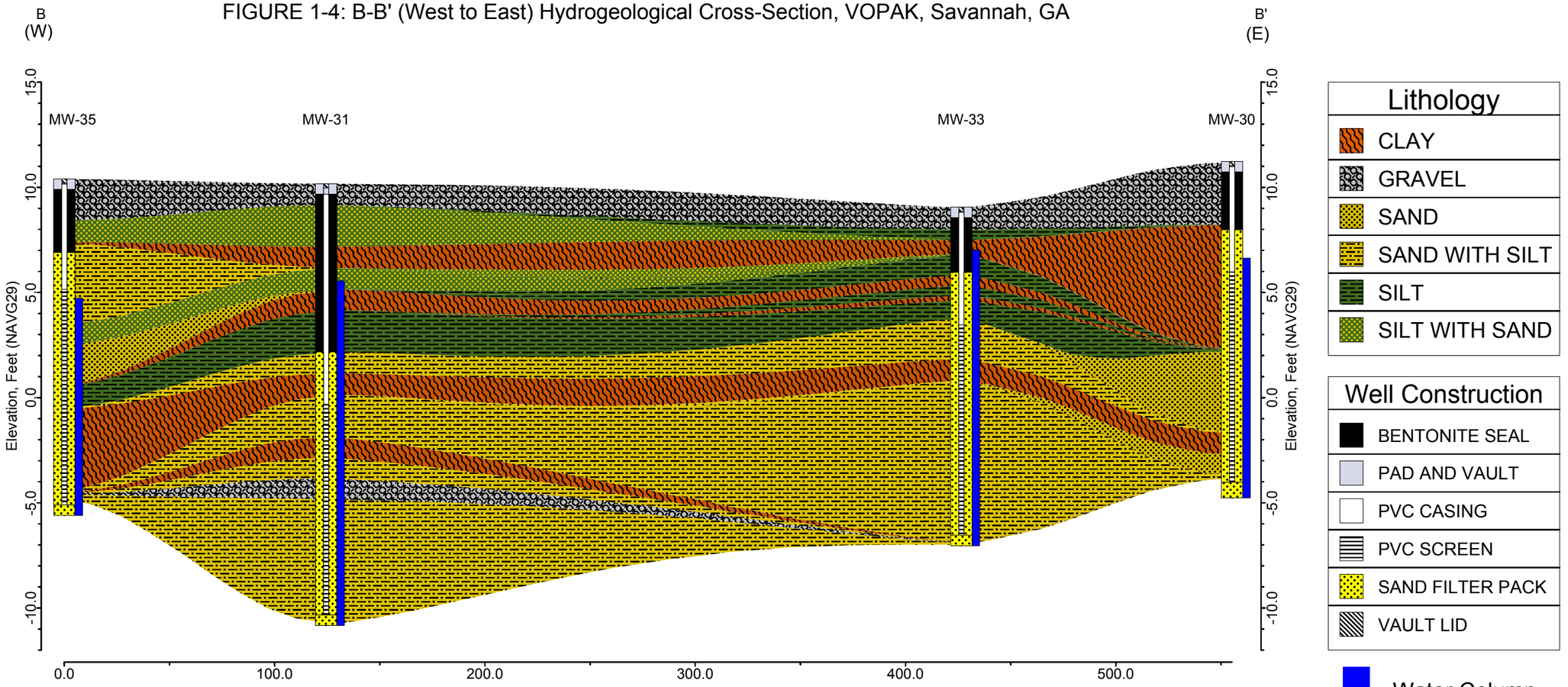
Figure 1-3: A-A' (South to North) Hydrogeological Cross-Section, VOPAK, Savannah, GA



NOTES:
Hydrogeological cross-section is based on lithological data logs recorded during well installation at the site by EIC. Extrapolated surfaces were derived utilizing Rockworks 2006 stratigraphy modeling software by Rockware. Well construction data is based on well construction logs recorded by EIC for each respective well. Groundwater elevation is based on EIC April 2014 gauging and is the highest recorded since October 2011.

VOPAK TERMINAL SAVANNAH P.O. BOX 7390 SAVANNAH, GEORGIA 31418-7390	EIC	SEAL:	DESIGNED BY:	S.F.H	DATE:	7/10/2014	FILE:	390031
			DRAWN BY:	S.F.H	REVISION:	DATE:	SHEET NO.:	1 of 1
ENVIRONMENTAL INTERNATIONAL CORPORATION 161 KIMBALL BRIDGE ROAD ALPHARETTA, GEORGIA 30009			CHECKED BY:	A.S.			VERTICAL EXAGERATION = 10X	
			APPROVED BY:	R.M.				

FIGURE 1-4: B-B' (West to East) Hydrogeological Cross-Section, VOPAK, Savannah, GA



Lithology

- CLAY
- GRAVEL
- SAND
- SAND WITH SILT
- SILT
- SILT WITH SAND

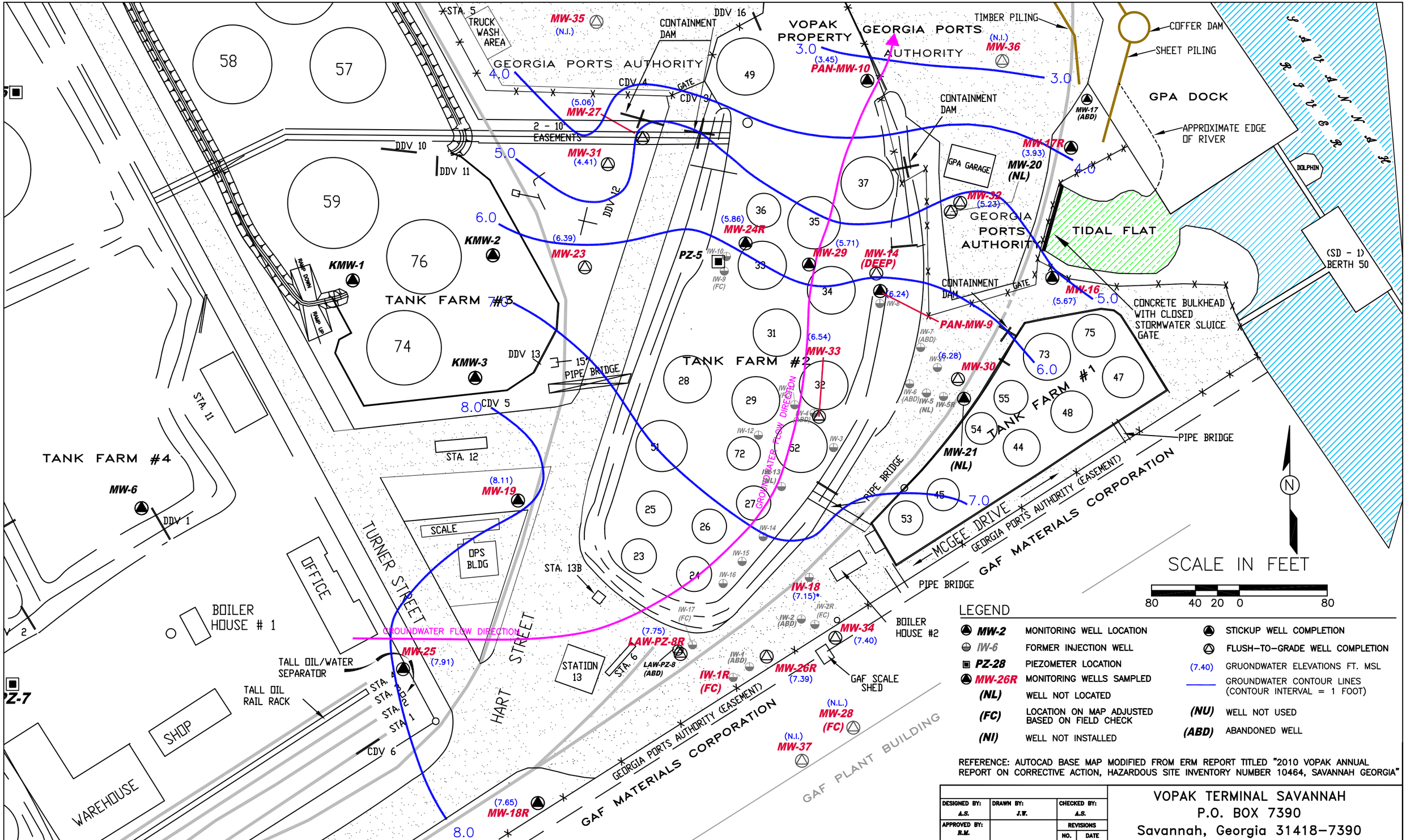
Well Construction

- BENTONITE SEAL
- PAD AND VAULT
- PVC CASING
- PVC SCREEN
- SAND FILTER PACK
- VAULT LID

Water Column (April 2014)

NOTES:
Hydrogeological cross-section is based on lithological data logs recorded during well installation at the site by EIC. Extrapolated surfaces were derived utilizing Rockworks 2006 stratigraphy modeling software by Rockware. Well construction data is based on well construction logs recorded by EIC for each respective well. Groundwater elevation is based on EIC April 2014 gauging and is the highest recorded since October 2011.

VOPAK TERMINAL SAVANNAH P.O. BOX 7390 SAVANNAH, GEORGIA 31418-7390	EIC	SEAL:	DESIGNED BY:	S.F.H	DATE:	7/22/2014	FILE:	390031
			DRAWN BY:	S.F.H	REVISION:	DATE:	SHEET NO.:	1 of 1
ENVIRONMENTAL INTERNATIONAL CORPORATION 161 KIMBALL BRIDGE ROAD ALPHARETTA, GEORGIA 30009			CHECKED BY:	A.S.			VERTICAL EXAGERATION = 10X	
			APPROVED BY:	R.M.				



LEGEND

MW-2	MONITORING WELL LOCATION		STICKUP WELL COMPLETION
IW-6	FORMER INJECTION WELL		FLUSH-TO-GRADE WELL COMPLETION
PZ-28	PIEZOMETER LOCATION	(7.40)	GRUONDWATER ELEVATIONS FT. MSL
MW-26R	MONITORING WELLS SAMPLED		GROUNDWATER CONTOUR LINES (CONTOUR INTERVAL = 1 FOOT)
(NL)	WELL NOT LOCATED	(NU)	WELL NOT USED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK	(ABD)	ABANDONED WELL
(NI)	WELL NOT INSTALLED		

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA"

NOTES:
ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC" WELLS, AND MW-15), IW-18, FENCE LINES BETWEEN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY.

FIGURE 1-5:
GROUNDWATER POTENTIOMETRIC SURFACE MAP
OCTOBER 25 - 27, 2011

DESIGNED BY:	DRAWN BY:	CHECKED BY:
A.S.	J.W.	A.S.
APPROVED BY: R.M.		REVISIONS NO. / DATE

SEAL:

VOPAK TERMINAL SAVANNAH
P.O. BOX 7390
Savannah, Georgia 31418-7390

ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	06/24/2015	390020 - 7TH MNA SAMPLING	

STA. 5
CONTAINMENT DAM
DDV 16
VOPAK PROPERTY
GEORGIA PORTS AUTHORITY
(3.35) PAN-MW-10
GEORGIA PORTS AUTHORITY
CONTAINMENT DAM
DOCK
CDV 4
GATE
CDV 3
(4.30) MW-27
2 - 10' EASEMENTS
DDV 10
DDV 11
MW-31 (3.92)
4.0
DDV 12
5.0
(5.71) MW-23
(5.22) MW-24R
(4.67) MW-29
MW-14 (DEEP) (NL)
(5.32) PAN-MW-9
(4.79) MW-17R
GPA GARAGE
MW-20 (NL)
(4.75) MW-32
GEORGIA PORTS AUTHORITY
TIDAL FLAT
DOLPHIN
(SD - 1) BERTH 50
KMW-2
KMW-1
PZ-5
IW-10
IW-9 (FC)
RAMP DOWN
RAMP UP
TANK FARM #3
6.0
KMW-3
DDV 13
15" PIPE BRIDGE
CDV 5
CONTAINMENT DAM
GATE
MW-16 (4.04)
4.0
CONCRETE BULKHEAD WITH STORMWATER SLUICE GATE
TANK FARM #2
(5.07) MW-33
(5.29) MW-30
MW-22 (FC) (NU)
TANK FARM #1
5.0
MW-21 (NL)
PIPE BRIDGE
STA. 11
TANK FARM #4
MW-6
DDV 1
7.0 STA. 12
(7.17) MW-19
SCALE
OPS BLDG
TURNER STREET
OFFICE
STA. 13B
PIPE BRIDGE
MCGEE DRIVE
GEORGIA PORTS AUTHORITY (EASEMENT)
6.0
GAF MATERIALS CORPORATION
MW-15 (NU) (FC)
IW-18 (6.22)
BOILER HOUSE # 1
(6.53) MW-34
BOILER HOUSE # 2
(7.12) MW-25
TALL OIL/WATER SEPARATOR
(6.78) LAW-PZ-8R
(5.41) MW-26R
STATION 13
STA. 6
TALL OIL RAIL RACK
STA. 4
STA. 3
STA. 2
STA. 1
HART STREET
GAF SCALE SHED
PZ-7
SHOP
CDV 6
7.0
MW-28 (NL)
WAREHOUSE
(6.76) MW-18R
GEORGIA PORTS AUTHORITY (EASEMENT)

SCALE IN FEET
80 40 20 0 80

LEGEND

MW-2	MONITORING WELL LOCATION
PZ-28	PIEZOMETER LOCATION
IW-6	FORMER INJECTION WELL
MW-15	WELLS SAMPLED
(NL)	WELL NOT LOCATED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
	STICKUP WELL COMPLETION
	FLUSH-TO-GRADE WELL COMPLETION
(6.53)	GROUNDWATER ELEVATIONS FT. MSL
7.0	GROUNDWATER CONTOUR LINES (CONTOUR INTERVAL = 1 FOOT)
(NU)	NOT USED DUE TO SEDIMENTS IN WELL
(ABD)	ABANDONED WELL

NOTES:
ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC" WELLS, AND MW-15), IW-18, FENCE LINES BETWEEN VOPAK AND GPA, GPA EASEMENT AND TANKS 32,34,37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. ON 6/30/2011

FIGURE 1-6:
GROUNDWATER POTENTIOMETRIC SURFACE MAP
JANUARY 21 – 24, 2013

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA"

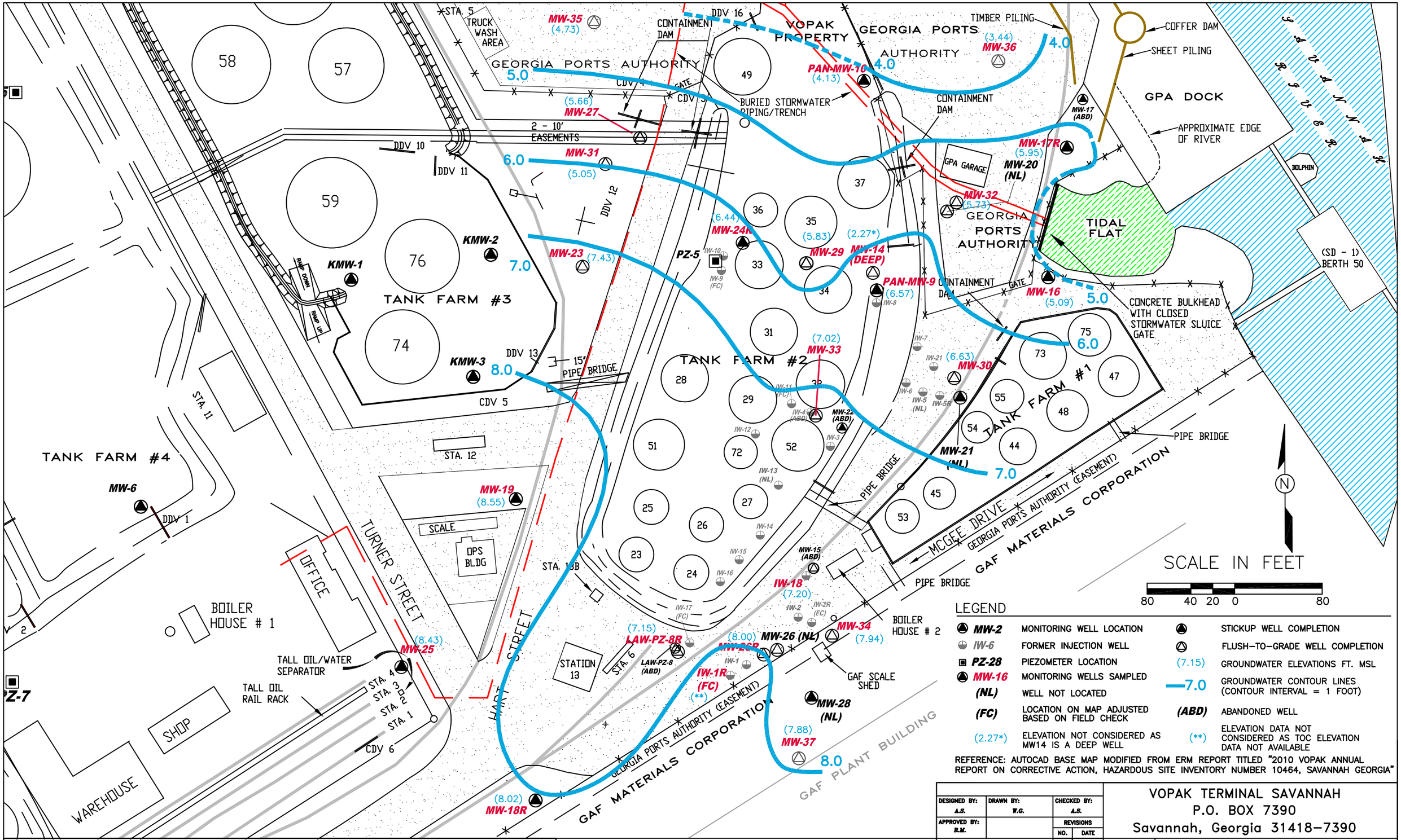
DESIGNED BY:	DRAWN BY:	CHECKED BY:
A.S.	S.K.	A.S.
APPROVED BY: R.M.		REVISIONS NO. / DATE

SEAL:

VOPAK TERMINAL SAVANNAH
P.O. BOX 7390
Savannah, Georgia 31418-7390

ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	02/15/2013	390020 - 6TH MNA SAMPLING	



LEGEND

MW-2	MONITORING WELL LOCATION		STICKUP WELL COMPLETION
IW-6	FORMER INJECTION WELL		FLUSH-TO-GRADE WELL COMPLETION
PZ-28	PIEZOMETER LOCATION	(7.15)	GROUNDWATER ELEVATIONS FT. MSL
MW-16	MONITORING WELLS SAMPLED	7.0	GROUNDWATER CONTOUR LINES (CONTOUR INTERVAL = 1 FOOT)
(NL)	WELL NOT LOCATED	(ABD)	ABANDONED WELL
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK	(**)	ELEVATION DATA NOT CONSIDERED AS TOC ELEVATION DATA NOT AVAILABLE
(2.27*)	ELEVATION NOT CONSIDERED AS MW14 IS A DEEP WELL		

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA"

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. THE ABONDONMENT OF IW-2 WAS HALTED IN DEC. 2013 AFTER THE DISCOVERY OF A NEARBY RHODIMET PIPELINE. THEREFORE, IW-2 IS CURRENTLY PARTIALLY ABANDONED. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014.

