



Evergreen Resources Management
2 Righter Parkway, Suite 120
Wilmington, DE 19803

August 30, 2019

Mr. Richard Staron, P.G.
Pennsylvania Department of Environmental Protection
2 East Main Street
Norristown, Pennsylvania 19401

**RE: Philadelphia Refinery Remediation Program
Groundwater Remediation Status Report, First Half 2019**

Dear Mr. Staron:

This semi-annual report summarizes Operation & Maintenance (O&M) work completed at the Philadelphia Energy Solutions Refining & Marketing LLC (PES) Philadelphia Refining Complex (Complex) and the Sunoco Partners Marketing and Terminals L.P. (SPMT) Belmont Terminal between January 1, 2019 and June 30, 2019. Detailed information regarding O&M activity is included in the attached tables for the PES Complex and Belmont Terminal as prepared by Stantec Consulting Services Inc. (Stantec). This letter summarizes the information detailed in the tables plus additional activities under the "Work Plan for Site Wide Approach under the One Cleanup Program" (Site Wide Approach) such as investigations of the various Areas of Interest (AOIs).

In compliance with the 2003 Consent Order and Agreement (CO&A) entered into between Sunoco Inc. (R&M) (Sunoco) and the Pennsylvania Department of Environmental Protection (PADEP) for the PES Complex located at 3144 Passyunk Avenue in Philadelphia, Pennsylvania, Sunoco has completed site characterization activities for all AOIs. The Complex has since entered into the Pennsylvania One Cleanup Program. On November 30, 2011, Sunoco submitted a Site Wide Approach to the PADEP and the United States Environmental Protection Agency (USEPA). The Site Wide Approach clarified the technical method beyond the CO&A and provided an anticipated schedule for future Act 2 submissions with respect to the Philadelphia Refinery remediation program. Effective December 30, 2013, Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC (Evergreen) assumed Sunoco legacy remediation liabilities with respect to the PES Complex. All remediation of Sunoco's/Atlantic's historic environmental liabilities at the PES Complex and Belmont Terminal will be managed moving forward by Evergreen. Environmental liabilities following the September 8, 2012 purchase and transfer of the Philadelphia Refinery to PES are managed by PES.

Evergreen will continue to submit the required documentation and implement remedial obligations. Supplemental characterization data obtained following an approved Area of Interest (AOI) Remedial Investigation Report (RIR) or Site Characterization Report (SCR) will be incorporated in a future Act 2 deliverable. Evergreen will submit a Groundwater Remediation Status Report with the O&M summary, figures, tables, and Act 2 submittal updates on an annual basis coinciding with the annual groundwater gauging and monitoring. On the alternating six-month interval, Evergreen will submit an abbreviated Groundwater Remediation Status Report detailing the O&M summary with limited tables and without figures.

On June 26, 2019, PES announced the planned closure of the Complex. The refinery closure has not affected the ongoing remediation program. However, if any significant changes to the program occur, they will be communicated to PADEP.

AOI 1 – Point Breeze Refinery No. 1 Tank Farm and No. 2 Tank Farm; and Belmont Terminal

Consent Order / Characterization Status

Sunoco submitted to the PADEP and the USEPA an SCR for AOI 1 dated June 30, 2005. Based on comments received by the PADEP with regard to the AOI 1 SCR, Sunoco prepared and submitted to the PADEP a revised SCR for AOI 1 dated July 17, 2006. The recommendations in the AOI 1 report were to supplement the existing remediation system along the northwestern portion of the Belmont Terminal and southeastern portion of the No. 2 Tank Farm. Sunoco has implemented these actions as detailed in previous quarterly reports. In addition, Sunoco provided the PADEP a Remedial Action Plan (RAP) for AOI 1 in January 2008. As a result of the 26th Street North Remediation System study and the S-50 Area (26th Street South) investigation, an addendum to the RAP was considered necessary. In December 2008, a RAP Addendum for AOI 1 was submitted to address the 26th Street North Remediation System data analysis and the 26th Street South investigation and subsequent remedial actions. Evergreen submitted a revised RIR for AOI 1 on August 5, 2016 which was approved by the PADEP on November 1, 2016.

Belmont Terminal Remediation System– Operation During the First Half of 2019

The Belmont Terminal Remediation System consists of two components including the Frontage Road System and the Loading Rack System.

On August 30, 2012, the Frontage Road system was turned off and will remain offline unless there are significant increases in light non-aqueous phase liquid (LNAPL) in the recovery wells. The recovery wells were gauged on February 14, 2019 and June 3, 2019, and no LNAPL was detected.

The Loading Rack system consists of six dual-phase pumping systems (RW-4, RW-21, RW-22, RW-23, RW-24, and RW-25). Each recovery well contains separate pumps controlled by density floats and conductivity probes to pump groundwater and LNAPL. Recovered groundwater is discharged to an onsite process sewer. LNAPL thicknesses are monitored, and pumps are turned on/off as needed based on recoverable LNAPL accumulations in each recovery well. The recovered LNAPL is stored in a 5,000-gallon holding tank, the contents of which are pumped out and recycled on an as needed basis. During the reporting period the pumps in RW-4, RW-23, RW-24, and RW-25 were active.

The Loading Rack system was operational during the reporting period. System performance and operational status for the Loading Rack system can be found in **Appendix 1**. A total of 1,434,343 gallons of groundwater and 38 gallons of LNAPL was recovered by this system during the first half of 2019.

Shunk Street Sewer Ventilation System and Biofilter – Operation During the First Half of 2019

The biofilter was operational until April 9, 2019 when the blower was removed for repair. The biofilter remained off during the remainder of the reporting period. Details of the Shunk Street Sewer Ventilation System and Biofilter operational status during the first half of 2019 can be found in **Appendix 1**.

26th Street North Remediation System - Operation During the First Half of 2019:

The 26th Street North Remediation system was modified in 2015 to increase the overall effectiveness of the system and was restarted on October 12, 2015. The four-inch diameter recovery wells (S-180, S-181, S-182, S-183, S-184, S-185, S-186, S-187, S-188, S-189, S-190, S-191, and S-192) were replaced with six-inch diameter recovery wells. Additionally, RW-400 and RW-402 are connected to the system for a total of fifteen recovery wells.

Within each well, a QED Environmental Systems Model AP-4+T AutoPump was installed to recover groundwater and LNAPL. Each recovery well contains a two-inch diameter lateral discharge line that connects to a four-inch high density polyethylene (HDPE) trunk line, which transfers the total fluids to an onsite process sewer. The pumps utilize compressed air, which is supplied by a Kaeser rotary screw air compressor. A one-inch diameter air line runs to each recovery well and is reduced to a 3/8-inch diameter line in each well vault at the pneumatic pump.

The 26th Street North Remediation System was operational during the reporting period. Details for the 26th Street Sewer North Remediation System performance data and operational status can be found in **Appendix 1**. A total of 7,764,941 gallons of total fluids was recovered by this system during the first half of 2019.

26th Street and Packer Avenue Sewers Biofilter Remediation System – Operation During the First Half of 2019

The 26th Street and Packer Avenue Sewers Biofilter system was upgraded including replacing the compost beds, repairing the duct work, and replacing or repairing the fans. The system was restarted on June 6, 2016 for final stages of startup and system startup was completed on November 10, 2016. The system was operational during the first half of 2019. Details for the 26th Street and Packer Avenue Sewer Biofilter system performance data and operational status can be found in **Appendix 1**.

AOI 2 – Point Breeze Refinery

Consent Order / Characterization Status

The AOI 2 SCR/RIR was submitted to the PADEP and the USEPA on September 29, 2010. A revised RIR was completed in July 2017. PADEP approved the report on October 18, 2017.

Pollock Street West End Remediation System – Operation During the First Half of 2019

During October 2011, heavier than usual quantities of oil were observed within the Pollock Street sewer outfall. As a result, Sunoco completed the expansion of the existing vertical recovery well remediation system in the vicinity of the Pollock Street sewer outfall in February 2012. The system, referred to as the Pollock Street West End system, consists of a total of ten 4-inch diameter recovery wells on the east side of River Road and twenty 6-inch diameter recovery wells on the west side of River Road. Groundwater and LNAPL are removed from select recovery wells using pneumatic submersible pumps. All liquids are processed through an oil/water separator (OWS) and water is discharged to a refinery process sewer (S-10 Sump). LNAPL is recovered in a 550-gallon tank and then recycled by the PES Complex. A report describing the details of the investigation and remediation performed in response to the oil observed in the Pollock Street sewer outfall was submitted to the PADEP and the USEPA on June 29, 2012.

The Pollock Street West End Remediation System was turned off December 19, 2016 to evaluate LNAPL recharge. The system remained off during the first half of 2019.

Pollock Street Horizontal Well Remediation System – Operation During the First Half of 2019

The Pollock Street Horizontal Well Remediation System consists of HW-1, HW-2, and HW-3. HW-1 was installed in July 2004 along the north side of the Pollock Street sewer from approximately RW-103 to approximately 100 feet west of RW-101. HW-2 and HW-3 were installed from approximately RW-103 to the intersection of Pollock Street and 16th Street in the first quarter of 2006. Groundwater and LNAPL from HW-1 and HW-2 discharge directly into a Benzene National Emission Standard for Hazardous Air Pollutants (NESHAP) controlled sewer, whereas groundwater and LNAPL from HW-3 discharges directly into an onsite process sewer.

Totalizers were installed in HW-1 and HW-2 on May 25, 2013 and July 6, 2015 respectively. The estimated flow rate for HW-3 as determined by pump testing is 15.38 gallons per minute (gpm).

The Pollock Street Horizontal Well Remediation System was operational during the reporting period. System performance data and operational status can be found in **Appendix 1**. A total of 5,136,206 gallons of total fluids was recovered by the Pollock Street Horizontal Well Remediation System during the reporting period.

Pollock Street Sewer Outfall – Operation During the First Half of 2019

The Pollock Street Sewer outfall is checked by PES personnel and findings are recorded with PES notifying Evergreen or Evergreen's contractors to take action if significant accumulations or sheening are found. This practice will continue and identified LNAPL will be handled by Evergreen contractors with spill control equipment to minimize or prevent releases to the Schuylkill River. Evergreen has continued to maintain a skimmer system located in the tide gate area. The skimmer discharges to a refinery process sewer (S-13 Sump). The skimmer will be activated if recoverable quantities of LNAPL are observed at the tide gate area. Except for the completion of preventative maintenance and equipment testing, the outfall skimmer remained off for the first half of 2019 due to the absence of recoverable oil in the outfall.

Passyunk Avenue Sewer

The Passyunk Avenue Sewer combined sewer overflow outfall (CSO) is checked by PES personnel if sheens are noticed in the Schuylkill River during routine checks. Evergreen has not been notified of any observed LNAPL at the outfall during the first half of 2019.

AOI 3 – Point Breeze Refinery, Impoundment Area

There are no Evergreen groundwater or LNAPL remediation systems active in this area. The AOI 3 SCR/RIR was submitted to the PADEP and the USEPA on September 27, 2010. The SCR/RIR stated that given the limited occurrence and mobility of LNAPL observed in RW-2, the former remediation system in this area will remain offline. A revised RIR for AOI 3 was submitted March 20, 2017, and approved on June 14, 2017. The disposition of remediation systems in AOI 3 will be revisited in the Site Wide Cleanup Plan.

LNAPL was identified in S-414 and with marked increases in thickness in two wells (S-283 and S-382) during the annual site-wide gauging in June 2018. PES was notified of the observations and an underground product line was determined to have released reformat from the UDEX feed line that runs from the 860 Unit in the Point Breeze Refinery to the Girard Point Refinery. PES has installed three active skimming systems located at wells S-283, S-382, and S-429.

AOI 4 – Point Breeze Refinery, No. 4 Tank Farm Area

Consent Order / Characterization Status

AOI 1 and AOI 4 were identified by Sunoco as the first areas of the refinery to be investigated in accordance with the Phase II Corrective Action Schedule included in the Current Conditions Report (CCR). Sunoco submitted a SCR to the PADEP and the USEPA for AOI 4 on August 24, 2006. A repackaged SCR/RIR was submitted to the agencies on October 16, 2013. A “Disapproval of Remedial Investigation Report” was received from the PADEP on January 16, 2014. A revised RIR was submitted on March 24, 2017. The revised RIR was disapproved by the PADEP in a letter dated June 21, 2017 due to lack of offsite wells. In 2018, five additional monitoring wells (S-374, S-375, S-376, S-377, and S-378) were installed offsite adjacent to the Penrose Avenue Remediation System. Evaluation of these wells is conducted during quarterly groundwater gauging events.

Penrose Avenue Remediation System – Operation During the First Half of 2019

Following characterization of AOI 4, Sunoco installed a hydraulic control system on the southern border of AOI 4. This system is permitted for discharge to the Philadelphia Water Department (PWD) and by Philadelphia Air Management Services (AMS). Installation of the Penrose Avenue Remediation System was completed in December 2012. Following minor modifications to the system to facilitate water discharge monitoring in accordance with the PWD groundwater discharge permit, the system was started on March 20, 2013. LNAPL thicknesses are monitored and pumps are turned on/off as needed based on recoverable LNAPL accumulations in each recovery well. On February 21, 2018 pumps were installed in S-221, S-236, and S-237 to address LNAPL in those wells.

During this reporting period, recovery wells RW-700, RW-701, RW-702, RW-703, RW-704, S-221, S-236, and S-237 were active. The system operated during the reporting period with exception to April 2, 2019 through May 2, 2019 during which time the system was turned off for sitewide transmissivity testing. System performance data and operational status can be found in **Appendix 1**. A total of 1,413,210 gallons of groundwater and 210 gallons of LNAPL were recovered by the Penrose Avenue Remediation System during the reporting period.

Additionally, the installation of an in-situ Submerged Oxygen Curtain (iSOC) was initiated during the second half of 2018 and remained active during the first half of 2019. The system consists of seven oxygen injection points located in RW-706, RW-709, RW-711, RW-712, RW-713, RW-714, and RW-715 with the purpose of creating an oxygen barrier to protect offsite receptors from migrating contaminant plume.

S-30 Remediation System – Operation During the First Half of 2019

On March 19, 2019, recovery well S-30 was activated due to an accumulation of LNAPL. The S-30 remediation system consists of an LNAPL pump, probe assembly, and control panel. The recovered LNAPL is stored in a 2,500-gallon holding tank, the contents of which are recycled by the PES Complex on an as needed basis. System performance data and operational status can be found in **Appendix 1**. A total of 18.6 gallons of LNAPL were recovered by the S-30 LNAPL Remediation System during the reporting period.

AOI 5 – Girard Point Refinery, South Tank Field

Consent Order / Characterization Status

In accordance with the Site Wide Approach, a SCR/RIR/Cleanup Plan was submitted to the PADEP and the USEPA on December 13, 2011. Sunoco received a Remedial Investigation Report/Cleanup Plan disapproval letter from the PADEP on March 15, 2012. A revised RIR was submitted on January 16, 2016 and was approved by the PADEP on May 2, 2017.

AOI 6 – Girard Point Refinery, Chemicals Processing Area

Consent Order / Characterization Status

AOI 6 was identified by Sunoco as the third area of the refinery to be investigated in accordance with the Phase II Corrective Action Schedule included in the CCR. An SCR for AOI 6 was submitted to the PADEP and the USEPA on September 29, 2006. A repackaged SCR/RIR was submitted to the agencies on September 3, 2013. PADEP issued a disapproval letter on November 27, 2013. A revised RIR was submitted on November 21, 2017 and was approved by the PADEP on February 26, 2018.

27 Pump House Area

The remediation system that existed in the area of the 27 Pump House was turned off September 20, 2010 due to absence of recoverable LNAPL. Passive remediation began on October 10, 2010 with the installation of absorbent socks in wells B-124, B-132, B-137, B-139, B-142, B-143, and B-147. Based on limited recoverable LNAPL in the proximal wells, passive remediation was discontinued on January 26, 2015 and the equipment subsequently removed. Due to continued presence of elevated benzene concentrations in soil and groundwater in this area, remediation alternatives are being evaluated.

Mobile Solar Powered LNAPL Recovery System

A solar powered LNAPL pump was operated at B-129 to evaluate the LNAPL recovery potential. Between February 14, 2019 and April 24, 2019, 1.6 gallons of LNAPL were recovered from B-129. On April 24, 2019, the pump was moved from B-129 to B-124. The LNAPL pump operated through the remainder of the reporting period at B-124 and recovered 2.9 gallons of LNAPL.

AOI 7 – Girard Point Refinery, Fuels Processing Area

Consent Order / Characterization Status

In accordance with the Site Wide Approach, a repackaged AOI 7 SCR/RIR was submitted to the PADEP and the USEPA on February 29, 2012. A RIR Addendum was submitted to the agencies on September 19, 2013. On December 18, 2013, Sunoco received comments on the RIR Addendum from the PADEP. These comments were addressed in the revised RIR that was submitted June 9, 2017. The RIR was approved in correspondence dated August 30, 2017.

3 Separator Remediation System – Operation During the First Half of 2019

On July 12, 2011, Sunoco reported a hydrocarbon sheen on the Schuylkill River to the National Response Center. The sheen was directly adjacent to the Girard Point Refinery No. 3 Separator. In response to the sheen on the river, Sunoco investigated the source of hydrocarbons to the river through the installation of monitoring wells and exploratory excavation around a process sewer junction box associated with the 137 Crude Unit and the No. 3 Separator. The monitoring wells demonstrated measurable oil on the water table and the exploratory excavation

revealed integrity issues with the junction box. The junction box and associated bulkhead penetration were sealed with concrete.

Construction of a ten recovery well hydraulic control system was completed on August 23, 2012 and included RW-801, RW-802, RW-803, RW-804, RW-805, RW-806, RW-807, RW-808, RW-809, and RW-810. Groundwater and LNAPL are extracted using pneumatic submersible pumps and total fluids pass through an oil/water separator. Water is discharged to an onsite process sewer. LNAPL is recovered in a 1,100-gallon holding tank and recycled by the PES Complex. In 2013, PES assumed primary responsibility for the 3 Separator System due to newer PES releases from the sewer system, which connects 137 Unit to the No. 4 separator, in the vicinity of the No. 3 separator.

The 3 Separator Remediation System was operational during the first half of 2019. System operation details and performance data for the system can be found in **Appendix 1**. A total of 1,399,900 gallons of groundwater and 263.7 gallons of LNAPL were recovered by the 3 Separator Remediation System during the first half of 2019.

AOI 8 – Point Breeze Refinery, North Yard

Consent Order / Characterization Status

An SCR was submitted to the PADEP on September 30, 2008. A repackaged SCR/RIR incorporating the PADEP's comments was submitted to the PADEP and the USEPA on January 31, 2012. Comments from the PADEP on the SCR/RIR were received by email on July 7, 2012. A revised RIR dated December 21, 2017 was submitted to the PADEP. PADEP issued an approval letter on March 22, 2018.

Northern Boundary/Verizon Area

The northern boundary of AOI 8 near the South District Work Center of Verizon Pennsylvania, LLC (Verizon SDWC) property is being evaluated for offsite impacts and potential system installation. An assessment of vapor intrusion was completed at the Verizon SDWC property during 2016 and 2017 and was reported in the December 2017 RIR. Ambient and indoor air samples collected within AOI 8 and at the adjacent Verizon SDWC property did not exceed the EPA RSLs for any of the site constituents of concern (COC). A vapor intrusion evaluation was completed in and near all occupied buildings in AOI 8, as well as the Verizon SDWC Property.

A test well (N-157) was installed in 2017 and a well performance test was conducted to evaluate the feasibility of LNAPL recovery as a remedial option near the adjacent Verizon SDWC property. Evergreen plans to install a horizontal well along the refinery property boundary in 2019 for the purpose of groundwater and LNAPL recovery.
PGW Border Remediation System – Operation During the First Half of 2019

The former PGW Border Remediation System was discontinued and the equipment was decommissioned. Evergreen is currently installing 30 new recovery wells and all new remediation system equipment which will allow groundwater and LNAPL recovery along the PGW border in the area of the former system. It is anticipated that installation will be completed and the system operational in 2019.

Jackson Street Sewer Remediation System – Operation During the First Half of 2019

The Jackson Street Sewer Remediation System consists of two components, an inactive total fluids system with submersible pumps that formerly recovered groundwater and LNAPL (Jackson Street System) and a vapor suppression water curtain installed in the Jackson Street Sewer Remediation system (Jackson Street Water Curtain).

The Jackson Street System is offline. Due to limited LNAPL presence in the area, the system will remain off unless there are significant increases in LNAPL in the proximal wells.

The Jackson Street Water Curtain was operational during the first half of 2019 and is monitored weekly. Vapor readings are collected at the water curtain and at the intercepting chamber along 26th Street. System data and operational status for the first half of 2019 is included in **Appendix 1**.

Evergreen will continue to operate the Jackson Street Water Curtain and report performance information in semi-annual Philadelphia Refinery Groundwater Remediation Status Reports. Details regarding plans to maintain this vapor mitigation system will be included in a future Act 2 deliverable. No other vapor intrusion assessment activities are recommended for AOI 8.

Sunoco agreed at a July 30, 2009 meeting to sample the air in the sewer onsite and offsite following notification from the PADEP of a neighborhood (28th and McKean Streets) complaint. No complaints regarding sewer odors were received during the first half of 2019.

AOI 9 – Schuylkill River Tank Farm

There are no groundwater or LNAPL remediation systems operational in AOI 9. A SCR was submitted to the PADEP and the USEPA on October 30, 2009. A revised RIR was submitted to the agencies in December 2015. The RIR was denied and a RIR Addendum to address the deficiencies was submitted on February 8, 2017. On April 18, the PADEP disapproved the RIR Addendum due to lack of offsite wells. Evergreen has obtained information from existing offsite wells, and five additional wells (S-146SRTF, S-147SRTF, S-148SRTF, S-149SRTF, and S-150SRTF) were installed along Essington Avenue, west of Schuylkill River Tank Farm, to evaluate offsite groundwater conditions.

AOI 10 – Point Breeze Refinery, West Yard

There are no groundwater or LNAPL remediation systems operational in AOI 10. An SCR/RIR was submitted to the PADEP and the USEPA on June 29, 2011. Approval of the RIR was received from the PADEP on January 6, 2012. An ecological assessment was conducted in 2015 and 2016 and an Ecological Risk Assessment Report was submitted in June 2016, which was approved on November 10, 2016.

A Solid Waste Management Unit (SWMU) closure letter which addressed past disposal areas located in AOI 10 and AOI 8 (SWMU 1 and SWMU 2 respectively) was submitted the USEPA on February 16, 2016. On November 29, 2016, the USEPA issued a response letter denying the no further action request for SWMU 1. Evergreen collected additional information in 2017 to address the USEPA letter and 2016 PADEP comments on the 2011 SCR/RIR and the Ecological Risk Assessment Report. Results will be provided in a future submittal.

AOI 11 – Deep Aquifer

The SCR/RIR was submitted to the PADEP and the USEPA on September 12, 2011. Sunoco received comments to the report by email on December 9, 2011. The Final Report was submitted to the agencies on June 21, 2013. Sunoco received a “Disapproval of Final Report” from the PADEP dated September 26, 2013.

Groundwater Monitoring

The current monitoring program consists of quarterly groundwater and LNAPL gauging of select wells, annual groundwater and LNAPL gauging of sitewide wells, and groundwater sampling of select monitoring wells. During the first, third, and fourth quarters, select wells are gauged to monitor LNAPL thicknesses and determine hydraulic effects of targeted remediation systems. The sitewide annual well gauging event is typically conducted during the second quarter of each year with results used to identify the presence of LNAPL and determine groundwater flow patterns. Annual site-wide groundwater sampling typically is performed in the second quarter in conjunction with annual sitewide gauging. Evergreen planned to increase the monitoring program to include quarterly site-wide groundwater gauging and sampling beginning with the second quarter 2019. This schedule may be adjusted again depending on the fate of the facility and remediation goals.

Liquid level measurements collected during the first quarter of 2019 are provided in **Table 1**. The sitewide 2019 annual liquid level measurements are provided in **Table 2** of this report. The following wells were observed to contain a marked increase in LNAPL between the last annual event and the 2019 annual liquid level measurement event. Efforts are being made to determine if changes are due to natural conditions such as season groundwater fluctuation or other factors

AOI	Well	Depth to LNAPL	Depth to Water	LNAPL Thickness (feet)
AOI 1	S-77	8.95	11.95	3.00
AOI 1	S-203	26.64	28.98	2.34
AOI 1	S-405	21.73	22.80	1.07
AOI 2	S-303	18.95	19.11	0.16
AOI 2	S-304	12.11	12.57	0.46
AOI 2	S-357	22.50	24.55	2.05
AOI 4	S-104	14.05	22.07	8.02
AOI 5	SW-5	4.93	9.35	4.42
AOI 7	C-161	9.36	10.95	1.59
AOI 8	N-112	9.86	11.84	1.98
AOI 8	N-116	3.75	7.12	3.37
AOI 9	WPB-5	7.98	9.19	1.21
AOI 9	S-122SRTF	8.56	9.92	1.36

The annual perimeter groundwater samples are analyzed pursuant to Pennsylvania's Land Recycling Program for leaded and unleaded gasoline and No. 2, 4, 5, and 6 fuel oils. These parameters include benzene, cumene (isopropylbenzene), 1,2-dichloroethane (EDC), ethylbenzene, methyl tert butyl ether (MTBE), toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and total xylenes by USEPA SW846 Method 8260B; 1,2-dibromoethane (EDB) by USEPA SW 846 Method 8011; anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, chrysene, fluorene, naphthalene, phenanthrene, and pyrene by USEPA SW846 Method 8270D; dissolved lead by USEPA SW846 Method 6010C. Additional wells were sampled for tert-Butyl alcohol (TBA) analysis during the annual groundwater sampling event for the purposes of fate and transport characterization and groundwater modeling.

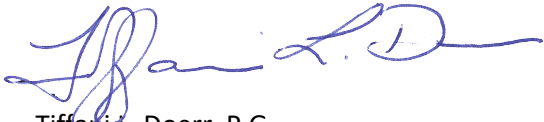
A summary of the annual sitewide groundwater sampling results from the June and July 2019 sampling event is provided in **Table 3**. A summary of the historical groundwater sampling analytical data is provided in **Table 4**. The

laboratory analytical reports for the 2019 annual groundwater sampling event are included electronically in **Appendix 2**.

Please contact me at (302) 477-1305 or tldoerr@evergreenresmgt.com with any questions or comments.