FIGURE 1-7:
GROUNDWATER POTENTIOMETRIC SURFACE MAP
APRIL 15-17, 2014

DESIGNED BY: A.S.	DRAWN BY: W.G.	CHECKED BY: A.S.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
SEAL:			

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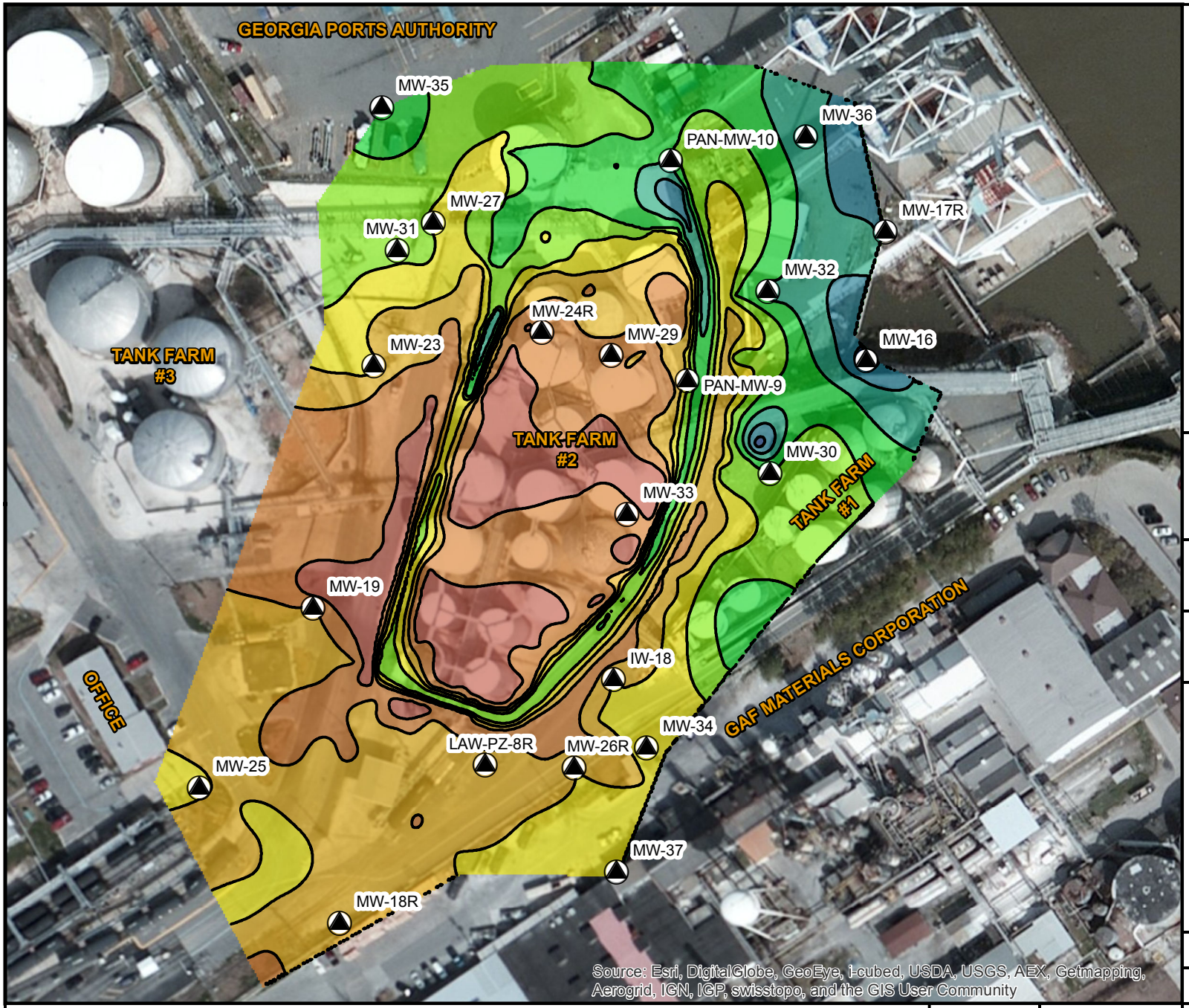
ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	05/2/2014	390020 - 11TH MNA SAMPLING	



Legend

Monitoring Wells

DEPTH TO GROUNDWATER BELOW GROUND SURFACE

0 - 1	5 - 6
1 - 2	6 - 7
2 - 3	7 - 8
3 - 4	8 - 9
4 - 5	9 - 10

N

50 0 50 100

Feet

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SAVANNAH, GEORGIA 31418-7390

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161 KIMBALL BRIDGE ROAD
ALPHARETTA, GEORGIA 30009

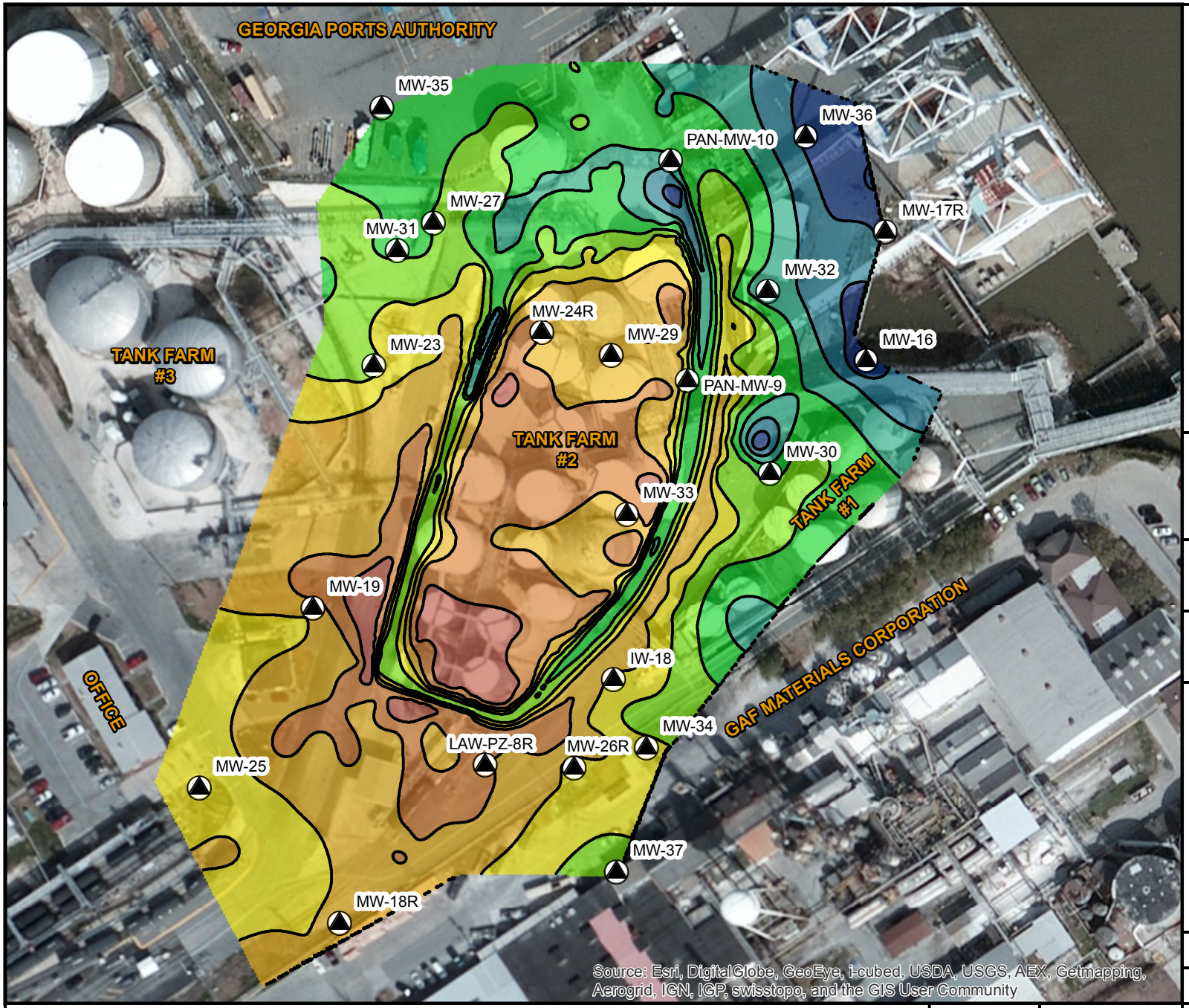
Source: Basemap aerial photograph is from ArcGIS Google Maps layer file. Topography elevation data derived from 2005 Topographic Survey Map by EMC Engineering Services and was converted to the NGVD 29 datum. Groundwater elevations are from EIC's April 2014 groundwater monitoring event. Depth to water below ground surface was estimated using ArcGIS's 3D Analyst software to interpolate and compute the difference between ground surface elevations and groundwater surface elevations. All elevations in the analysis were in the NGVD 29 datum.

Figure 1-8: Depth to Groundwater Below Ground Surface During Highest Recorded Groundwater Surface Elevation VOPAK Savannah Terminal, Savannah, GA

Seal:

Designed By: W.G.	Revision No.	Date
Drawn By: W.G.		
Checked By: A.S,		
Approved By: R.M.		
File: 390031	Sheet No.: 1 of 1	
Scale: See bar scale	Date: 7/24/2014	

Document Path: Z:\projects\1910 project-GA\290000 VOPAK\Savannah\390031 SCM\120 draft EIC reports\GW Vs. Elevation Analysis\GIS\GW Elevation vs. Ground Surface Map.mxd



Legend

Monitoring Wells

DEPTH TO GROUNDWATER BELOW GROUND SURFACE

0 - 1	5 - 6
1 - 2	6 - 7
2 - 3	7 - 8
3 - 4	8 - 9
4 - 5	9 - 10

N

50 0 50 100

Feet

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SAVANNAH, GEORGIA 31418-7390

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161 KIMBALL BRIDGE ROAD
ALPHARETTA, GEORGIA 30009

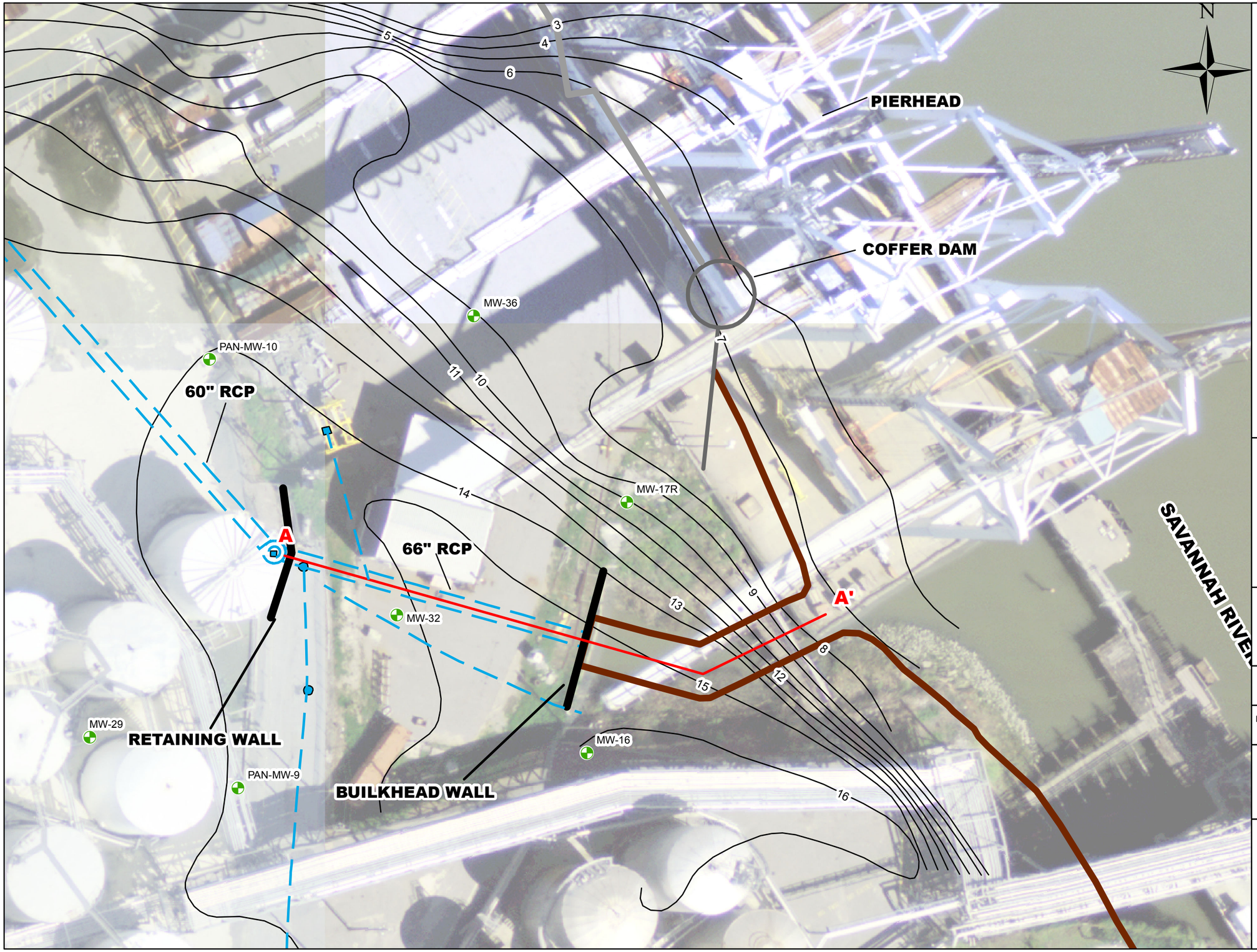
Source: Basemap aerial photograph is from ArcGIS Google Maps layer file. Topography elevation data derived from 2005 Topographic Survey Map by EMC Engineering Services and was converted to the NGVD 29 datum. Groundwater elevations are from EIC's January 2014 groundwater monitoring event. Depth to water below ground surface was estimated using ArcGIS's 3D Analyst software to interpolate and compute the difference between ground surface elevations and groundwater surface elevations. All elevations in the analysis were in the NGVD 29 datum.

Figure 1-9: Depth to Groundwater Below Ground Surface During Lowest Recorded Groundwater Surface Elevation VOPAK Savannah Terminal, Savannah, GA

Seal:

Designed By: W.G.	Revision No.	Date
Drawn By: W.G.		
Checked By: A.S,		
Approved By: R.M.		
File: 390031	Sheet No.: 1 of 1	
Scale: See bar scale	Date: 7/24/2014	

Document Path: Z:\projects\1910 project-GA\290000 VOPAK\Savannah\390031 SCM\120 draft EIC reports\GW Vs. Elevation Analysis\GIS\GW Elevation vs. Ground Surface Map.mxd



Legend

- CROSS SECTION TRACE
- PIERHEAD
- BULKHEAD
- STORMWATER FEATURES
- SHEETPILE
- HISTORICAL SHORELINE (1953)
- TOPOGRAPHICAL CONTOURS PRIOR TO DEVELOPMENT (1953) (1 FT INTERVAL)
- MONITORING WELL

REFERENCE: FEATURES DERIVED FROM GEORGIA PORTS AUTHORITY UTILITIES LAYOUT DRAWING BY ROBERT AND COMPANY 7/29/53 NUMBERED 00-45-007-031. TOPOGRAPHICAL CONTOURS ARE IN THE NVGD29 REFERENCE DATUM.

AERIAL PHOTS ARE FROM USGS AERIAL PHOTO DATABASE (2011).