Best Regards,

Evergreen Resources Management Operations



Tiffani L. Doerr, P.G.
Project Manager

Enclosures: Figure 1 – Site Location Map
 Figure 2 – Site Plan
 Figure 3 – Apparent LNAPL Thickness Map, June 2019
 Figure 4 – Water-Table Groundwater Elevation Map, June 2019
 Figure 5 – Lower Aquifer Groundwater Elevation Map, June 2019
 Table 1 – First Quarter 2019 Gauging Data
 Table 2 – Sitewide 2019 Annual Gauging Data
 Table 3 – Sitewide 2019 Annual Groundwater Sampling Analytical Results
 Table 4 – Historical Perimeter Groundwater Sampling Analytical Results
 Appendix 1 – Remediation System Recovery Data
 Appendix 2 – Laboratory Analytical Data Reports (electronic)

cc: Mr. Paul Gotthold
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 Philadelphia, Pennsylvania 19103-2029

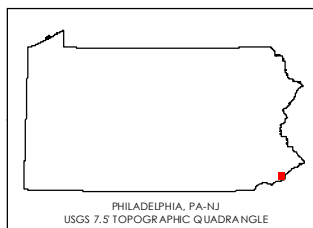
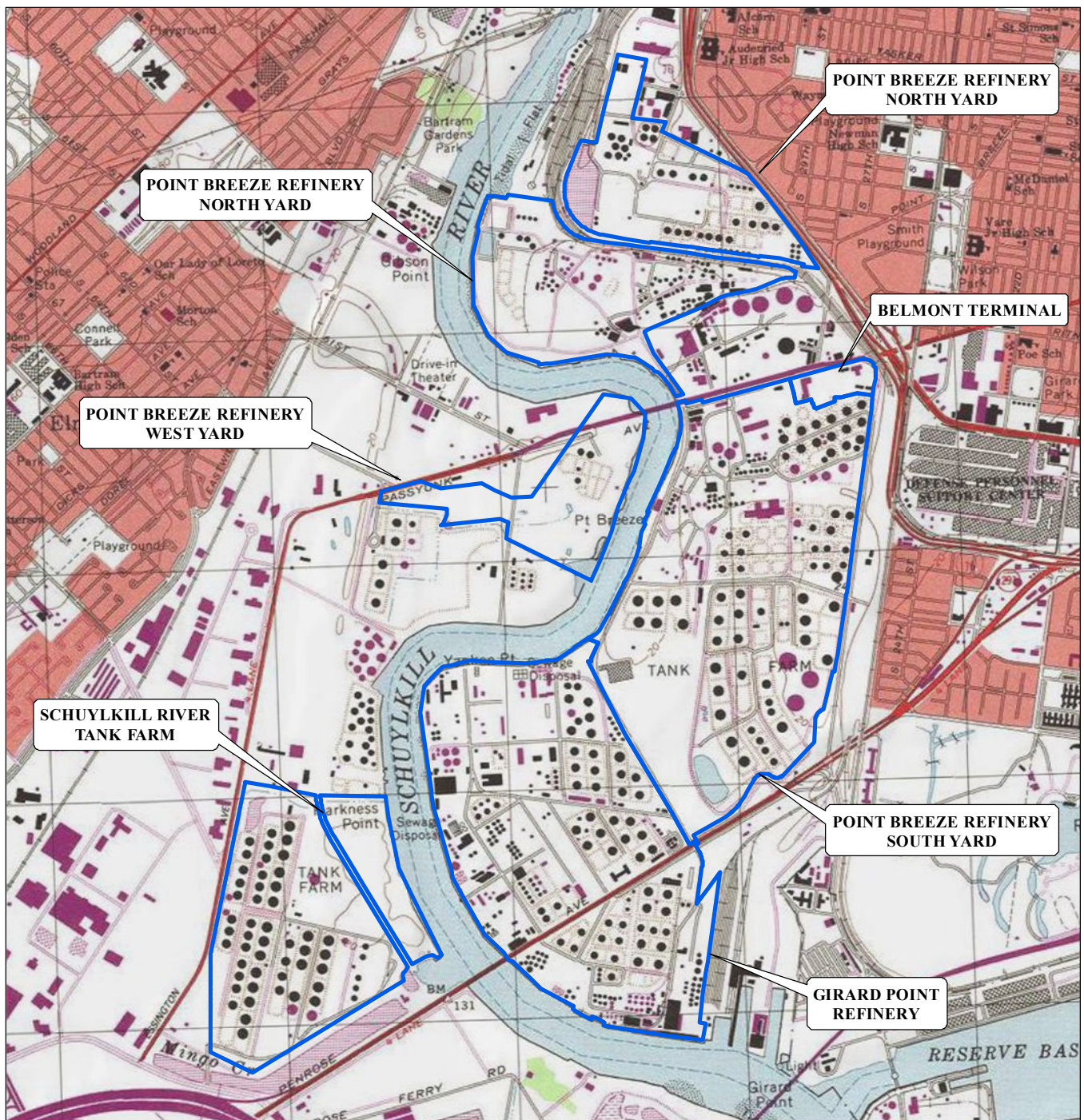
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File: ENFOS

FIGURES



- Notes**
1. Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
 2. Sources: Stantec, USGS
 3. Service Layer Credits: Copyright © 2013 National Geographic Society, i-cubed

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Legend
 PHILADELPHIA REFINING COMPLEX

0 1,100 2,200
 1:26,400 (at original document size of 8.5x11) Feet



Project Location: City of Philadelphia, Philadelphia County, Pennsylvania
 Prepared by GWC on 8/7/2019
 Technical Review by AJB on 8/26/2019
 Independent Review by DPH on 8/29/2019

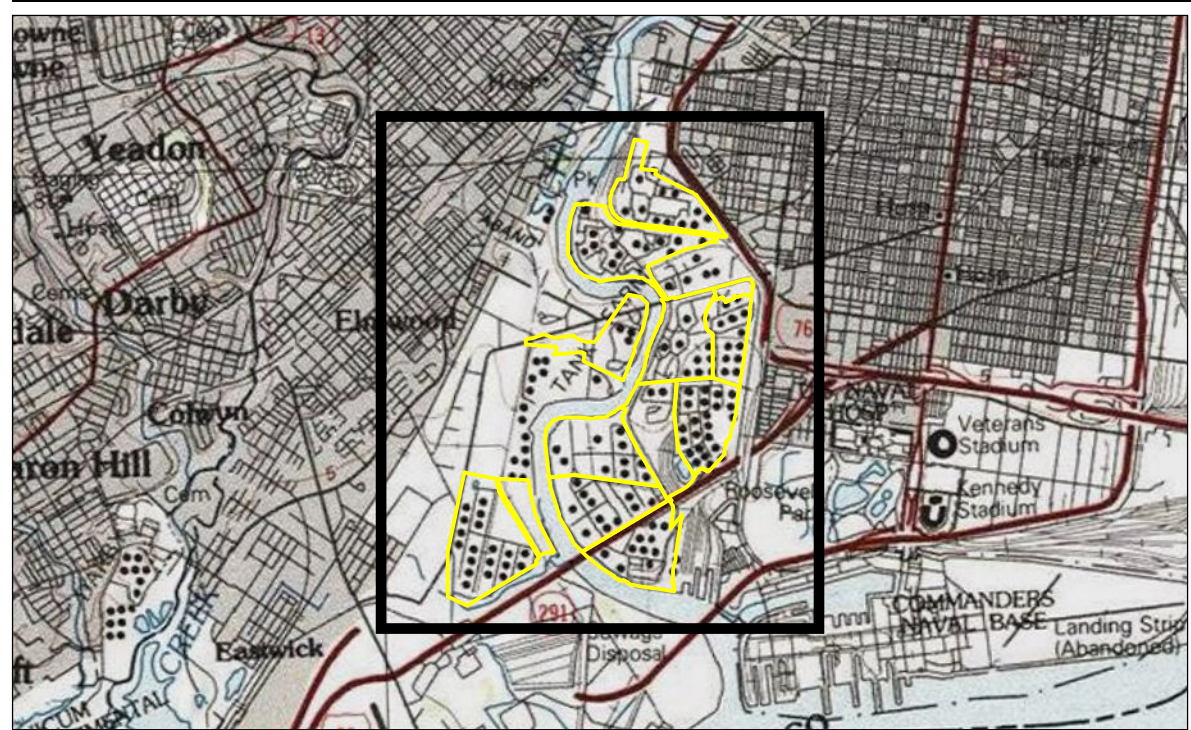
Client/Project: PHILADELPHIA REFINERY OPERATIONS, A SERIES OF EVERGREEN RESOURCES GROUP, LLC
 PHILADELPHIA REFINING COMPLEX
 3144 PASSYUNK AVENUE, PHILADELPHIA, PA 19145

Figure No.

1

Title

SITE LOCATION MAP



Notes
1. Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
2. Source: Stantec
3. Aerial & Topo Source: Copyright© 2013 National Geographic Society, i-cubed
Pictometry International Corp. Philadelphia Imagery 2018 downloaded from
Pennsylvania Spatial Data Access (PASDA)

- Legend**
- MONITORING WELL
 - RECOVERY WELL
 - DAMAGED MONITORING WELL
 - DESTROYED MONITORING WELL
 - PIEZOMETER
 - UNABLE TO ACCESS OR UNABLE TO LOCATE
 - APPROXIMATE LOCATION OF PHILADELPHIA WATER DEPARTMENT SEWER
 - REMEDATION SYSTEMS DESIGNATED AS CURRENTLY ACTIVE
 - AREA OF INTEREST (AOI)
 - PHILADELPHIA GAS WORKS (PGW) PASSYUNK FACILITY PROPERTY BOUNDARY
 - VERIZON SOUTH DISTRICT WORK CENTER (SDWC) PROPERTY

0 400 800 Feet
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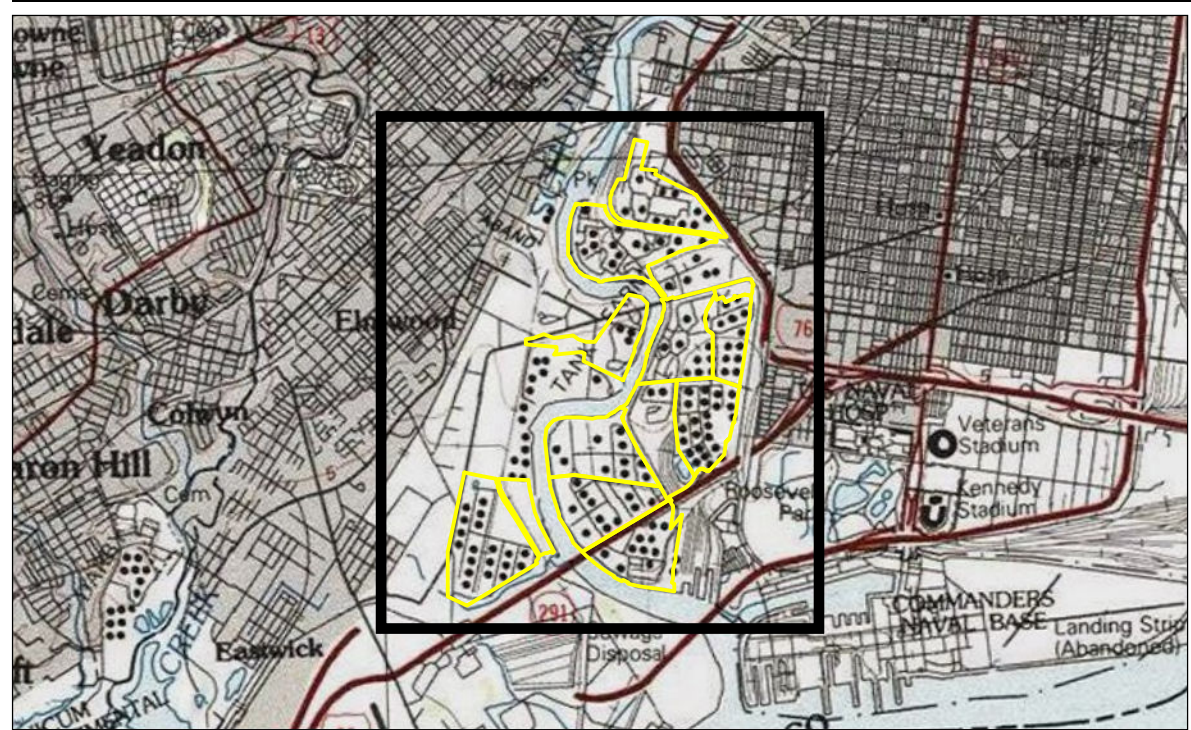


Figure No.
2
Title
SITE PLAN

Client/Project
PHILADELPHIA REFINERY OPERATIONS, A SERIES OF
EVERGREEN RESOURCES GROUP, LLC
PHILADELPHIA REFINING COMPLEX
3144 PASSYUNK AVENUE, PHILADELPHIA, PA 19145

Project Location
City of Philadelphia, Philadelphia County, Pennsylvania
Prepared by GWC on 8/7/2019
Technical Review by AJB on 8/28/2019
Independent Review by DPH on 8/29/2019
213402429





Notes

1. Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
North American Vertical Datum of 1988 (NAVD 88)
2. Source: Stantec
3. Callouts denote product thickness measured in feet using an interface probe.
4. Measurements from wells gauged during June 2019 synoptic event are provided. Wells not measured during the event include:
But not limited to: damaged wells, destroyed wells, inaccessible wells, wells with pumps, and wells that were gauged but dry.
5. Aerial & Topo Copyright© 2013 National Geographic Society, i-Cubed
Pictometry International Corp. Philadelphia imagery 2018 downloaded from Pennsylvania Spatial Data Access (PASDA)

Legend

- WELL – LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL) OBSERVED
- WELL – LNAPL NOT OBSERVED
- WELL – NOT MEASURED (SEE NOTE 4)
- APPROXIMATE LOCATION OF PHILADELPHIA WATER DEPARTMENT SEWER
- REMEDATION SYSTEMS DESIGNATED AS CURRENTLY ACTIVE
- AREA OF INTEREST (AOI)
- PHILADELPHIA GAS WORKS (PGW) PASSYUNK FACILITY PROPERTY BOUNDARY
- VERIZON SOUTH DISTRICT WORK CENTER (SDWC) PROPERTY
- 1.12 APPARENT LNAPL THICKNESS (FEET)
- <0.01 SHEEN

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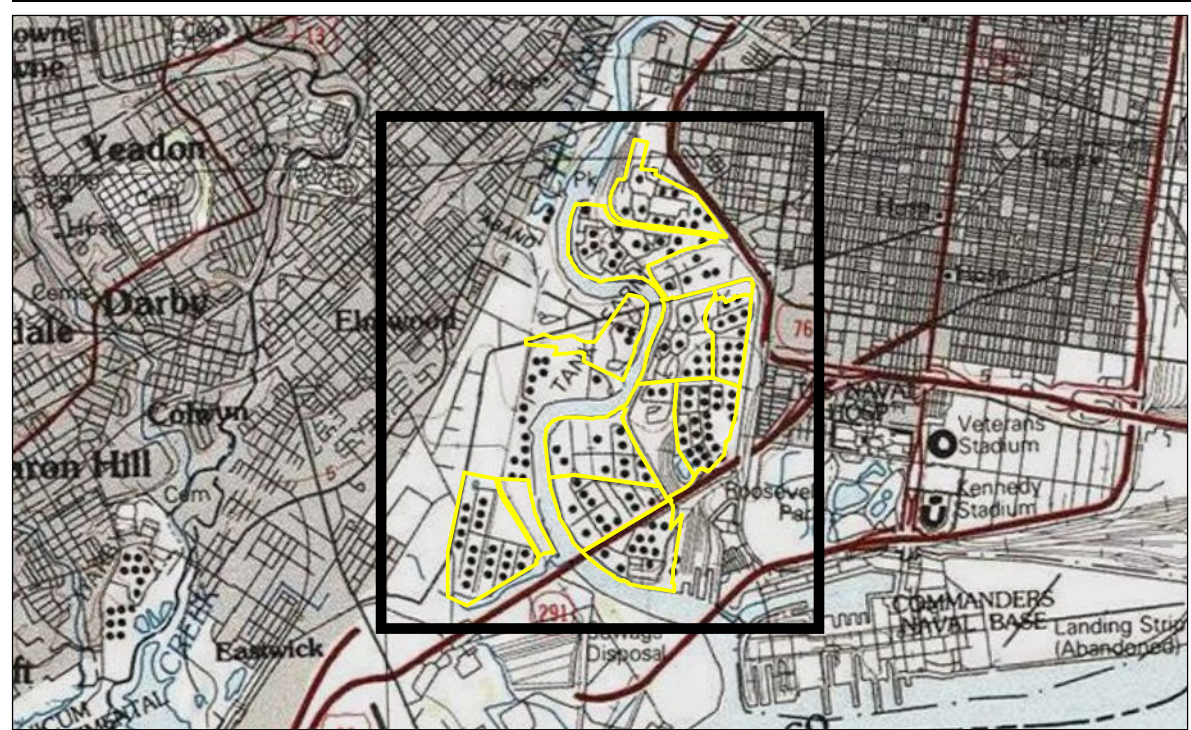


Figure No.
3
Title
**APPARENT LNAPL THICKNESS MAP
JUNE 2019**

Client/Project
PHILADELPHIA REFINERY OPERATIONS, A SERIES OF
EVERGREEN RESOURCES GROUP, LLC
PHILADELPHIA REFINING COMPLEX
3144 PASSYUNK AVENUE, PHILADELPHIA, PA 19145

Project Location
City of Philadelphia, Philadelphia County, Pennsylvania
213402429
Prepared by GWC on 8/15/2019
Technical Review by ADK on 8/16/2019
Independent Review by DPH on 8/29/2019





Notes

1. Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet, North American Vertical Datum of 1988 (NAVD 88)
2. Source: Stantec
3. Callouts denote corrected groundwater elevation in feet. Depth to groundwater was measured in each well to the nearest one-hundredth of a foot using an interface probe. PWS Complex groundwater remediation systems were not in operation during well gauging.
4. Groundwater elevation data was interpolated using block kriging with a linear variogram model in Surfer.
5. Wells not measured during the June 2019 event are not displayed and include (but not limited to) damaged wells, destroyed wells, inaccessible wells, wells with pumps, and wells that were gauged but dry.
6. Wells gauged during June 2019 but not utilized for water-table contouring include those containing measurable light, non-aqueous phase liquid, wells screened across a fill-supported peached aquifer, wells intersecting more than one water-bearing unit, wells with faired screens, a subset of the remediation system wells, and wells excluded from contouring in recent Remedial Investigation Reports. Wells not used for contouring are not displayed.
7. Contour interval = 1 foot
8. Aerial & Topo Copyright © 2013 National Geographic Society, Inc. (reused)
9. Pictometry International Corp. Philadelphia Imagery 2018 downloaded from Pennsylvania Spatial Data Access (PASDA)

Legend

- ◆ WATER-TABLE MONITORING WELL
- RECOVERY WELL
- PIEZOMETER
- WATER-TABLE ELEVATION CONTOUR (FEET NAVD 88)
- APPROXIMATE LOCATION OF PHILADELPHIA WATER DEPARTMENT SEWER
- LIMITS OF WATER-TABLE WELL CONTROL
- AREA OF INTEREST (AOI)
- VERIZON SOUTH DISTRICT WORK CENTER (SDWC) PROPERTY
- PHILADELPHIA GAS WORKS (PGW) PASSYUNK FACILITY PROPERTY BOUNDARY
- WATER-TABLE ELEVATION (FEET NAVD 88)

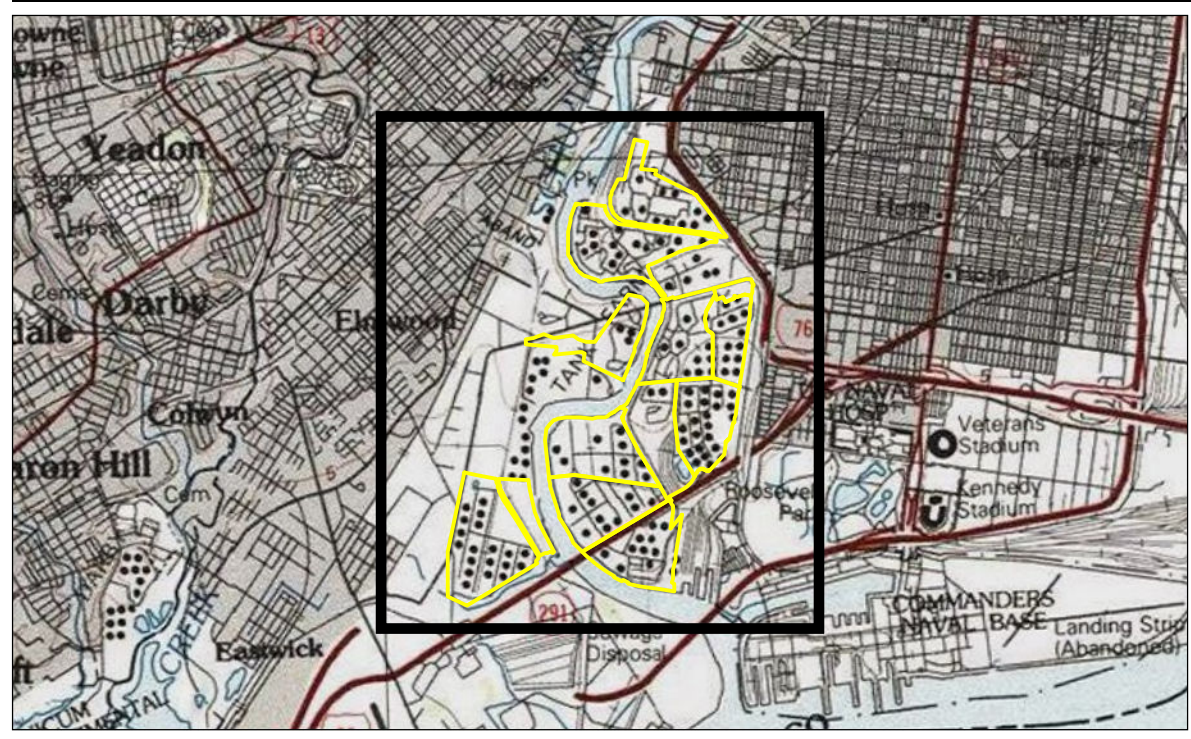
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1:4,800 (At original document size of 36x48)



Figure No.
4
Title
**WATER-TABLE
GROUNDWATER ELEVATION MAP
JUNE 2019**
Client/Project
PHILADELPHIA REFINERY OPERATIONS, A SERIES OF
EVERGREEN RESOURCES GROUP, LLC
PHILADELPHIA REFINING COMPLEX
3144 PASSYUNK AVENUE, PHILADELPHIA, PA 19145
Project Location
City of Philadelphia
Philadelphia County,
Pennsylvania
Prepared by GWC on 8/15/2019
Technical Review by ADK on 8/16/2019
Independent Review by DPH on 8/29/2019
213402429



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Notes

1. Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
2. North American Vertical Datum of 1988 (NAVD 88)
3. Source: Stantec
4. Callbacks denote connected groundwater elevation in feet. Depth to groundwater was measured in each well to the nearest one-hundredth of a foot using an interface probe.
5. Groundwater elevation data was interpolated using block kriging with a linear variogram model in Surfer.
6. Contour Interval = 1 foot
7. Aerial & Topo Copyright © 2013 National Geographic Society, Inc. used
8. Pictometry International Corp. Philadelphia Imagery 2018, downloaded from Pennsylvania Spatial Data Access (PASDA)

- Legend**
- LOWER AQUIFER MONITORING WELL
 - GROUNDWATER ELEVATION CONTOUR (FEET NAVD 88)
 - APPROXIMATE LOCATION OF PHILADELPHIA WATER DEPARTMENT SEWER
 - LIMITS OF LOWER AQUIFER WELL CONTROL
 - AREA OF INTEREST (AOI)
 - VERIZON SOUTH DISTRICT WORK CENTER (SDWC) PROPERTY
 - PHILADELPHIA GAS WORKS (PGW) PASSYUNK FACILITY PROPERTY BOUNDARY
 - 1.11 GROUNDWATER ELEVATION (FEET NAVD 88)

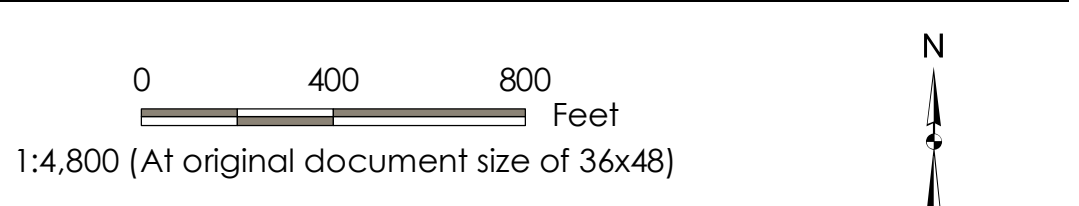


Figure No.
5

Title
**LOWER AQUIFER
GROUNDWATER ELEVATION MAP
JUNE 2019**

Client/Project
PHILADELPHIA REFINERY OPERATIONS, A SERIES OF
EVERGREEN RESOURCES GROUP, LLC
PHILADELPHIA REFINING COMPLEX
3144 PASSYUNK AVENUE, PHILADELPHIA, PA 19145

Project Location
City of Philadelphia,
Philadelphia County,
Pennsylvania

213402429
Prepared by GWC on 8/15/2019
Technical Review by ADK on 8/16/2019
Independent Review by DPH on 8/29/2019



TABLES

Table 1
First Quarter 2019 Gauging Data
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
AOI 1	RW-401	13-Feb-19	20.38	20.63	0.25	4.34	NYC	Static	
AOI 1	RW-402	13-Feb-19	---	23.05	---	-1.34	unconfined	Pumping	
AOI 1	RW-403	13-Feb-19	---	20.30	---	3.83	unconfined	Static	
AOI 1	RW-404	13-Feb-19	---	21.87	---	1.87	unconfined	Static	
AOI 1	RW-405	13-Feb-19	24.14	24.31	0.17	-0.06	NYC	Static	
AOI 1	RW-406	13-Feb-19	22.93	23.00	0.07	5.65	NYC	Static	
AOI 1	S-179	13-Feb-19	---	17.11	---	7.42	unconfined	Static	
AOI 1	S-180	13-Feb-19	---	17.56	---	4.64	unconfined	Static	
AOI 1	S-181	13-Feb-19	20.60	20.60	<0.01	2.27	NYC	Static	
AOI 1	S-182	13-Feb-19	---	19.21	---	3.79	unconfined	Static	pump not operational-removed for repair/cleaning
AOI 1	S-183	13-Feb-19	---	26.25	---	-2.77	unconfined	Pumping	
AOI 1	S-184	13-Feb-19	---	23.95	---	-0.47	unconfined	Pumping	
AOI 1	S-185	13-Feb-19	---	19.70	---	4.18	unconfined	Static	pump not operational-removed for repair/cleaning
AOI 1	S-186	13-Feb-19	---	28.70	---	-4.34	unconfined	Pumping	
AOI 1	S-187	13-Feb-19	---	25.70	---	-1.19	unconfined	Pumping	
AOI 1	S-188	13-Feb-19	---	25.00	---	-0.18	unconfined	Pumping	
AOI 1	S-189	13-Feb-19	---	21.33	---	4.46	unconfined	Static	pump not operational-removed for repair/cleaning
AOI 1	S-190	13-Feb-19	---	25.90	---	-0.33	NYC	Pumping	
AOI 1	S-191	13-Feb-19	---	21.28	---	4.55	unconfined	Static	pump not operational-removed for repair/cleaning
AOI 1	S-192	13-Feb-19	---	21.41	---	4.61	unconfined	Static	pump not operational-removed for repair/cleaning
AOI 2	River1	11-Feb-19	---	12.10	---	NM	NYC	Static	measured at 09:50
AOI 2	RW-100	11-Feb-19	19.03	19.42	0.39	1.64	NYC	Static	
AOI 2	RW-101	11-Feb-19	18.80	18.83	0.03	0.97	NYC	Static	
AOI 2	RW-102	11-Feb-19	15.60	15.62	0.02	1.87	NYC	Static	
AOI 2	RW-103	11-Feb-19	18.28	18.31	0.03	1.73	NYC	Static	
AOI 2	RW-104	11-Feb-19	---	8.42	---	0.54	NYC	Static	
AOI 2	RW-105	11-Feb-19	---	8.85	---	-0.17	NYC	Static	
AOI 2	RW-106	11-Feb-19	---	8.01	---	1.29	NYC	Static	
AOI 2	RW-107	11-Feb-19	---	9.80	---	0.75	NYC	Static	
AOI 2	RW-108	11-Feb-19	---	7.70	---	2.20	NYC	Static	
AOI 2	RW-109	11-Feb-19	---	7.18	---	2.67	NYC	Static	
AOI 2	RW-113	11-Feb-19	---	9.36	---	0.87	NYC	Static	
AOI 2	RW-114	11-Feb-19	---	11.98	---	1.03	NYC	Static	
AOI 2	RW-115	11-Feb-19	---	9.11	---	1.09	NYC	Static	
AOI 2	RW-116	11-Feb-19	---	9.63	---	1.18	NYC	Static	
AOI 2	RW-117	11-Feb-19	8.50	8.88	0.38	1.23	NYC	Static	
AOI 2	RW-118	11-Feb-19	---	10.49	---	1.33	NYC	Static	
AOI 2	RW-119	11-Feb-19	---	11.64	---	1.21	NYC	Static	
AOI 2	RW-120	11-Feb-19	---	12.36	---	1.22	NYC	Static	
AOI 2	RW-121	11-Feb-19	---	14.15	---	1.15	NYC	Static	
AOI 2	RW-122	11-Feb-19	---	8.76	---	1.48	NYC	Static	
AOI 2	RW-123	11-Feb-19	---	8.57	---	1.40	NYC	Static	
AOI 2	RW-124	11-Feb-19	---	7.60	---	1.56	NYC	Static	
AOI 2	RW-125	11-Feb-19	---	13.37	---	0.90	NYC	Static	
AOI 2	RW-126	11-Feb-19	---	7.78	---	1.45	NYC	Static	
AOI 2	RW-127	11-Feb-19	---	12.78	---	1.12	NYC	Static	
AOI 2	RW-128	11-Feb-19	8.36	8.69	0.33	0.02	NYC	Static	
AOI 2	RW-129	11-Feb-19	---	9.23	---	0.60	NYC	Static	
AOI 2	S-64	11-Feb-19	---	6.95	---	3.61	NYC	Static	
AOI 2	S-65	11-Feb-19	---	9.59	---	1.03	NYC	Static	
AOI 2	S-93	11-Feb-19	---	16.98	---	1.27	NYC	Static	
AOI 2	S-313	11-Feb-19	---	19.70	---	1.20	NYC	Static	
AOI 2	S-315	11-Feb-19	---	20.53	---	-0.06	NYC	Static	
AOI 2	S-316	11-Feb-19	NM	NM	NM	NM	NYC	Static	could not locate - K90under stone
AOI 2	S-406	11-Feb-19	10.82	10.82	<0.01	1.38	NYC	Static	
AOI 2	S-420	11-Feb-19	---	6.67	---	2.59	NYC	Static	
AOI 3	RW-2	12-Feb-19	10.44	10.45	0.01	0.85	NYC	Static	
AOI 3	S-20	15-Jan-19	---	17.49	---	2.77	unconfined	Static	
AOI 3	S-23	15-Jan-19	---	17.51	---	2.77	NYC	Static	
AOI 3	S-25	15-Jan-19	---	9.34	---	2.77	NYC	Static	
AOI 4	RW-700	12-Feb-19	---	20.90	---	-2.89	unconfined	Pumping	
AOI 4	RW-701	12-Feb-19	---	20.30	---	-2.03	unconfined	Pumping	
AOI 4	RW-702	11-Feb-19	---	33.80	---	-12.85	unconfined	Pumping	
AOI 4	RW-703	12-Feb-19	---	29.70	---	-9.08	unconfined	Pumping	
AOI 4	RW-704	12-Feb-19	---	21.25	---	-1.02	unconfined	Pumping	
AOI 4	RW-705	12-Feb-19	---	12.53	---	3.39	unconfined	Static	
AOI 4	RW-706	12-Feb-19	---	13.69	---	2.20	unconfined	Static	
AOI 4	RW-707	12-Feb-19	---	13.38	---	2.91	unconfined	Static	
AOI 4	RW-708	12-Feb-19	---	13.20	---	2.29	unconfined	Static	
AOI 4	RW-709	12-Feb-19	---	13.02	---	2.28	unconfined	Static	
AOI 4	RW-710	12-Feb-19	---	11.83	---	4.05	unconfined	Static	
AOI 4	RW-711	12-Feb-19	---	13.17	---	2.32	unconfined	Static	
AOI 4	RW-712	12-Feb-19	---	13.21	---	2.35	unconfined	Static	
AOI 4	RW-713	12-Feb-19	---	12.77	---	2.25	unconfined	Static	
AOI 4	RW-714	12-Feb-19	---	12.88	---	2.33	unconfined	Static	
AOI 4	RW-715	12-Feb-19	---	13.07	---	2.30	unconfined	Static	
AOI 4	RW-716	12-Feb-19	---	13.21	---	2.34	unconfined	Static	