RCP = Reinforced Concrete Pipe

0 20 40 80 Feet

DRAWN BY: S.F.H	CHECKED BY: A.S.	Date: 6/24/2015
DESIGNED BY: S.F.H	APPROVED BY: R.M.	Project Number: 390031

FIGURE 1-10: BULKHEAD MAP WITH CROSS SECTIONAL TRACE LINES

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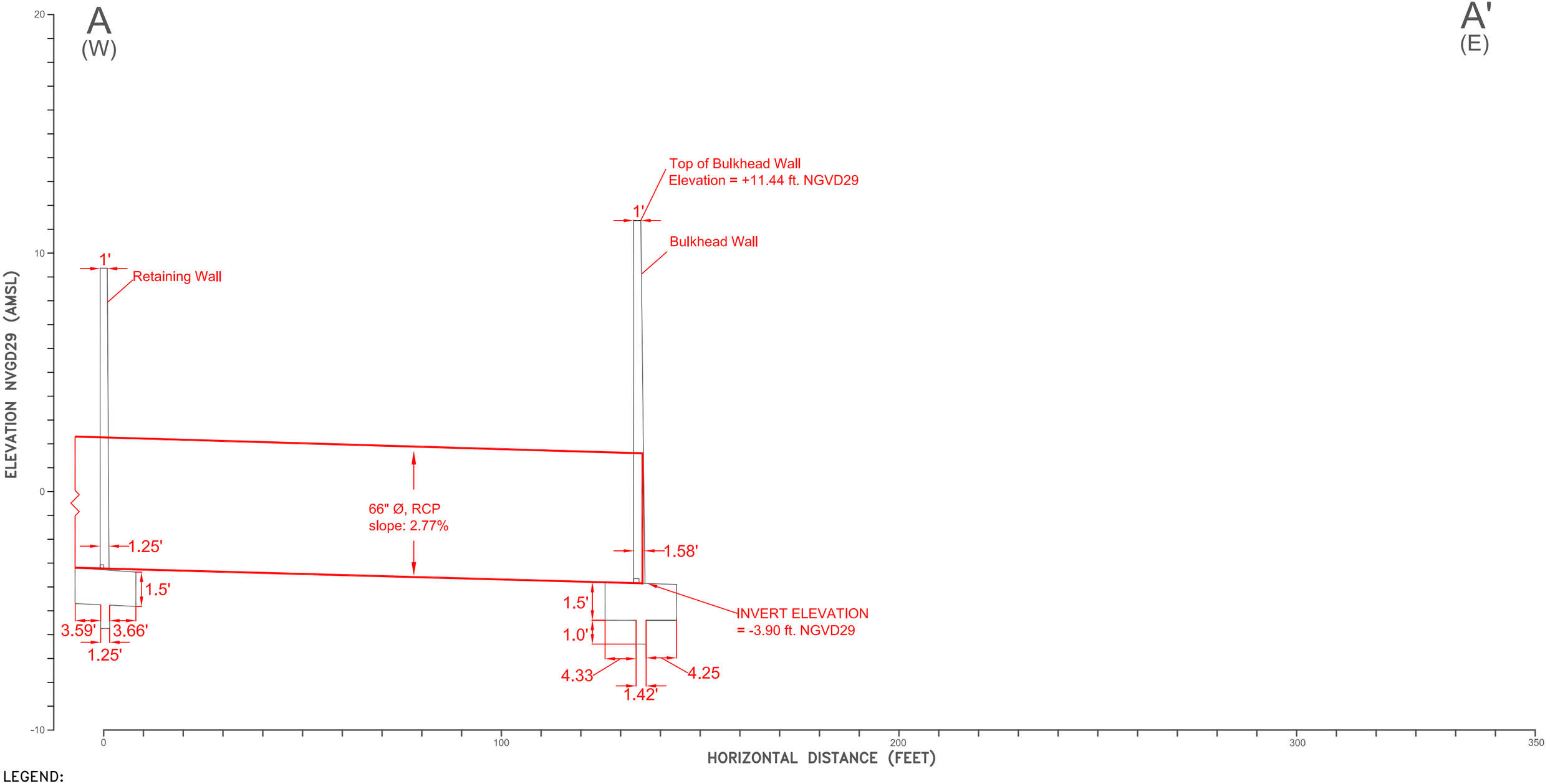

LEGEND:

STORMWATER PIPE

BULKHEAD

8.5' ANNOTATIONS

NOTES:
SURVEY ELEVATION OF EASTERN BULKHEAD FROM 2011 GEOGRAPHICAL SURVEY BY EMC ENGINEERING SERVICES. BULKHEAD DIMENSIONS WERE BASED ON GEORGIA PORTS AUTHORITY SAVANNAH PORTS FACILITIES DRAWING NO. 00-45-007-031 BY ROBERT AND COMPANY TITLED UTILITIES LAYOUT. ALL ELEVATIONS OF STORMWATER PIPE AND BULKHEAD ARE BASED ON COMPARISON OF 1953 AND 2004 SURVEY MAPS WITH BOTH SURVEYS MARKING THE ELEVATION OF THE TOP OF THE EASTERN BULKHEAD WALL.

FIGURE 1-11:
BULKHEAD CROSS SECTION DIAGRAM
VOPAK TERMINAL SAVANNAH, SAVANNAH, GA

DESIGNED BY:	DRAWN BY:	CHECKED BY:
D.V.	D.V.	W.G.
APPROVED BY:		REVISIONS NO. / DATE

SEAL:

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P.O. BOX 7390
Savannah, Georgia 31418-7390

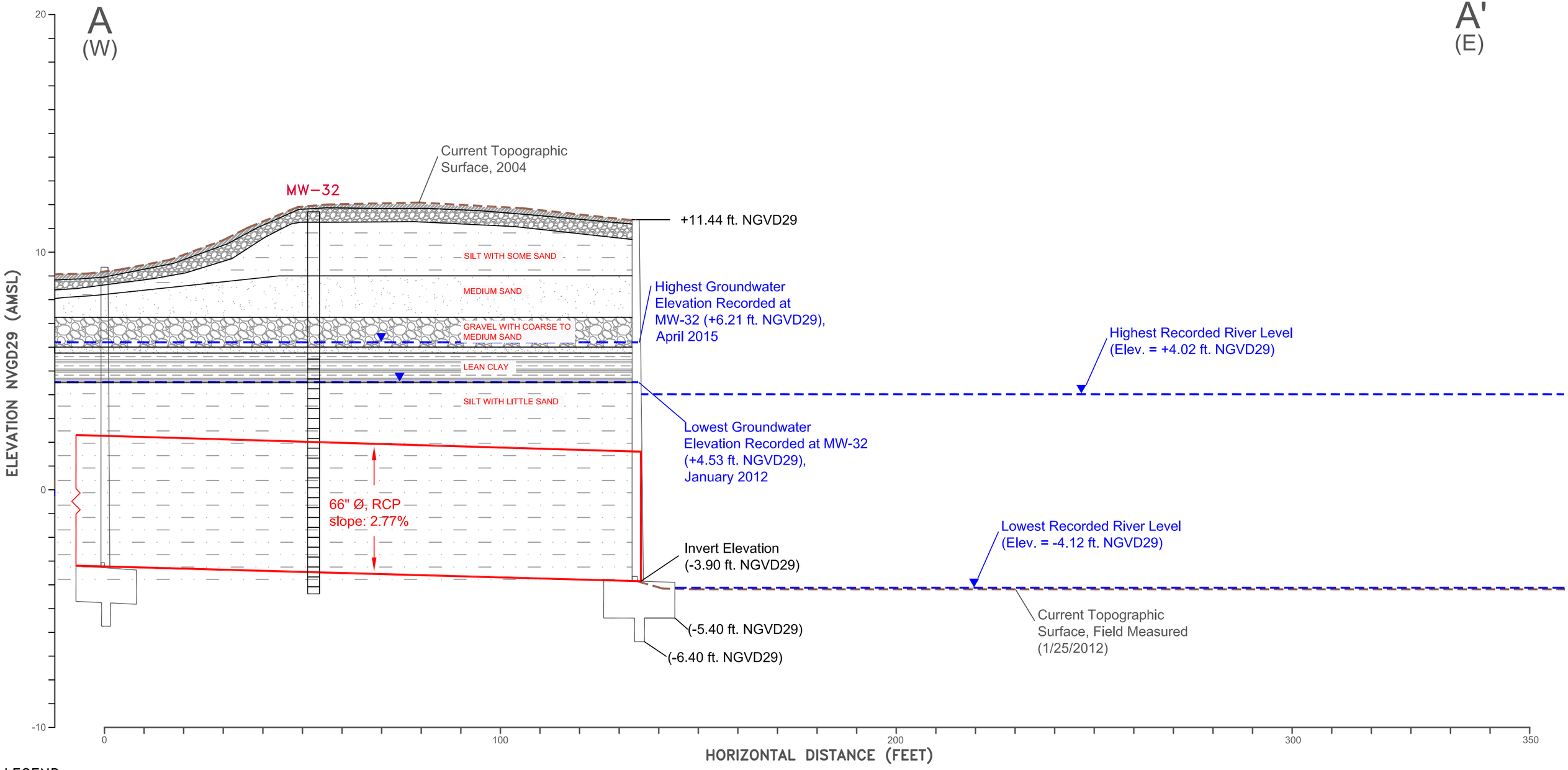
ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

VERTICAL EXAGGERATION: 3.33X

DATE: 06/23/2015

FILE: 390033 - SCM Bulkhead X-Section

SHEET NO.:



LEGEND:

- STORMWATER PIPE
- BULKHEAD
- GROUND SURFACE
- GROUNDWATER/ SURFACE WATER
- WELL SCREEN

NOTES:
CURRENT GROUND SURFACE ELEVATIONS ARE BASED ON 2004 TOPOGRAPHY SURVEY BY EMC ENGINEERING SERVICES AND WERE CONVERTED TO THE NGVD 29 VERTICAL DATUM. SURVEY ELEVATION OF EASTERN BULKHEAD FROM 2011 GEOGRAPHICAL SURVEY BY EMC ENGINEERING SERVICES. BULKHEAD DIMENSIONS WERE BASED ON GEORGIA PORTS AUTHORITY SAVANNAH PORTS FACILITIES DRAWING NO. 00–45–007–031 BY ROBERT AND COMPANY TITLED UTILITIES LAYOUT. ALL ELEVATIONS OF STORMWATER PIPE AND BULKHEAD ARE BASED ON COMPARISON OF 1953 AND 2004 SURVEY MAPS WITH BOTH SURVEYS MARKING THE ELEVATION OF THE TOP OF THE EASTERN BULKHEAD WALL. SURFACE WATER ELEVATIONS FOR SAVANNAH RIVER ARE DERIVED FROM EIC'S TIDAL INFLUENCE STUDY, CONDUCTED IN APRIL 2012. LITHOLOGY IS DERIVED FROM THE SOIL LOG FOR MONITORING WELL MW–32.

FIGURE 1–12:
BULKHEAD LITHOLOGICAL CROSS SECTION DIAGRAM
VOPAK TERMINAL SAVANNAH, SAVANNAH, GA

DESIGNED BY: D.V.	DRAWN BY: D.V.	CHECKED BY: W.G.
APPROVED BY:		REVISIONS NO. / DATE

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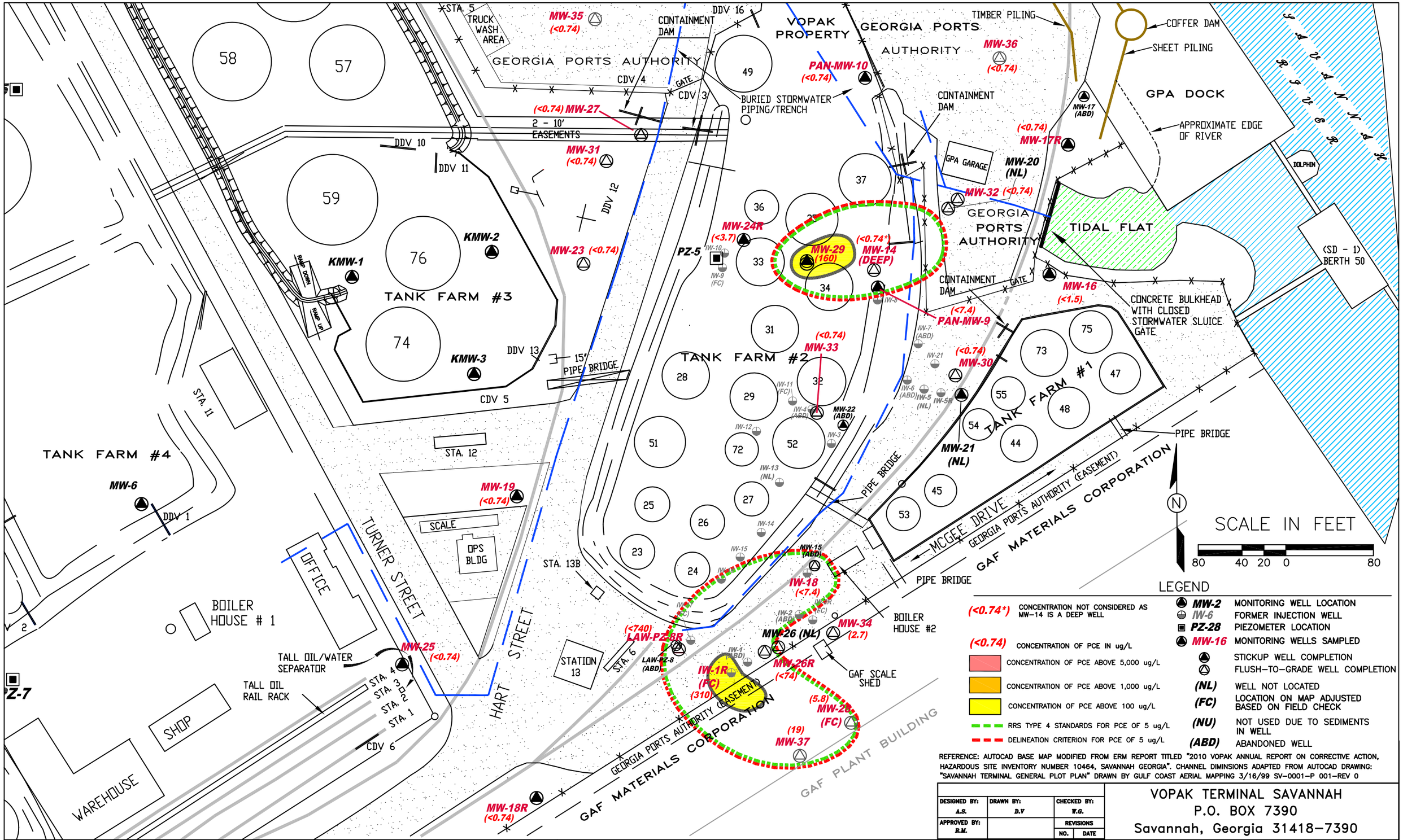
ALPHARETTA GEORGIA 30009

VERTICAL EXAGGERATION: 3.33X | DATE: 06/23/2015 | FILE: 390033 – SCM Bulkhead X-Section | SHEET NO.:



LEGEND

(<0.74*) CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL	MW-2 MONITORING WELL LOCATION
	IW-6 FORMER INJECTION WELL
	PZ-28 PIEZOMETER LOCATION
(<0.74) CONCENTRATION OF PCE IN ug/L	MW-16 MONITORING WELLS SAMPLED
CONCENTRATION OF PCE ABOVE 5,000 ug/L	STICKUP WELL COMPLETION
CONCENTRATION OF PCE ABOVE 1,000 ug/L	FLUSH-TO-GRADE WELL COMPLETION
CONCENTRATION OF PCE ABOVE 100 ug/L	(NL) WELL NOT LOCATED
RRS TYPE 4 STANDARDS FOR PCE OF 5 ug/L	(FC) LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
DELINEATION CRITERION FOR PCE OF 5 ug/L	(NU) NOT USED DUE TO SEDIMENTS IN WELL
	(ABD) ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 3-1:
PCE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE

SEAL:

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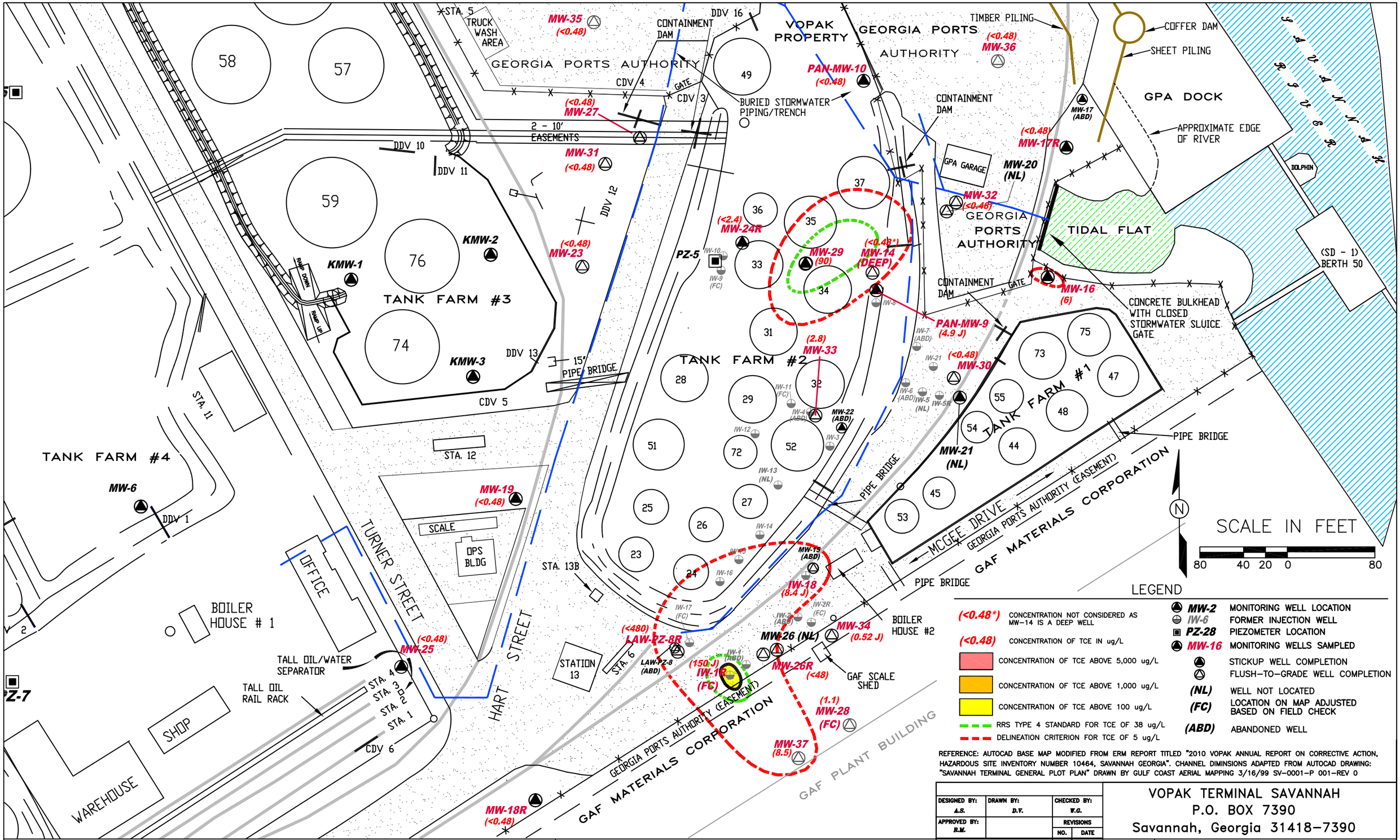
P.O. BOX 7390
Savannah, Georgia 31418-7390

ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE: SEE BAR SCALE | DATE: 04/16/2015 | FILE: 390020 - 8TH SEMI-ANNUAL RPT | SHEET NO.:



REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 3-2:
TCE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE

SEAL:

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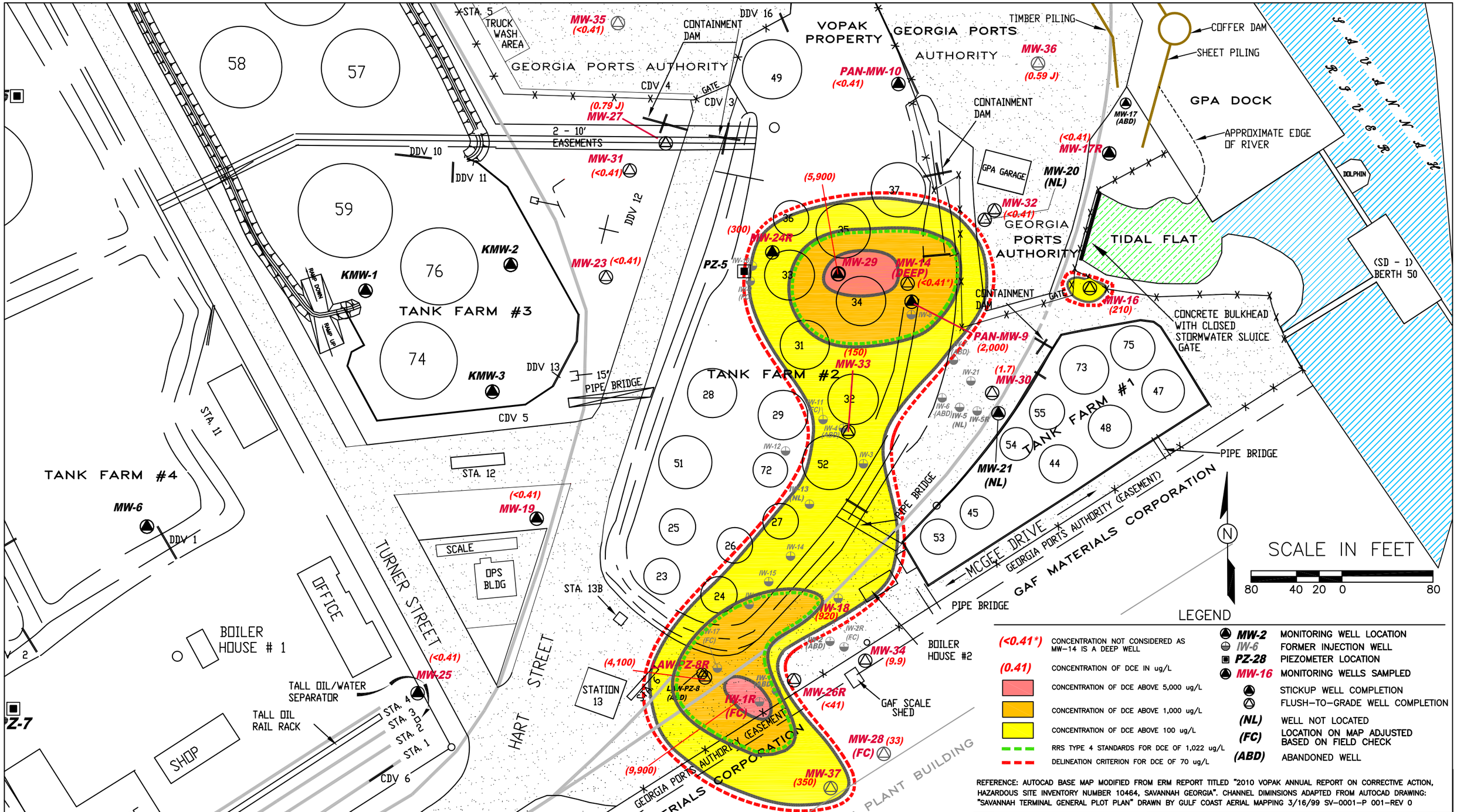
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	4/16/2015	390020 - 8TH SEMI-ANNUAL RPT	



REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 3-3:
CIS-1, 2 DCE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY:	DRAWN BY:	CHECKED BY:
A.S.	D.V	W.G.
APPROVED BY: R.M.		REVISIONS NO. / DATE

SEAL:

VOPAK TERMINAL SAVANNAH
P.O. BOX 7390
Savannah, Georgia 31418-7390

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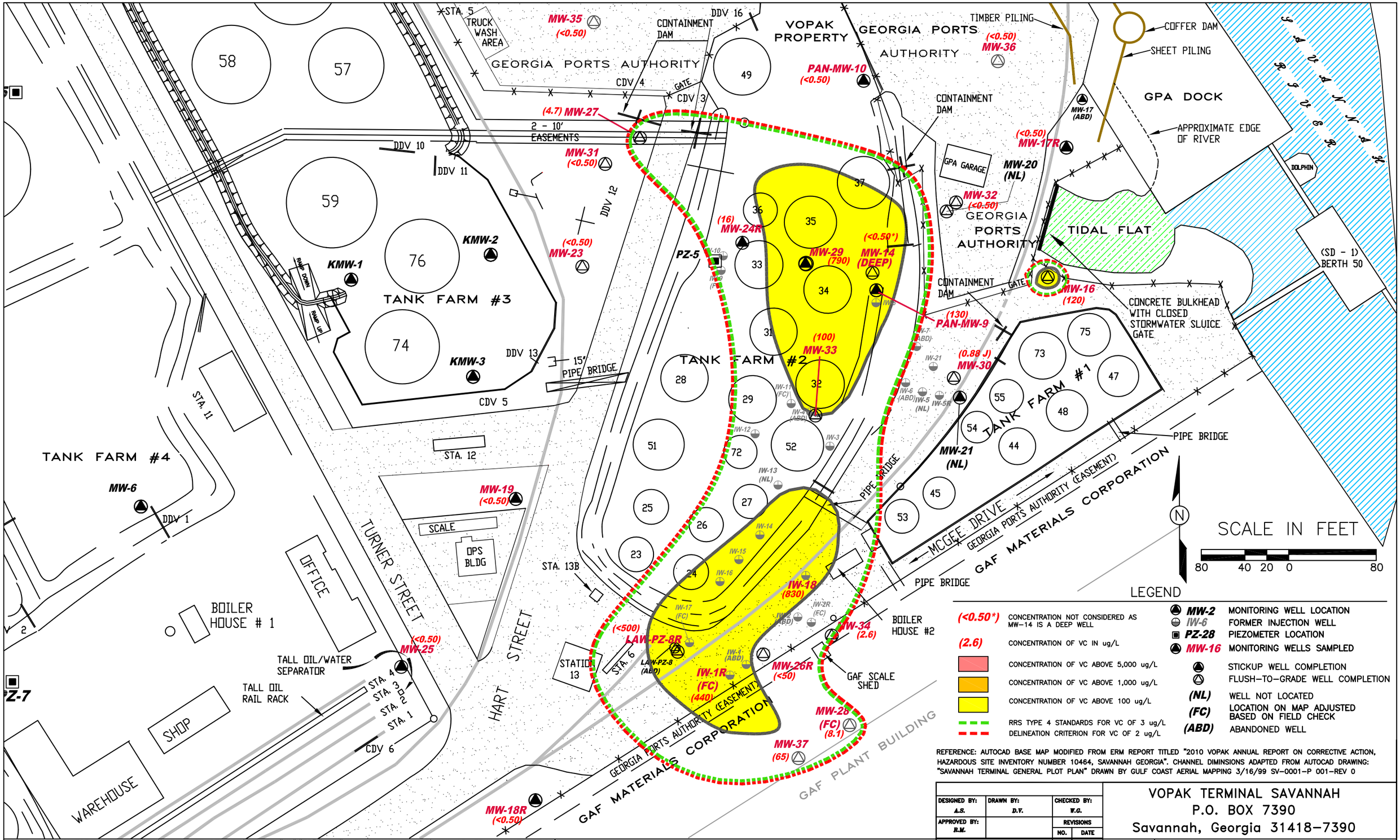
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/16/2015	390020 - 8TH SEMI-ANNUAL RPT	



REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 3-4:
VINYL CHLORIDE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE

SEAL:

VOPAK TERMINAL SAVANNAH
P.O. BOX 7390
Savannah, Georgia 31418-7390

ENVIRONMENTAL INTERNATIONAL CORP.
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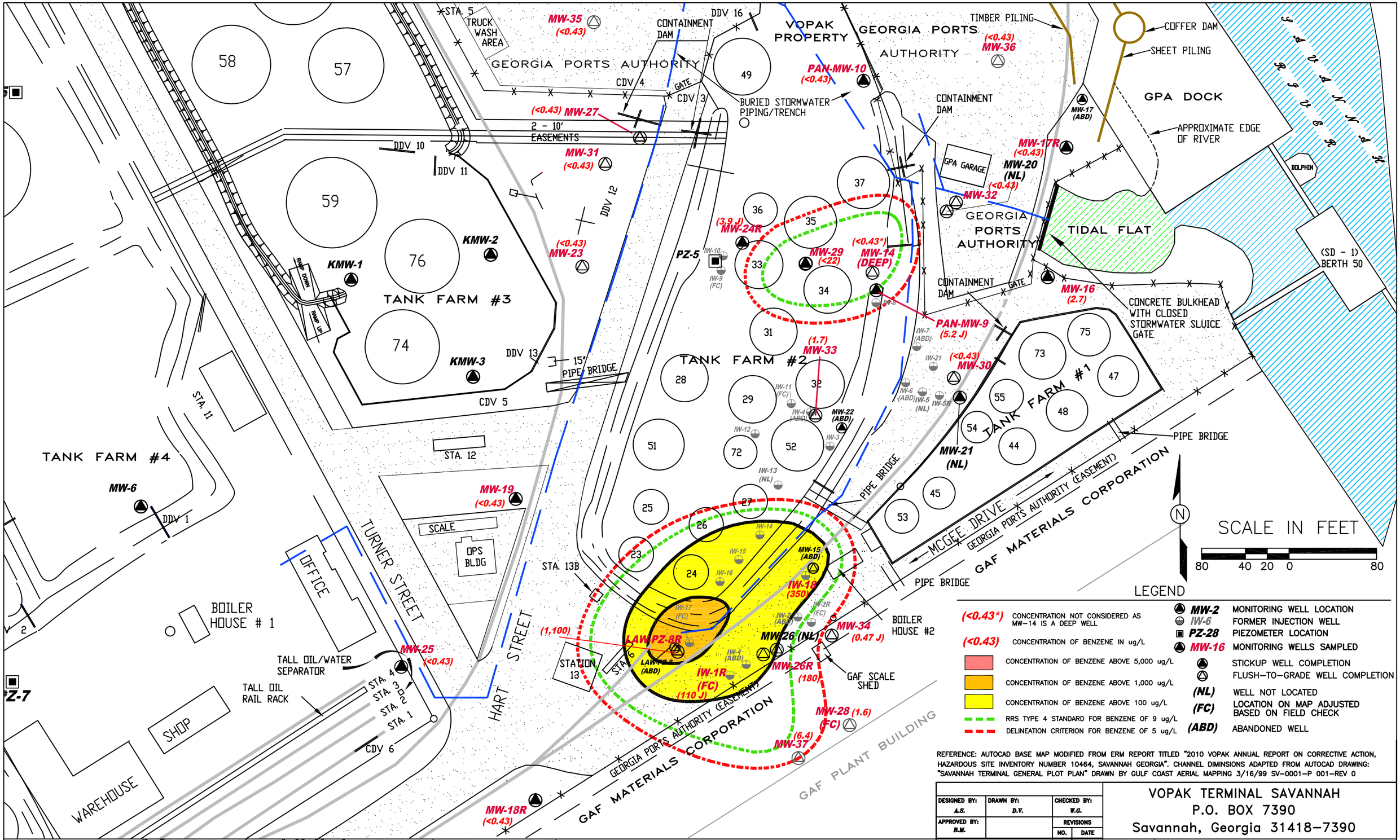
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/16/2015	390020 - 8TH SEMI-ANNUAL RPT	



LEGEND

(<0.43*)	CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL
(<0.43)	CONCENTRATION OF BENZENE IN ug/L
	CONCENTRATION OF BENZENE ABOVE 5,000 ug/L
	CONCENTRATION OF BENZENE ABOVE 1,000 ug/L
	CONCENTRATION OF BENZENE ABOVE 100 ug/L
	RRS TYPE 4 STANDARD FOR BENZENE OF 9 ug/L
	DELINEATION CRITERION FOR BENZENE OF 5 ug/L
MW-2	MONITORING WELL LOCATION
IW-6	FORMER INJECTION WELL
PZ-28	PIEZOMETER LOCATION
MW-16	MONITORING WELLS SAMPLED
	STICKUP WELL COMPLETION
	FLUSH-TO-GRADE WELL COMPLETION
(NL)	WELL NOT LOCATED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
(ABD)	ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 3-5:
BENZENE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
SEAL:			

VOPAK TERMINAL SAVANNAH
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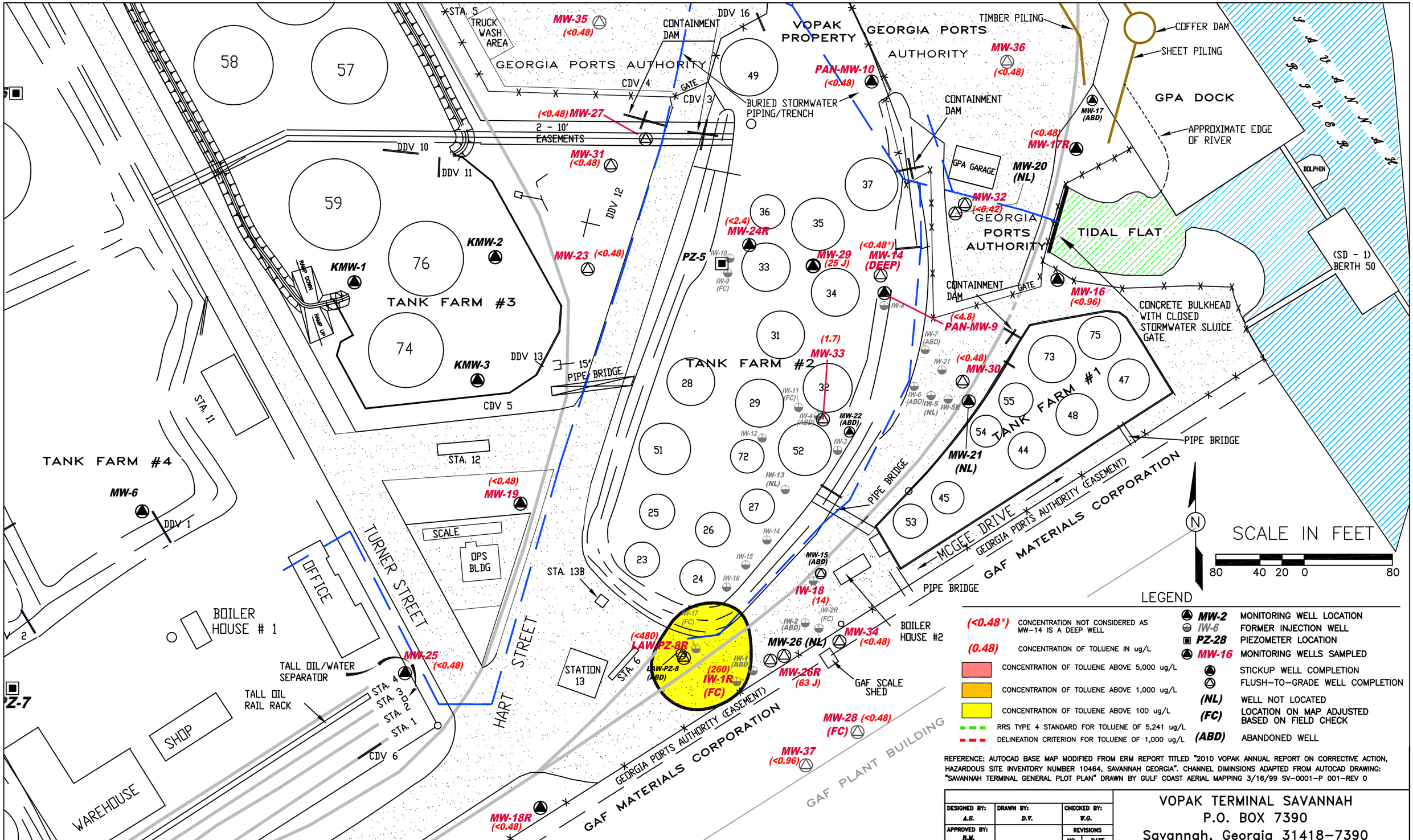
ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/16/2015	390020 - 8TH SEMI-ANNUAL RPT	



LEGEND

(<0.48*)	CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL
(0.48)	CONCENTRATION OF TOLUENE IN ug/L
	CONCENTRATION OF TOLUENE ABOVE 5,000 ug/L
	CONCENTRATION OF TOLUENE ABOVE 1,000 ug/L
	CONCENTRATION OF TOLUENE ABOVE 100 ug/L
	RRS TYPE 4 STANDARD FOR TOLUENE OF 5,241 ug/L
	DELINEATION CRITERION FOR TOLUENE OF 1,000 ug/L
MW-2	MONITORING WELL LOCATION
IW-6	FORMER INJECTION WELL
PZ-28	PIEZOMETER LOCATION
MW-16	MONITORING WELLS SAMPLED
	STICKUP WELL COMPLETION
	FLUSH-TO-GRADE WELL COMPLETION
(NL)	WELL NOT LOCATED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
(ABD)	ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 3-6:
TOLUENE ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
SEAL:			