Table 1
First Quarter 2019 Gauging Data
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

AOI 4	RW-717	12-Feb-19	---	13.23	---	2.38	unconfined	Static	
AOI 4	S-26	15-Jan-19	---	17.98	---	2.78	unconfined	Static	
AOI 4	S-30	12-Feb-19	20.67	21.35	0.68	2.37	unconfined	Static	
AOI 4	S-34	12-Feb-19	---	14.53	---	6.36	unconfined	Static	
AOI 4	S-35	12-Feb-19	---	19.20	---	1.74	unconfined	Static	
AOI 4	S-36	12-Feb-19	22.32	22.32	<0.01	1.92	unconfined	Static	
AOI 4	S-38	15-Jan-19	---	16.13	---	2.82	unconfined	Static	
AOI 4	S-123	15-Jan-19	---	19.30	---	2.83	unconfined	Static	
AOI 4	S-124	15-Jan-19	---	20.54	---	2.66	unconfined	Static	
AOI 4	S-220	15-Jan-19	17.98	18.01	0.03	2.83	unconfined	Static	
AOI 4	S-221	12-Feb-19	---	25.00	---	-2.00	unconfined	Static	
AOI 4	S-222	15-Jan-19	---	13.30	---	2.99	unconfined	Static	
AOI 4	S-223	15-Jan-19	---	13.04	---	2.84	unconfined	Static	
AOI 4	S-224	15-Jan-19	---	13.20	---	2.83	unconfined	Static	
AOI 4	S-233	15-Jan-19	18.42	19.12	0.70	5.85	unconfined	Static	
AOI 4	S-234	15-Jan-19	---	18.73	---	2.50	unconfined	Static	
AOI 4	S-235	15-Jan-19	20.35	20.38	0.03	2.77	unconfined	Static	
AOI 4	S-236	12-Feb-19	---	25.85	---	-2.88	unconfined	Static	
AOI 4	S-237	12-Feb-19	---	26.05	---	-3.24	unconfined	Static	
AOI 4	S-238	15-Jan-19	20.18	20.44	0.26	2.69	unconfined	Static	
AOI 4	S-239	15-Jan-19	---	12.98	---	2.84	unconfined	Static	
AOI 4	S-240	15-Jan-19	---	21.20	---	2.66	unconfined	Static	
AOI 4	S-241	15-Jan-19	23.30	26.04	2.74	2.49	unconfined	Static	
AOI 4	S-242	15-Jan-19	---	19.13	---	2.76	unconfined	Static	
AOI 4	S-243	15-Jan-19	---	12.75	---	2.99	unconfined	Static	
AOI 4	S-245	15-Jan-19	---	19.11	---	3.10	unconfined	Static	
AOI 4	S-278	15-Jan-19	---	18.23	---	2.80	unconfined	Static	
AOI 4	S-279	15-Jan-19	23.43	24.08	0.65	2.88	unconfined	Static	
AOI 4	S-329	15-Jan-19	---	18.33	---	2.59	unconfined	Static	
AOI 4	S-373	15-Jan-19	18.25	18.31	0.06	2.51	unconfined	Static	
AOI 4	S-374	16-Jan-19	---	12.95	---	2.68	NYC	Static	
AOI 4	S-375	16-Jan-19	---	13.33	---	2.63	NYC	Static	
AOI 4	S-376	16-Jan-19	13.07	13.07	<0.01	2.58	NYC	Static	trace LNAPL detected
AOI 4	S-377	16-Jan-19	---	12.28	---	2.41	NYC	Static	
AOI 4	S-378	16-Jan-19	---	9.57	---	2.40	NYC	Static	
AOI 4	S-408	15-Jan-19	---	13.06	---	2.82	unconfined	Static	
AOI 5	RWBH-1	15-Feb-19	2.71	2.88	0.17	2.60	unconfined	Static	
AOI 5	RWBH-2	15-Feb-19	1.39	4.35	2.96	2.45	unconfined	Static	
AOI 6	B-124	15-Feb-19	4.63	6.92	2.29	3.91	NYC	Static	
AOI 6	B-132	15-Feb-19	4.61	4.72	0.11	2.25	NYC	Static	
AOI 6	B-135	15-Feb-19	4.93	4.93	<0.01	1.46	NYC	Static	
AOI 6	B-136	15-Feb-19	4.37	4.37	<0.01	4.79	NYC	Static	
AOI 6	B-137	15-Feb-19	3.92	5.55	1.63	4.59	NYC	Static	
AOI 6	B-142	15-Feb-19	6.46	7.48	1.02	3.14	NYC	Static	
AOI 6	B-143	15-Feb-19	4.13	4.93	0.80	4.74	NYC	Static	
AOI 6	B-147	15-Feb-19	5.02	5.02	<0.01	3.89	NYC	Static	
AOI 7	RW-801	13-Feb-19	---	18.80	---	-12.53	NYC	Pumping	
AOI 7	RW-802	13-Feb-19	---	19.85	---	-14.15	NYC	Pumping	
AOI 7	RW-803	13-Feb-19	---	20.55	---	-14.77	NYC	Pumping	
AOI 7	RW-804	13-Feb-19	---	20.80	---	-15.02	NYC	Pumping	
AOI 7	RW-805	13-Feb-19	---	17.30	---	-11.55	NYC	Pumping	
AOI 7	RW-806	13-Feb-19	---	20.40	---	-14.99	NYC	Pumping	
AOI 7	RW-807	13-Feb-19	---	16.10	---	-9.26	NYC	Pumping	
AOI 7	RW-808	13-Feb-19	---	18.50	---	-12.42	NYC	Pumping	
AOI 7	RW-809	13-Feb-19	NM	NM	NM	NM	NYC	Pumping	no access- equipment on vault lid
AOI 7	RW-810	15-Feb-19	---	14.50	---	-8.06	NYC	Static	
AOI 8	N-137	22-Mar-19	15.25	15.27	0.02	10.34	unconfined	Static	passive bailer was empty
AOI 8	N-138	22-Mar-19	---	24.94	---	10.35	unconfined	Static	passive bailer was empty
AOI 8	N-139	22-Mar-19	24.65	24.70	0.05	10.34	unconfined	Static	passive bailer was full of black product
AOI 8	RW-200	15-Feb-19	---	4.60	---	7.42	unconfined	Static	
AOI 8	RW-201	15-Feb-19	21.73	21.78	0.05	10.25	unconfined	Static	
AOI 8	RW-202	15-Feb-19	---	19.17	---	10.34	unconfined	Static	
AOI 8	RW-203	15-Feb-19	21.25	21.27	0.02	9.85	unconfined	Static	
AOI 8	RW-204	15-Feb-19	17.86	20.44	2.58	10.45	unconfined	Static	
AOI 8	RW-205	15-Feb-19	17.72	20.45	2.73	11.71	unconfined	Static	
AOI 8	RW-206	15-Feb-19	19.48	20.52	1.04	11.35	unconfined	Static	
AOI 8	RW-300	15-Feb-19	13.83	14.45	0.62	7.71	lower aquifer	Static	
AOI 8	RW-301	15-Feb-19	---	11.38	---	11.03	unconfined	Static	
AOI 8	RW-302	15-Feb-19	---	12.60	---	11.49	unconfined	Static	
AOI 8	RW-303	15-Feb-19	---	13.22	---	11.76	unconfined	Static	
AOI 8	RW-304	15-Feb-19	---	14.07	---	11.21	unconfined	Static	
AOI 8	RW-305	15-Feb-19	---	14.17	---	11.10	unconfined	Static	
AOI 8	RW-306	15-Feb-19	---	12.35	---	11.23	unconfined	Static	
AOI 8	RW-307	15-Feb-19	---	14.31	---	8.95	unconfined	Static	
AOI 8	RW-308	15-Feb-19	---	16.15	---	9.46	unconfined	Static	
AOI 8	RW-309	15-Feb-19	---	15.06	---	10.17	unconfined	Static	
AOI 8	RW-500	15-Feb-19	---	1.74	---	5.82	unconfined	Static	
AOI 8	RW-501	15-Feb-19	---	3.94	---	5.85	unconfined	Static	
AOI 8	RW-502	15-Feb-19	8.48	8.81	0.33	3.96	unconfined	Static	
BELMONT	RW-1	14-Feb-19	NM	NM	NM	NM	unconfined	Static	no access-vehicle on vault
BELMONT	RW-4	14-Feb-19	26.20	26.85	0.65	4.11	NYC	Static	

Table 1
First Quarter 2019 Gauging Data
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

BELMONT	RW-6	14-Feb-19	---	26.15	---	4.91	unconfined	Static	
BELMONT	RW-7	14-Feb-19	---	23.34	---	4.87	unconfined	Static	
BELMONT	RW-15	14-Feb-19	---	26.28	---	3.77	unconfined	Static	
BELMONT	RW-21	14-Feb-19	---	24.31	---	4.55	unconfined	Static	
BELMONT	RW-22	14-Feb-19	---	22.21	---	4.82	unconfined	Static	
BELMONT	RW-23	14-Feb-19	---	22.37	---	4.76	NYC	Static	
BELMONT	RW-24	14-Feb-19	26.01	26.47	0.46	1.06	unconfined	Pumping	
BELMONT	RW-25	14-Feb-19	29.00	29.32	0.32	1.09	NYC	Pumping	
BELMONT	RW-26	14-Feb-19	---	23.87	---	5.34	unconfined	Static	
BELMONT	RW-27	14-Feb-19	---	25.43	---	4.28	unconfined	Static	
BELMONT	RW-28	14-Feb-19	---	22.08	---	7.66	unconfined	Static	
BELMONT	RW-29	14-Feb-19	---	25.31	---	4.13	unconfined	Static	
BELMONT	RW-30	14-Feb-19	---	25.16	---	4.23	unconfined	Static	
BELMONT	RW-31	14-Feb-19	---	25.14	---	4.24	unconfined	Static	
BELMONT	RW-32	14-Feb-19	---	6.62	---	22.43	unconfined	Static	
BELMONT	RW-400	14-Feb-19	---	27.40	---	0.79	unconfined	Pumping	

Notes:

For product thickness <0.01 ft, the corrected groundwater elevation was calculated using 0.01 foot.

LNAPL = Light non-aqueous phase liquid

ft = Feet

toc = Top of casing

ft btoc = Feet below top of casing

NAVD 88 = North American Vertical Datum of 1988

--- = LNAPL not present

NM = Field reading not measured and/or corrected groundwater elevation not calculated due to lack of surveyed reference elevation or well was dry or presence of down-well pump.

NA = Not Accessible, Not Applicable, or Not Available

NYC = Not yet classified

unconfined* = Hydrostratigraphic unit was assumed because there was no well construction data available.

Table 2
 Sitewide 2019 Annual Gauging Data
 Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
AOI 1	ARCO-1	6/3/2019	---	25.87	---	1.08	unconfined	Static	
AOI 1	ARCO-1D	6/3/2019	---	25.80	---	1.26	lower aquifer	Static	
AOI 1	ARCO-2	6/3/2019	---	25.04	---	0.96	unconfined	Static	
AOI 1	ARCO-3	6/3/2019	---	23.79	---	0.52	unconfined	Static	
AOI 1	MW-330	03-Jun-19	---	24.75	---	NM	NYC	Static	
AOI 1	MW-331	03-Jun-19	---	25.17	---	NM	NYC	Static	
AOI 1	MW-332	10-Jun-19	NM	NM	NM	NM	NYC	Static	
AOI 1	MWELL-28	03-Jun-19	---	20.77	---	0.88	NYC	Static	
AOI 1	MWELL-29	03-Jun-19	---	21.97	---	0.25	NYC	Static	
AOI 1	MWELL-30	03-Jun-19	---	25.66	---	0.47	NYC	Static	
AOI 1	MWELL-31	03-Jun-19	---	24.95	---	0.97	NYC	Static	
AOI 1	PZ-401	03-Jun-19	19.61	19.67	0.06	4.10	unconfined	Static	
AOI 1	PZ-402	03-Jun-19	19.15	19.23	0.08	4.23	NYC	Static	
AOI 1	PZ-403	03-Jun-19	22.95	22.96	0.01	1.46	NYC	Static	viscous LNAPL
AOI 1	PZ-404	03-Jun-19	---	26.00	---	0.01	NYC	Static	
AOI 1	RW-110	03-Jun-19	---	15.97	---	1.70	unconfined	Static	
AOI 1	RW-111	03-Jun-19	---	14.32	---	3.40	unconfined	Static	
AOI 1	RW-112	03-Jun-19	---	16.01	---	1.60	unconfined	Static	
AOI 1	RW-401	16-Jul-19	20.04	20.75	0.71	4.59	NYC	Static	
AOI 1	RW-402	03-Jun-19	---	23.40	---	-1.69	unconfined	Static	
AOI 1	RW-403	03-Jun-19	---	20.40	---	3.73	unconfined	Static	
AOI 1	RW-404	03-Jun-19	---	21.17	---	2.57	unconfined	Static	
AOI 1	RW-405	03-Jun-19	24.16	24.31	0.15	-0.07	NYC	Static	
AOI 1	RW-406	03-Jun-19	22.45	22.82	0.37	6.07	NYC	Static	
AOI 1	S-41	03-Jun-19	---	24.81	---	0.94	unconfined	Static	
AOI 1	S-42I	03-Jun-19	---	24.11	---	-0.55	lower aquifer	Static	
AOI 1	S-43	03-Jun-19	---	23.11	---	0.11	unconfined	Static	
AOI 1	S-44	03-Jun-19	---	24.53	---	-1.19	unconfined	Static	
AOI 1	S-45	03-Jun-19	---	16.56	---	5.01	unconfined	Static	
AOI 1	S-46	03-Jun-19	---	20.86	---	1.70	unconfined	Static	
AOI 1	S-46D	03-Jun-19	---	13.69	---	2.02	NYC	Static	
AOI 1	S-47I	03-Jun-19	---	20.52	---	1.69	middle clay unit	Static	
AOI 1	S-50	03-Jun-19	---	20.83	---	1.65	unconfined	Static	
AOI 1	S-51	03-Jun-19	---	21.68	---	0.86	unconfined	Static	
AOI 1	S-52	03-Jun-19	---	22.17	---	1.37	unconfined	Static	
AOI 1	S-77	03-Jun-19	8.95	11.95	3.00	21.18	NYC	Static	
AOI 1	S-77P	16-Jul-19	---	28.03	---	5.01	unconfined	Static	
AOI 1	S-78	03-Jun-19	---	25.65	---	5.28	unconfined	Static	
AOI 1	S-80	03-Jun-19	---	27.07	---	5.06	unconfined	Static	
AOI 1	S-80D	03-Jun-19	---	28.94	---	2.80	lower aquifer	Static	
AOI 1	S-82	03-Jun-19	22.38	22.38	<0.01	4.92	NYC	Static	
AOI 1	S-83	03-Jun-19	19.82	20.01	0.19	3.47	NYC	Static	
AOI 1	S-84P	03-Jun-19	---	15.75	---	7.51	unconfined	Static	
AOI 1	S-85	03-Jun-19	---	22.96	---	2.17	unconfined	Static	
AOI 1	S-86	03-Jun-19	25.60	25.61	0.01	1.45	NYC	Static	
AOI 1	S-87I	03-Jun-19	---	23.95	---	1.92	lower aquifer	Static	
AOI 1	S-88	03-Jun-19	---	24.83	---	-0.73	unconfined	Static	
AOI 1	S-88A	03-Jun-19	---	17.15	---	6.65	unconfined	Static	
AOI 1	S-89	03-Jun-19	25.93	26.00	0.07	0.05	unconfined	Static	
AOI 1	S-95	03-Jun-19	---	21.36	---	1.63	unconfined	Static	
AOI 1	S-98	03-Jun-19	22.36	22.36	<0.01	6.45	unconfined	Static	
AOI 1	S-99	03-Jun-19	---	24.37	---	1.03	unconfined	Static	
AOI 1	S-100	03-Jun-19	22.49	23.42	0.93	4.32	NYC	Static	
AOI 1	S-101	03-Jun-19	---	46.51	---	2.61	unconfined	Static	
AOI 1	S-117	03-Jun-19	---	16.40	---	2.01	unconfined	Static	
AOI 1	S-118	03-Jun-19	---	16.48	---	1.42	unconfined	Static	
AOI 1	S-125	03-Jun-19	21.70	21.82	0.12	4.27	NYC	Static	
AOI 1	S-126	16-Jul-19	14.22	14.53	0.31	14.22	NYC	Static	
AOI 1	S-127	03-Jun-19	---	17.61	---	-0.51	unconfined	Static	
AOI 1	S-162	03-Jun-19	---	16.39	---	1.67	unconfined	Static	
AOI 1	S-164	03-Jun-19	---	14.83	---	1.87	unconfined	Static	
AOI 1	S-179	03-Jun-19	---	17.60	---	6.93	unconfined	Static	
AOI 1	S-180	03-Jun-19	---	17.15	---	5.05	unconfined	Static	
AOI 1	S-181	03-Jun-19	---	18.97	---	3.89	NYC	Static	
AOI 1	S-182	03-Jun-19	---	18.65	---	4.35	unconfined	Static	
AOI 1	S-183	03-Jun-19	---	19.01	---	4.47	unconfined	Static	
AOI 1	S-184	03-Jun-19	---	21.53	---	1.95	unconfined	Pumping	
AOI 1	S-185	03-Jun-19	---	19.03	---	4.85	unconfined	Static	
AOI 1	S-186	03-Jun-19	---	19.39	---	4.97	unconfined	Static	
AOI 1	S-187	16-Jul-19	---	19.94	---	4.57	unconfined	Static	
AOI 1	S-188	03-Jun-19	---	19.95	---	4.87	unconfined	Static	

Table 2
 Sitewide 2019 Annual Gauging Data
 Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
AOI 1	S-189	03-Jun-19	---	20.94	---	4.85	unconfined	Static	
AOI 1	S-190	03-Jun-19	---	20.70	---	4.87	NYC	Static	
AOI 1	S-191	03-Jun-19	---	20.96	---	4.87	unconfined	Static	
AOI 1	S-192	03-Jun-19	---	20.15	---	5.87	unconfined	Static	
AOI 1	S-193	03-Jun-19	---	23.21	---	4.89	unconfined	Static	
AOI 1	S-194	03-Jun-19	---	25.15	---	5.89	unconfined	Static	
AOI 1	S-196	03-Jun-19	---	44.95	---	5.10	unconfined	Static	
AOI 1	S-197	03-Jun-19	---	44.32	---	5.46	NYC	Static	
AOI 1	S-198	03-Jun-19	24.19	25.31	1.12	4.91	NYC	Static	
AOI 1	S-199	16-Jul-19	24.34	25.81	1.47	4.54	NYC	Static	
AOI 1	S-200	03-Jun-19	---	24.09	---	4.97	unconfined	Static	
AOI 1	S-201	03-Jun-19	22.90	23.58	0.68	4.90	NYC	Static	
AOI 1	S-202	03-Jun-19	---	27.63	---	4.98	unconfined	Static	
AOI 1	S-203	16-Jul-19	26.64	28.98	2.34	5.01	NYC	Static	
AOI 1	S-205	03-Jun-19	16.83	16.84	0.01	11.34	NYC	Static	
AOI 1	S-206	03-Jun-19	---	26.70	---	5.08	unconfined	Static	
AOI 1	S-207	03-Jun-19	---	13.14	---	14.06	unconfined	Static	
AOI 1	S-208	03-Jun-19	---	18.57	---	2.29	unconfined	Static	
AOI 1	S-209	03-Jun-19	---	25.28	---	1.70	unconfined	Static	
AOI 1	S-210	03-Jun-19	---	23.21	---	0.48	unconfined	Static	
AOI 1	S-211	03-Jun-19	---	13.25	---	2.00	unconfined	Static	
AOI 1	S-213	03-Jun-19	---	13.49	---	1.72	unconfined	Static	
AOI 1	S-214	03-Jun-19	---	17.68	---	2.16	unconfined	Static	
AOI 1	S-215	03-Jun-19	NM	NM	NM	NM	NYC	Static	obstruction at 0.65 feet
AOI 1	S-226	03-Jun-19	---	21.17	---	0.91	unconfined	Static	
AOI 1	S-227	03-Jun-19	---	21.07	---	0.72	unconfined	Static	
AOI 1	S-228	03-Jun-19	---	21.00	---	0.18	unconfined	Static	
AOI 1	S-230	03-Jun-19	---	17.75	---	2.44	unconfined	Static	
AOI 1	S-231	03-Jun-19	---	19.54	---	0.40	unconfined	Static	
AOI 1	S-232	03-Jun-19	---	20.11	---	0.20	unconfined	Static	
AOI 1	S-255	03-Jun-19	---	21.72	---	0.19	unconfined	Static	
AOI 1	S-256	03-Jun-19	---	20.96	---	0.45	unconfined	Static	
AOI 1	S-257	03-Jun-19	---	22.55	---	0.72	unconfined	Static	
AOI 1	S-258	03-Jun-19	---	22.32	---	0.48	unconfined	Static	
AOI 1	S-259	03-Jun-19	---	23.86	---	-1.30	unconfined	Static	
AOI 1	S-260	03-Jun-19	---	22.58	---	-0.88	unconfined	Static	
AOI 1	S-261	03-Jun-19	---	24.63	---	2.78	unconfined	Static	
AOI 1	S-262	03-Jun-19	---	17.89	---	1.55	unconfined	Static	
AOI 1	S-263	03-Jun-19	---	15.45	---	1.33	unconfined	Static	
AOI 1	S-264D	03-Jun-19	---	25.13	---	1.50	lower aquifer	Static	
AOI 1	S-265	03-Jun-19	---	14.81	---	16.37	NYC	Static	
AOI 1	S-266	03-Jun-19	NM	NM	NM	NM	NYC	Static	no access-covered with concrete
AOI 1	S-267	03-Jun-19	---	17.43	---	15.44	unconfined	Static	
AOI 1	S-268	03-Jun-19	---	26.30	---	5.15	unconfined	Static	
AOI 1	S-269	03-Jun-19	---	19.45	---	3.11	unconfined	Static	
AOI 1	S-270	03-Jun-19	---	20.28	---	2.85	unconfined	Static	
AOI 1	S-271	03-Jun-19	---	23.57	---	4.91	unconfined	Static	
AOI 1	S-272	03-Jun-19	---	15.66	---	12.70	unconfined	Static	
AOI 1	S-273	03-Jun-19	---	22.68	---	5.07	unconfined	Static	
AOI 1	S-274	03-Jun-19	---	22.48	---	4.89	unconfined	Static	
AOI 1	S-275	03-Jun-19	---	21.72	---	4.85	unconfined	Static	
AOI 1	S-276	03-Jun-19	21.81	22.12	0.31	4.72	NYC	Static	
AOI 1	S-277	16-Jul-19	20.78	21.43	0.65	4.79	NYC	Static	
AOI 1	S-312	03-Jun-19	---	5.88	---	12.00	unconfined	Static	
AOI 1	S-388D	03-Jun-19	---	24.48	---	1.71	lower aquifer	Static	
AOI 1	S-389D	03-Jun-19	---	24.34	---	1.96	lower aquifer	Static	
AOI 1	S-390D	03-Jun-19	---	24.76	---	1.72	lower aquifer	Static	
AOI 1	S-391D	03-Jun-19	---	28.82	---	2.64	lower aquifer	Static	
AOI 1	S-392D	03-Jun-19	---	18.47	---	1.50	lower aquifer	Static	
AOI 1	S-396	03-Jun-19	---	24.20	---	1.99	upper sand unit	Static	
AOI 1	S-397	03-Jun-19	---	25.00	---	1.60	upper sand unit	Static	
AOI 1	S-398	03-Jun-19	---	23.94	---	1.62	middle clay unit	Static	
AOI 1	S-399	03-Jun-19	---	18.65	---	1.51	lower aquifer	Static	
AOI 1	S-400	03-Jun-19	---	29.54	---	2.15	lower aquifer	Static	
AOI 1	S-401	03-Jun-19	---	28.55	---	3.21	middle clay unit	Static	
AOI 1	S-402	03-Jun-19	---	28.43	---	5.02	NYC	Static	
AOI 1	S-403	03-Jun-19	23.18	23.56	0.38	3.58	NYC	Static	
AOI 1	S-404	03-Jun-19	13.31	13.32	0.01	15.20	NYC	Static	
AOI 1	S-405	03-Jun-19	21.73	22.80	1.07	4.23	NYC	Static	
AOI 1	S-417	03-Jun-19	26.26	26.37	0.11	6.00	NYC	Static	
AOI 1	S-418	19-Jun-19	---	16.81	---	0.48	NYC	Static	

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 Sitewide 2019 Annual Gauging Data
 Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
AOI 1	S-419	03-Jun-19	---	14.34	---	1.68	NYC	Static	
AOI 2	C-HEADER	04-Jun-19	---	11.64	---	8.97	NYC	Static	
AOI 2	PGW-MW-8D	04-Jun-19	---	32.80	---	2.31	lower aquifer	Static	
AOI 2	PGW-MW-8S	04-Jun-19	---	29.69	---	5.39	unconfined	Static	
AOI 2	PGW-MW-9D	04-Jun-19	---	30.03	---	2.40	lower aquifer	Static	
AOI 2	PZ-100	04-Jun-19	---	15.53	---	2.54	NYC	Static	
AOI 2	PZ-101	04-Jun-19	---	2.72	---	14.45	NYC	Static	
AOI 2	River1	04-Jun-19	---	7.80	---	NM	NYC	Static	
AOI 2	River3	04-Jun-19	---	7.50	---	NM	NYC	Static	
AOI 2	RW-100	04-Jun-19	17.65	18.06	0.41	3.02	NYC	Static	
AOI 2	RW-101	04-Jun-19	17.15	17.21	0.06	2.61	NYC	Static	
AOI 2	RW-102	04-Jun-19	14.64	14.69	0.05	2.82	NYC	Static	
AOI 2	RW-103	04-Jun-19	17.27	17.55	0.28	2.71	NYC	Static	
AOI 2	RW-104	04-Jun-19	9.29	9.29	<0.01	-0.32	NYC	Static	
AOI 2	RW-105	04-Jun-19	---	7.90	---	0.78	NYC	Static	
AOI 2	RW-106	04-Jun-19	---	6.90	---	2.40	NYC	Static	
AOI 2	RW-107	04-Jun-19	---	10.18	---	0.37	NYC	Static	
AOI 2	RW-108	04-Jun-19	---	7.64	---	2.26	NYC	Static	
AOI 2	RW-109	04-Jun-19	---	6.85	---	3.00	NYC	Static	
AOI 2	RW-113	06-Jun-19	---	8.14	---	2.09	NYC	Pumping	
AOI 2	RW-114	04-Jun-19	---	10.64	---	2.37	NYC	Static	
AOI 2	RW-115	04-Jun-19	---	7.95	---	2.25	NYC	Static	
AOI 2	RW-116	04-Jun-19	---	8.42	---	2.39	NYC	Static	
AOI 2	RW-117	04-Jun-19	7.41	7.47	0.06	2.36	NYC	Static	
AOI 2	RW-118	04-Jun-19	---	9.32	---	2.50	NYC	Static	
AOI 2	RW-119	04-Jun-19	10.38	10.38	<0.01	2.48	NYC	Static	
AOI 2	RW-120	04-Jun-19	---	11.06	---	2.52	NYC	Static	
AOI 2	RW-121	04-Jun-19	---	12.85	---	2.45	NYC	Static	
AOI 2	RW-122	04-Jun-19	---	7.84	---	2.40	NYC	Static	
AOI 2	RW-123	04-Jun-19	---	7.55	---	2.42	NYC	Static	
AOI 2	RW-124	04-Jun-19	---	6.68	---	2.48	NYC	Static	
AOI 2	RW-125	04-Jun-19	---	11.85	---	2.42	NYC	Static	
AOI 2	RW-126	04-Jun-19	16.91	16.91	<0.01	-7.67	NYC	Static	
AOI 2	RW-127	04-Jun-19	---	11.44	---	2.46	NYC	Static	
AOI 2	RW-128	04-Jun-19	8.07	8.07	<0.01	0.37	NYC	Static	
AOI 2	RW-129	04-Jun-19	---	8.32	---	1.51	NYC	Static	
AOI 2	RW-600	04-Jun-19	NM	NM	NM	NM	NYC	Static	obstruction at 6 feet
AOI 2	S-53	16-Jul-19	18.05	18.05	<0.01	3.64	NYC	Static	
AOI 2	S-54	04-Jun-19	NM	NM	NM	NM	NYC	Static	unable to locate
AOI 2	S-61	04-Jun-19	15.57	15.81	0.24	2.67	NYC	Static	
AOI 2	S-62	04-Jun-19	---	18.23	---	3.15	NYC	Static	
AOI 2	S-63	04-Jun-19	18.62	18.63	0.01	2.65	NYC	Static	
AOI 2	S-64	04-Jun-19	---	6.05	---	4.51	NYC	Static	
AOI 2	S-65	04-Jun-19	9.39	9.39	<0.01	1.24	NYC	Static	
AOI 2	S-71	04-Jun-19	---	20.27	---	3.77	NYC	Static	
AOI 2	S-72	04-Jun-19	---	23.25	---	7.81	NYC	Static	
AOI 2	S-72D	04-Jun-19	---	32.30	---	2.21	NYC	Static	
AOI 2	S-91	04-Jun-19	---	18.57	---	4.56	NYC	Static	
AOI 2	S-92	04-Jun-19	9.09	9.52	0.43	10.92	NYC	Static	
AOI 2	S-93	04-Jun-19	---	15.58	---	2.67	NYC	Static	
AOI 2	S-105	04-Jun-19	---	10.30	---	2.23	NYC	Static	
AOI 2	S-107	04-Jun-19	9.20	9.70	0.50	3.00	NYC	Static	
AOI 2	S-108	04-Jun-19	---	6.62	---	4.10	NYC	Static	
AOI 2	S-110	04-Jun-19	---	15.34	---	10.33	NYC	Static	
AOI 2	S-130	16-Jul-19	18.96	18.96	<0.01	3.53	NYC	Static	
AOI 2	S-131	04-Jun-19	---	15.66	---	3.10	NYC	Static	
AOI 2	S-132	04-Jun-19	---	17.93	---	3.10	NYC	Static	
AOI 2	S-133	04-Jun-19	---	19.02	---	3.00	NYC	Static	
AOI 2	S-134	04-Jun-19	---	18.77	---	3.26	NYC	Static	
AOI 2	S-135	04-Jun-19	21.86	23.59	1.73	1.09	NYC	Static	
AOI 2	S-136	04-Jun-19	---	17.64	---	2.95	NYC	Static	
AOI 2	S-137	04-Jun-19	---	16.60	---	3.44	NYC	Static	
AOI 2	S-139	04-Jun-19	---	18.62	---	2.84	NYC	Static	
AOI 2	S-141	04-Jun-19	19.25	19.29	0.04	2.67	NYC	Static	
AOI 2	S-142	04-Jun-19	18.19	18.43	0.24	1.62	NYC	Static	
AOI 2	S-143	04-Jun-19	NM	NM	NM	NM	NYC	Static	obstruction at 9.85 feet
AOI 2	S-150	04-Jun-19	---	17.40	---	3.43	NYC	Static	
AOI 2	S-152	04-Jun-19	---	7.95	---	2.54	NYC	Static	
AOI 2	S-153	04-Jun-19	---	9.70	---	0.11	NYC	Static	
AOI 2	S-154	04-Jun-19	---	11.20	---	-0.58	NYC	Static	
AOI 2	S-156	04-Jun-19	---	18.01	---	2.83	NYC	Static	

Table 2
 Sitewide 2019 Annual Gauging Data
 Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
AOI 2	S-157	04-Jun-19	16.83	17.44	0.61	3.03	NYC	Static	
AOI 2	S-159	04-Jun-19	---	15.62	---	3.25	NYC	Static	
AOI 2	S-165	04-Jun-19	---	15.60	---	2.51	unconfined	Static	
AOI 2	S-166	04-Jun-19	---	15.66	---	2.57	unconfined	Static	
AOI 2	S-174	04-Jun-19	9.19	9.44	0.25	10.40	NYC	Static	
AOI 2	S-175	04-Jun-19	16.24	16.55	0.31	3.75	NYC	Static	
AOI 2	S-177	04-Jun-19	NM	NM	NM	NM	unconfined	Static	no access area around well flooded
AOI 2	S-178	04-Jun-19	NM	NM	NM	NM	unconfined	Static	no access area around well flooded
AOI 2	S-246A	04-Jun-19	---	10.91	---	0.85	NYC	Static	
AOI 2	S-247	04-Jun-19	---	11.10	---	0.99	NYC	Static	
AOI 2	S-248	04-Jun-19	---	9.89	---	0.91	NYC	Static	
AOI 2	S-249	04-Jun-19	---	10.39	---	2.22	NYC	Static	
AOI 2	S-251	04-Jun-19	---	16.55	---	2.72	NYC	Static	
AOI 2	S-252	04-Jun-19	---	16.63	---	2.66	NYC	Static	
AOI 2	S-253	04-Jun-19	---	17.95	---	2.88	NYC	Static	
AOI 2	S-254	04-Jun-19	18.34	18.49	0.15	2.52	NYC	Static	
AOI 2	S-292	04-Jun-19	NM	NM	NM	NM	NYC	Static	dry at 19.44
AOI 2	S-294	04-Jun-19	29.21	29.21	<0.01	5.26	unconfined	Static	
AOI 2	S-294D	04-Jun-19	---	31.76	---	2.92	lower aquifer	Static	
AOI 2	S-295	04-Jun-19	---	23.55	---	9.19	NYC	Static	
AOI 2	S-297	04-Jun-19	---	23.75	---	6.26	NYC	Static	
AOI 2	S-298	04-Jun-19	14.90	15.90	1.00	11.86	NYC	Static	
AOI 2	S-299	04-Jun-19	---	20.63	---	3.37	NYC	Static	
AOI 2	S-300	04-Jun-19	---	20.80	---	4.48	NYC	Static	
AOI 2	S-301	04-Jun-19	---	16.00	---	4.41	NYC	Static	
AOI 2	S-302	04-Jun-19	21.10	21.20	0.10	2.84	NYC	Static	
AOI 2	S-302D	04-Jun-19	---	24.00	---	0.60	NYC	Static	
AOI 2	S-303	16-Jul-19	18.95	19.11	0.16	3.62	NYC	Static	
AOI 2	S-304	16-Jul-19	12.11	12.57	0.46	12.01	unconfined	Static	
AOI 2	S-305	04-Jun-19	---	17.78	---	1.95	unconfined	Static	
AOI 2	S-305D	04-Jun-19	---	19.23	---	1.25	lower aquifer	Static	
AOI 2	S-306	04-Jun-19	---	19.98	---	2.49	NYC	Static	
AOI 2	S-307	04-Jun-19	---	15.35	---	3.22	NYC	Static	
AOI 2	S-308	04-Jun-19	---	22.94	---	5.17	NYC	Static	
AOI 2	S-309	04-Jun-19	---	16.82	---	2.91	NYC	Static	
AOI 2	S-311	04-Jun-19	22.14	22.33	0.19	3.99	NYC	Static	
AOI 2	S-313	04-Jun-19	---	17.94	---	2.96	NYC	Static	
AOI 2	S-314	04-Jun-19	---	18.07	---	2.63	NYC	Static	
AOI 2	S-315	04-Jun-19	18.25	18.25	<0.01	2.23	NYC	Static	
AOI 2	S-316	04-Jun-19	---	16.00	---	4.90	NYC	Static	
AOI 2	S-317	04-Jun-19	---	17.54	---	2.65	NYC	Static	
AOI 2	S-318	04-Jun-19	---	21.39	---	2.36	NYC	Static	
AOI 2	S-328	04-Jun-19	18.50	18.75	0.25	3.44	NYC	Static	
AOI 2	S-333	04-Jun-19	---	12.72	---	1.01	NYC	Static	
AOI 2	S-335	04-Jun-19	---	9.45	---	0.65	NYC	Static	
AOI 2	S-336	04-Jun-19	---	9.15	---	2.37	NYC	Static	
AOI 2	S-337	04-Jun-19	11.70	11.71	0.01	0.51	NYC	Static	
AOI 2	S-338	04-Jun-19	12.50	13.05	0.55	2.91	NYC	Static	
AOI 2	S-346	16-Jul-19	17.07	17.13	0.06	2.41	NYC	Static	
AOI 2	S-347	04-Jun-19	16.97	17.36	0.39	2.11	NYC	Static	
AOI 2	S-348	04-Jun-19	12.47	12.65	0.18	7.09	NYC	Static	
AOI 2	S-349	04-Jun-19	14.65	14.66	0.01	3.96	NYC	Static	
AOI 2	S-350	04-Jun-19	---	26.35	---	5.13	unconfined	Static	
AOI 2	S-351	04-Jun-19	---	30.04	---	5.20	NYC	Static	
AOI 2	S-354	04-Jun-19	---	24.25	---	3.78	NYC	Static	
AOI 2	S-355	04-Jun-19	---	27.10	---	3.72	NYC	Static	
AOI 2	S-357	04-Jun-19	22.50	24.55	2.05	5.24	NYC	Static	
AOI 2	S-359	04-Jun-19	16.22	16.34	0.12	4.04	NYC	Static	
AOI 2	S-360	16-Jul-19	---	17.98	---	5.82	NYC	Static	
AOI 2	S-361	04-Jun-19	---	22.68	---	3.69	NYC	Static	
AOI 2	S-362	04-Jun-19	NM	NM	NM	NM	NYC	Static	obstruction at 10.00 feet
AOI 2	S-363	16-Jul-19	NM	NM	NM	NM	NYC	Static	unable to locate
AOI 2	S-406	04-Jun-19	9.31	9.42	0.11	2.87	NYC	Static	
AOI 2	S-420	04-Jun-19	---	6.56	---	2.70	NYC	Static	
AOI 2	S-422	04-Jun-19	---	13.42	---	3.15	NYC	Static	
AOI 2	S-423	04-Jun-19	---	26.60	---	4.86	NYC	Static	
AOI 2	S-425	04-Jun-19	---	8.37	---	3.43	unconfined	Static	
AOI 2	S-426	04-Jun-19	---	6.10	---	5.50	unconfined	Static	
AOI 2	S-427	04-Jun-19	---	6.35	---	5.61	NYC	Static	
AOI 2	SD-1	04-Jun-19	---	7.19	---	12.31	NYC	Static	
AOI 3	BF-88	05-Jun-19	---	9.28	---	1.33	NYC	Static	

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AOI 3	BF-90	05-Jun-19	---	2.12	---	5.37	NYC	Static	
AOI 3	BF-90D	05-Jun-19	---	9.41	---	0.36	NYC	Static	
AOI 3	BF-99	05-Jun-19	---	9.82	---	1.14	NYC	Static	
AOI 3	BF-100	05-Jun-19	---	11.15	---	1.21	NYC	Static	
AOI 3	BF-101	05-Jun-19	NM	NM	NM	NM	NYC	Static	unable to locate
AOI 3	BF-103R	05-Jun-19	13.60	13.97	0.37	0.86	NYC	Static	
AOI 3	BF-104	05-Jun-19	---	5.48	---	6.26	NYC	Static	
AOI 3	BF-105	05-Jun-19	---	11.02	---	0.89	NYC	Static	
AOI 3	BF-106	05-Jun-19	---	12.77	---	0.85	NYC	Static	
AOI 3	BF-107	05-Jun-19	---	11.25	---	1.11	NYC	Static	
AOI 3	BF-108	05-Jun-19	---	10.61	---	0.37	NYC	Static	
AOI 3	RW-2	05-Jun-19	10.45	10.47	0.02	0.84	NYC	Static	
AOI 3	S-1	05-Jun-19	---	5.63	---	3.12	NYC	Static	
AOI 3	S-2	05-Jun-19	---	3.03	---	4.18	NYC	Static	
AOI 3	S-3	05-Jun-19	---	7.57	---	3.23	NYC	Static	
AOI 3	S-5	05-Jun-19	3.72	3.90	0.18	2.09	NYC	Static	
AOI 3	S-8	05-Jun-19	---	6.97	---	-0.55	NYC	Static	
AOI 3	S-9	05-Jun-19	---	3.90	---	2.68	NYC	Static	
AOI 3	S-10	05-Jun-19	---	4.02	---	2.05	NYC	Static	
AOI 3	S-11	05-Jun-19	---	3.71	---	2.67	NYC	Static	
AOI 3	S-12	05-Jun-19	---	4.20	---	2.03	NYC	Static	
AOI 3	S-13	05-Jun-19	---	6.92	---	-0.56	NYC	Static	
AOI 3	S-14	05-Jun-19	---	2.98	---	2.76	NYC	Static	
AOI 3	S-16	05-Jun-19	---	21.52	---	2.16	NYC	Static	
AOI 3	S-17	05-Jun-19	---	14.54	---	2.15	unconfined	Static	
AOI 3	S-18	05-Jun-19	---	4.03	---	19.46	NYC	Static	
AOI 3	S-19	05-Jun-19	NM	NM	NM	NM	NYC	Static	obstruction at 1 foot
AOI 3	S-20	05-Jun-19	---	18.16	---	2.10	unconfined	Static	
AOI 3	S-21	05-Jun-19	NM	NM	NM	NM	NYC	Static	dry at 14.00
AOI 3	S-22	05-Jun-19	---	18.95	---	-0.29	lower aquifer	Static	
AOI 3	S-23	05-Jun-19	---	18.20	---	2.08	NYC	Static	
AOI 3	S-24	05-Jun-19	NM	NM	NM	NM	NYC	Static	obstruction at 0.85 feet
AOI 3	S-59	05-Jun-19	---	8.83	---	3.66	unconfined	Static	
AOI 3	S-60	05-Jun-19	10.70	11.12	0.42	1.47	NYC	Static	
AOI 3	S-69	05-Jun-19	NM	NM	NM	NM	NYC	Static	obstruction at 1.10 feet
AOI 3	S-69D	05-Jun-19	---	11.25	---	0.10	NYC	Static	
AOI 3	S-113	05-Jun-19	11.12	11.64	0.52	1.46	NYC	Static	
AOI 3	S-280	05-Jun-19	---	23.86	---	2.66	NYC	Static	
AOI 3	S-280D	05-Jun-19	---	25.40	---	0.48	NYC	Static	
AOI 3	S-281	05-Jun-19	---	12.97	---	1.39	NYC	Static	
AOI 3	S-283	05-Jun-19	10.83	11.11	0.28	0.24	NYC	Static	
AOI 3	S-284	05-Jun-19	---	8.12	---	1.38	NYC	Static	
AOI 3	S-284D	05-Jun-19	---	11.17	---	0.95	NYC	Static	
AOI 3	S-285	05-Jun-19	12.31	12.92	0.61	2.84	NYC	Static	
AOI 3	S-288	05-Jun-19	---	14.65	---	4.44	NYC	Static	
AOI 3	S-290	05-Jun-19	---	8.82	---	2.87	NYC	Static	
AOI 3	S-291	05-Jun-19	---	7.47	---	4.52	NYC	Static	
AOI 3	S-372	05-Jun-19	---	17.60	---	2.13	unconfined	Static	
AOI 3	S-382	16-Jul-19	15.84	16.96	1.12	4.17	NYC	Static	
AOI 3	S-383	05-Jun-19	---	11.86	---	0.89	NYC	Static	
AOI 3	S-384	05-Jun-19	---	15.27	---	1.24	NYC	Static	
AOI 3	S-385	05-Jun-19	---	11.31	---	1.60	unconfined	Static	
AOI 3	S-386	05-Jun-19	---	12.07	---	1.68	NYC	Static	
AOI 3	S-387	05-Jun-19	---	4.25	---	2.86	NYC	Static	
AOI 3	S-407	05-Jun-19	---	12.48	---	1.53	NYC	Static	
AOI 3	S-409	05-Jun-19	---	2.81	---	19.48	NYC	Static	
AOI 3	S-410	05-Jun-19	12.64	13.02	0.38	9.62	NYC	Static	
AOI 3	S-411	05-Jun-19	---	25.26	---	1.41	NYC	Static	
AOI 3	S-412	05-Jun-19	---	12.00	---	1.11	NYC	Static	
AOI 3	S-413	05-Jun-19	---	16.62	---	1.29	NYC	Static	
AOI 3	S-414	05-Jun-19	21.05	22.92	1.87	0.97	NYC	Static	
AOI 3	S-428	05-Jun-19	---	9.83	---	1.01	unconfined	Static	
AOI 3	S-429	05-Jun-19	20.25	20.38	0.13	0.92	unconfined	Static	
AOI 3	S-430	05-Jun-19	11.87	12.14	0.27	1.14	unconfined	Static	
AOI 3	S-431	05-Jun-19	16.35	16.66	0.31	1.08	unconfined	Static	
AOI 3	S-432	10-Jun-19	20.80	22.32	1.52	0.80	unconfined	Static	
AOI 3,7	C-95	07-Jun-19	---	5.94	---	6.31	NYC	Static	
AOI 4	AS-9	05-Jun-19	NM	NM	NM	NM	unconfined	Static	well destroyed
AOI 4	PH-66	05-Jun-19	NM	NM	NM	NM	NYC	Static	well destroyed
AOI 4	PH-67	05-Jun-19	NM	NM	NM	NM	NYC	Static	well destroyed
AOI 4	RW-700	05-Jun-19	---	19.00	---	-0.99	unconfined	Pumping	

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AOI 4	RW-701	06-Jun-19	---	20.80	---	-2.53	unconfined	Pumping	
AOI 4	RW-702	06-Jun-19	---	21.90	---	-0.95	unconfined	Pumping	
AOI 4	RW-703	06-Jun-19	---	18.83	---	1.79	unconfined	Pumping	
AOI 4	RW-704	06-Jun-19	---	21.75	---	-1.52	unconfined	Pumping	
AOI 4	RW-705	05-Jun-19	---	14.97	---	0.95	unconfined	Static	
AOI 4	RW-706	05-Jun-19	---	14.16	---	1.73	unconfined	Static	
AOI 4	RW-707	05-Jun-19	---	14.54	---	1.75	unconfined	Static	
AOI 4	RW-708	06-Jun-19	---	13.72	---	1.77	unconfined	Pumping	
AOI 4	RW-709	05-Jun-19	---	13.45	---	1.85	unconfined	Static	
AOI 4	RW-710	05-Jun-19	---	14.31	---	1.57	unconfined	Static	
AOI 4	RW-711	05-Jun-19	---	13.07	---	2.42	unconfined	Static	
AOI 4	RW-712	05-Jun-19	---	13.83	---	1.73	unconfined	Static	
AOI 4	RW-713	05-Jun-19	---	13.18	---	1.84	unconfined	Static	
AOI 4	RW-714	05-Jun-19	---	13.33	---	1.88	unconfined	Static	
AOI 4	RW-715	05-Jun-19	---	13.49	---	1.88	unconfined	Static	
AOI 4	RW-716	05-Jun-19	---	13.62	---	1.93	unconfined	Static	
AOI 4	RW-717	05-Jun-19	---	13.31	---	2.30	unconfined	Static	
AOI 4	S-26	05-Jun-19	---	18.84	---	1.92	unconfined	Static	
AOI 4	S-27	05-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 4	S-28	05-Jun-19	NM	NM	NM	NM	unconfined	Static	dry at 19.65
AOI 4	S-29	05-Jun-19	22.65	22.68	0.03	0.65	unconfined	Static	
AOI 4	S-30	05-Jun-19	21.01	21.23	0.22	2.09	unconfined	Static	
AOI 4	S-32	05-Jun-19	---	22.34	---	1.86	unconfined	Static	
AOI 4	S-34	06-Jun-19	---	10.90	---	9.99	unconfined	Pumping	
AOI 4	S-35	06-Jun-19	---	18.83	---	2.11	unconfined	Pumping	
AOI 4	S-36	05-Jun-19	22.41	22.42	0.01	1.82	unconfined	Static	
AOI 4	S-38	05-Jun-19	---	16.97	---	1.98	unconfined	Static	
AOI 4	S-38D	05-Jun-19	---	17.36	---	0.34	lower aquifer	Static	
AOI 4	S-38D2	05-Jun-19	---	18.45	---	-0.26	lower aquifer	Static	
AOI 4	S-39	05-Jun-19	---	20.60	---	2.28	unconfined	Static	
AOI 4	S-39D	05-Jun-19	---	23.75	---	0.76	lower aquifer	Static	
AOI 4	S-40	05-Jun-19	---	22.89	---	1.57	unconfined	Static	
AOI 4	S-57	05-Jun-19	---	10.81	---	1.69	unconfined	Static	
AOI 4	S-59D	05-Jun-19	---	15.66	---	1.47	lower aquifer	Static	
AOI 4	S-96	05-Jun-19	17.75	19.11	1.36	1.84	unconfined	Static	
AOI 4	S-97	06-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 4	S-102	05-Jun-19	---	16.46	---	1.76	unconfined	Static	
AOI 4	S-103	16-Jul-19	23.70	23.98	0.28	2.35	unconfined	Static	
AOI 4	S-104	05-Jun-19	14.05	22.07	8.02	3.54	unconfined	Static	
AOI 4	S-119	05-Jun-19	---	24.78	---	1.82	unconfined	Static	
AOI 4	S-119D	05-Jun-19	---	23.69	---	1.41	lower aquifer	Static	
AOI 4	S-120	05-Jun-19	---	17.58	---	2.24	unconfined	Static	
AOI 4	S-122	16-Jul-19	---	23.24	---	2.47	unconfined	Static	
AOI 4	S-123	05-Jun-19	---	20.06	---	2.07	unconfined	Static	
AOI 4	S-124	05-Jun-19	21.40	21.40	<0.01	1.81	unconfined	Static	
AOI 4	S-216	05-Jun-19	---	13.64	---	2.12	unconfined	Static	
AOI 4	S-218	05-Jun-19	---	23.18	---	2.56	unconfined	Static	
AOI 4	S-218D	05-Jun-19	---	22.23	---	2.29	lower aquifer	Static	
AOI 4	S-219	05-Jun-19	---	20.85	---	2.24	unconfined	Static	
AOI 4	S-220	05-Jun-19	---	18.75	---	2.06	unconfined	Static	
AOI 4	S-221	06-Jun-19	---	21.50	---	1.50	unconfined	Pumping	
AOI 4	S-222	05-Jun-19	---	13.15	---	3.14	unconfined	Static	
AOI 4	S-223	05-Jun-19	---	14.93	---	0.95	unconfined	Static	
AOI 4	S-224	05-Jun-19	---	16.34	---	-0.31	unconfined	Static	
AOI 4	S-225	05-Jun-19	---	15.58	---	-0.59	unconfined	Static	
AOI 4	S-233	05-Jun-19	19.72	19.88	0.16	4.61	unconfined	Static	
AOI 4	S-234	05-Jun-19	---	19.65	---	1.58	unconfined	Static	
AOI 4	S-235	05-Jun-19	21.33	21.35	0.02	1.79	unconfined	Static	
AOI 4	S-236	06-Jun-19	---	25.45	---	-2.48	unconfined	Pumping	
AOI 4	S-237	06-Jun-19	---	21.30	---	1.52	unconfined	Pumping	
AOI 4	S-238	05-Jun-19	21.34	21.98	0.64	1.46	unconfined	Static	
AOI 4	S-239	05-Jun-19	---	13.95	---	1.87	unconfined	Static	
AOI 4	S-240	16-Jul-19	21.69	22.38	0.69	2.10	unconfined	Static	
AOI 4	S-241	05-Jun-19	24.10	25.92	1.82	1.79	unconfined	Static	
AOI 4	S-242	05-Jun-19	---	20.06	---	1.83	unconfined	Static	
AOI 4	S-243	05-Jun-19	---	13.43	---	2.31	unconfined	Static	
AOI 4	S-244	05-Jun-19	---	19.94	---	2.00	unconfined	Static	
AOI 4	S-245	05-Jun-19	---	20.21	---	2.00	unconfined	Static	
AOI 4	S-246	05-Jun-19	---	19.01	---	2.55	unconfined	Static	
AOI 4	S-278	05-Jun-19	---	19.16	---	1.87	unconfined	Static	
AOI 4	S-279	05-Jun-19	23.96	24.61	0.65	2.35	unconfined	Static	

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AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
AOI 4	S-282	16-Jul-19	18.94	19.73	0.79	1.70	unconfined	Static	
AOI 4	S-329	05-Jun-19	---	19.77	---	1.15	unconfined	Static	
AOI 4	S-364	05-Jun-19	NM	NM	NM	NM	unconfined	Static	obstruction at 5.00 feet
AOI 4	S-365	16-Jul-19	19.17	19.43	0.26	1.69	unconfined	Static	
AOI 4	S-366	16-Jul-19	20.25	20.27	0.02	2.00	unconfined	Static	
AOI 4	S-367	05-Jun-19	---	14.06	---	1.96	unconfined	Static	
AOI 4	S-368	16-Jul-19	15.47	16.23	0.76	2.46	unconfined	Static	
AOI 4	S-369	05-Jun-19	---	28.41	---	1.01	unconfined	Static	
AOI 4	S-370	05-Jun-19	---	10.39	---	1.67	unconfined	Static	
AOI 4	S-371	05-Jun-19	---	19.25	---	2.80	unconfined	Static	
AOI 4	S-373	05-Jun-19	19.29	19.31	0.02	1.48	unconfined	Static	
AOI 4	S-374	05-Jun-19	---	13.68	---	1.95	NYC	Static	
AOI 4	S-375	06-Jun-19	---	14.09	---	1.87	NYC	Pumping	
AOI 4	S-376	16-Jul-19	13.34	13.72	0.38	2.25	NYC	Static	
AOI 4	S-377	06-Jun-19	---	12.87	---	1.82	NYC	Pumping	
AOI 4	S-378	06-Jun-19	---	10.09	---	1.88	NYC	Pumping	
AOI 4	S-379	05-Jun-19	---	24.02	---	1.63	unconfined	Static	
AOI 4	S-380	05-Jun-19	---	19.15	---	2.17	unconfined	Static	
AOI 4	S-381	16-Jul-19	---	23.76	---	2.10	unconfined	Static	
AOI 4	S-408	05-Jun-19	---	13.78	---	2.10	unconfined	Static	
AOI 4	S-415	05-Jun-19	---	17.45	---	1.78	unconfined	Static	
AOI 4	S-416	05-Jun-19	---	11.87	---	7.31	unconfined	Static	
AOI 5	A-1	10-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 5	A-3	10-Jun-19	---	6.35	---	1.89	unconfined	Static	
AOI 5	A-4	10-Jun-19	---	4.10	---	1.94	unconfined	Static	
AOI 5	A-6	10-Jun-19	---	3.10	---	3.64	unconfined	Static	
AOI 5	A-7	10-Jun-19	4.50	4.85	0.35	2.18	unconfined	Static	
AOI 5	A-8	10-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 5	A-9	10-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 5	A-10	10-Jun-19	---	3.66	---	4.62	unconfined	Static	
AOI 5	A-11	10-Jun-19	---	4.53	---	3.24	unconfined	Static	
AOI 5	A-12	10-Jun-19	---	3.36	---	4.21	unconfined	Static	
AOI 5	A-15	07-Jun-19	---	0.36	---	4.75	unconfined	Static	
AOI 5	A-19D	07-Jun-19	---	12.59	---	-1.95	lower aquifer	Static	
AOI 5	A-21	10-Jun-19	2.20	2.40	0.20	5.94	unconfined	Static	
AOI 5	A-21D	16-Jul-19	---	15.62	---	-4.37	lower aquifer	Static	
AOI 5	A-22	10-Jun-19	5.64	5.65	0.01	2.31	unconfined	Static	
AOI 5	A-23	16-Jul-19	---	3.21	---	3.10	unconfined	Static	
AOI 5	A-24	10-Jun-19	---	2.73	---	2.80	unconfined	Static	
AOI 5	A-26	16-Jul-19	---	4.30	---	4.35	unconfined	Static	
AOI 5	A-27	10-Jun-19	---	6.60	---	3.41	unconfined	Static	
AOI 5	A-39	10-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 5	A-40	10-Jun-19	---	3.75	---	1.97	unconfined	Static	
AOI 5	A-41	10-Jun-19	---	3.66	---	1.97	unconfined	Static	
AOI 5	A-44	10-Jun-19	---	7.90	---	2.11	unconfined	Static	
AOI 5	A-45	10-Jun-19	---	3.70	---	1.02	unconfined	Static	
AOI 5	A-46	10-Jun-19	---	8.37	---	2.45	unconfined	Static	
AOI 5	A-47	10-Jun-19	---	2.57	---	2.33	unconfined	Static	
AOI 5	A-48	10-Jun-19	---	4.38	---	2.07	unconfined	Static	
AOI 5	A-49	10-Jun-19	---	3.35	---	3.85	unconfined	Static	
AOI 5	A-118	07-Jun-19	---	2.59	---	5.71	unconfined	Static	
AOI 5	A-122	10-Jun-19	---	3.94	---	3.50	unconfined	Static	
AOI 5	A-133	10-Jun-19	---	9.25	---	3.77	unconfined	Static	
AOI 5	A-134	10-Jun-19	---	7.85	---	1.29	unconfined	Static	
AOI 5	A-135	10-Jun-19	---	7.70	---	3.06	unconfined	Static	
AOI 5	A-136	10-Jun-19	7.35	7.36	0.01	1.35	unconfined	Static	
AOI 5	A-137	10-Jun-19	---	3.93	---	1.87	unconfined	Static	
AOI 5	A-139	10-Jun-19	---	4.68	---	2.31	unconfined	Static	
AOI 5	A-140	10-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 5	A-142	10-Jun-19	---	4.40	---	1.00	unconfined	Static	
AOI 5	A-143	10-Jun-19	---	7.43	---	2.07	unconfined	Static	
AOI 5	A-146	07-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 5	A-147	07-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 5	A-148	07-Jun-19	---	2.67	---	5.34	unconfined	Static	
AOI 5	A-149	07-Jun-19	---	3.31	---	5.18	unconfined	Static	
AOI 5	A-151	10-Jun-19	---	4.45	---	3.04	unconfined	Static	
AOI 5	A-153	07-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 5	A-155	10-Jun-19	5.48	5.80	0.32	2.87	unconfined	Static	
AOI 5	A-156	10-Jun-19	---	4.74	---	4.14	unconfined	Static	
AOI 5	A-157	10-Jun-19	---	4.90	---	3.72	unconfined	Static	
AOI 5	A-158	10-Jun-19	---	3.97	---	2.17	unconfined	Static	