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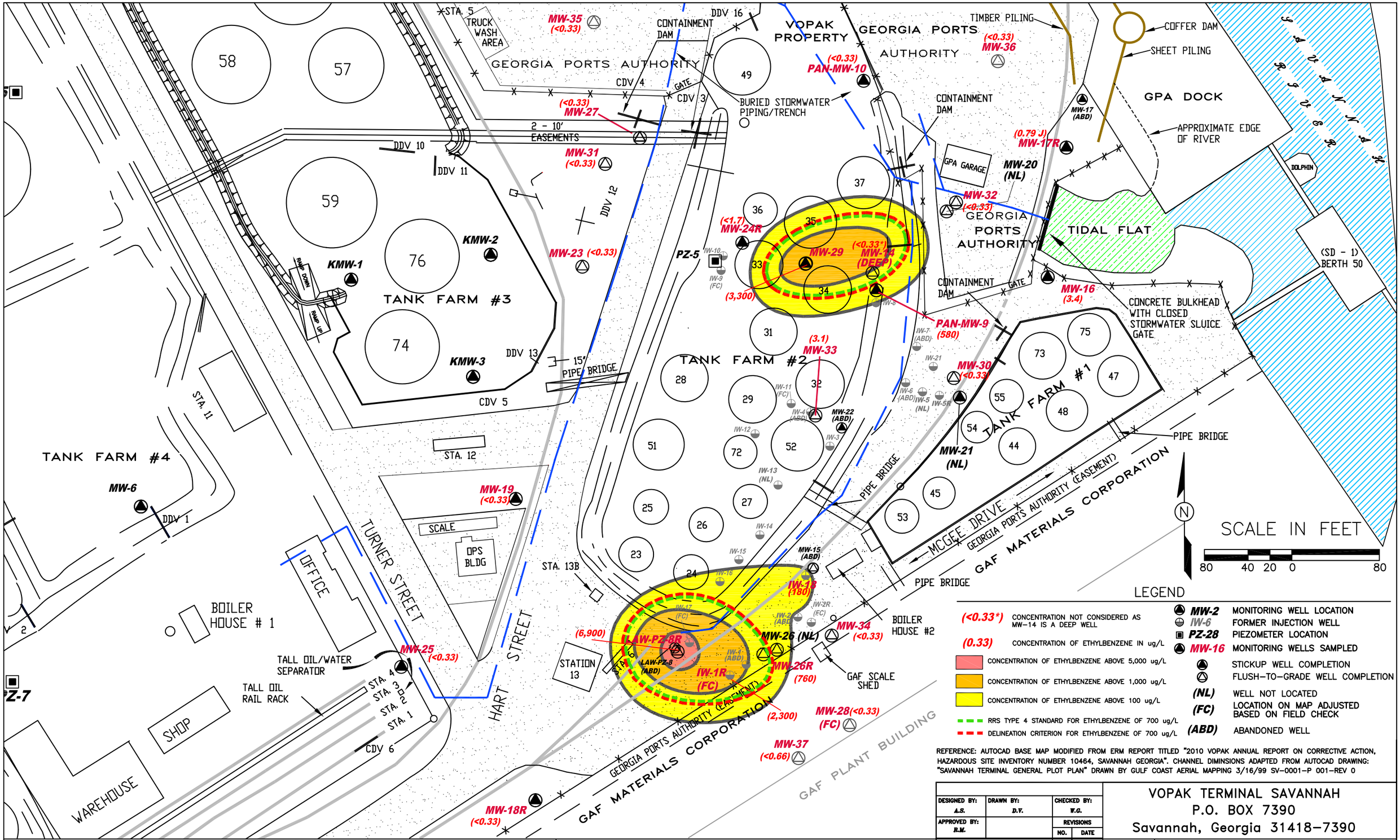
Savannah, Georgia 31418-7390

ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/16/2015	390020 - 8TH SEMI-ANNUAL RPT	



LEGEND

(<0.33*)	CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL
(0.33)	CONCENTRATION OF ETHYLBENZENE IN ug/L
	CONCENTRATION OF ETHYLBENZENE ABOVE 5,000 ug/L
	CONCENTRATION OF ETHYLBENZENE ABOVE 1,000 ug/L
	CONCENTRATION OF ETHYLBENZENE ABOVE 100 ug/L
	RRS TYPE 4 STANDARD FOR ETHYLBENZENE OF 700 ug/L
	DELINEATION CRITERION FOR ETHYLBENZENE OF 700 ug/L

MW-2	MONITORING WELL LOCATION
IW-6	FORMER INJECTION WELL
PZ-28	PIEZOMETER LOCATION
MW-16	MONITORING WELLS SAMPLED
	STICKUP WELL COMPLETION
	FLUSH-TO-GRADE WELL COMPLETION
(NL)	WELL NOT LOCATED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
(ABD)	ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 3-7:
ETHYLBENZENE ISOCONCENTTRAION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE

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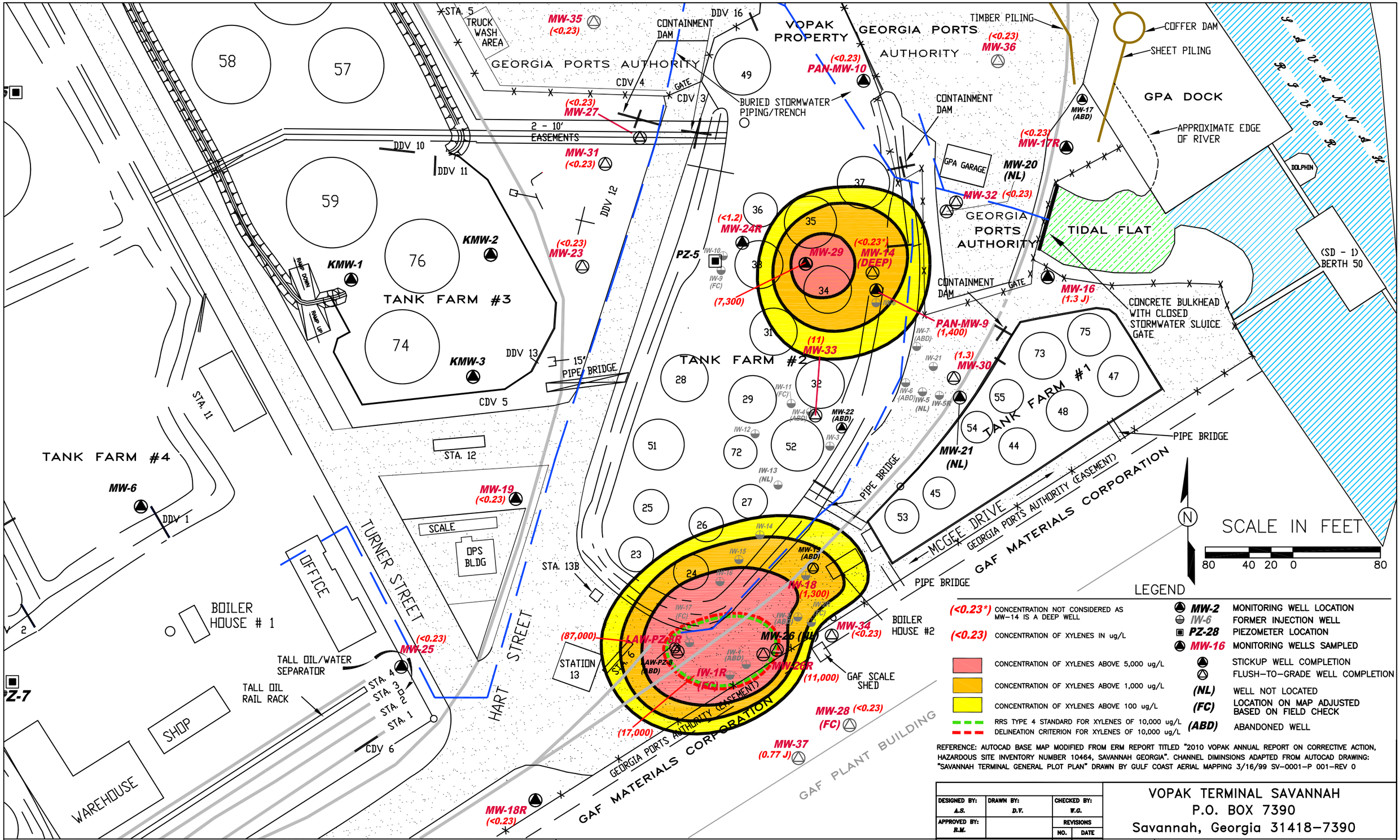
ALPHARETTA GEORGIA 30009

SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/16/2015	390020 - 8TH SEMI-ANNUAL RPT	



LEGEND

(<0.23*)	CONCENTRATION NOT CONSIDERED AS MW-14 IS A DEEP WELL
(<0.23)	CONCENTRATION OF XYLENES IN ug/L
	CONCENTRATION OF XYLENES ABOVE 5,000 ug/L
	CONCENTRATION OF XYLENES ABOVE 1,000 ug/L
	CONCENTRATION OF XYLENES ABOVE 100 ug/L
	RRS TYPE 4 STANDARD FOR XYLENES OF 10,000 ug/L
	DELINEATION CRITERION FOR XYLENES OF 10,000 ug/L

MW-2	MONITORING WELL LOCATION
IW-6	FORMER INJECTION WELL
PZ-28	PIEZOMETER LOCATION
MW-16	MONITORING WELLS SAMPLED
	STICKUP WELL COMPLETION
	FLUSH-TO-GRADE WELL COMPLETION
(NL)	WELL NOT LOCATED
(FC)	LOCATION ON MAP ADJUSTED BASED ON FIELD CHECK
(ABD)	ABANDONED WELL

REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA". CHANNEL DIMINSIONS ADAPTED FROM AUTOCAD DRAWING: "SAVANNAH TERMINAL GENERAL PLOT PLAN" DRAWN BY GULF COAST AERIAL MAPPING 3/16/99 SV-0001-P 001-REV 0

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014. MW-28 WAS DISCOVERED 10/16/2014 AND PLOTTED BASED ON FIELD MEASUREMENTS.

FIGURE 3-8:
TOTAL XYLENES ISOCONCENTRATION MAP
MARCH 30-APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: D.V.	CHECKED BY: W.G.	
APPROVED BY: R.M.		REVISIONS NO.	DATE

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SEAL:

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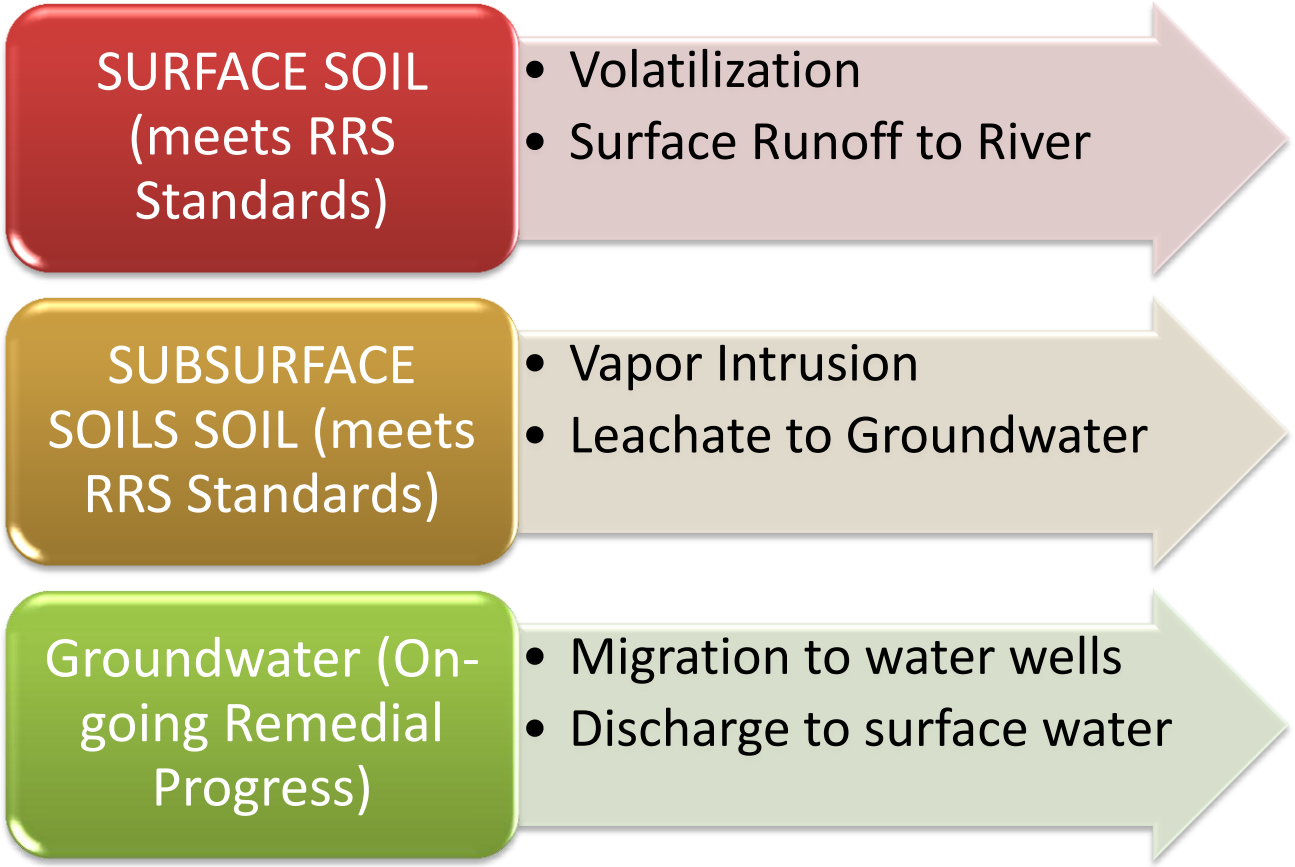
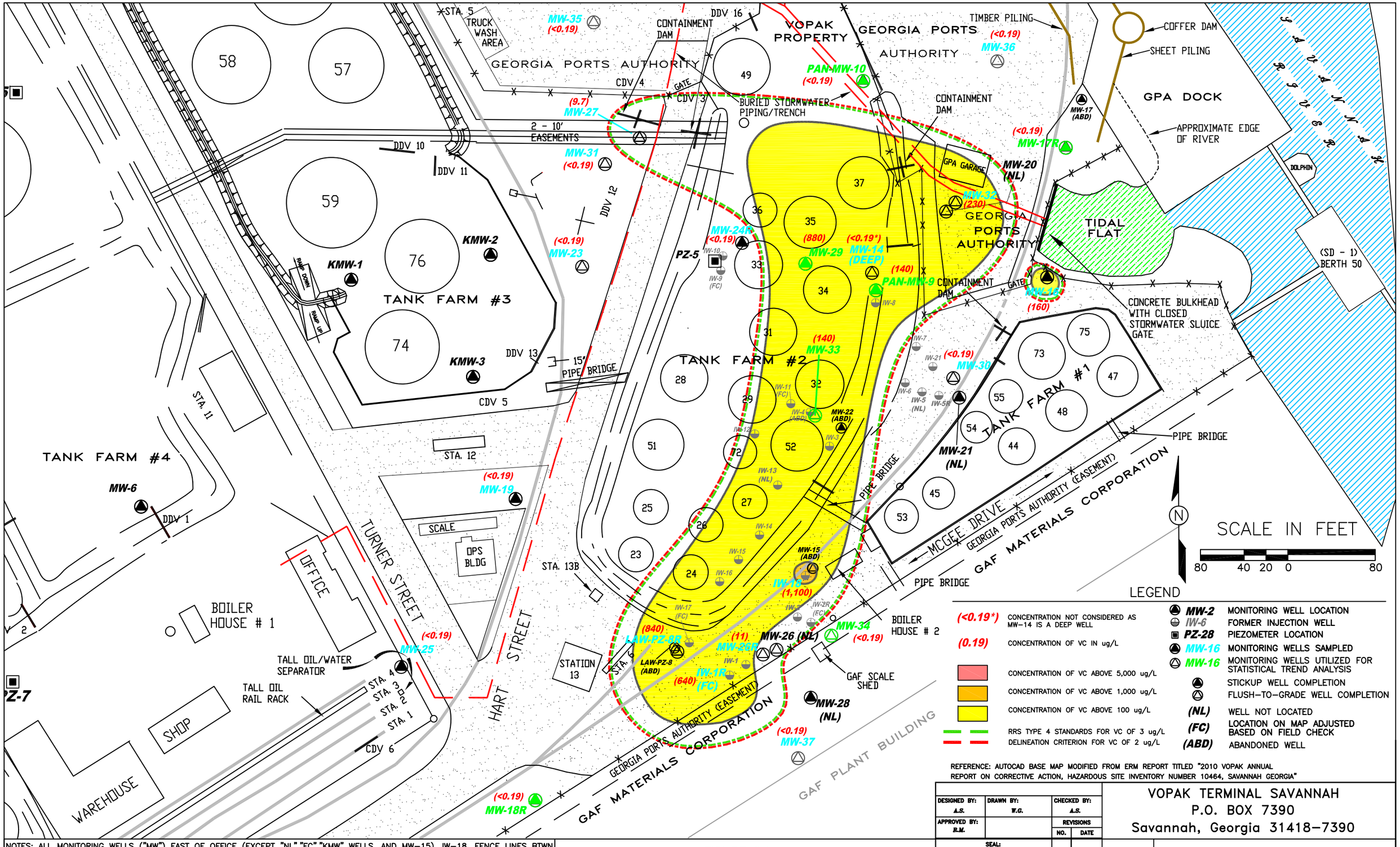
SCALE:	DATE:	FILE:	SHEET NO.:
SEE BAR SCALE	04/16/2015	390020 - 8TH SEMI-ANNUAL RPT	

Figure 4-1: Potential COC Migration Pathways





REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA"

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. THE ABONDONMENT OF IW-2 WAS HALTED IN DEC. 2013 AFTER THE DISCOVERY OF A NEARBY RHODIMET PIPELINE. THEREFORE, IW-2 IS CURRENTLY PARTIALLY ABANDONED. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014.