Table 2
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 Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
AOI 5	A-163	10-Jun-19	---	6.23	---	4.26	unconfined	Static	
AOI 5	A-164	10-Jun-19	---	4.95	---	3.96	unconfined	Static	
AOI 5	A-166	10-Jun-19	---	8.05	---	3.23	unconfined	Static	
AOI 5	A-167	10-Jun-19	---	5.03	---	4.43	unconfined	Static	
AOI 5	A-168	10-Jun-19	---	5.50	---	5.19	unconfined	Static	
AOI 5	A-169	10-Jun-19	---	4.54	---	4.08	unconfined	Static	
AOI 5	A-170	10-Jun-19	---	2.60	---	2.03	unconfined	Static	
AOI 5	A-171	10-Jun-19	5.95	5.96	0.01	1.69	unconfined	Static	
AOI 5	A-172	10-Jun-19	---	4.25	---	2.07	unconfined	Static	
AOI 5	A-175	10-Jun-19	---	4.18	---	0.55	unconfined	Static	
AOI 5	A-176	10-Jun-19	4.00	4.15	0.15	0.55	unconfined*	Static	
AOI 5	A-177	10-Jun-19	1.65	2.15	0.50	NM	NYC	Static	
AOI 5	A-179	10-Jun-19	3.50	6.25	2.75	4.73	unconfined*	Static	
AOI 5	A-180	10-Jun-19	NM	NM	NM	NM	unconfined*	Static	unable to locate
AOI 5	A-181	10-Jun-19	---	3.75	---	2.77	unconfined	Static	
AOI 5	A-182	10-Jun-19	---	6.72	---	0.18	unconfined	Static	
AOI 5	A-183	10-Jun-19	3.65	4.40	0.75	4.64	unconfined*	Static	
AOI 5	A-186	07-Jun-19	---	5.25	---	3.01	unconfined	Static	
AOI 5	A-187	10-Jun-19	---	6.21	---	3.19	unconfined	Static	
AOI 5	A-188	10-Jun-19	8.30	9.25	0.95	3.08	unconfined	Static	
AOI 5	A-189	16-Jul-19	---	4.27	---	4.24	unconfined	Static	
AOI 5	PZ-2	10-Jun-19	---	5.62	---	5.26	unconfined*	Static	
AOI 5	PZ-3	10-Jun-19	---	7.75	---	2.78	unconfined*	Static	
AOI 5	RW-6S	10-Jun-19	---	5.34	---	2.88	unconfined	Static	
AOI 5	RW16-2	10-Jun-19	NM	NM	NM	NM	unconfined*	Static	unable to locate
AOI 5	RWBH-1	16-Jul-19	2.29	3.03	0.74	2.97	unconfined	Static	
AOI 5	RWBH-2	10-Jun-19	3.60	5.25	1.65	0.37	unconfined	Static	
AOI 5	SW-1	10-Jun-19	7.75	7.95	0.20	1.99	unconfined	Static	
AOI 5	SW-2	10-Jun-19	---	7.29	---	2.65	unconfined	Static	
AOI 5	SW-3	10-Jun-19	---	8.37	---	1.60	unconfined	Static	
AOI 5	SW-4	10-Jun-19	5.10	5.15	0.05	2.05	unconfined	Static	
AOI 5	SW-5	10-Jun-19	4.93	9.35	4.42	5.16	unconfined	Static	
AOI 5	SWR-1	10-Jun-19	6.99	7.00	0.01	1.29	unconfined*	Static	
AOI 5	SWR-2	10-Jun-19	---	7.46	---	2.60	unconfined	Static	
AOI 5	SWR-3	10-Jun-19	---	7.52	---	3.09	unconfined	Static	
AOI 5	WP-8	10-Jun-19	---	5.13	---	1.86	unconfined	Static	
AOI 5	WP9-7	10-Jun-19	---	2.90	---	NM	unconfined	Static	
AOI 5	WP9-8	10-Jun-19	5.10	6.35	1.25	3.65	unconfined*	Static	
AOI 5	WP-14	16-Jul-19	---	6.56	---	2.56	unconfined	Static	
AOI 5	WP16-3	07-Jun-19	---	7.98	---	3.09	unconfined	Static	
AOI 5	WP-A	10-Jun-19	---	4.75	---	4.85	unconfined	Static	
AOI 5	WP-B	16-Jul-19	5.13	5.13	<0.01	4.96	unconfined	Static	
AOI 5	WP-D	10-Jun-19	---	5.64	---	2.62	unconfined	Static	
AOI 5	WP-E	10-Jun-19	---	4.69	---	2.66	unconfined	Static	
AOI 6	B-39	16-Jul-19	1.09	1.09	<0.01	4.40	NYC	Static	
AOI 6	B-43	06-Jun-19	---	2.77	---	4.44	NYC	Static	
AOI 6	B-45	06-Jun-19	---	1.13	---	3.97	NYC	Static	
AOI 6	B-46	06-Jun-19	---	1.39	---	6.64	NYC	Static	
AOI 6	B-47	06-Jun-19	2.87	2.93	0.06	5.43	NYC	Static	
AOI 6	B-48	06-Jun-19	---	0.00	---	6.50	NYC	Static	water to TOC
AOI 6	B-48D	06-Jun-19	---	11.09	---	-1.67	NYC	Static	
AOI 6	B-92	06-Jun-19	---	4.60	---	5.63	NYC	Static	
AOI 6	B-94	06-Jun-19	---	6.74	---	3.61	NYC	Static	
AOI 6	B-95	06-Jun-19	---	3.59	---	5.28	NYC	Static	
AOI 6	B-115	16-Jul-19	---	2.68	---	4.82	NYC	Static	
AOI 6	B-116	06-Jun-19	---	5.17	---	3.12	NYC	Static	
AOI 6	B-117	06-Jun-19	---	7.78	---	1.87	NYC	Static	
AOI 6	B-123	06-Jun-19	---	4.78	---	5.98	NYC	Static	
AOI 6	B-124	06-Jun-19	5.06	6.13	1.07	3.71	NYC	Static	small product pump installed in well
AOI 6	B-125	06-Jun-19	---	4.59	---	3.92	NYC	Static	
AOI 6	B-126	06-Jun-19	---	4.90	---	3.61	NYC	Static	
AOI 6	B-129	06-Jun-19	5.32	5.46	0.14	2.68	NYC	Static	
AOI 6	B-130	06-Jun-19	4.57	4.68	0.11	5.11	NYC	Static	
AOI 6	B-131	06-Jun-19	---	5.10	---	3.62	NYC	Static	
AOI 6	B-132	06-Jun-19	4.65	4.66	0.01	2.22	NYC	Static	
AOI 6	B-132D	06-Jun-19	---	16.07	---	-5.76	NYC	Static	
AOI 6	B-133	06-Jun-19	---	5.00	---	2.33	NYC	Static	
AOI 6	B-133D	06-Jun-19	---	10.25	---	-1.65	NYC	Static	
AOI 6	B-134	06-Jun-19	---	4.60	---	1.92	NYC	Static	
AOI 6	B-134D	06-Jun-19	---	11.66	---	-3.54	NYC	Static	
AOI 6	B-135	06-Jun-19	---	4.79	---	1.59	NYC	Static	

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AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
AOI 6	B-136	06-Jun-19	4.45	4.47	0.02	4.70	NYC	Static	
AOI 6	B-137	06-Jun-19	4.65	6.55	1.90	3.82	NYC	Static	
AOI 6	B-138	06-Jun-19	4.80	4.90	0.10	4.52	NYC	Static	
AOI 6	B-142	06-Jun-19	6.47	7.75	1.28	3.10	NYC	Static	
AOI 6	B-143	06-Jun-19	5.00	5.80	0.80	3.87	NYC	Static	
AOI 6	B-144	06-Jun-19	5.09	5.10	0.01	3.93	NYC	Static	
AOI 6	B-145	06-Jun-19	---	4.97	---	4.84	NYC	Static	
AOI 6	B-146	07-Jun-19	NM	NM	NM	NM	NYC	Static	unable to locate
AOI 6	B-147	06-Jun-19	4.87	4.95	0.08	4.02	NYC	Static	
AOI 6	B-148	06-Jun-19	5.08	6.12	1.04	2.02	NYC	Static	
AOI 6	B-149	06-Jun-19	2.98	3.10	0.12	4.75	NYC	Static	
AOI 6	B-150	06-Jun-19	3.09	5.34	2.25	4.45	NYC	Static	
AOI 6	B-151	06-Jun-19	---	4.16	---	3.58	NYC	Static	
AOI 6	B-152	06-Jun-19	---	1.26	---	3.78	NYC	Static	
AOI 6	B-153	06-Jun-19	---	1.71	---	4.66	NYC	Static	
AOI 6	B-155	07-Jun-19	---	5.39	---	3.15	NYC	Static	
AOI 6	B-156	06-Jun-19	---	5.70	---	3.16	NYC	Static	
AOI 6	B-157	06-Jun-19	---	1.67	---	3.25	NYC	Static	
AOI 6	B-158	06-Jun-19	---	3.48	---	4.73	NYC	Static	
AOI 6	B-160	06-Jun-19	---	4.03	---	4.50	NYC	Static	
AOI 6	B-161	06-Jun-19	4.87	5.10	0.23	3.39	NYC	Static	
AOI 6	B-162	16-Jul-19	NM	NM	NM	NM	NYC	Static	no access-area around well is flooded
AOI 6	B-163	07-Jun-19	---	1.81	---	5.64	NYC	Static	
AOI 6	B-164	06-Jun-19	---	5.03	---	3.79	NYC	Static	
AOI 6	B-165	06-Jun-19	---	1.56	---	4.23	NYC	Static	
AOI 6	B-166	07-Jun-19	NM	NM	NM	NM	NYC	Static	unable to locate
AOI 6	B-167	07-Jun-19	---	3.18	---	3.55	NYC	Static	
AOI 6	B-168	06-Jun-19	---	1.13	---	5.33	NYC	Static	
AOI 6	B-169	06-Jun-19	---	0.74	---	5.38	NYC	Static	
AOI 6	B-170	16-Jul-19	---	0.81	---	5.67	NYC	Static	
AOI 6	B-172	06-Jun-19	---	4.58	---	3.43	NYC	Static	
AOI 6	B-173	06-Jun-19	---	4.60	---	3.58	NYC	Static	
AOI 6	B-174	06-Jun-19	---	3.64	---	4.66	NYC	Static	
AOI 6	B-175	06-Jun-19	4.47	7.82	3.35	3.64	NYC	Static	
AOI 6	PZ-132A	07-Jun-19	---	6.92	---	3.23	NYC	Static	
AOI 6	PZ-135A	07-Jun-19	NM	NM	NM	NM	NYC	Static	well destroyed
AOI 6	RW-9	06-Jun-19	5.04	6.10	1.06	3.52	NYC	Static	
AOI 6	SUMP-1	06-Jun-19	5.35	5.45	0.10	5.34	NYC	Static	
AOI 6	U-1	07-Jun-19	NM	NM	NM	NM	NYC	Static	unable to locate
AOI 6	U-2	06-Jun-19	---	7.25	---	2.14	NYC	Static	
AOI 6	U-3	16-Jul-19	4.55	5.98	1.43	4.98	NYC	Static	
AOI 6	U-4	06-Jun-19	---	5.82	---	3.40	NYC	Static	
AOI 6	U-5	06-Jun-19	---	9.20	---	0.59	NYC	Static	
AOI 6	URS-1	06-Jun-19	---	6.90	---	3.12	NYC	Static	
AOI 6	URS-2	06-Jun-19	---	4.20	---	3.69	NYC	Static	
AOI 6	URS-3	06-Jun-19	---	3.93	---	3.67	NYC	Static	
AOI 6	URS-4	16-Jul-19	---	6.24	---	3.70	NYC	Static	
AOI 6	URS-5	06-Jun-19	---	4.85	---	3.09	NYC	Static	
AOI 6	WP9-4	06-Jun-19	5.07	5.57	0.50	3.88	NYC	Static	
AOI 6	WP11-3	06-Jun-19	---	3.77	---	NM	NYC	Static	
AOI 6	WP11-11	06-Jun-19	---	0.92	---	NM	NYC	Static	
AOI 6	C-134D	07-Jun-19	---	11.00	---	-1.60	NYC	Static	
AOI 7	C-49	06-Jun-19	---	4.58	---	5.00	NYC	Static	
AOI 7	C-50	06-Jun-19	---	7.45	---	5.32	NYC	Static	
AOI 7	C-51	06-Jun-19	---	4.92	---	4.34	NYC	Static	
AOI 7	C-52	07-Jun-19	---	4.62	---	3.01	NYC	Static	
AOI 7	C-53A	06-Jun-19	---	3.98	---	5.49	NYC	Static	
AOI 7	C-54	06-Jun-19	---	0.37	---	6.24	NYC	Static	
AOI 7	C-55	06-Jun-19	---	5.15	---	4.26	NYC	Static	
AOI 7	C-56	06-Jun-19	---	2.46	---	8.26	NYC	Static	
AOI 7	C-57	06-Jun-19	---	2.56	---	5.94	NYC	Static	
AOI 7	C-58	06-Jun-19	---	1.39	---	6.03	NYC	Static	
AOI 7	C-60	06-Jun-19	---	3.69	---	3.75	NYC	Static	
AOI 7	C-61	07-Jun-19	---	3.26	---	4.67	NYC	Static	
AOI 7	C-62	06-Jun-19	---	4.71	---	6.69	NYC	Static	
AOI 7	C-63	06-Jun-19	---	5.58	---	1.83	NYC	Static	
AOI 7	C-64	07-Jun-19	8.91	9.02	0.11	-0.78	NYC	Static	
AOI 7	C-65	06-Jun-19	4.99	5.43	0.44	5.81	NYC	Static	
AOI 7	C-96	06-Jun-19	---	6.14	---	6.74	NYC	Static	
AOI 7	C-97	07-Jun-19	12.84	12.87	0.03	-2.32	NYC	Static	
AOI 7	C-98	06-Jun-19	---	5.10	---	5.45	NYC	Static	

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AOI 7	C-104	06-Jun-19	---	6.43	---	3.10	NYC	Static	
AOI 7	C-105	06-Jun-19	---	4.20	---	4.97	NYC	Static	
AOI 7	C-106	06-Jun-19	8.34	8.66	0.32	3.18	NYC	Static	
AOI 7	C-108	06-Jun-19	---	3.95	---	4.32	NYC	Static	
AOI 7	C-109	06-Jun-19	---	4.16	---	5.84	NYC	Static	
AOI 7	C-110	06-Jun-19	---	5.71	---	6.87	NYC	Static	
AOI 7	C-111	06-Jun-19	---	5.23	---	6.94	NYC	Static	
AOI 7	C-112	07-Jun-19	NM	NM	NM	NM	NYC	Static	no access area around well flooded
AOI 7	C-113	06-Jun-19	---	4.61	---	7.04	NYC	Static	
AOI 7	C-114	06-Jun-19	---	3.68	---	7.28	NYC	Static	
AOI 7	C-127	07-Jun-19	---	8.15	---	1.65	NYC	Static	
AOI 7	C-129	07-Jun-19	---	3.43	---	5.51	NYC	Static	
AOI 7	C-129D	07-Jun-19	---	9.41	---	-0.22	NYC	Static	
AOI 7	C-130	06-Jun-19	---	6.81	---	5.17	NYC	Static	
AOI 7	C-131	06-Jun-19	---	3.33	---	6.81	NYC	Static	
AOI 7	C-132	06-Jun-19	NM	NM	NM	NM	NYC	Static	obstruction at 5.35 feet
AOI 7	C-133	06-Jun-19	---	1.50	---	6.23	NYC	Static	
AOI 7	C-136	06-Jun-19	---	4.27	---	4.58	NYC	Static	
AOI 7	C-137	06-Jun-19	---	1.87	---	1.97	NYC	Static	
AOI 7	C-138	06-Jun-19	---	4.66	---	2.29	NYC	Static	
AOI 7	C-139	06-Jun-19	2.74	2.75	0.01	NM	NYC	Static	
AOI 7	C-140	07-Jun-19	---	1.55	---	6.00	NYC	Static	
AOI 7	C-142	07-Jun-19	---	8.08	---	3.27	NYC	Static	
AOI 7	C-143	07-Jun-19	NM	NM	NM	NM	NYC	Static	dry
AOI 7	C-144D	07-Jun-19	---	12.72	---	-3.76	NYC	Static	
AOI 7	C-145	07-Jun-19	---	5.36	---	1.56	NYC	Static	
AOI 7	C-146	07-Jun-19	---	8.79	---	-2.05	NYC	Static	
AOI 7	C-147	07-Jun-19	8.84	9.14	0.30	-2.01	NYC	Static	
AOI 7	C-148	07-Jun-19	---	10.28	---	-0.94	NYC	Static	
AOI 7	C-150	07-Jun-19	10.37	10.41	0.04	-2.19	NYC	Static	
AOI 7	C-152	07-Jun-19	---	9.11	---	0.27	NYC	Static	
AOI 7	C-153	07-Jun-19	---	10.38	---	-2.11	NYC	Static	
AOI 7	C-154	07-Jun-19	---	10.08	---	-2.19	NYC	Static	
AOI 7	C-155	07-Jun-19	---	6.39	---	2.78	NYC	Static	
AOI 7	C-156	07-Jun-19	---	3.34	---	3.38	NYC	Static	
AOI 7	C-157	16-Jul-19	---	1.49	---	5.09	NYC	Static	
AOI 7	C-158	07-Jun-19	NM	NM	NM	NM	NYC	Static	unable to locate
AOI 7	C-159	07-Jun-19	---	3.20	---	3.59	NYC	Static	
AOI 7	C-161	07-Jun-19	9.36	10.95	1.59	-0.49	NYC	Static	
AOI 7	C-162	07-Jun-19	---	11.56	---	-3.06	NYC	Static	
AOI 7	C-163	07-Jun-19	---	3.64	---	3.24	NYC	Static	
AOI 7	C-164	07-Jun-19	---	3.63	---	3.20	NYC	Static	
AOI 7	C-165	07-Jun-19	---	5.18	---	3.28	NYC	Static	
AOI 7	C-168	06-Jun-19	---	7.23	---	0.18	NYC	Static	
AOI 7	C-169	07-Jun-19	8.39	10.37	1.98	-1.67	NYC	Static	
AOI 7	C-170	16-Jul-19	---	1.48	---	10.01	NYC	Static	
AOI 7	C-171	06-Jun-19	---	3.14	---	7.22	NYC	Static	
AOI 7	C-172	06-Jun-19	---	3.29	---	2.62	NYC	Static	
AOI 7	C-174	07-Jun-19	---	11.28	---	0.21	unconfined	Static	
AOI 7	River4	06-Jun-19	---	11.45	---	NM	NYC	Static	
AOI 7	RW-801	06-Jun-19	---	11.46	---	-5.19	NYC	Static	no pump in well
AOI 7	RW-802	06-Jun-19	---	19.85	---	-14.15	NYC	Pumping	
AOI 7	RW-803	06-Jun-19	---	20.55	---	-14.77	NYC	Pumping	
AOI 7	RW-804	06-Jun-19	---	20.80	---	-15.02	NYC	Pumping	
AOI 7	RW-805	06-Jun-19	---	17.30	---	-11.55	NYC	Pumping	
AOI 7	RW-806	06-Jun-19	---	20.40	---	-14.99	NYC	Pumping	
AOI 7	RW-807	06-Jun-19	---	16.61	---	-9.77	NYC	Static	
AOI 7	RW-808	06-Jun-19	---	18.50	---	-12.42	NYC	Pumping	
AOI 7	RW-809	06-Jun-19	---	19.80	---	-13.25	NYC	Pumping	
AOI 7	RW-810	06-Jun-19	---	14.50	---	-8.06	NYC	Pumping	
AOI 7	WP14-2	16-Jul-19	---	8.97	---	-1.06	NYC	Static	
AOI 8	N-1	10-Jun-19	---	10.55	---	11.72	unconfined	Static	
AOI 8	N-2	26-Jun-19	---	15.61	---	10.72	unconfined		
AOI 8	N-3	10-Jun-19	---	16.68	---	9.98	NA	Static	
AOI 8	N-4	10-Jun-19	---	16.60	---	9.76	lower aquifer	Static	
AOI 8	N-5	10-Jun-19	---	9.03	---	16.93	perched aquifer	Static	
AOI 8	N-6	10-Jun-19	---	11.15	---	19.90	perched aquifer	Static	
AOI 8	N-7	10-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 8	N-8	10-Jun-19	---	25.15	---	12.46	unconfined	Static	
AOI 8	N-9	10-Jun-19	---	38.55	---	-2.65	lower aquifer	Static	
AOI 8	N-10	10-Jun-19	---	4.77	---	15.17	perched aquifer	Static	

Table 2
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 Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
AOI 8	N-11	10-Jun-19	---	17.75	---	11.99	unconfined	Static	
AOI 8	N-12	16-Jul-19	---	15.14	---	11.85	unconfined	Static	
AOI 8	N-13	10-Jun-19	---	15.19	---	11.58	lower aquifer	Static	
AOI 8	N-14	10-Jun-19	19.75	20.25	0.50	12.20	unconfined	Static	
AOI 8	N-15	10-Jun-19	---	20.03	---	9.32	unconfined	Static	
AOI 8	N-16	10-Jun-19	---	20.85	---	12.13	unconfined	Static	
AOI 8	N-17	10-Jun-19	---	22.30	---	12.12	unconfined	Static	
AOI 8	N-18	10-Jun-19	---	20.95	---	11.95	unconfined	Static	
AOI 8	N-19	10-Jun-19	---	28.30	---	4.48	lower aquifer	Static	
AOI 8	N-20	10-Jun-19	---	16.85	---	11.54	unconfined	Static	
AOI 8	N-21	10-Jun-19	---	21.25	---	6.76	lower aquifer	Static	
AOI 8	N-24	10-Jun-19	---	9.46	---	8.27	unconfined	Static	
AOI 8	N-25	10-Jun-19	3.68	4.77	1.09	15.03	perched aquifer	Static	
AOI 8	N-27	10-Jun-19	---	18.80	---	3.92	lower aquifer	Static	
AOI 8	N-29	10-Jun-19	---	24.77	---	11.67	unconfined	Static	
AOI 8	N-30	10-Jun-19	---	31.76	---	4.54	lower aquifer	Static	
AOI 8	N-33	16-Jul-19	---	9.43	---	4.54	lower aquifer	Static	
AOI 8	N-34	16-Jul-19	---	2.28	---	8.68	unconfined	Static	
AOI 8	N-35	10-Jun-19	---	3.41	---	10.67	unconfined	Static	
AOI 8	N-36	10-Jun-19	---	4.74	---	7.13	unconfined	Static	
AOI 8	N-37	10-Jun-19	---	11.74	---	6.48	lower aquifer	Static	
AOI 8	N-38	10-Jun-19	---	6.50	---	3.59	unconfined	Static	
AOI 8	N-38D	16-Jul-19	---	9.61	---	0.82	lower aquifer	Static	
AOI 8	N-40	10-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 8	N-42	10-Jun-19	---	6.79	---	8.11	unconfined	Static	
AOI 8	N-46D	16-Jul-19	---	28.28	---	3.70	lower aquifer	Static	
AOI 8	N-47	10-Jun-19	17.70	18.99	1.29	14.07	unconfined	Static	
AOI 8	N-48	10-Jun-19	20.57	20.58	0.01	10.68	unconfined	Static	
AOI 8	N-49	10-Jun-19	22.71	24.87	2.16	10.77	unconfined	Static	
AOI 8	N-50D	10-Jun-19	---	25.23	---	7.92	lower aquifer	Static	
AOI 8	N-51	10-Jun-19	21.77	21.79	0.02	10.08	unconfined	Static	
AOI 8	N-55	10-Jun-19	---	4.04	---	6.24	unconfined	Static	
AOI 8	N-56	10-Jun-19	---	7.00	---	6.37	unconfined	Static	
AOI 8	N-57	10-Jun-19	---	4.91	---	6.00	unconfined	Static	
AOI 8	N-58	10-Jun-19	---	3.53	---	5.70	unconfined	Static	
AOI 8	N-59	10-Jun-19	NM	NM	NM	NM	unconfined	Static	viscous LNAPL
AOI 8	N-61	10-Jun-19	---	3.47	---	5.44	unconfined	Static	
AOI 8	N-64	10-Jun-19	---	4.57	---	4.21	unconfined	Static	
AOI 8	N-67	16-Jul-19	---	3.35	---	14.81	unconfined	Static	
AOI 8	N-68	10-Jun-19	12.25	12.31	0.06	11.95	unconfined	Static	
AOI 8	N-69	10-Jun-19	---	13.93	---	9.27	lower aquifer	Static	
AOI 8	N-70	10-Jun-19	---	13.74	---	8.43	lower aquifer	Static	
AOI 8	N-72	10-Jun-19	---	8.70	---	3.97	unconfined	Static	well damaged
AOI 8	N-73	10-Jun-19	---	7.36	---	1.54	lower aquifer	Static	
AOI 8	N-74	10-Jun-19	---	5.37	---	2.79	unconfined	Static	
AOI 8	N-75	10-Jun-19	---	6.27	---	1.58	lower aquifer	Static	
AOI 8	N-76	16-Jul-19	NM	NM	NM	NM	unconfined	Static	abandoned
AOI 8	N-77	10-Jun-19	---	7.20	---	11.41	unconfined	Static	
AOI 8	N-78	10-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 8	N-82	16-Jul-19	---	20.75	---	12.74	unconfined	Static	
AOI 8	N-83	10-Jun-19	---	14.66	---	6.79	lower aquifer	Static	
AOI 8	N-84	10-Jun-19	---	14.16	---	11.72	unconfined	Static	
AOI 8	N-85	10-Jun-19	---	13.45	---	11.84	unconfined	Static	
AOI 8	N-86	10-Jun-19	---	14.75	---	11.09	unconfined	Static	
AOI 8	N-87	10-Jun-19	---	14.90	---	11.36	unconfined	Static	
AOI 8	N-89	10-Jun-19	---	13.70	---	9.71	unconfined	Static	
AOI 8	N-92	10-Jun-19	---	7.68	---	13.18	unconfined	Static	
AOI 8	N-93	10-Jun-19	---	14.67	---	10.42	unconfined	Static	
AOI 8	N-94	10-Jun-19	---	6.30	---	14.06	lower aquifer	Static	
AOI 8	N-97	10-Jun-19	---	13.51	---	9.45	unconfined	Static	
AOI 8	N-98	10-Jun-19	---	22.75	---	11.78	unconfined	Static	
AOI 8	N-99	10-Jun-19	---	17.15	---	11.11	unconfined	Static	
AOI 8	N-100	10-Jun-19	---	16.60	---	10.41	unconfined	Static	
AOI 8	N-101	10-Jun-19	---	15.25	---	11.90	unconfined	Static	
AOI 8	N-102	10-Jun-19	20.55	21.75	1.20	12.58	unconfined	Static	
AOI 8	N-103	16-Jul-19	16.43	16.43	<0.01	11.70	unconfined	Static	
AOI 8	N-104	10-Jun-19	---	15.90	---	11.74	unconfined	Static	
AOI 8	N-105	10-Jun-19	---	16.57	---	11.54	unconfined	Static	
AOI 8	N-106	10-Jun-19	---	7.74	---	15.29	unconfined	Static	
AOI 8	N-107	10-Jun-19	13.85	14.50	0.65	12.46	unconfined	Static	
AOI 8	N-109	10-Jun-19	---	11.21	---	7.21	lower aquifer	Static	

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AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
AOI 8	N-110	10-Jun-19	NM	NM	NM	NM	unconfined	Static	
AOI 8	N-111	10-Jun-19	---	6.04	---	4.72	unconfined	Static	
AOI 8	N-112	10-Jun-19	9.86	11.84	1.98	5.69	lower aquifer	Static	
AOI 8	N-113	10-Jun-19	6.82	10.38	3.56	7.04	unconfined	Static	
AOI 8	N-114	10-Jun-19	---	7.41	---	6.96	lower aquifer	Static	
AOI 8	N-115	10-Jun-19	---	7.13	---	8.20	unconfined	Static	
AOI 8	N-116	10-Jun-19	3.75	7.12	3.37	7.19	unconfined	Static	
AOI 8	N-120	10-Jun-19	NM	NM	NM	NM	unconfined	Static	unable to locate
AOI 8	N-122	10-Jun-19	---	8.54	---	8.51	unconfined	Static	
AOI 8	N-127	10-Jun-19	23.55	24.18	0.63	9.82	unconfined	Static	
AOI 8	N-129	10-Jun-19	18.29	19.00	0.71	10.54	unconfined	Static	
AOI 8	N-130	10-Jun-19	19.77	20.31	0.54	11.71	unconfined	Static	
AOI 8	N-133	10-Jun-19	---	3.29	---	6.07	unconfined	Static	
AOI 8	N-134	10-Jun-19	---	15.97	---	11.52	unconfined	Static	
AOI 8	N-137	10-Jun-19	15.55	16.05	0.50	9.96	unconfined	Static	
AOI 8	N-138	10-Jun-19	25.60	25.66	0.06	9.68	unconfined	Static	
AOI 8	N-139	10-Jun-19	25.28	25.29	0.01	9.72	unconfined	Static	
AOI 8	N-140	10-Jun-19	---	16.02	---	10.72	unconfined	Static	
AOI 8	N-141	10-Jun-19	---	13.04	---	11.35	unconfined	Static	
AOI 8	N-142	10-Jun-19	---	24.98	---	9.58	unconfined	Static	
AOI 8	N-143	10-Jun-19	---	21.80	---	11.22	unconfined	Static	
AOI 8	N-144	10-Jun-19	---	24.55	---	9.73	unconfined	Static	
AOI 8	N-145	10-Jun-19	---	16.35	---	9.64	unconfined	Static	
AOI 8	N-146	10-Jun-19	15.81	17.45	1.64	10.34	unconfined	Static	
AOI 8	N-147D	10-Jun-19	---	11.60	---	3.62	lower aquifer	Static	
AOI 8	N-148D	10-Jun-19	---	28.04	---	3.94	lower aquifer	Static	
AOI 8	N-149D	10-Jun-19	---	11.35	---	-1.06	lower aquifer	Static	
AOI 8	N-150	10-Jun-19	---	5.91	---	4.29	unconfined	Static	
AOI 8	N-151	10-Jun-19	15.96	17.94	1.98	11.50	unconfined	Static	
AOI 8	N-152	10-Jun-19	---	9.10	---	11.76	unconfined	Static	
AOI 8	N-153	10-Jun-19	---	25.94	---	9.77	unconfined	Static	
AOI 8	N-154	10-Jun-19	---	9.33	---	18.20	perched aquifer	Static	
AOI 8	N-155	10-Jun-19	---	24.61	---	9.66	lower aquifer	Static	
AOI 8	N-156	10-Jun-19	---	8.57	---	1.94	unconfined	Static	
AOI 8	N-157	10-Jun-19	---	25.94	---	9.59	lower aquifer	Static	
AOI 8	N-503	10-Jun-19	8.23	9.04	0.81	4.10	unconfined	Static	
AOI 8	N-504	16-Jul-19	8.20	8.23	0.03	4.11	unconfined	Static	
AOI 8	P-21	10-Jun-19	---	4.41	---	8.68	NYC	Static	
AOI 8	PGW-MW-5	16-Jul-19	---	26.08	---	8.00	unconfined	Static	
AOI 8	PGW-MW-6	10-Jun-19	---	10.25	---	-2.24	unconfined	Static	
AOI 8	PGW-MW-7	16-Jul-19	---	14.15	---	8.91	unconfined	Static	
AOI 8	PGW-MW-8	10-Jun-19	---	23.70	---	7.89	unconfined	Static	
AOI 8	PGW-MW-9	16-Jul-19	---	24.57	---	7.84	unconfined	Static	
AOI 8	PGW-MW-20	10-Jun-19	NM	NM	NM	NM	unconfined	Static	obstruction in well
AOI 8	PGW-MW-21	25-Jun-19	---	4.31	---	8.64	unconfined	Static	
AOI 8	PZ-201	10-Jun-19	20.70	20.71	0.01	11.58	unconfined	Static	
AOI 8	PZ-202	10-Jun-19	20.50	20.60	0.10	12.88	unconfined	Static	
AOI 8	PZ-203	10-Jun-19	---	19.85	---	14.26	unconfined	Static	
AOI 8	PZ-204	10-Jun-19	NM	NM	NM	NM	unconfined	Static	viscous LNAPL
AOI 8	PZ-300	10-Jun-19	---	15.10	---	11.67	unconfined	Static	
AOI 8	PZ-500	10-Jun-19	NM	NM	NM	NM	unconfined	Static	abandoned
AOI 8	PZ-501	10-Jun-19	---	3.53	---	5.47	unconfined	Static	
AOI 8	PZ-502	10-Jun-19	2.27	3.91	1.64	5.51	unconfined	Static	
AOI 8	PZ-503	10-Jun-19	---	3.34	---	5.35	unconfined	Static	
AOI 8	PZ-504	10-Jun-19	---	2.33	---	5.30	unconfined	Static	
AOI 8	PZ-505	10-Jun-19	---	3.09	---	5.37	unconfined	Static	
AOI 8	PZ-507	10-Jun-19	---	8.08	---	4.60	unconfined	Static	
AOI 8	RW-200	10-Jun-19	---	5.45	---	6.57	unconfined	Static	
AOI 8	RW-201	10-Jun-19	22.23	22.24	0.01	9.76	unconfined	Static	
AOI 8	RW-202	10-Jun-19	---	18.95	---	10.56	unconfined	Static	
AOI 8	RW-203	10-Jun-19	22.09	22.11	0.02	9.01	unconfined	Static	
AOI 8	RW-204	10-Jun-19	16.75	18.84	2.09	11.61	unconfined	Static	
AOI 8	RW-205	10-Jun-19	18.19	18.60	0.41	11.44	unconfined	Static	
AOI 8	RW-206	10-Jun-19	19.72	22.07	2.35	10.96	unconfined	Static	
AOI 8	RW-300	10-Jun-19	14.00	14.50	0.50	7.56	lower aquifer	Static	
AOI 8	RW-301	10-Jun-19	---	11.51	---	10.90	unconfined	Static	
AOI 8	RW-302	10-Jun-19	---	12.70	---	11.39	unconfined	Static	
AOI 8	RW-303	10-Jun-19	---	13.35	---	11.63	unconfined	Static	
AOI 8	RW-304	10-Jun-19	---	14.25	---	11.03	unconfined	Static	
AOI 8	RW-305	10-Jun-19	---	14.30	---	10.97	unconfined	Static	
AOI 8	RW-306	10-Jun-19	---	12.50	---	11.08	unconfined	Static	

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AOI 8	RW-307	10-Jun-19	---	14.40	---	8.86	unconfined	Static	
AOI 8	RW-308	10-Jun-19	---	16.26	---	9.35	unconfined	Static	
AOI 8	RW-309	10-Jun-19	---	15.20	---	10.03	unconfined	Static	
AOI 8	RW-500	10-Jun-19	---	2.00	---	5.56	unconfined	Static	
AOI 8	RW-501	10-Jun-19	---	4.69	---	5.10	unconfined	Static	
AOI 8	RW-502	10-Jun-19	8.44	8.46	0.02	4.03	unconfined	Static	
AOI 8	V-MW-1	11-Jun-19	---	20.97	---	11.56	NYC	Static	
AOI 8	V-MW-2	10-Jun-19	---	23.92	---	9.68	NYC	Static	
AOI 8	V-MW-3	10-Jun-19	---	22.92	---	9.73	NYC	Static	
AOI 8	V-MW-4	10-Jun-19	---	24.55	---	10.36	NYC	Static	
AOI 8	V-MW-5	10-Jun-19	23.89	23.89	<0.01	9.72	NYC	Static	
AOI 8	V-MW-6	10-Jun-19	---	24.63	---	9.82	NYC	Static	
AOI 8	V-MW-7	10-Jun-19	---	23.87	---	9.70	NYC	Static	
AOI 8	V-MW-8	10-Jun-19	---	23.79	---	9.84	NYC	Static	
AOI 8	V-MW-9	10-Jun-19	---	23.12	---	9.96	NYC	Static	
AOI 8	V-MW-10	10-Jun-19	---	24.47	---	10.01	NYC	Static	
AOI 8	V-MW-11	10-Jun-19	---	25.00	---	10.20	NYC	Static	
AOI 8	V-MW-12	10-Jun-19	---	25.13	---	10.44	NYC	Static	
AOI 8	V-MW-16	10-Jun-19	---	29.17	---	10.37	NYC	Static	
AOI 9	MW-1SRTF	10-Jun-19	1.95	5.05	3.10	4.82	NYC	Static	
AOI 9	MW-2SRTF	10-Jun-19	2.68	2.97	0.29	4.59	NYC	Static	
AOI 9	MW-3SRTF	10-Jun-19	2.25	3.06	0.81	4.53	NYC	Static	
AOI 9	RW-A	10-Jun-19	---	4.21	---	-6.08	NYC	Static	
AOI 9	RW-B	10-Jun-19	2.27	4.17	1.90	4.64	NYC	Static	
AOI 9	RW-B5	10-Jun-19	---	3.26	---	4.58	NYC	Static	
AOI 9	S-74D1SRTF	10-Jun-19	---	21.02	---	-8.21	lower aquifer	Static	
AOI 9	S-74D2SRTF	10-Jun-19	---	15.56	---	-2.48	NYC	Static	
AOI 9	S-74SRTF	10-Jun-19	---	7.80	---	6.74	NYC	Static	
AOI 9	S-75SRTF	10-Jun-19	NM	NM	NM	NM	NYC	Static	
AOI 9	S-76DSRTF	10-Jun-19	---	16.51	---	-7.96	lower aquifer	Static	
AOI 9	S-76SRTF	10-Jun-19	---	5.85	---	1.08	NYC	Static	
AOI 9	S-77SRTF	10-Jun-19	---	11.97	---	-7.62	NYC	Static	
AOI 9	S-78SRTF	10-Jun-19	---	9.71	---	-8.21	NYC	Static	
AOI 9	S-79SRTF	10-Jun-19	---	7.93	---	-6.09	NYC	Static	
AOI 9	S-80SRTF	10-Jun-19	---	3.56	---	-0.99	NYC	Static	
AOI 9	S-81SRTF	10-Jun-19	---	9.47	---	-8.01	NYC	Static	
AOI 9	S-82SRTF	10-Jun-19	---	1.79	---	-0.68	NYC	Static	
AOI 9	S-83SRTF	10-Jun-19	---	4.31	---	-1.93	NYC	Static	
AOI 9	S-105SRTF	10-Jun-19	---	6.22	---	-4.27	NYC	Static	
AOI 9	S-106DSRTF	10-Jun-19	---	18.71	---	-9.25	lower aquifer	Static	
AOI 9	S-106SRTF	10-Jun-19	---	5.71	---	4.31	NYC	Static	
AOI 9	S-108SRTF	10-Jun-19	---	5.07	---	-0.76	NYC	Static	
AOI 9	S-109SRTF	10-Jun-19	---	2.88	---	-0.53	NYC	Static	
AOI 9	S-110DSRTF	10-Jun-19	---	10.64	---	-7.97	NYC	Static	
AOI 9	S-110SRTF	10-Jun-19	NM	NM	NM	NM	NYC	Static	dry at 8.60 feet
AOI 9	S-111SRTF	10-Jun-19	8.46	8.46	<0.01	-7.68	NYC	Static	
AOI 9	S-112SRTF	10-Jun-19	9.86	9.86	<0.01	-8.34	NYC	Static	
AOI 9	S-113SRTF	10-Jun-19	---	11.30	---	-8.28	NYC	Static	
AOI 9	S-114SRTF	10-Jun-19	10.41	10.41	<0.01	-8.24	NYC	Static	
AOI 9	S-115DSRTF	10-Jun-19	---	10.85	---	-8.15	NYC	Static	
AOI 9	S-115SRTF	10-Jun-19	---	11.22	---	-8.47	NYC	Static	
AOI 9	S-116SRTF	10-Jun-19	---	9.41	---	-8.54	NYC	Static	
AOI 9	S-117SRTF	10-Jun-19	---	7.82	---	-4.95	NYC	Static	
AOI 9	S-118DSRTF	10-Jun-19	---	11.85	---	-8.59	NYC	Static	
AOI 9	S-118SRTF	10-Jun-19	---	11.53	---	-7.90	NYC	Static	
AOI 9	S-119SRTF	10-Jun-19	---	3.73	---	-1.38	NYC	Static	
AOI 9	S-120DSRTF	10-Jun-19	---	21.10	---	-8.73	NYC	Static	
AOI 9	S-120SRTF	10-Jun-19	---	8.81	---	3.26	NYC	Static	
AOI 9	S-121SRTF	10-Jun-19	---	7.36	---	-6.35	NYC	Static	
AOI 9	S-122SRTF	10-Jun-19	8.56	9.92	1.36	-6.38	NYC	Static	
AOI 9	S-123SRTF	10-Jun-19	---	9.63	---	-7.22	NYC	Static	
AOI 9	S-124SRTF	10-Jun-19	---	6.57	---	1.31	NYC	Static	
AOI 9	S-125SRTF	10-Jun-19	---	4.74	---	2.44	NYC	Static	
AOI 9	S-126SRTF	10-Jun-19	---	6.94	---	4.89	NYC	Static	
AOI 9	S-127SRTF	10-Jun-19	---	7.42	---	4.71	NYC	Static	
AOI 9	S-128SRTF	10-Jun-19	---	9.20	---	4.11	NYC	Static	
AOI 9	S-129SRTF	10-Jun-19	NM	NM	NM	NM	NYC	Static	no access-area secured
AOI 9	S-130SRTF	10-Jun-19	---	7.45	---	3.09	perched aquifer	Static	
AOI 9	S-131SRTF	10-Jun-19	---	4.94	---	3.87	NYC	Static	
AOI 9	S-132SRTF	10-Jun-19	---	6.47	---	2.23	NYC	Static	
AOI 9	S-133SRTF	10-Jun-19	---	3.54	---	1.14	NYC	Static	

Table 2
 Sitewide 2019 Annual Gauging Data
 Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
AOI 9	S-134SRTF	10-Jun-19	---	7.81	---	2.37	NYC	Static	
AOI 9	S-135SRTF	10-Jun-19	---	10.42	---	-7.44	NYC	Static	
AOI 9	S-136SRTF	10-Jun-19	NM	NM	NM	NM	NYC	Static	unable to locate
AOI 9	S-137SRTF	10-Jun-19	---	19.92	---	-9.96	unconfined	Static	
AOI 9	S-138SRTF	10-Jun-19	---	18.51	---	-8.52	lower aquifer	Static	
AOI 9	S-139SRTF	10-Jun-19	---	17.75	---	-7.70	unconfined	Static	
AOI 9	S-140SRTF	10-Jun-19	---	5.80	---	4.67	unconfined	Static	
AOI 9	S-141SRTF	10-Jun-19	---	20.15	---	-9.69	unconfined	Static	
AOI 9	S-142SRTF	10-Jun-19	---	16.80	---	-9.86	NYC	Static	
AOI 9	S-143SRTF	10-Jun-19	---	15.86	---	-9.09	lower aquifer	Static	
AOI 9	S-144SRTF	10-Jun-19	---	8.35	---	-7.83	unconfined	Static	
AOI 9	S-145SRTF	10-Jun-19	---	9.30	---	-8.08	unconfined	Static	
AOI 9	S-146SRTF	10-Jun-19	---	25.25	---	-8.57	NYC	Static	
AOI 9	S-147SRTF	10-Jun-19	---	23.28	---	-8.15	NYC	Static	
AOI 9	S-148SRTF	10-Jun-19	---	21.13	---	-8.36	NYC	Static	
AOI 9	S-149SRTF	10-Jun-19	---	21.54	---	-8.08	NYC	Static	
AOI 9	S-150SRTF	10-Jun-19	---	15.68	---	-9.28	NYC	Static	
AOI 9	WPA-1	10-Jun-19	---	7.15	---	-4.42	NYC	Static	
AOI 9	WPA-2	10-Jun-19	---	8.36	---	-5.67	NYC	Static	
AOI 9	WPA-3	10-Jun-19	NM	NM	NM	NM	NYC	Static	dry at 7.10 feet
AOI 9	WPA-5	10-Jun-19	---	6.13	---	-3.65	NYC	Static	
AOI 9	WPB-2	10-Jun-19	---	6.89	---	4.41	NYC	Static	
AOI 9	WPB-3	10-Jun-19	2.58	3.05	0.47	4.49	NYC	Static	
AOI 9	WPB-4	10-Jun-19	---	1.73	---	6.31	NYC	Static	
AOI 9	WPB-5	16-Jul-19	7.98	9.19	1.21	4.03	NYC	Static	
AOI 10	W-1	14-Jun-19	---	6.25	---	3.35	NYC	Static	measured DTW at top of steel casing
AOI 10	W-1D	14-Jun-19	---	9.39	---	1.34	NYC	Static	
AOI 10	W-2	14-Jun-19	---	14.90	---	4.55	NYC	Static	
AOI 10	W-5	14-Jun-19	---	3.06	---	4.67	NYC	Static	
AOI 10	W-6	14-Jun-19	---	0.38	---	7.11	NYC	Static	
AOI 10	W-8	14-Jun-19	2.95	2.96	0.01	5.49	NYC	Static	
AOI 10	W-9	14-Jun-19	---	9.65	---	-0.36	NYC	Static	
AOI 10	W-10	14-Jun-19	3.20	3.21	0.01	4.27	NYC	Static	
AOI 10	W-11	14-Jun-19	---	3.93	---	4.13	NYC	Static	
AOI 10	W-12	14-Jun-19	---	3.10	---	4.00	NYC	Static	
AOI 10	W-13	14-Jun-19	---	7.87	---	-1.22	NYC	Static	
AOI 10	W-14	14-Jun-19	---	2.77	---	4.49	NYC	Static	
AOI 10	W-15	14-Jun-19	---	1.93	---	6.85	NYC	Static	
AOI 10	W-16	14-Jun-19	---	2.25	---	4.39	NYC	Static	
AOI 10	W-17	14-Jun-19	---	3.25	---	3.97	NYC	Static	
AOI 10	W-19	14-Jun-19	---	10.91	---	-0.85	NYC	Static	
AOI 10	W-20	14-Jun-19	---	2.62	---	7.49	NYC	Static	
AOI 10	W-22	14-Jun-19	---	1.22	---	5.22	NYC	Static	
AOI 10	W-23	14-Jun-19	---	2.47	---	5.08	NYC	Static	
AOI 10	W-24	14-Jun-19	NM	NM	NM	NM	NYC	Static	area around well flooded; unable to access
AOI 10	W-25	14-Jun-19	---	5.72	---	4.43	NYC	Static	
AOI 10	W-26	14-Jun-19	---	11.93	---	-1.95	NYC	Static	
AOI 10	W-27	14-Jun-19	---	9.68	---	1.18	NYC	Static	
AOI 10	W-28	14-Jun-19	---	3.72	---	4.89	NYC	Static	
AOI 10	W-29	14-Jun-19	---	7.07	---	4.75	NYC	Static	
AOI 10	W-30	14-Jun-19	---	3.49	---	5.16	NYC	Static	
AOI 10	W-31	14-Jun-19	3.23	3.34	0.11	5.04	NYC	Static	
AOI 10	W-32	14-Jun-19	---	10.14	---	4.69	NYC	Static	
AOI 10	W-32D	14-Jun-19	---	14.75	---	-0.05	NYC	Static	
AOI 10	W-33	14-Jun-19	---	11.81	---	5.26	NYC	Static	
AOI 10	W-34	14-Jun-19	---	7.48	---	6.66	NYC	Static	
BELMONT	MW-26	03-Jun-19	21.60	22.13	0.53	5.03	NYC	Static	
BELMONT	MW-27	03-Jun-19	23.64	23.90	0.26	4.96	NYC	Static	
BELMONT	MW-28	03-Jun-19	23.60	23.74	0.14	5.15	unconfined	Static	
BELMONT	MW-29	03-Jun-19	23.51	26.25	2.74	4.89	NYC	Static	
BELMONT	MW-30	03-Jun-19	---	26.64	---	5.06	unconfined	Static	
BELMONT	MW-31	03-Jun-19	25.11	25.11	<0.01	5.46	unconfined	Static	
BELMONT	MW-32	03-Jun-19	---	24.33	---	4.81	unconfined	Static	
BELMONT	MW-33	03-Jun-19	---	24.95	---	5.04	unconfined	Static	
BELMONT	MW-35	03-Jun-19	---	25.29	---	5.36	unconfined	Static	
BELMONT	MW-36	03-Jun-19	---	27.20	---	5.37	unconfined	Static	
BELMONT	MW-37	03-Jun-19	---	26.32	---	5.60	unconfined	Static	
BELMONT	MW-38	03-Jun-19	---	22.68	---	4.94	unconfined	Static	
BELMONT	MW-39	03-Jun-19	---	22.55	---	5.00	unconfined	Static	
BELMONT	MW-40	03-Jun-19	22.82	23.03	0.21	5.02	NYC	Static	
BELMONT	MW-41	03-Jun-19	---	22.30	---	5.05	unconfined	Static	

Table 2
 Sitewide 2019 Annual Gauging Data
 Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

AOI	Well ID	Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation (ft NAVD 88)	Well Classification	Static or Pumping	Comments
BELMONT	MW-43	03-Jun-19	---	25.62	---	4.99	unconfined	Static	
BELMONT	MW-44	03-Jun-19	---	24.84	---	4.46	unconfined	Static	
BELMONT	OW-2	03-Jun-19	---	26.23	---	5.44	unconfined	Static	
BELMONT	OW-12	03-Jun-19	---	25.12	---	5.10	unconfined	Static	
BELMONT	OW-13	03-Jun-19	---	26.89	---	5.31	unconfined	Static	
BELMONT	OW-14	03-Jun-19	---	27.08	---	5.13	unconfined	Static	
BELMONT	OW-16	03-Jun-19	25.97	26.45	0.48	5.32	unconfined	Static	
BELMONT	OW-17	03-Jun-19	---	25.26	---	4.73	unconfined	Static	
BELMONT	OW-18	03-Jun-19	---	25.31	---	5.53	unconfined	Static	
BELMONT	OW-19	03-Jun-19	---	25.47	---	5.53	unconfined	Static	
BELMONT	OW-20	03-Jun-19	---	26.51	---	5.36	unconfined	Static	
BELMONT	PZ-400	03-Jun-19	---	23.12	---	4.98	unconfined	Static	
BELMONT	RW-1	03-Jun-19	---	24.53	---	5.02	unconfined	Static	
BELMONT	RW-4	03-Jun-19	25.12	25.40	0.28	5.27	NYC	Static	
BELMONT	RW-6	03-Jun-19	---	25.83	---	5.23	unconfined	Static	
BELMONT	RW-7	03-Jun-19	---	22.98	---	5.23	unconfined	Static	
BELMONT	RW-15	03-Jun-19	---	26.00	---	4.05	unconfined	Static	
BELMONT	RW-21	03-Jun-19	23.92	23.92	<0.01	4.95	unconfined	Static	
BELMONT	RW-22	03-Jun-19	---	21.82	---	5.21	unconfined	Static	
BELMONT	RW-23	03-Jun-19	NM	NM	NM	NM	NYC	Static	
BELMONT	RW-24	03-Jun-19	---	22.08	---	5.09	unconfined	Static	
BELMONT	RW-25	03-Jun-19	24.95	24.96	0.01	5.20	NYC	Static	
BELMONT	RW-26	03-Jun-19	---	24.72	---	4.49	unconfined	Static	
BELMONT	RW-27	03-Jun-19	---	25.32	---	4.39	unconfined	Static	
BELMONT	RW-28	03-Jun-19	---	24.68	---	5.06	unconfined	Static	
BELMONT	RW-29	03-Jun-19	---	24.96	---	4.48	unconfined	Static	
BELMONT	RW-30	03-Jun-19	---	24.90	---	4.49	unconfined	Static	
BELMONT	RW-31	03-Jun-19	---	24.92	---	4.46	unconfined	Static	
BELMONT	RW-32	03-Jun-19	---	21.80	---	7.25	unconfined	Static	
BELMONT	RW-400	03-Jun-19	---	28.23	---	-0.04	unconfined	Static	
BELMONT	S-74	03-Jun-19	---	25.10	---	4.94	unconfined	Static	
BELMONT	S-75	03-Jun-19	26.25	26.25	<0.01	4.99	unconfined	Static	
BELMONT	S-76	03-Jun-19	26.13	26.23	0.10	4.89	NYC	Static	
BELMONT	S-330	03-Jun-19	---	24.75	---	5.10	unconfined	Static	
BELMONT	S-331	03-Jun-19	---	25.17	---	6.11	unconfined	Static	
BELMONT	S-332	03-Jun-19	---	25.44	---	4.81	unconfined	Static	
BELMONT	S-393D	03-Jun-19	---	28.84	---	3.22	lower aquifer	Static	
BELMONT	S-394	03-Jun-19	---	28.87	---	3.25	lower aquifer	Static	
BELMONT	S-395	03-Jun-19	---	26.73	---	5.49	unconfined	Static	
BELMONT	TW-3	03-Jun-19	---	26.81	---	5.30	unconfined	Static	
BELMONT	TW-5	03-Jun-19	---	26.48	---	5.59	unconfined	Static	
BELMONT	TW-8	03-Jun-19	---	25.06	---	5.08	unconfined	Static	
BELMONT	TW-9	03-Jun-19	---	26.96	---	5.14	unconfined	Static	
BELMONT	TW-10	03-Jun-19	NM	NM	NM	NM	NYC	Static	no access-vault lid damaged
BELMONT	TW-11	03-Jun-19	---	27.40	---	5.00	unconfined	Static	

Notes:

For product thickness <0.01 ft, the corrected groundwater elevation was calculated using 0.01 foot.

LNAPL = Light non-aqueous phase liquid

ft = Feet

toc = Top of casing

ft btoc = Feet below top of casing

NAVD 88 = North American Vertical Datum of 1988

--- = LNAPL not present

NM = Field reading not measured and/or corrected groundwater elevation not calculated due to lack of surveyed reference elevation or well was dry or presence of down-well pump.

NA = Not Accessible, Not Applicable, or Not Available

NYC = Not yet classified

unconfined* = Hydrostratigraphic unit was assumed because there was no well construction data available.