FIGURE 6-1a:

STATISTICAL TREND ANALYSIS WELL UTILIZATION WITH VINYL CHLORIDE PLUME MAP

APRIL 15-17, 2014

DESIGNED BY: A.S.	DRAWN BY: W.G.	CHECKED BY: A.S.	
APPROVED BY: R.M.		REVISIONS NO.	DATE
SEAL:		SCALE: SEE BAR SCALE	DATE: 07/25/2014

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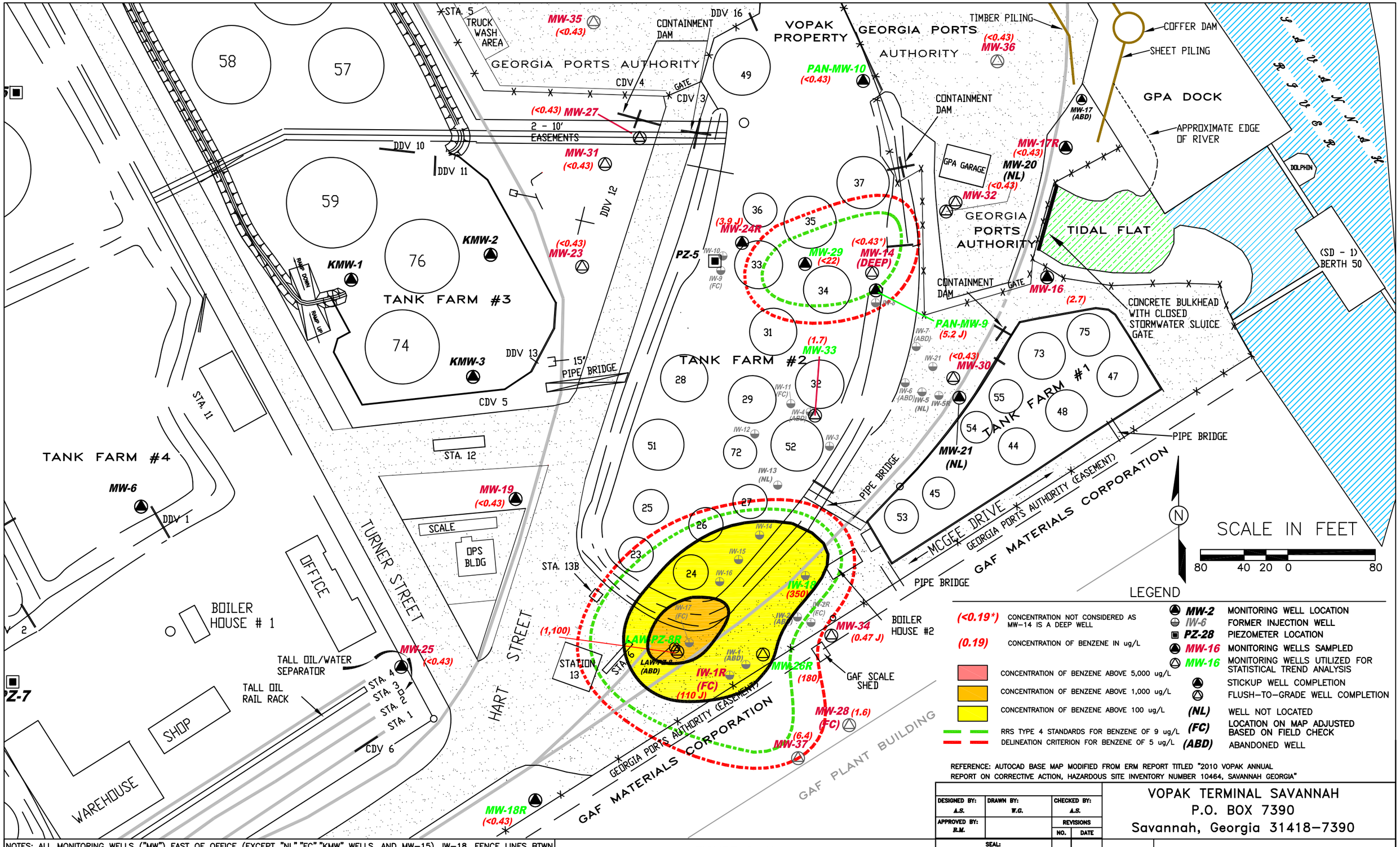
Savannah, Georgia 31418-7390

ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

FILE: 390031 - STAT. TREND ANALYSIS

SHEET NO.:



REFERENCE: AUTOCAD BASE MAP MODIFIED FROM ERM REPORT TITLED "2010 VOPAK ANNUAL REPORT ON CORRECTIVE ACTION, HAZARDOUS SITE INVENTORY NUMBER 10464, SAVANNAH GEORGIA"

NOTES: ALL MONITORING WELLS ("MW") EAST OF OFFICE (EXCEPT "NL","FC","KMW" WELLS, AND MW-15), IW-18, FENCE LINES BTWN VOPAK AND GPA, GPA EASEMENT AND TANKS 32, 34, 37, AND 52 WERE DRAWN BASED ON SURVEY CONDUCTED BY EMC ENGINEERING SERVICES, INC. (EMC) ON 6/30/2011. MONITORING WELLS, MW-14, MW-26R, MW-30, MW-33, AND INJECTION WELLS ("IW"), IW2-R, IW5-R, IW-6, IW-7, IW-8, AND IW-21 WERE ADJUSTED BASED ON SURVEY CONDUCTED BY EMC ON 1/24/2013. SHEET PILING, TIMBER PILING, STORMWATER PIPES AND RAIL ROAD FEATURES WERE DRAWN BASED ON AS-BUILT DRAWINGS PROVIDED BY THE GEORGIA PORTS AUTHORITY. THE ABONDONMENT OF IW-2 WAS HALTED IN DEC. 2013 AFTER THE DISCOVERY OF A NEARBY RHODIMET PIPELINE. THEREFORE, IW-2 IS CURRENTLY PARTIALLY ABANDONED. MW-35, MW-36, AND MW-37 WERE PLOTTED BASED ON SURVEY CONDUCTED BY EMC ON 1/20/2014.

FIGURE 6-1b:
STATISTICAL TREND ANALYSIS WELL UTILIZATION WITH BENZENE PLUME MAP
MARCH 30 – APRIL 2, 2015

DESIGNED BY: A.S.	DRAWN BY: W.G.	CHECKED BY: A.S.	
APPROVED BY: R.M.		REVISIONS NO.	DATE

VOPAK TERMINAL SAVANNAH
P.O. BOX 7390
Savannah, Georgia 31418-7390

SEAL:

ENVIRONMENTAL INTERNATIONAL CORP.
161 KIMBALL BRIDGE ROAD
ALPHARETTA GEORGIA 30009

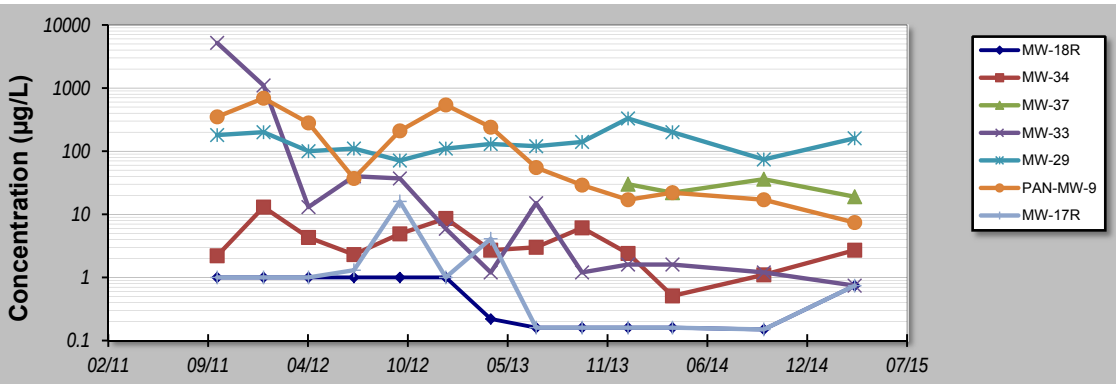
SCALE: SEE BAR SCALE | DATE: 06/24/2015 | FILE: 390031 - STAT. TREND ANALYSIS | SHEET NO.:

Figure 6-2: PCE Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	PCE
Conducted By:	EIC	Concentration Units:	µg/L

Sampling Point ID:	MW-18R	MW-34	MW-37	MW-33	MW-29	PAN-MW-9	MW-17R
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	2-Oct-11	1	2.2	not installed	5200	180	350	1
2	3-Jan-12	1	13	not installed	1100	200	690	1
3	2-Apr-12	1	4.3	not installed	13	100	280	1
4	2-Jul-12	1	2.3	not installed	40	110	37	1.3
5	2-Oct-12	1	4.9	not installed	37	71	210	16
6	2-Jan-13	1	8.6	not installed	5.9	110	540	1
7	2-Apr-13	0.22	2.7	not installed	1.2	130	240	4.1
8	2-Jul-13	0.16	3	not installed	15	120	55	0.16
9	2-Oct-13	0.16	6.1	not installed	1.2	140	29	0.16
10	2-Jan-14	0.16	2.4	30	1.6	330	17	0.16
11	1-Apr-14	0.16	0.51	22	1.6	200	22	0.16
12	1-Oct-14	0.15	1.1	36	1.2	74	17	0.15
13	1-Apr-15	0.74	2.7	19	0.74	160	7.4	0.74
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.70	0.83	0.29	2.93	0.47	1.16	2.08
Mann-Kendall Statistic (S):		-45	-19	-2	-56	12	-57	-32
Confidence Factor:		99.8%	86.1%	62.5%	>99.9%	74.5%	>99.9%	97.1%
Concentration Trend:		Decreasing	Stable	Stable	Decreasing	No Trend	Decreasing	Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

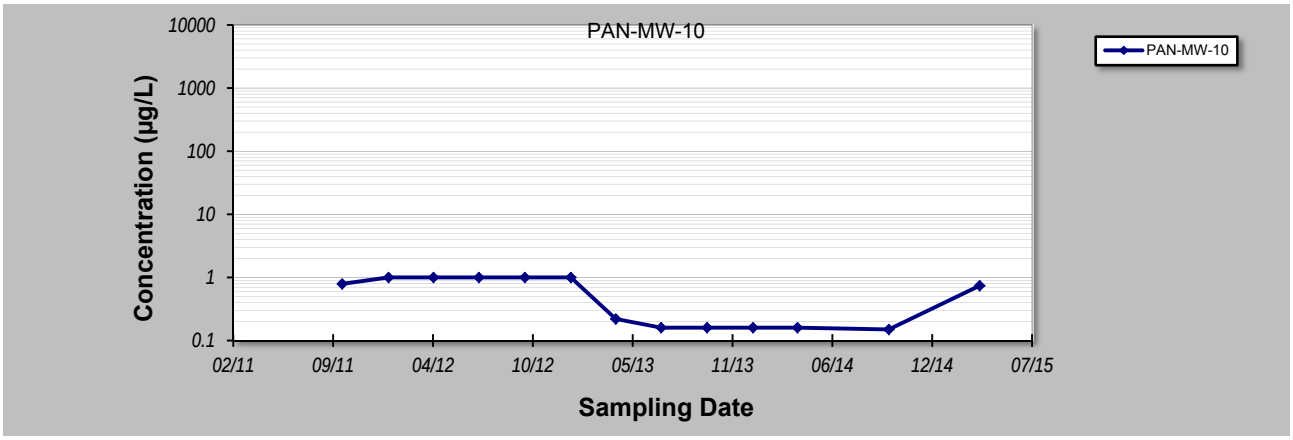
Figure 6-2: PCE Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	PCE
Conducted By:	EIC	Concentration Units:	µg/L

Sampling Point ID: **PAN-MW-10**

Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)
1	2-Oct-11	0.79
2	3-Jan-12	1
3	2-Apr-12	1
4	2-Jul-12	1
5	2-Oct-12	1
6	2-Jan-13	1
7	2-Apr-13	0.22
8	2-Jul-13	0.16
9	2-Oct-13	0.16
10	2-Jan-14	0.16
11	1-Apr-14	0.16
12	1-Oct-14	0.15
13	1-Apr-15	0.74
14		
15		
16		
17		
18		
19		
20		
Coefficient of Variation:		0.70
Mann-Kendall Statistic (S):		-40
Confidence Factor:		99.3%
Concentration Trend:		Decreasing



Notes:

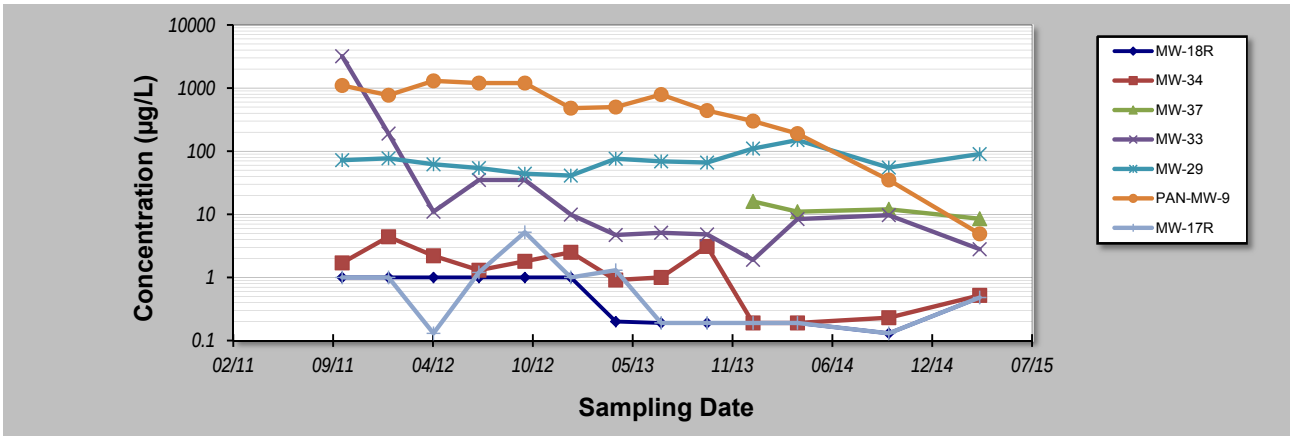
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

Figure 6-3: TCE Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	TCE
Conducted By:	EIC	Concentration Units:	µg/L

Sampling Point ID:	MW-18R	MW-34	MW-37	MW-33	MW-29	PAN-MW-9	MW-17R
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	2-Oct-11	1	1.7	Not Installed	3200	72	1100	1
2	3-Jan-12	1	4.4	Not Installed	190	77	770	1
3	2-Apr-12	1	2.2	Not Installed	11	62	1300	0.13
4	2-Jul-12	1	1.3	Not Installed	35	54	1200	1.2
5	2-Oct-12	1	1.8	Not Installed	35	44	1200	5.2
6	2-Jan-13	1	2.5	Not Installed	9.9	41	480	1
7	2-Apr-13	0.20	0.91	Not Installed	4.7	76	500	1.3
8	2-Jul-13	0.19	1	Not Installed	5.1	69	790	0.19
9	2-Oct-13	0.19	3.1	Not Installed	4.8	66	440	0.19
10	2-Jan-14	0.19	0.19	16	1.9	110	300	0.19
11	1-Apr-14	0.19	0.19	11	8.4	150	190	0.19
12	1-Oct-14	0.13	0.23	12	9.7	55	35	0.13
13	1-Apr-15	0.48	0.52	8.5	2.8	90	4.9	0.48
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.71	0.82	0.26	3.26	0.39	0.71	1.45
Mann-Kendall Statistic (S):		-45	-35	-4	-49	14	-57	-22
Confidence Factor:		99.8%	98.2%	83.3%	99.9%	78.2%	>99.9%	89.8%
Concentration Trend:		Decreasing	Decreasing	Stable	Decreasing	No Trend	Decreasing	No Trend



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

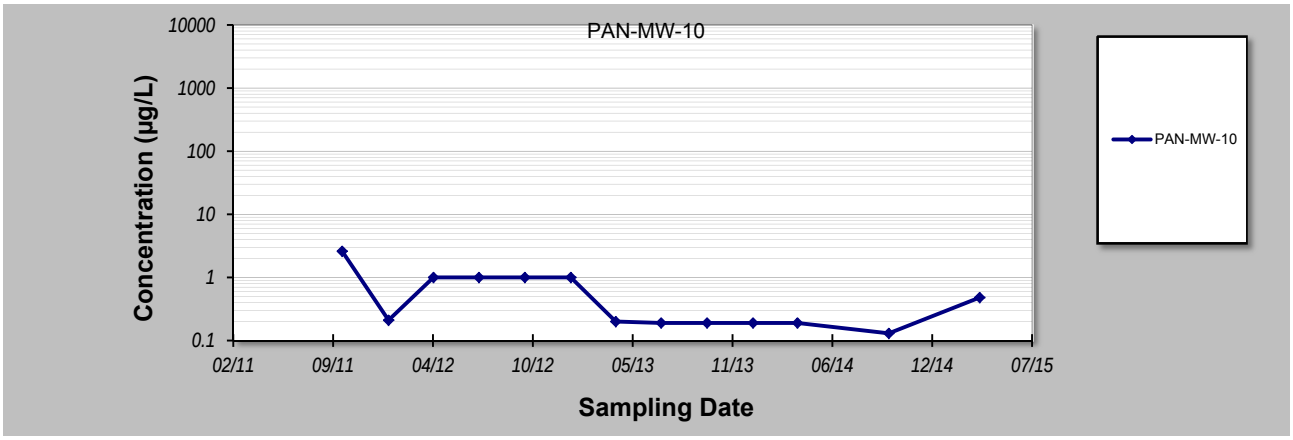
Figure 6-3: TCE Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	TCE
Conducted By:	EIC	Concentration Units:	µg/L

Sampling Point ID: **PAN-MW-10**

Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)
1	2-Oct-11	2.6
2	3-Jan-12	0.21
3	2-Apr-12	1
4	2-Jul-12	1
5	2-Oct-12	1
6	2-Jan-13	1
7	2-Apr-13	0.2
8	2-Jul-13	0.19
9	2-Oct-13	0.19
10	2-Jan-14	0.19
11	1-Apr-14	0.19
12	1-Oct-14	0.13
13	1-Apr-15	0.48
14		
15		
16		
17		
18		
19		
20		
Coefficient of Variation:		1.08
Mann-Kendall Statistic (S):		-44
Confidence Factor:		99.7%
Concentration Trend:		Decreasing