Table 3
Sitewide 2019 Annual Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	LEAD, Dissolved
Area of Interest	Sample Location	Sample Type	Sample Date	Sample ID	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
AOI 1	ARCO-1		8-Jul-19	ARCO-1 20190708	420	49	12	48	ND (0.2)	11 J	48	4	2 J	7	ND (2)	ND (0.0094)	ND (0.09)	1	1	ND (0.09)	0.1 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	ARCO-1D		3-Jul-19	ARCO-1D 20190703	3	ND (0.2)	ND (0.2)	ND (0.5)	66	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
		Field Duplicate	3-Jul-19	DUP-6 20190703	3	ND (0.2)	ND (0.2)	ND (0.5)	66	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	ARCO-2		8-Jul-19	ARCO-2 20190708	370	47	25	87	ND (0.2)	13 J	84	3	0.3 J	6	ND (2)	ND (0.0095)	ND (0.1)	2	2	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
		Field Duplicate	8-Jul-19	DUP-7 20190708	370	47	26	86	ND (0.2)	13 J	84	2	0.3 J	6	ND (2)	ND (0.0094)	ND (0.1)	1	1	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	ARCO-3		8-Jul-19	ARCO-3 20190708	2,200	120	76	150	ND (1)	52 J	73	24	17 J	23 J	ND (10)	ND (0.0094)	ND (0.09)	2	1	ND (0.09)	0.2 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	S-42i		17-Jun-19	S-42i 20190617	0.5 J	ND (0.2)	ND (0.2)	ND (0.5)	7	38	0.7 J	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)	
	S-44		18-Jun-19	S-44 20190618	220	12	4	19	84	3,000	38	ND (0.09)	0.4 J	2 J	ND (2)	ND (0.0096)	ND (0.09)	1	1	ND (0.09)	0.1 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	S-50		11-Jul-19	S-50 20190711	8,300	18	170	15 J	3 J	ND (100)	23 J	99	6 J	10 J	ND (20)	ND (0.0094)	ND (0.09)	0.6	0.7	0.1 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	0.1 J	ND (1.1)
	S-85		25-Jun-19	S-85 20190625	4	2	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-87i		17-Jun-19	S-87i 20190617	0.2 J	ND (0.2)	ND (0.2)	ND (0.5)	380	180,000	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	3 J	ND (0.0094)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)	
	S-98		25-Jun-19	S-98 20190625	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-193		9-Jul-19	S-193 20190709	140	0.6 J	7	4 J	8	62	2 J	0.5	5 J	1 J	ND (2)	0.012 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-199		11-Jul-19	S-199-SL 20190711	8,000 SL	1,300 SL	770 SL	2,700 SL	21,000 SL	47,000 SL	68 SL	5,400 SL	690 SL	220 SL	ND (20) SL	ND (0.0094) SL	8 J SL	76 SL	120 SL	27 SL	22 J SL	8 J SL	5 J SL	7 J SL	ND (5) SL	2.6 J SL
	S-230		19-Jun-19	S-230 20190619	3,200	150	9	11 J	ND (1)	ND (50)	ND (2)	0.2 J	3 J	ND (2)	ND (10)	ND (0.0095)	0.5 J	0.1 J	0.3 J	0.7	ND (0.1)	0.3 J	0.3 J	0.5	0.3 J	ND (1.1)
	S-271		18-Jun-19	S-271 20190618	140	33	10	49	32	2,500	88	ND (0.1)	1 J	11	ND (2)	ND (0.0094)	0.3 J	8	8	2	2	0.3 J	0.2 J	0.3 J	0.1 J	7.0
	S-273		18-Jun-19	S-273 20190618	330	7	16	81	72	560	21	ND (0.1)	4 J	7	ND (2)	ND (0.0096)	ND (0.1)	0.3 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-276		10-Jul-19	S-276-SL 20190710	5,800 SL	69 SL	700 SL	2,100 SL	72 SL	300 SL	40 J SL	80 SL	380 SL	220 SL	ND (20) SL	ND (0.0095) SL	3 SL	30 SL	54 SL	9 SL	ND (0.1) SL	2 SL	1 SL	2 SL	0.8 SL	2.3 J SL
	S-277		10-Jul-19	S-277-SL 20190710	3,000 SL	1,000 SL	510 SL	2,900 SL	1,800 SL	56,000 SL	62 SL	89 SL	410 SL	180 SL	ND (20) SL	ND (0.0095) SL	ND (0.1) SL	3 SL	3 SL	3 SL	ND (0.1) SL	0.4 J SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	9.3 SL
	S-388D		17-Jun-19	S-388D 20190617	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	7	1,200	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-396		20-Jun-19	S-396 20190620	1,600	ND (2)	14	6 J	1,700	78,000	12 J	0.9	ND (3)	ND (3)	ND (20)	ND (0.0094)	ND (0.1)	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-398		18-Jun-19	S-398 20190618	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	5	31	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	2	ND (0.1)	0.4 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-399		17-Jun-19	S-399 20190617	0.4 J	0.2 J	ND (0.2)	ND (0.5)	19	1,600	0.6 J	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	0.1 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	S-418		19-Jun-19	S-418 20190619	23,000	87	160	180	45	1,000	72	43	93	45	ND (10)	ND (0.0095)	ND (0.1)	1	0.9	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
		Field Duplicate	19-Jun-19	DUP2 20190619	23,000	83	140	170 J	45 J	1,100 J	60 J	35	83 J	40 J	ND (100)	ND (0.0094)	ND (0.1)	1	0.8	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
S-71		18-Jun-19	S-71 20190618	1	0.5 J	0.3 J	3 J	25	390	19	ND (0.1)	0.4 J	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	2	1	ND (0.1)	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
S-72D		17-Jun-19	S-72D 20190617	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	3	ND (10)	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)	
S-152		25-Jun-19	S-152 20190625	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
S-249		27-Jun-19	S-249 20190627	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)	
	Field Duplicate	27-Jun-19	DUP-4 20190627	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
S-294		17-Jun-19	S-294 20190617	49	6	260	320	2	91	140	3,000	240	84	ND (2)	ND (0.0095)	4	82	110	16	21	3	2	3	0.9	ND (1.1)	
S-294D		17-Jun-19	S-294D 20190617	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	3	ND (10)	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	0.4 J	ND (0.09)	0.3 J	0.6	ND (0.09)	ND (0.09)	ND (0.09)	0.3 J	0.6	0.3 J	ND (1.1)
S-302D		17-Jun-19	S-302D 20190617	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	2	400	ND (0.3)	ND (0.1)															

Table 3
Sitewide 2019 Annual Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOLUENE	ETHYL BENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	LEAD, Dissolved
Area of Interest	Sample Location	Sample Type	Sample Date	Sample ID	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
AOI 6	B-39		8-Jul-19	B-39-SL 20190708	5 SL	3 SL	0.6 J SL	5 J SL	ND (0.2) SL	-	31 SL	2 SL	0.4 J SL	ND (0.3) SL	ND (2) SL	ND (0.0094) SL	2 SL	9 SL	13 SL	4 SL	4 SL	2 SL	1 SL	2 SL	0.7 SL	272 SL
	B-43		27-Jun-19	B-43 20190627	8	0.5 J	ND (0.2)	ND (0.5)	ND (0.2)	-	3 J	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	0.6	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)	
	B-132D		27-Jun-19	B-132DAOI6 20190627	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	2	11 J	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	B-150		11-Jul-19	B-150-SL 20190711	170,000 SL	23,000 SL	320 SL	1,100 SL	ND (20) SL	-	8,000 SL	77 SL	150 J SL	56 J SL	ND (200) SL	ND (0.0095) SL	0.1 J SL	1 SL	2 SL	0.4 J SL	0.3 J SL	0.1 J SL	ND (0.1) SL	ND (0.1) SL	ND (1.1) SL	ND (1.1) SL
	B-156		28-Jun-19	B-156AOI6 20190628	99	21	6	30	ND (0.2)	-	110	ND (0.1)	7	6	ND (2)	ND (0.0094)	0.2 J	7	6	1	2	0.3 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	B-165		27-Jun-19	B-165AOI6 20190627	13	ND (0.2)	ND (0.2)	ND (0.5)	0.2 J	-	0.7 J	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	2	ND (0.1)	1	0.5	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	B-169		10-Jul-19	B-169 20190710	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	B-170		10-Jul-19	B-170 20190710	2	0.4 J	0.3 J	1 J	ND (0.2)	-	6	49	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	4	4	0.2 J	0.4 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	B-172		28-Jun-19	B-172AOI6 20190628	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	C-134D		27-Jun-19	C-134DAOI6 20190627	2	ND (0.2)	ND (0.2)	ND (0.5)	0.3 J	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
AOI 7	URS-5		1-Jul-19	URS-5 20190701	3,300	4,400	530	2,300	ND (1)	-	26	180	240	73	ND (10)	ND (0.0095)	ND (0.1)	14	25	4	4	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	C-106		9-Jul-19	C-106-SL 20190709	ND (0.2) SL	ND (0.2) SL	ND (0.2) SL	ND (0.5) SL	ND (0.2) SL	-	ND (0.3) SL	ND (0.1) SL	ND (0.3) SL	ND (0.3) SL	ND (2) SL	ND (0.0094) SL	0.8 SL	1 SL	0.9 SL	2 SL	0.5 SL	0.7 SL	0.4 J SL	0.5 SL	0.3 J SL	ND (1.1) SL
	C-129D		11-Jul-19	C-129D 20190711	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	0.5 J	54	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	0.1 J	0.2 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	C-144D		11-Jul-19	C-144D 20190711	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	C-146		9-Jul-19	C-146 20190709	0.4 J	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	19	9	0.6 J	ND (0.3)	ND (2)	ND (0.0095)	15	22	72	34	14	12	9	10	3	ND (1.1)
	C-168		9-Jul-19	C-168-SL 20190709	110 SL	25 SL	2 SL	13 SL	ND (0.2) SL	-	0.4 J SL	6 SL	2 J SL	0.5 J SL	ND (2) SL	ND (0.0094) SL	ND (0.1) SL	2 SL	3 SL	2 SL	0.6 SL	0.4 J SL	0.4 J SL	0.4 J SL	0.2 J SL	ND (1.1) SL
AOI 8	N-2		26-Jun-19	N-2 20190626	ND (0.2)	0.2 J	ND (0.2)	ND (0.5)	ND (0.2)	-	4 J	0.4 J	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	1	0.4 J	0.8	0.3 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	N-3		26-Jun-19	N-3 20190626	ND (0.2)	0.4 J	0.7 J	1 J	ND (0.2)	-	0.6 J	1	ND (0.3)	1 J	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	N-9		24-Jun-19	N-9 20190624	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	N-13		24-Jun-19	N-13 20190624	25	8	0.7 J	9	ND (0.2)	-	5 J	ND (0.1)	0.4 J	0.4 J	ND (2)	ND (0.0094)	ND (0.1)	5	4	0.3 J	0.7	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	N-30		24-Jun-19	N-30 20190624	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)	
	N-69		24-Jun-19	N-69 20190624	ND (0.2)	ND (0.2)	0.2 J	ND (0.5)	ND (0.2)	-	0.4 J	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	N-74		2-Jul-19	N-74-SL 20190702	670 SL	ND (1) SL	ND (1) SL	ND (3) SL	ND (1) SL	-	ND (2) SL	0.9 SL	2 J SL	ND (2) SL	ND (10) SL	ND (0.0094) SL	1 SL	1 SL	3 SL	2 SL	1 SL	0.7 SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (1.1) SL
	N-75		26-Jun-19	N-75 20190626	6 J	ND (2)	ND (2)	ND (5)	ND (2)	-	ND (3)	0.7	ND (3)	ND (3)	ND (20)	ND (0.0094)	ND (0.09)	3	ND (0.09)	0.8	0.5	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	N-82		3-Jul-19	N-82-SL 20190703	2,500 SL	1,000 SL	2,700 SL	1,700 SL	ND (1) SL	-	130 SL	4,500 SL	540 SL	150 SL	ND (10) SL	ND (0.0095) SL	5 SL	44 SL	58 SL	14 SL	13 SL	5 SL	3 SL	3 SL	1 SL	ND (1.1) SL
	N-112		9-Jul-19	N-112 SL 20190709	ND (0.2) SL	ND (0.2) SL	ND (0.2) SL	ND (0.5) SL	ND (0.2) SL	-	2 J SL	ND (0.1) SL	ND (0.3) SL	ND (0.3) SL	ND (2) SL	ND (0.0095) SL	8 SL	9 SL	9 SL	19 SL	5 SL	4 SL	2 SL	1 SL	0.8 SL	ND (1.1) SL
	N-133		8-Jul-19	N-133 20190708	8,500	3 J	15	30	ND (1)	-	8 J	12	10 J	3 J	ND (10)	ND (0.0095)	ND (0.1)	0.5	0.6	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	N-151		8-Jul-19	N-151 SL 20190708	ND (0.2) SL	0.2 J SL	0.8 J SL	13 SL	ND (0.2) SL	-	5 SL	ND (0.1) SL	1 J SL	ND (0.3) SL	ND (2) SL	ND (0.0094) SL	ND (0.1) SL	0.6 SL	0.4 J SL	0.7 SL	ND (0.1) SL	0.3 J SL	ND (0.1) SL	ND (0.1) SL	ND (1.1) SL	
	N-156		25-Jun-19	N-156 20190625	3	0.3 J	0.4 J	3 J	ND (0.2)	-	12	0.9	8	6	ND (2)	ND (0.0095)	0.3 J	32	42	3	7	0.3 J	0.1 J	0.2 J	ND (1.1)	
	N-157		24-Jun-19	N-157 20190624	570	110	63	110	1	-	22	110	0.7 J	23	ND (2)	ND (0.0095)	ND (0.09)	0.3 J	0.2 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	PGW-MW-6		25-Jun-19	PGW-MW-6 20190625	11	0.3 J	0.3 J	1 J	0.3 J	-	26	1	0.5 J	0.5 J	ND (2)	ND (0.0095)	0.5 J	26	4	3	4	0.4 J	0.4 J	0.4 J	0.3 J	ND (1.1)
	PGW-MW-9		12-Jul-19	PGW-MW-9 20190712	20	1	82	26	ND (0.2)	-	120	20	39	20	ND (2)	ND (0.0094)	15	71	67	42	23	13	11	9	5	ND (1.1)
	PGW-MW-21		25-Jun-19	PGW-MW-21 20190625	130	17	150	130	ND (0.2)	-	47	640	65	24	ND (2)	ND (0.0094)	2	110	86	9	18	2	2	1	ND (1.1)	
	RW-502		2-Jul-19	RW-502-SL 20190702	46 SL	6 J SL	ND (2) SL	14 J SL	ND (2) SL	-	45 J SL	32 SL	ND (3) SL	ND (3) SL	ND (20) SL	ND (0.0094) SL	9 SL	32 SL	61 SL	18 SL						

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
AOI 1	ARCO-1	13-Jul-11	ARCO-1_07132011		2,400	350	690	2,400	ND (5)	-	77	220	610	200	ND (5)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		10-Jul-12	ARCO 1_071012		840	84	120	540	ND (3)	-	79	6	260	110	ND (3)	ND (0.0097)	0.1 J	3	4	0.3 J	0.4 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.19 J
		3-Jun-14	ARCO-1		242	25.6	48.0	110	ND (5.0)	-	109	ND (0.10)	123	77.5	ND (5.0)	ND (0.020)	0.319	3.44	3.37	0.660	ND (0.10)	0.151	ND (0.10)	0.119	ND (0.10)	1.4 J
		16-Dec-14	ARCO-1-20141216		293	37.1	14.3	44.3	ND (1.0)	-	51.3	ND (0.11)	12.4	14.0	ND (1.0)	ND (0.020)	ND (0.11)	1.93	1.06	0.285	0.212	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (3.0)
		18-Aug-16	ARCO-1-20160818-WG		520	ND (100)	ND (20.0)	ND (60.0)	ND (20.0)	-	55.6	3.90	ND (20.0)	ND (20.0)	ND (20.0)	ND (0.0100) *	0.0632	2.16	1.18	0.338	0.262	0.0540	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		18-Aug-16	ARCO-1-20160818-WG-DUP	Field Duplicate	272	41.2	5.34	32.3	ND (5.00)	-	49.2	1.86	ND (5.00)	5.03	ND (5.00)	ND (0.0100) *	0.0634	1.78	0.965	0.328	0.220	0.0545	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		11-Oct-16	ARCO-1-20161011-WG		294	ND (50.0)	ND (10.0)	44.0	ND (10.0)	-	52.5	3.39	ND (10.0)	ND (10.0)	ND (10.0)	ND (0.0100) *	ND (0.0500)	1.40	0.845	ND (0.0500)	0.117	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		25-Jun-18	ARCO_1_20180625		327	21.6	7.81	27.6	ND (1.00)	-	54.7	3.47	ND (1.00)	2.69	ND (1.00)	ND (0.0100)	ND (0.100)	1.67	1.46	ND (0.100)	0.160	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (2.00)
	ARCO-1D	8-Jul-19	ARCO-1_20190708		420	49	12	48	ND (0.2)	11 J	48	4	2 J	7	ND (2)	ND (0.0094)	ND (0.09)	1	1	ND (0.09)	0.1 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
		13-Jul-11	ARCO-1D_07132011		290	5	5	40	2	-	2	ND (5)	13	9	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		10-Jul-12	ARCO 1D_071012		380	2	9	8	2	-	6	0.4 J	10	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.1)	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.085 J
		1-Apr-13	A-1D_40113		1,450	3.0	16.6	0.64 J	2.7	-	21.4	ND (0.10)	8.2	1.2 J	ND (1.0)	ND (0.020)	ND (0.10)	0.238	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	4.0
		21-May-14	ARCO-1D		378	1.1	0.84 J	0.77 J	6.7	-	2.7	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.7 J
		5-Dec-14	ARCO-1D-20141205		252	0.36 J	0.47 J	ND (1.0)	8.1	-	1.8	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	0.115	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.8 J
		19-Aug-16	ARCO-1D-20160819-WG		593	ND (5.00)	ND (1.00)	ND (3.00)	2.01	-	7.47	0.338	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	0.394	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		11-Oct-16	ARCO-1D-20161011-WG		495	ND (50.0)	ND (10.0)	ND (30.0)	ND (10.0)	-	ND (10.0)	0.384	12.1	ND (10.0)	ND (10.0)	ND (0.0100) *	ND (0.0500)	0.552	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		25-Jun-18	ARCO_1D_20180625		276	1.22	ND (1.00)	ND (3.00)	30.4	-	1.61	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		3-Jul-19	ARCO-1D_20190703		3	ND (0.2)	ND (0.2)	ND (0.5)	66	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
		3-Jul-19	DUP-6_20190703	Field Duplicate	3	ND (0.2)	ND (0.2)	ND (0.5)	66	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	ARCO-2	13-Jul-11	ARCO-2_07132011		470	54	300	290	ND (2)	-	85	97	140	19	ND (2)	ND (0.029)	ND (5)	ND (5)	6	ND (5)	-	-	-	-	-	ND (1.0)
		10-Jul-12	ARCO 2_071012		380	49	200	310	ND (5)	-	110	32	93	29	ND (5)	ND (0.0097)	1	10	14	2	2	0.7	0.4 J	0.4 J	0.2 J	2.2
		3-Jun-14	ARCO-2		517	48.5	70.5	118	0.45 J	-	68.6	3.56	3.0	4.1	ND (1.0)	ND (0.020)	ND (0.10)	1.62	1.10	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		16-Dec-14	ARCO-2-20141216		362	34.6	45.0	79.7	ND (1.0)	-	32.0	3.97	1.2 J	4.6	ND (1.0)	ND (0.020)	ND (0.10)	2.20	1.65	ND (0.10)	0.177	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		18-Aug-16	ARCO-2-20160818-WG		372	38.6 MI	16.5	48.9	ND (1.00)	-	29.4 MI	7.04	ND (1.00)	3.36 MI	ND (1.00)	ND (0.0100) *	ND (0.0500)	2.01	1.49	0.0603	0.167	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		11-Oct-16	ARCO-2-20161011-WG		375	ND (50.0)	59.3	90.0	ND (10.0)	-	74.2	6.82	ND (10.0)	ND (10.0)	ND (10.0)	ND (0.0100) *	ND (0.0500)	1.65	1.35	ND (0.0500)	0.132	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		25-Jun-18	ARCO_2_20180625		301	36.9	66.7	58.2	ND (1.00)	-	60.5	10.6	ND (1.00)	3.82	ND (1.00)	ND (0.0101)	ND (0.0500)	2.10	1.56	ND (0.0500)	0.143	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		8-Jul-19	ARCO-2_20190708		370	47	25	87	ND (0.2)	13 J	84	3	0.3 J	6	ND (2)	ND (0.0095)	ND (0.1)	2	2	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
		8-Jul-19	DUP-7_20190708	Field Duplicate	370	47	26	86	ND (0.2)	13 J	84	2	0.3 J	6	ND (2)	ND (0.0094)	ND (0.1)	1	1	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	ARCO-3	13-Jul-11	ARCO-3_07132011		2,700	150	480	400	6	-	73	180	150	160	ND (5)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		10-Jul-12	ARCO 3_071012		2,500	120	84	200	7	-	67	88	33	38	ND (3)	ND (0.0097)	ND (0.1)	3	3	0.2 J	0.3 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.24 J
		3-Jun-14	ARCO-3		2,250	109	90.5	193	ND (10)	-	86.5	45.2	26.7	33.4	ND (10)	ND (0.020)	ND (0.10)	2.08	1.95	0.130	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		16-Dec-14	ARCO-3-20141216		2,430	126	65.7	179	ND (20)	-	54.5	32.7	18.7 J	18.5 J	ND (20)	ND (0.020)	ND (0.10)	1.47	0.968	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		18-Aug-16	ARCO-3-20160818-WG		1,580	96.2	34.1	118	ND (5.00)	-	42.8	32.2	9.40	16.4	ND (5.00)	ND (0.0100) *	ND (0.0500)	1.89	1.32	0.0623	0.178	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		11-Oct-16	ARCO-3-20161011-WG		1,050	95.7	45.9	142	ND (5.00)	-	66.1	24.0	14.6	16.4	ND (5.00)	ND (0.0100) *	ND (0.0500)	1.39	1.02	ND (0.0500)	0.126	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		26-Jun-18	ARCO_3_20180626		2,080	108	46.0	122	ND (1.00)	-	68.0	1.23	11.0	14.8	ND (1.00)	ND (0.0101)	ND (0.0500)	1.61	0.827	ND (0.0500)	0.153	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		8-Jul-19	ARCO-3_20190708		2,200	120	76	150	ND (1)	52 J	73	24	17 J	23 J	ND (10)	ND (0.0094)	ND (0.09)	2	1	ND (0.09)	0.2 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 1	S-41	19-Oct-04	S-41		70	5.5	ND (1.8)	ND (3.2)	490	-	63	ND (3.6)	-	-	ND (1.5)	ND (0.0020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		22-Apr-05	S41-042205		65	ND (50)	ND (50)	ND (50)	530	-	ND (50)	ND (10)	-	-	ND (50)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		27-Mar-09	S-41_032709		44	7	12	28	20	-	98	ND (5)	-	-	ND (1)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		23-Jun-09	S-41		15	3	4	4	45	-	100	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-
		17-Sep-09	S-41_091709		37	11	ND (5)	6	28	-	46	ND (5)	-	-	ND (5)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		13-Nov-09	S-41		3	3	3	1 J	56	-	120	ND (1)	ND (0.5)	0.7 J	ND (0.5)	ND (0.0098)	ND (0.057)	-	1.9	ND (0.095)	-	-	-	-	-	0.22 J
		9-Dec-09	S-41_120909		12	5	2	5	40	-	29	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		11-Nov-10	S-41		14	3	2	3	23	-	41	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (1)	2 J	1 J	ND (1)	-	-	-	-	-	0.20 J
		22-Nov-11	S-41		4	2	3	1	25	-	110	ND (0.95)	0.5 J	0.5 J	ND (0.5)	ND (0.0097)	ND (0.076)	5.8	1.4	ND (0.095)	-	-	-	-	-	0.22 J
		19-Jul-12	S-41_071912		19	3	1 J	3	13	-	35	ND (0.09)	ND (1)	ND (1)	ND (1)	ND (0.0097)	ND (0.09)	2	0.8	ND (0.09)	0.1 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	0.22 J
		2-Apr-13	S-41		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		2-Apr-13	S-41_040213		1.3 J	1.1 J	3.1	0.65 J	17.4	-	101	ND (0.10)	ND (4.0)	ND (4.0)	ND (2.0)	ND (0.020)	ND (0.10)	1.79	1.33	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	-
		23-May-14	S-41		2.2	1.5	1.1	2.6	9.6	-	47.7	ND (0.10)	ND (2.0)	0.36 J	ND (1.0) J	ND (0.020)	ND (0.10)	1.45	0.868	ND (0.10)	0.117	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		8-Dec-14	S-41-20141208		0.93	2.1	1.6	1.3	6.5	-	91.0	ND (0.10)	ND (2.0)	0.23 J	ND (1.0)	ND (0.020)	ND (0.10)	2.21	1.77	ND (0.10)	0.192	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.2 J
		18-May-15	S-41_20150518		6	2	0.9 J	3	5	-	20	1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	2	1	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.50 J
		10-May-16	S-41-20160510		ND (5)	ND (5)	ND (5)	ND (5)	6	-	28	2	ND (10)	ND (10)	ND (5)	ND (0.029)	ND (0.5)	2	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
		16-May-17	S-41-20170516		ND (3)	ND (3)	ND (3)	ND (3)	4 J	-	70	0.8	ND (3)	ND (3)	ND (3)	ND (0.0095)	ND (0.1)	0.7	0.3 J	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.15 J
		21-Jun-18	S-41_20180621		ND (1.00)	1.48	ND (1.00)	ND (3.00)	ND (1.00)	-	106	1.38	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	2.49	0.314	0.0519	0.178	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	S-42I	19-Oct-04	S-42I (formerly S-42)		ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		15-Apr-05	S42D-041505		ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)	ND (10)	-	-	ND (5)	ND (0.028)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		27-Mar-09	S-42I_032709		25	2	7	19	11	-	ND (2)	ND (5)	-	-	3	ND (0.032)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		23-Jun-09	S-42I		6	ND (1)	ND (1)	2	14	-	ND (2)	ND (5)	-	-	4	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-
		17-Sep-09	S-42I_091709		78	20	2	10	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		9-Dec-09	S-42I_120909		29	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		19-Jul-12	S-42I_071912		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	23	-	ND (0.5)	0.2 J	ND (0.5)	ND (0.5)	4	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.034)
		22-May-14	S-42I		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	6.3	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	0.43 J	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.5 J
		3-Dec-14	S-42I-20141203		0.48 J	ND (1.0)	ND (1.0)	ND (1.0)	9.6	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	1.7	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		19-Jun-18	S-42I_20180619		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	13.5	ND (5.00)	ND (1.00)	-	ND (1.00)	ND (1.00)	1.01	ND (0.0100) HT	-	-	-	-	-	-	-	-	-	-
		17-Jun-19	S-42I_20190617		0.5 J	ND (0.2)	ND (0.2)	ND (0.5)	7	38	0.7 J	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 1	S-43	1-Jan-93	DM	S-43	12,000	190	1,300	1,000	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-94	DM	S-43	17,000	1,700	250 J	1,680	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		28-Dec-95		S-43	12,000	1,200	170	860	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-96	DM	S-43	2,100	110	120	110	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		19-Nov-97		S-43	13,000	210	1,200	1,000	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		12-Nov-98		S-43	6,700	94 J	720	470	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		2-Dec-99		S-43	3,600	ND (100)	ND (100)	250	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		16-Nov-00		S-43	990	ND (100)	ND (100)	ND (200)	ND (100)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		14-Nov-01		S-43	6,100	ND (500)	ND (500)	ND (1,000)	ND (500)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		12-Nov-02		S-43	5,500	170	790	460	-	-	-	-	-	-	-	-	ND (15)	-	-	-	-	ND (13)	ND (10)	ND (14)	-	-
		13-Nov-03		S-43	3,600	130	836	489	18.8	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		19-Oct-04		S-43	720	31	150	90	ND (4.4)	-	39	50	-	-	11	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		21-Apr-05		S43-042105	940	41	160	98	10	-	42	28	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		2-May-05		S43-050205	820	35	160	100	ND (20)	-	36	35	-	-	ND (20)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		14-Sep-05		S-43_091405	740	40	180	89	10	-	42	34	-	-	-	-	-	ND (5)	ND (5)	-	-	-	-	-	-	-
		8-Nov-05		S-43_11_8_2005	5,520 D	212	1,090	716	20	-	-	208	-	-	119	ND (0.02)	ND (0.1)	1.1	1	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		30-Nov-06		S-43	890	32	48	34	7.0	-	13	9.0	-	-	ND (1.0)	ND (0.0099)	1.0 J	ND (1.0)	2.0 J	3.0 J	-	-	-	-	-	0.2 J
		14-Sep-07		S-43_091407	1,200	69	320	220	ND (10)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		5-Dec-07		S-43	15	1.0	3.0	3.0	-	-	2.0 J	1.0 J	-	-	ND (0.5)	ND (0.0096)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.40 J
		7-Nov-08		S-43_110708	140	15	30	20	4	-	32	6	8	5	ND (0.5)	ND (0.0098)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	7.7
		27-Mar-09		S-43_032709	1,300	98	370	290	5	-	42	71	-	-	ND (2)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		23-Jun-09		S-43	1,600	90	520	350	7	-	52	110	-	-	ND (5)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-
		17-Sep-09		S-43_091709	590	34	140	100	ND (5)	-	26	32	-	-	ND (5)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		17-Nov-09		S-43	860	59	200	210	6	-	40	61	140	71	ND (0.5)	ND (0.0098)	0.19	-	0.64	0.44	-	-	-	-	-	0.37 J
		9-Dec-09		S-43_120909	220	21	110	92	1	-	19	21	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		11-Nov-10		S-43	850	91	410	340	9	-	76	110	210	93	ND (1)	ND (0.0096)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	0.29 J
		22-Nov-11		S-43	29	3	19	16	ND (0.5)	-	4	16	11	2 J	ND (0.5)	ND (0.0099)	0.95	2.2	1.9	1.1	-	-	-	-	-	2.6
		19-Jul-12		S-43_071912	260	36	190	110	3	-	30	51	75	38	ND (0.5)	ND (0.0097)	0.4 J	1	1	0.5	0.1 J	0.3 J	0.3 J	0.5 J	0.2 J	8.7
		2-Apr-13		S-43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		2-Apr-13		S-43_040213	371	52.7	222	78.9	2.7	-	31.7	28.2	74.5	44.5	ND (2.5)	ND (0.020)	ND (0.10)	0.668	0.330	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	-
		27-May-14		S-43	44.3	7.4	13.7	9.5	4.5	-	55.4	1.66	2.9	1.8 J	ND (1.0)	ND (0.020)	ND (0.10)	1.14	0.370	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.5 J
		12-Dec-14		S-43-20141212	36.6	15.2	33.0	20.9	4.4	-	69.2	7.52	6.6	5.2	ND (1.0)	ND (0.020)	ND (0.10)	3.27	1.56	0.122	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		18-May-15		S-43_20150518	50	21	52	34	5	-	68	29	19	14	ND (0.5)	ND (0.0097)	0.4 J	5	5	0.6	0.2 J	0.3 J	0.3 J	0.5 J	0.3 J	0.11 J
		10-May-16		S-43-20160510	11	7	3	7	5	-	56	1	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.5)	4	2	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE µg/L	TOLUENE µg/L	ETHYLBENZENE µg/L	XYLENES, TOTAL (DIMETHYLBENZENE) µg/L	METHYL TERTIARY BUTYL ETHER µg/L	TERT-BUTYL ALCOHOL µg/L	ISOPROPYLBENZENE (CUMENE) µg/L	NAPHTHALENE µg/L	1,2,4-TRIMETHYLBENZENE µg/L	1,3,5-TRIMETHYLBENZENE µg/L	1,2-DICHLOROETHANE (EDC) µg/L	1,2-DIBROMOETHANE (EDB) µg/L	CHRYSENE µg/L	FLUORENE µg/L	PHENANTHRENE µg/L	PYRENE µg/L	ANTHRACENE µg/L	BENZO(A)ANTHRACENE µg/L	BENZO(A)PYRENE µg/L	BENZO(B)FLUORANTHENE µg/L	BENZO(G,H)PERYLENE µg/L	LEAD, Dissolved µg/L
AOI 1	S-44	18-Oct-04	S-44		1,700	37	16	28	19	-	51	ND (10)	-	-	ND (5.0)	0.058	ND (0.16)	ND (11)	ND (11)	ND (11)	-	-	-	-	-	ND (5.0)
		21-Apr-05	S44-042105		2,100	52	16	44	34	-	38	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		14-Sep-05	S-44_091405		-	-	-	-	-	-	-	-	-	-	-	-	ND (5)	ND (5)	-	-	-	-	-	-	-	-
		14-Sep-07	S-44_091407		1,100	24	28	58	210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		27-Mar-09	S-44_032709		620	22	25	65	310	-	23	ND (5)	-	-	ND (1)	ND (0.03)	ND (5)	ND (5)	5	ND (5)	-	-	-	-	-	ND (1)
		23-Jun-09	S-44		1,300	27	18	37	290	-	37	ND (5)	-	-	ND (5)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-
		17-Sep-09	S-44_091709		2,300	130	40	110	250	-	59	ND (5)	-	-	ND (10)	ND (0.030)	ND (5)	5	5	ND (5)	-	-	-	-	-	ND (1.0)
		18-Nov-09	S-44		1,100	27	7	38	270	-	17	ND (1)	0.8 J	4	ND (0.5)	ND (0.0097)	ND (40)	-	2.5	ND (0.099)	-	-	-	-	-	0.14 J
		9-Dec-09	S-44_120909		1,200	25	18	37	260	-	46	ND (5)	-	-	ND (2)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		11-Nov-10	S-44		660	20	10	20	260	-	30	ND (1)	ND (5)	ND (5)	ND (5)	ND (0.0096)	ND (1)	2 J	1 J	ND (1)	-	-	-	-	-	0.25 J
		21-Nov-11	S-44		850	20	14	24	180	-	38	ND (1.1)	ND (5)	6 J	ND (5)	ND (0.0096)	ND (0.089)	3.4	0.95	ND (0.11)	-	-	-	-	-	0.17 J
		20-Jul-12	S-44_072012		590	13	5	12	180	-	23	1	ND (3)	ND (3)	ND (3)	ND (0.0096)	0.2 J	3	2	0.3 J	0.3 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	0.38 J
		3-Apr-13	S-44		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		3-Apr-13	S-44_040313		450	14.3	7.8	16.5	146	-	53.3	ND (0.10)	37.1	1.8 J	ND (4.0)	ND (0.020)	ND (0.10)	1.33	0.611	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	-
		27-May-14	S-44		575	22.5	9.1	28.6	144	-	44.8	ND (0.10)	0.68 J	2.4	ND (1.0)	ND (0.020)	ND (0.10)	1.18	0.687	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		15-Dec-14	S-44-20141215		260	11.6	3.6	17.2	134	-	23.0	ND (0.10)	0.45 J	2.3	ND (1.0)	ND (0.020)	ND (0.10)	1.47	0.956	ND (0.10)	ND (0.10)	ND (0.10) J	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		18-May-15	S-44_20150518		340	16	5	20	110	-	34	3	0.6 J	2	ND (0.5)	ND (0.0097)	0.2 J	4	4	0.3 J	0.6	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.26 J
		11-May-16	S-44-20160511		310	14	ND (5)	19	120	-	14	1	ND (10)	ND (10)	ND (5)	ND (0.029)	ND (0.5)	2	0.6	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
		11-May-16	S-44-20160511DUP	Field Duplicate	310	14	ND (5)	17	120	-	14	1	ND (10)	ND (10)	ND (5)	ND (0.029)	ND (0.5)	2	0.7	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
		16-May-17	S-44-20170516		130	7	3 J	7	78	-	27	ND (0.1)	ND (3)	23	ND (3)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.19 J
		22-Jun-18	S-44_20180622		231	11.2	4.34	16.6	94.3	-	51.3	0.794	ND (1.00)	1.64	ND (1.00)	ND (0.0100)	ND (0.0500)	2.08	1.42	ND (0.0500)	0.0841	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		18-Jun-19	S-44_20190618		220	12	4	19	84	3,000	38	ND (0.09)	0.4 J	2 J	ND (2)	ND (0.0096)	ND (0.09)	1	1	ND (0.09)	0.1 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)