Notes:

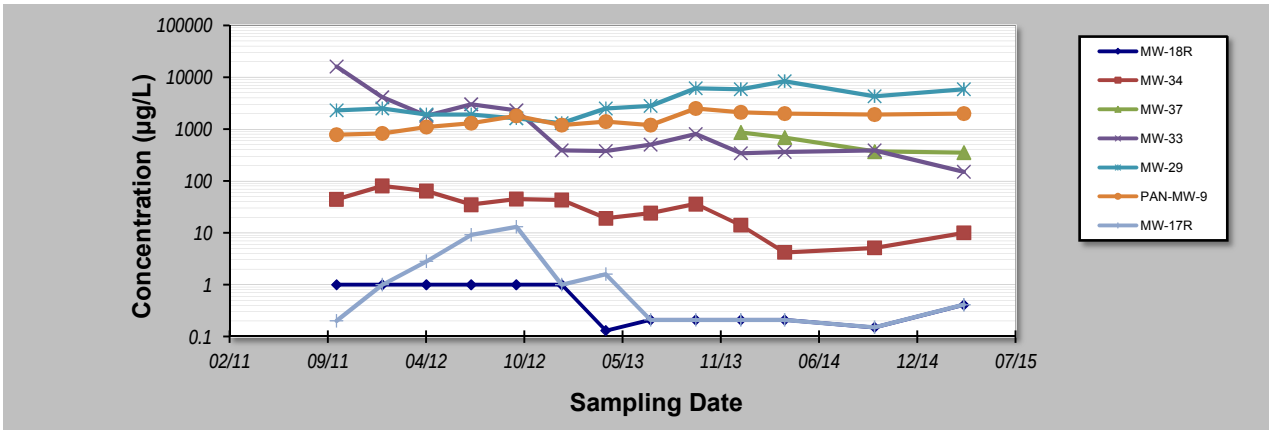
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

Figure 6-4: DCE Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	DCE
Conducted By:	EIC	Concentration Units:	µg/L

Sampling Point ID:	MW-18R	MW-34	MW-37	MW-33	MW-29	PAN-MW-9	MW-17R
Sampling Event	Sampling Date	DCE CONCENTRATION (µg/L)						
1	2-Oct-11	1	44	Not Installed	16000	2300	780	0.20
2	3-Jan-12	1	80	Not Installed	4100	2500	820	1
3	2-Apr-12	1	64	Not Installed	1800	1900	1100	2.8
4	2-Jul-12	1	35	Not Installed	3000	1900	1300	9.2
5	2-Oct-12	1	45	Not Installed	2300	1600	1800	13
6	2-Jan-13	1	43	Not Installed	390	1300	1200	1
7	2-Apr-13	0.13	19	Not Installed	380	2500	1400	1.6
8	2-Jul-13	0.21	24	Not Installed	500	2800	1200	0.21
9	2-Oct-13	0.21	36	Not Installed	800	6100	2500	0.21
10	2-Jan-14	0.21	14	860	340	5900	2100	0.21
11	1-Apr-14	0.21	4.2	690	360	8400	2000	0.21
12	1-Oct-14	0.15	5.1	370	390	4300	1900	0.15
13	1-Apr-15	0.41	9.9	350	150	5900	2000	0.41
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.71	0.71	0.44	1.83	0.61	0.35	1.74
Mann-Kendall Statistic (S):		-35	-54	-6	-55	37	48	-23
Confidence Factor:		98.2%	>99.9%	95.8%	>99.9%	98.7%	99.9%	90.8%
Concentration Trend:		Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing	Prob. Decreasing



Notes:

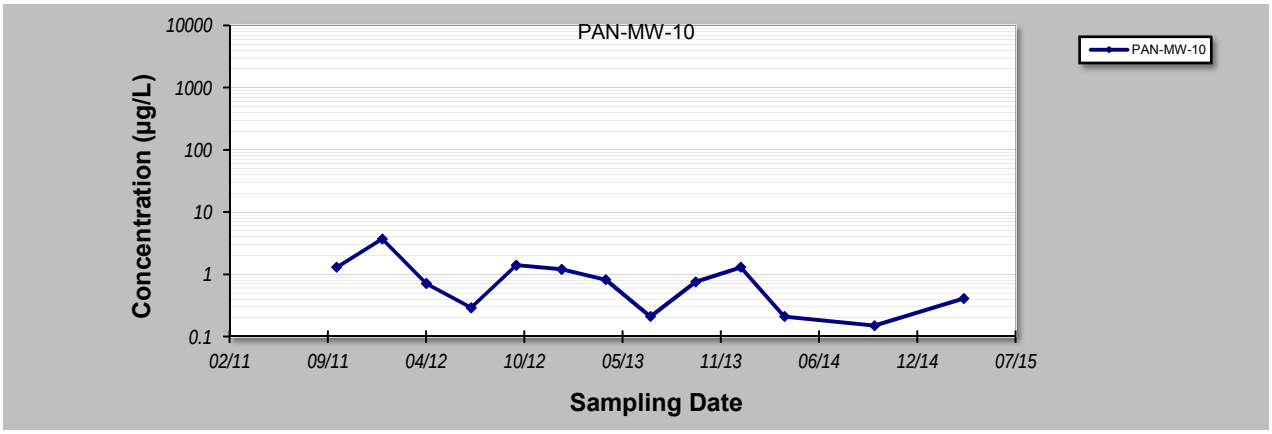
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

Figure 6-4: DCE Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **11-Jun-15**
Facility Name: **VOPAK, Savannah Terminal**
Conducted By: **EIC**
Job ID: **390031**
Constituent: **DCE**
Concentration Units: **µg/L**
Sampling Point ID: **PAN-MW-10**

Sampling Event	Sampling Date	DCE CONCENTRATION (µg/L)
1	2-Oct-11	1.3
2	3-Jan-12	3.7
3	2-Apr-12	0.71
4	2-Jul-12	0.29
5	2-Oct-12	1.4
6	2-Jan-13	1.2
7	2-Apr-13	0.82
8	2-Jul-13	0.21
9	2-Oct-13	0.76
10	2-Jan-14	1.3
11	1-Apr-14	0.21
12	1-Oct-14	0.15
13	1-Apr-15	0.41
14		
15		
16		
17		
18		
19		
20		
Coefficient of Variation:		0.98
Mann-Kendall Statistic (S):		-34
Confidence Factor:		97.9%
Concentration Trend:		Decreasing



Notes:

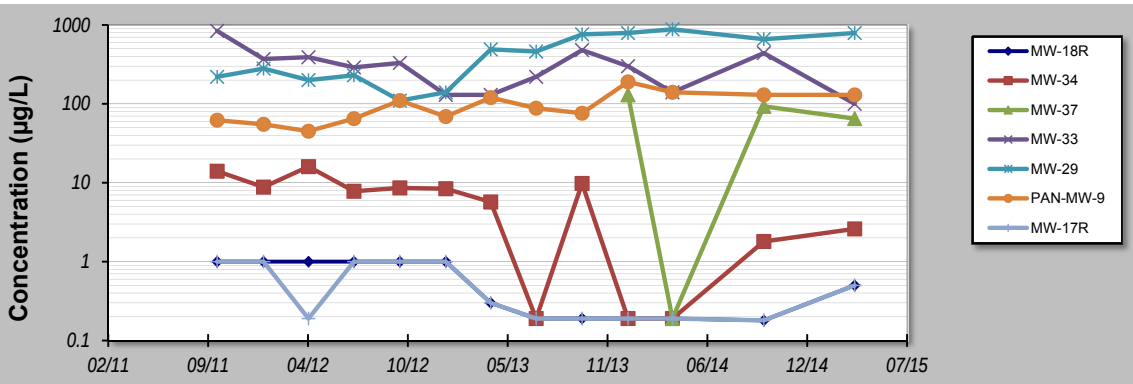
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

Figure 6-5: VC Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	VC
Conducted By:	EIC	Concentration Units:	µg/L

Sampling Point ID:	MW-18R	MW-34	MW-37	MW-33	MW-29	PAN-MW-9	MW-17R
Sampling Event	Sampling Date	VC CONCENTRATION (µg/L)						
1	2-Oct-11	1	14	Not Installed	840	220	62	1
2	3-Jan-12	1	8.8	Not Installed	370	280	55	1
3	2-Apr-12	1	16	Not Installed	390	200	45	0.19
4	2-Jul-12	1	7.8	Not Installed	290	230	65	1
5	2-Oct-12	1	8.6	Not Installed	330	110	110	1
6	2-Jan-13	1	8.4	Not Installed	130	140	69	1
7	2-Apr-13	0.30	5.7	Not Installed	130	490	120	0.30
8	2-Jul-13	0.19	0.19	Not Installed	220	460	88	0.19
9	2-Oct-13	0.19	9.8	Not Installed	480	760	76	0.19
10	2-Jan-14	0.19	0.19	130	300	790	190	0.19
11	1-Apr-14	0.19	0.19	0.19	140	880	140	0.19
12	1-Oct-14	0.18	1.8	93	440	660	130	0.18
13	1-Apr-15	0.50	2.6	65	100	790	130	0.50
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.67	0.81	0.76	0.63	0.61	0.43	0.74
Mann-Kendall Statistic (S):		-45	-41	-2	-25	45	49	-36
Confidence Factor:		99.8%	99.4%	62.5%	92.7%	99.8%	99.9%	98.5%
Concentration Trend:		Decreasing	Decreasing	Stable	Prob. Decreasing	Increasing	Increasing	Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

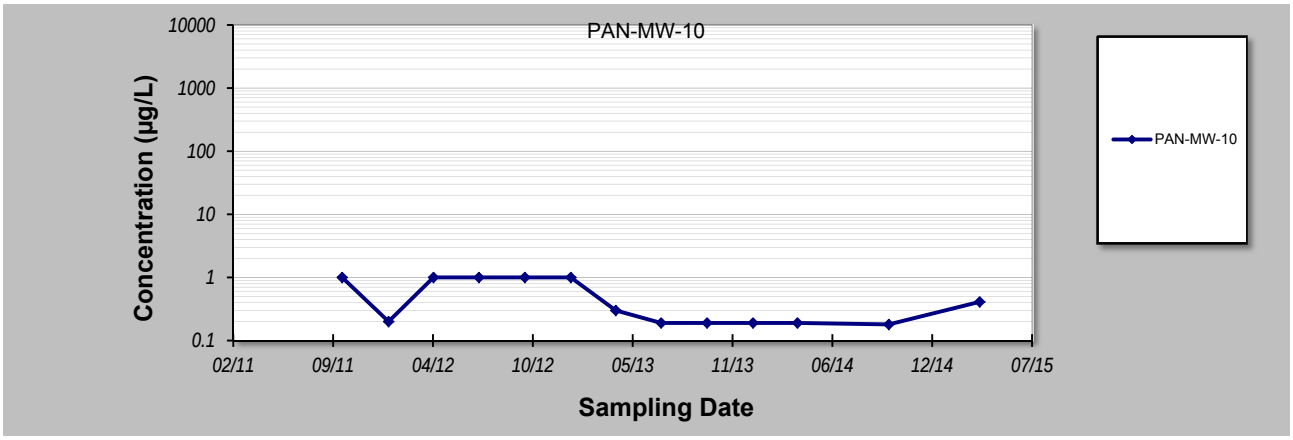
Figure 6-5: VC Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	VC
Conducted By:	EIC	Concentration Units:	µg/L

Sampling Point ID: **PAN-MW-10**

Sampling Event	Sampling Date	VC CONCENTRATION (µg/L)
1	2-Oct-11	1
2	3-Jan-12	0.2
3	2-Apr-12	1
4	2-Jul-12	1
5	2-Oct-12	1
6	2-Jan-13	1
7	2-Apr-13	0.3
8	2-Jul-13	0.19
9	2-Oct-13	0.19
10	2-Jan-14	0.19
11	1-Apr-14	0.19
12	1-Oct-14	0.18
13	1-Apr-15	0.41
14		
15		
16		
17		
18		
19		
20		
Coefficient of Variation:		0.75
Mann-Kendall Statistic (S):		-38
Confidence Factor:		98.9%
Concentration Trend:		Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

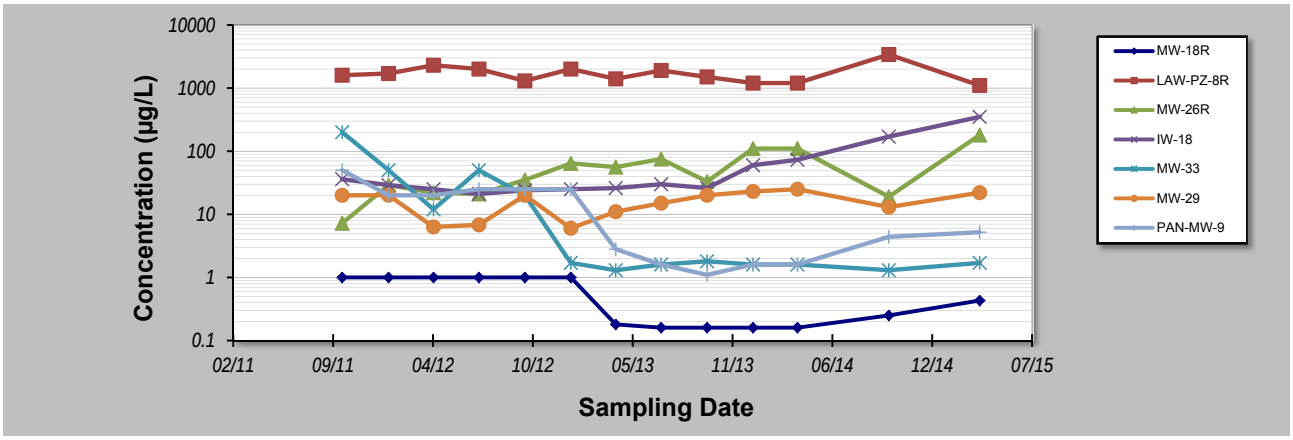
Figure 6-6: Benzene Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: 11-Jun-15
Facility Name: VOPAK, Savannah Terminal
Conducted By: EIC

Job ID: 390031
Constituent: Benzene
Concentration Units: µg/L

Sampling Point ID:	MW-18R	LAW-PZ-8R	MW-26R	IW-18	MW-33	MW-29	PAN-MW-9
Sampling Event	Sampling Date	BENZENE CONCENTRATION (µg/L)						
1	2-Oct-11	1	1600	7.2	36	200	20	50
2	3-Jan-12	1	1700	29	29	50	20	20
3	2-Apr-12	1	2300	22	25	12	6.3	20
4	2-Jul-12	1	2000	21	21	50	6.8	25
5	2-Oct-12	1	1300	35	24	20	20	25
6	2-Jan-13	1	2000	64	25	1.7	6	25
7	2-Apr-13	0.18	1400	56	26	1.3	11	2.8
8	2-Jul-13	0.16	1900	75	30	1.6	15	1.6
9	2-Oct-13	0.16	1500	33	26	1.8	20	1.1
10	2-Jan-14	0.16	1200	110	60	1.6	23	1.6
11	1-Apr-14	0.16	1200	110	73	1.6	25	1.6
12	1-Oct-14	0.25	3400	19	170	1.3	13	4.4
13	1-Apr-15	0.43	1100	180	350	1.7	22	5.2
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.72	0.36	0.85	1.36	2.08	0.42	1.05
Mann-Kendall Statistic (S):		-35	-24	41	42	-46	24	-33
Confidence Factor:		98.2%	91.8%	99.4%	99.5%	99.8%	91.8%	97.5%
Concentration Trend:		Decreasing	Prob. Decreasing	Increasing	Increasing	Decreasing	Prob. Increasing	Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

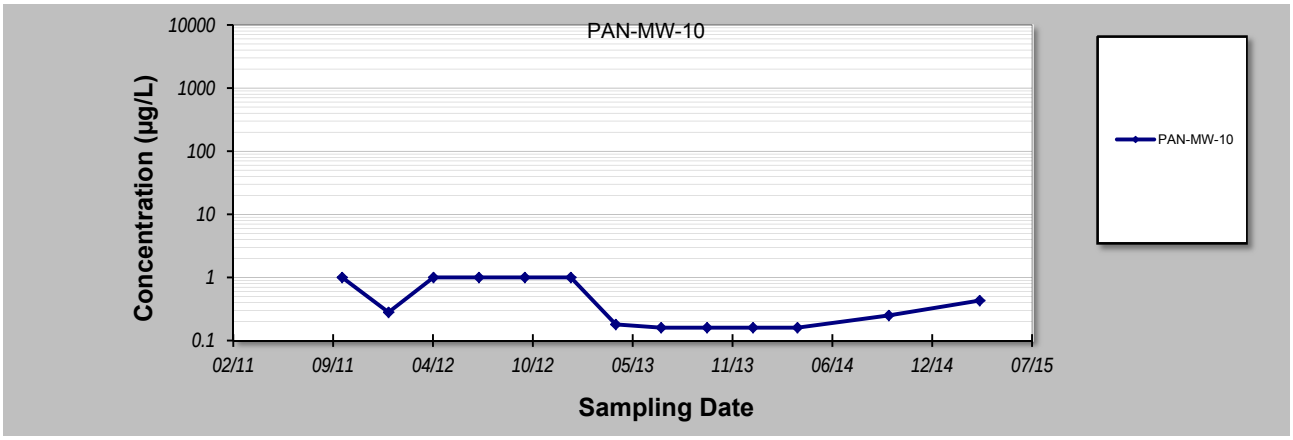
Figure 6-6: Benzene Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **11-Jun-15**
Facility Name: **VOPAK, Savannah Terminal**
Conducted By: **EIC**
Job ID: **390031**
Constituent: **Benzene**
Concentration Units: **µg/L**

Sampling Point ID: **PAN-MW-10**

Sampling Event	Sampling Date	BENZENE CONCENTRATION (µg/L)
1	2-Oct-11	1
2	3-Jan-12	0.28
3	2-Apr-12	1
4	2-Jul-12	1
5	2-Oct-12	1
6	2-Jan-13	1
7	2-Apr-13	0.18
8	2-Jul-13	0.16
9	2-Oct-13	0.16
10	2-Jan-14	0.16
11	1-Apr-14	0.16
12	1-Oct-14	0.25
13	1-Apr-15	0.43
14		
15		
16		
17		
18		
19		
20		
Coefficient of Variation:		0.77
Mann-Kendall Statistic (S):		-30
Confidence Factor:		96.2%
Concentration Trend:		Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

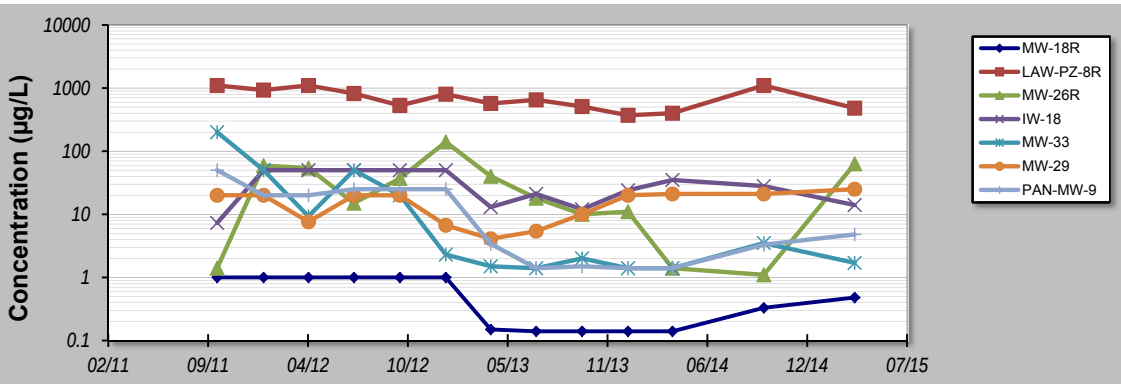
Figure 6-7: Toluene Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: 11-Jun-15
Facility Name: VOPAK, Savannah Terminal
Conducted By: EIC

Job ID: 390031
Constituent: Toluene
Concentration Units: µg/L

Sampling Point ID:	MW-18R	LAW-PZ-8R	MW-26R	IW-18	MW-33	MW-29	PAN-MW-9
Sampling Event	Sampling Date	TOLUENE CONCENTRATION (µg/L)						
1	2-Oct-11	1	1100	1.4	7.3	200	20	50
2	3-Jan-12	1	930	59	50	50	20	20
3	2-Apr-12	1	1100	54	50	9.3	7.6	20
4	2-Jul-12	1	820	15	50	50	20	25
5	2-Oct-12	1	530	37	50	20	20	25
6	2-Jan-13	1	800	140	50	2.3	6.7	25
7	2-Apr-13	0.15	570	40	13	1.5	4.1	3.4
8	2-Jul-13	0.14	650	18	21	1.4	5.4	1.4
9	2-Oct-13	0.14	510	10	12	2	10	1.5
10	2-Jan-14	0.14	370	11	24	1.4	20	1.4
11	1-Apr-14	0.14	400	1.4	35	1.4	21	1.4
12	1-Oct-14	0.33	1100	1.1	28	3.5	21	3.3
13	1-Apr-15	0.48	480	63	14	1.7	25	4.8
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.72	0.38	1.12	0.55	2.08	0.48	1.07
Mann-Kendall Statistic (S):		-35	-41	-19	-16	-46	21	-37
Confidence Factor:		98.2%	99.4%	86.1%	81.6%	99.8%	88.6%	98.7%
Concentration Trend:		Decreasing	Decreasing	No Trend	Stable	Decreasing	No Trend	Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

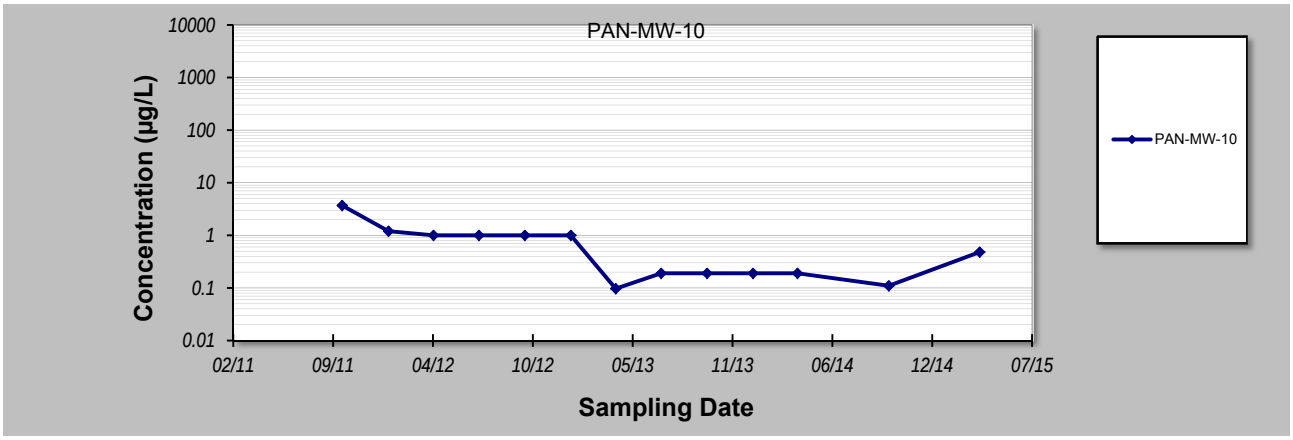
Figure 6-7: Toluene Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	Toluene
Conducted By:	EIC	Concentration Units:	µg/L

Sampling Point ID: **PAN-MW-10**

Sampling Event	Sampling Date	TOLUENE CONCENTRATION (µg/L)
1	2-Oct-11	3.7
2	3-Jan-12	1.2
3	2-Apr-12	1
4	2-Jul-12	1
5	2-Oct-12	1
6	2-Jan-13	1
7	2-Apr-13	0.097
8	2-Jul-13	0.19
9	2-Oct-13	0.19
10	2-Jan-14	0.19
11	1-Apr-14	0.19
12	1-Oct-14	0.11
13	1-Apr-15	0.48
14		
15		
16		
17		
18		
19		
20		
Coefficient of Variation:		1.22
Mann-Kendall Statistic (S):		-44
Confidence Factor:		99.7%
Concentration Trend:		Decreasing



Notes:

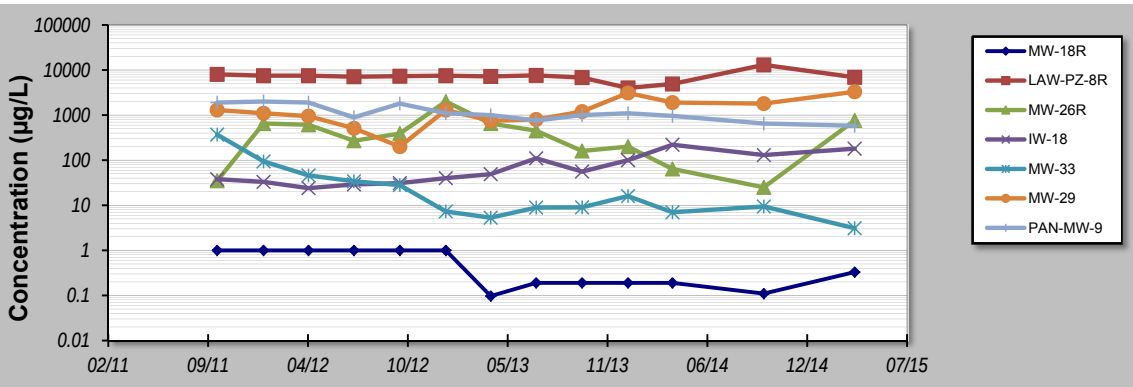
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

Figure 6-8: Ethylbenzene Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	Ethylbenzene
Conducted By:	EIC	Concentration Units:	µg/L

Sampling Point ID:	MW-18R	LAW-PZ-8R	MW-26R	IW-18	MW-33	MW-29	PAN-MW-9
Sampling Event	Sampling Date	ETHYLBENZENE CONCENTRATION (µg/L)						
1	2-Oct-11	1	8000	35	38	370	1300	1900
2	3-Jan-12	1	7500	650	33	94	1100	2000
3	2-Apr-12	1	7500	610	24	46	950	1900
4	2-Jul-12	1	7100	270	29	34	510	890
5	2-Oct-12	1	7300	390	31	28	200	1800
6	2-Jan-13	1	7500	2000	40	7.3	1300	1100
7	2-Apr-13	0.097	7200	650	49	5.3	750	1000
8	2-Jul-13	0.19	7600	450	110	8.9	800	760
9	2-Oct-13	0.19	6800	160	56	9	1200	1000
10	2-Jan-14	0.19	4000	200	100	16	3100	1100
11	1-Apr-14	0.19	4900	64	220	7	1900	960
12	1-Oct-14	0.11	13000	25	130	9.4	1800	650
13	1-Apr-15	0.33	6900	760	180	3.1	3300	580
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.76	0.28	1.08	0.80	2.03	0.66	0.42
Mann-Kendall Statistic (S):		-35	-25	-13	56	-48	31	-51
Confidence Factor:		98.2%	92.7%	76.4%	>99.9%	99.9%	96.7%	100.0%
Concentration Trend:		Decreasing	Prob. Decreasing	No Trend	Increasing	Decreasing	Increasing	Decreasing



Notes:

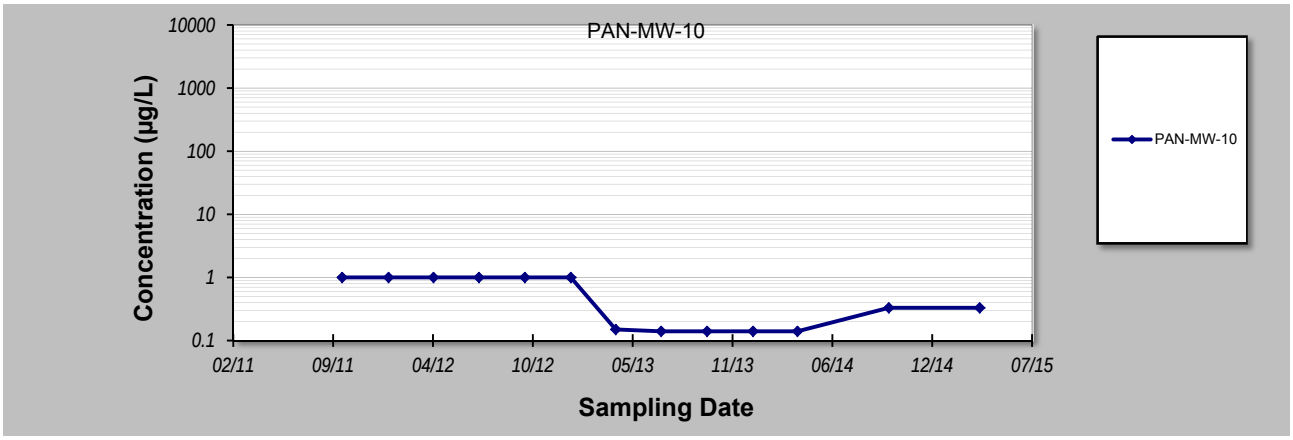
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

Figure 6-8: Ethylbenzene Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	Ethylbenzene
Conducted By:	EIC	Concentration Units:	µg/L
Sampling Point ID:	PAN-MW-10		

Sampling Event	Sampling Date	ETHYLBENZENE CONCENTRATION (µg/L)
1	2-Oct-11	1
2	3-Jan-12	1
3	2-Apr-12	1
4	2-Jul-12	1
5	2-Oct-12	1
6	2-Jan-13	1
7	2-Apr-13	0.15
8	2-Jul-13	0.14
9	2-Oct-13	0.14
10	2-Jan-14	0.14
11	1-Apr-14	0.14
12	1-Oct-14	0.33
13	1-Apr-15	0.33
14		
15		
16		
17		
18		
19		
20		
Coefficient of Variation:		0.74
Mann-Kendall Statistic (S):		-36
Confidence Factor:		98.5%
Concentration Trend:		Decreasing



Notes:

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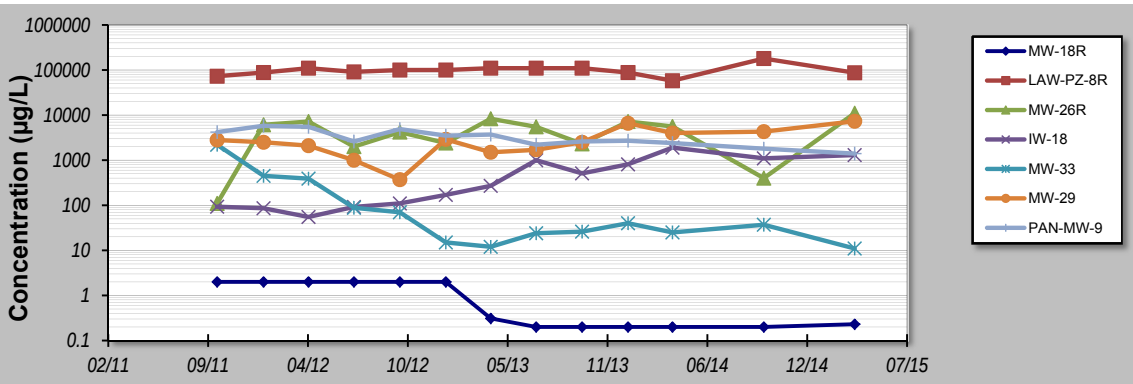
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

Figure 6-9: Total Xylenes Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	Total Xylenes
Conducted By:	EIC	Concentration Units:	µg/L

Sampling Point ID:	MW-18R	LAW-PZ-8R	MW-26R	IW-18	MW-33	MW-29	PAN-MW-9
Sampling Event	Sampling Date	TOTAL XYLENES CONCENTRATION (µg/L)						
1	2-Oct-11	2	73000	110	93	2200	2800	4200
2	3-Jan-12	2	88000	6100	86	450	2500	5800
3	2-Apr-12	2	110000	7200	55	390	2100	5500
4	2-Jul-12	2	91000	2000	92	88	1000	2600
5	2-Oct-12	2	100000	4200	110	70	370	4900
6	2-Jan-13	2	100000	2400	170	15	2900	3500
7	2-Apr-13	0.31	110000	8300	270	12	1500	3700
8	2-Jul-13	0.2	110000	5500	1000	24	1700	2200
9	2-Oct-13	0.2	110000	2300	510	26	2500	2600
10	2-Jan-14	0.20	88000	7200	810	40	6600	2700
11	1-Apr-14	0.20	58000	5600	1900	25	4000	2400
12	1-Oct-14	0.20	180000	400	1100	37	4300	1800
13	1-Apr-15	0.23	87000	11000	1300	11	7300	1400
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.89	0.29	0.68	1.03	2.30	0.67	0.42
Mann-Kendall Statistic (S):		-43	10	15	62	-44	33	-53
Confidence Factor:		99.6%	70.5%	79.9%	>99.9%	99.7%	97.5%	>99.9%
Concentration Trend:		Decreasing	No Trend	No Trend	Increasing	Decreasing	Increasing	Decreasing



Notes:

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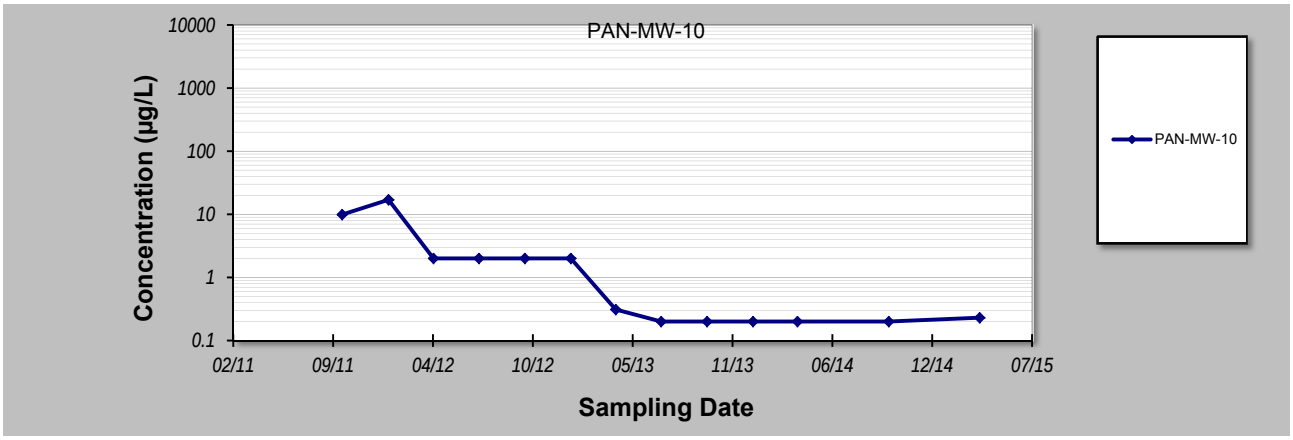
Figure 6-9: Total Xylenes Mann-Kendall Constituent Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	11-Jun-15	Job ID:	390031
Facility Name:	VOPAK, Savannah Terminal	Constituent:	Total Xylenes
Conducted By:	EIC	Concentration Units:	µg/L

Sampling Point ID: **PAN-MW-10**

Sampling Event	Sampling Date	TOTAL XYLENES CONCENTRATION (µg/L)
1	2-Oct-11	9.9
2	3-Jan-12	17
3	2-Apr-12	2
4	2-Jul-12	2
5	2-Oct-12	2
6	2-Jan-13	2
7	2-Apr-13	0.31
8	2-Jul-13	0.2
9	2-Oct-13	0.2
10	2-Jan-14	0.2
11	1-Apr-14	0.2
12	1-Oct-14	0.2
13	1-Apr-15	0.23
14		
15		
16		
17		
18		
19		
20		
Coefficient of Variation:		1.79
Mann-Kendall Statistic (S):		-50
Confidence Factor:		99.9%
Concentration Trend:		Decreasing



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