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Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERP. BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PYRENE	LEAD, Dissolved	
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
AOI 1	S-50	1-Jan-85	DM	S-50	23,000	ND	5,400	23,000	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		1-Jan-86	DM	S-50	24,000	ND	2,300	1,520	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		1-Jan-88	DM	S-50	24,000	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		1-Jan-94	DM	S-50	290	20 J	160 J	40 J	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-	
		28-Dec-95		S-50	17,000	1,600	98 J	3,000	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		1-Jan-96	DM	S-50	14	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		19-Nov-97		S-50	21,000	210	1,300	2,200	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		12-Nov-98		S-50	18,000	57 J	570	980	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		2-Dec-99		S-50	28,000	ND (1,000)	ND (1,000)	ND (2,000)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		16-Nov-00		S-50	47,000	ND (100)	240	370	590	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-	
		27-Nov-01		S-50	53,000	1,400	9	1,300	5,200	-	-	-	-	-	-	-	ND (2)	-	-	-	-	ND (2)	ND (2)	ND (3)	-	-	
		30-Nov-06		S-50	42,000	94 J	720	630	99 J	-	ND (50)	170 J	-	-	ND (50)	ND (0.0098)	ND (1.0)	1.0 J	1.0 J	ND (1.0)	-	-	-	-	-	0.15 J	
		4-Dec-07		S-50	31,000	86	420	370	-	-	35 J	93 J	-	-	ND (25)	ND (0.0098)	ND (1.0)	ND (1.0)	1.0 J	ND (1.0)	-	-	-	-	-	0.14 J	
		12-Jun-08		S-50_061208	880	2	17	7	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		10-Nov-08		S-50	16,000	160	400	1,400	390	-	36 J	110 J	260	90 J	ND (25)	ND (0.0096)	ND (1)	-	1 J	ND (1)	-	-	-	-	-	-	0.073 J
		23-Mar-09		S-50_032309	21,000	ND (50)	230	91	ND (50)	-	ND (100)	37	-	-	ND (50)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	ND (1)
		7-May-09		S-50	9,300	ND (20)	120	41	ND (20)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		23-Jun-09		S-50	15,000	21	170	63	26	-	ND (40)	41	-	-	ND (20)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	-
		21-Jul-09		S-50_072109	32,000	55	340	210	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Aug-09		S-50_081809	5,300	ND (10)	120	37	ND (10)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-Sep-09		S-50_091609	12,000	ND (20)	140	52	28	-	ND (40)	33	-	-	ND (20)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	ND (1.0)
		22-Oct-09		S-50_102209	8,200	ND (20)	140	37	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19-Nov-09		S-50	4,700	10	75	22	45	-	10 J	37 J	42	17 J	ND (5)	ND (0.0097)	0.18 J	-	0.66	ND (0.098)	-	-	-	-	-	-	ND (0.050)
		25-Nov-09		S-50_112509	9,500	ND (20)	140	36	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		10-Dec-09		S-50_121009	12,000	18	140	62	78	-	ND (20)	50	-	-	ND (10)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	ND (1.0)
		17-Mar-10		S-50_031710	580	6	18	25	3	-	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		7-Sep-10		S-50_090710	1,200	5	18	6	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		9-Nov-10		S-50_110910	5,500	13	28	12	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11-Nov-10		S-50	7,600	12	34	11	39	-	7 J	13	8 J	5 J	ND (5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	0.083 J
		14-Mar-11		S-50_031411	73	45	1	6	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-May-11		S-50-05162011	120	11	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		21-Jul-11		S-50_07212011	3,000	7	18	ND (5)	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		21-Nov-11		S-50	190	1	1	0.5 J	1	-	2	3.7	ND (0.5)	0.5 J	ND (0.5)	ND (0.0097)	ND (0.076)	0.20 J	0.083 J	ND (0.095)	-	-	-	-	-	-	ND (0.080)
		21-Dec-11		S-50_12212011	870	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		24-Jul-12		S-50_072412	130	2	ND (0.5)	2	ND (0.5)	-	2 J	1	1 J	0.9 J	ND (0.5)	ND (0.0098)	ND (0.09)	0.2 J	0.3 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.034)
		9-Aug-12		S-50_080912	4,700	32	35	ND (10)	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Oct-12		S-50_101812	6,700	20	59	ND (10)	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		15-Jan-13		S-50_011513	671	8.6	20.4	3.7	ND (2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3-Apr-13		S-50_040313	0.46 J	ND (1.0)	ND (1.0)	0.29 J	ND (1.0)	-	ND (2.0)	ND (0.11)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	0.090 J
		20-May-14		S-50	509	2.2 J	13.5	1.2 J	ND (5.0)	-	4.2 J	2.46	1.2 J	3.1 J	ND (5.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		15-Dec-14		S-50-20141215	2,390	9.8	19.7	ND (5.0)	5.7	-	6.1	4.53	ND (10)	3.9 J	ND (5.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10) J	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		18-May-15		S-50_20150518	2,000	8	34	ND (3)	3 J	-	9 J	16	ND (3)	5 J	ND (3)	ND (0.0097)	ND (0.1)	0.1 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.092 J
		10-May-16		S-50-20160510	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
		16-May-17		S-50-20170516	5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		26-Jun-18		S_50_20180626	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	0.0590	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		11-Jul-19		S-50_20190711	8,300	18	170	15 J	3 J	ND (100)	23 J	99	6 J	10 J	ND (20)	ND (0.0094)	ND (0.09)	0.6	0.7	0.1 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	0.1 J	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE µg/L	TOLUENE µg/L	ETHYLBENZENE µg/L	XYLENES, TOTAL (DIMETHYLBENZENE) µg/L	METHYL TERTIARY BUTYL ETHER µg/L	TERT-BUTYL ALCOHOL µg/L	ISOPROPYLBENZENE (CUMENE) µg/L	NAPHTHALENE µg/L	1,2,4-TRIMETHYLBENZENE µg/L	1,3,5-TRIMETHYLBENZENE µg/L	1,2-DICHLOROETHANE (EDC) µg/L	1,2-DIBROMOETHANE (EDB) µg/L	CHRYSENE µg/L	FLUORENE µg/L	PHENANTHRENE µg/L	PYRENE µg/L	ANTHRACENE µg/L	BENZO(A)ANTHRACENE µg/L	BENZO(A)PYRENE µg/L	BENZO(B)FLUORANTHENE µg/L	BENZO(G,H)PERYLENE µg/L	LEAD, Dissolved µg/L
AOI 1	S-51	19-Apr-05	S-51		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		19-Apr-05	S51-041905		590	ND (100)	ND (100)	190	1,900	-	ND (100)	15	-	-	ND (100)	ND (0.029)	ND (10)	ND (10)	10	ND (10)	-	-	-	-	-	-
		5-Dec-07	S-51		120	10	5.0 J	9.0	-	-	60	ND (5.0)	-	-	ND (3.0)	0.034	ND (10)	22 J	24 J	ND (10)	-	-	-	-	-	0.32 J
		10-Nov-08	S-51		5,000	32	160	38	41	-	14 J	22 J	14 J	14 J	ND (5)	ND (0.0096)	ND (0.9)	-	ND (0.9)	ND (0.9)	-	-	-	-	-	ND (0.050)
		17-Nov-09	S-51		250	8	5	5	120	-	61	1 J	5	7	ND (0.5)	ND (0.0097)	13	-	39	ND (60)	-	-	-	-	-	0.93 J
		11-Nov-10	S-51		140	5	3	3	51	-	55	1 J	ND (0.5)	0.6 J	ND (0.5)	ND (0.0098)	ND (1)	3 J	2 J	ND (1)	-	-	-	-	-	0.98 J
		23-Nov-11	S-51		12	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.96)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.52	0.19 J	0.55	0.71	-	-	-	-	-	0.41 J
		2-Apr-13	S-51		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		2-Apr-13	S-51_040213		4.1	3.3	1.4 J	4.4	33.6	-	74.7	ND (0.10)	ND (5.0)	ND (5.0)	ND (2.5)	ND (0.020)	ND (0.10)	2.50	1.47	0.176	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	-
		23-May-14	S-51		9.9	2.6 J	ND (5.0)	2.3 J	36.0	-	62.5	ND (0.10)	ND (10)	ND (10)	ND (5.0) J	ND (0.020)	ND (0.10)	1.51	0.775	0.212	ND (0.10)	ND (0.10)	ND (0.10)	0.130	ND (0.10)	ND (3.0)
		12-Dec-14	S-51-20141212		13.9	2.7	2.6	4.1	20.7	-	51.4	ND (0.10)	0.26 J	ND (2.0)	ND (1.0)	ND (0.020)	0.210	1.62	1.10	0.395	0.183	0.203	0.155	0.185	0.121	1.8 J
		19-May-15	S-51_20150519		5	3	1	4	39	-	79	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	3	1	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.099 J
		10-May-16	S-51-20160510		ND (5)	ND (5)	ND (5)	ND (5)	32	-	28	0.6	ND (10)	ND (10)	ND (5)	ND (0.029)	ND (0.5)	2	1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
	S-52	19-Oct-04	S-52		57	5.3	ND (5.0)	ND (10)	960	-	30	34	-	-	ND (5.0)	ND (0.020)	ND (0.16)	ND (11)	ND (11)	ND (11)	-	-	-	-	-	ND (5.0)
		19-Apr-05	S-52		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		19-Apr-05	S-52-041905		230	ND (50)	ND (50)	ND (50)	1,200	-	ND (50)	ND (10)	-	-	ND (50)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		7-Nov-05	S-52		72	ND (10)	ND (10)	11	1,390	-	33	ND (10)	-	-	ND (10)	ND (0.02)	ND (0.01)	1.5	0.8	0.2	-	-	-	-	-	ND (10)
		8-Nov-05	S-52_11_8_2005		72	ND (10)	ND (10)	11	1,390 D	-	-	ND (10)	-	-	ND (10)	ND (0.02)	ND (0.1)	1.5	0.8	0.2	-	ND (0.1)	ND (0.1)	0.1	ND (0.1)	-
		25-Mar-09	S-52_032509		280	3	7	18	1,500	-	24	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		22-Jun-09	S-52_062209		44	2	ND (1)	2	1,300	-	23	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		16-Sep-09	S-52_091609		51	3	ND (1)	3	1,200	-	32	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		10-Dec-09	S-52_121009		21	3	1	3	1,100	-	33	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		17-Mar-10	S-52_031710		4	2	ND (1)	2	930	-	18	ND (4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-May-11	S-52-05162011		14	27	ND (1)	6	320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		25-Jul-12	S-52_072512		1 J	2	ND (1)	ND (1)	420	-	12	ND (0.1)	ND (1)	ND (1)	ND (1)	ND (0.0098)	ND (0.1)	2	0.1 J	0.2 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.43 J
		3-Apr-13	S-52_040313		1.3	1.5	0.24 J	0.72 J	316	-	15.4	ND (0.11)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.11)	0.697	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	0.39 J
		20-May-14	S-52		ND (2.5)	ND (5.0)	ND (2.5)	ND (5.0)	194	-	15.8	ND (0.10)	ND (10)	ND (10)	ND (5.0)	ND (0.020)	ND (0.10)	1.06	0.123	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		9-Dec-14	S-52-20141209		0.26 J	0.40 J	ND (1.0)	0.30 J	133	-	7.3	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	1.09	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.6 J
	S-82	8-Nov-05	S-82_11_8_2005		19,900 D	91	248	850	3,100 D	-	-	205	-	-	489	ND (0.02)	0.4	13.4	17	1.9	-	0.7	ND (0.3)	0.3	ND (0.3)	-
	S-85	5-Nov-08	S-85_110508		10	3	160	230	67	-	97	120	100	170	ND (1)	ND (0.0099)	11	-	66	30	17	10	8	8	7	21.8
		24-Feb-09	S-85_022409		12	3	170	220	62	-	120	160	110	160	ND (0.5)	ND (0.0097)	ND (5.5)	16	29	ND (27)	7.1	3.2	2.8	2.6	ND (3.5)	4.4
		26-Jun-09	S-85_062609		13	4	92	29	62	-	130	97	26	160	ND (0.5)	ND (0.010)	0.93 J	17	25	6.2	6.1	1.6	1.4	1.5	2.6	4.3
		9-Sep-09	S-85_090909		11	3	220	310	53	-	140	180	190	290	ND (0.5)	ND (0.0098)	ND (9)	20 J	39 J	23 J	ND (9)	ND (9)	ND (9)	ND (9)	ND (9)	4.2
		20-Nov-09	S-85_112009		8	ND (3)	99	150	36	-	110	150	170	180	ND (3)	ND (0.0099)	5.9	27	46	17	13	4.6	4.0	3.8	3.9	3.6
		8-Mar-10	85_030810		7	1	53	230	12	-	62	90	110	130	ND (0.5)	ND (0.0098)	13	23	41	40	12	8.8	8.1	9.1	8.7	6.2
		5-May-10	S-85_050510		10	2	46	240	22	-	96	120	130	150	ND (0.5)	ND (0.017)	7.3	22	36	17	9.1	4.5	5.0	4.5	4.6	4.2
		22-Jul-10	85_072210		4	0.7 J	10	300	0.9 J	-	12	40	140	110	ND (0.5)	ND (0.0096)	8.3	22	41	19	12	5.3	5.3	5.6	6.3	2.3
		19-Jul-12	S-85_071912		7	2	8	72	21	-	100	39	76	87	ND (0.5)	ND (0.0096)	14	46	76	51	20	18	11	15	7	63.4
		23-May-14	S-85		6.9	ND (5.0)	5.6	56.2	61.9	-	110	ND (0.10)	65.0	72.9	ND (5.0) J	ND (0.020)	2.75	11.2	17.0	12.1	3.63	2.94	3.14	3.21	2.16	10.7
		12-Dec-14	S-85-20141212		3.6	1.9	2.3	28.4	13.4	-	75.7	ND (0.10)	11.2	20.4	ND (1.0)	ND (0.020)	1.29	6.98	9.00	4.99	1.60	1.42	1.10	1.38	0.758	25.6
		25-Jun-19	S-85_20190625		4	2	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-871	20-May-14	S-871		0.96	ND (1.0)	ND (1.0)	ND (1.0)	990	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	3.1
		5-Dec-14	S-871-20141205		0.34 J	ND (1.0)	ND (1.0)	ND (1.0)	1,080	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.2 J
		19-Jun-18	S-871_20180619		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	937	229,000	ND (1.00)	-	ND (1.00)	ND (1.00)	10.5	ND (0.0100) HT	-	-	-	-	-	-	-	-	-	-
		17-Jun-19	S-871_20190617		0.2 J	ND (0.2)	ND (0.2)	ND (0.5)	380	180,000	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	3 J	ND (0.0094)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 1	S-88	21-Apr-05	S88-042105		28	5	ND (5)	ND (5)	590	-	12	ND (10)	-	-	ND (5)	ND (0.029)	18	ND (10)	ND (10)	17	-	-	-	-	-	-
		5-Dec-06	S-88		22.0	6.0	5.0	1.0 J	81.0	-	24.0	ND (1.0)	-	-	ND (1.0)	ND (0.0099)	3.0 J	8.0	10.0	10.0	-	-	-	-	-	1.3
		14-Dec-07	S-88		5.0	2.0	1.0	ND (0.5)	-	-	13	ND (1.0)	-	-	ND (0.5)	ND (0.0095)	5.0 J	2.0 J	3.0 J	6.0	-	-	-	-	-	1.1
		7-Nov-08	S-88_110708		29	8	2	3	70	-	29	ND (1)	ND (0.5)	0.5 J	ND (0.5)	ND (0.0097)	6	-	11	7	3 J	3 J	2 J	3 J	2 J	3.1
		24-Feb-09	S-88_022409		30	8	4	27	69	-	27	ND (1)	13	9	ND (0.5)	ND (0.0096)	ND (9.0)	5.3	11	ND (16)	3.7	2.3	2.2	3.4	ND (6.0)	2.1
		26-Jun-09	S-88_062609		29	11	4	6	92	-	48	ND (1)	0.8 J	1 J	ND (0.5)	ND (0.010)	0.40	4.4	5.1	ND (0.90)	1.2	0.25	0.20	0.20	0.40	2.1
		8-Sep-09	S-88_090809		35	24	6	28	77	-	42	7	7	7	ND (0.5)	ND (0.0099)	ND (1)	3 J	3 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1.8
		20-Nov-09	S-88_112009		12	4	3	3	47	-	16	ND (2)	2 J	2 J	ND (1)	ND (0.0097)	1.8 J	3.1 J	3.2	1.6 J	0.98 J	0.45	0.89	1.3	1.9 J	1.5
		8-Mar-10	88_030810		17	8	2	4	100	-	29	ND (1)	0.5 J	1 J	ND (0.5)	ND (0.0097)	2.5	2.7 J	2.4	1.8 J	0.70 J	0.54	0.83	1.7	ND (2.3)	17.9
		5-May-10	S-88_050510		8	3	ND (1)	1 J	170	-	15	ND (2)	ND (1)	ND (1)	ND (1)	ND (0.018)	360	160	240	350	83	90	160	250	330	2,060
		22-Jul-10	88_072210		19	8	2	6	100	-	38	ND (1)	0.9 J	0.8 J	ND (0.5)	ND (0.0097)	ND (9.7)	9.2	11	13	3.8	ND (2.8)	4.3	9.1	ND (20)	0.98 J
		19-Jul-12	S-88_071912		11	4	0.8 J	4	340	-	27	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.5	3	2	0.8	0.7	0.2 J	0.2 J	0.3 J	0.1 J	42.6
		28-May-14	S-88		15.1	7.1	ND (5.0)	4.4 J	186	-	42.1	ND (0.10)	ND (10)	ND (10)	ND (5.0)	ND (0.020)	4.06	4.71	4.39	3.77	1.36	2.37	2.00	2.29	1.00	ND (3.0)
		12-Dec-14	S-88-20141212		11.8	5.1	1.1	4.1	422	-	34.6	ND (0.10)	0.28 J	ND (2.0)	ND (1.0)	ND (0.020)	0.164	2.13	1.73	0.350	0.366	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.7 J
	S-98	17-Mar-04	S-98		770	53	560	5,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		12-Oct-04	S-98		670	11	60	330	ND (5.0)	-	24	53	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	ND (10)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5.0)
		22-Apr-05	S98-042205		580	ND (25)	140	1,000	ND (25)	-	37	110	-	-	ND (25)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		23-Feb-09	S-98_022309		2,000	78	1,400	7,800	10	-	140	800	2,300	1,100	ND (5)	ND (0.0099)	ND (11)	59	91	ND (110)	22	ND (4.5)	2.3	2.0	2.8 J	4.9
		6-May-10	S-98_050610		170	7 J	110	480	42	-	27	68	480	150	ND (5)	ND (0.018)	1.6	3.4	6.6	ND (9.9)	ND (2.0)	0.42	0.28	0.22	0.41	3.5
		21-Jul-10	98_072110		50	9	260	1,700	25	-	46	160	1,100	310	ND (0.5)	ND (0.0097)	0.64	4.0	4.5	ND (0.095)	ND (1.5)	0.21	0.11	0.099	0.15 J	2.3
		10-Jul-12	S-98_071012		430	16 J	310	1,800	120	-	38 J	86	920	470	ND (10)	ND (0.0097)	0.9 J	5	7	5	1 J	1 J	0.7 J	0.8 J	0.5 J	7.5
		3-Jun-14	S-98		143	3.4	173	814	2.3	-	24.6	85.4	590	142	ND (1.0)	ND (0.020)	1.02	ND (0.10)	3.08	3.01	1.38	1.08	0.730	0.916	1.17	5.0
		15-Dec-14	S-98-20141215		1,390	34.7	326	1,350	151	-	49.5	107	848	234	ND (5.0)	ND (0.020)	0.215	1.08	1.49	0.671	ND (0.10)	0.203	0.120	0.130	0.128	6.8
		25-Jun-19	S-98_20190625		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-99	12-Oct-04	S-99		150	25	6.2	25	ND (5.0)	-	72	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		22-Apr-05	S99-042205		200	23	6	19	17	-	81	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		6-Nov-08	S-99_110608		46	14	ND (3)	14	36	-	30	ND (5)	ND (3)	ND (3)	ND (3)	ND (0.0098)	ND (1)	-	4 J	1 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1.6
		23-Feb-09	S-99_022309		55	20	4	20	19	-	65	ND (1)	ND (0.5)	1 J	ND (0.5)	ND (0.0097)	ND (0.15)	5.4	3.7	ND (0.095)	0.69	0.062	0.072	0.076	ND (0.15)	1.2
		29-Jun-09	S-99_062909		34	31	7	31	25	-	99	ND (1)	ND (0.5)	2 J	ND (0.5)	ND (0.017)	-	-	-	-	-	-	-	-	-	1.4
		9-Sep-09	S-99_090909		24	22	5	26	19	-	87	ND (2)	ND (1)	2 J	ND (1)	ND (0.0099)	ND (1)	3 J	4 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1.5
		20-Nov-09	S-99_112009		22	25	6 J	26	21	-	90	ND (10)	ND (5)	ND (5)	ND (5)	ND (0.0097)	ND (0.057)	5.0	3.3	0.18 J	0.69	0.030 J	0.024 J	0.017 J	ND (0.057)	1.5
		9-Mar-10	99_030910		22	16	4	18	8	-	60	ND (1)	ND (0.5)	1 J	ND (0.5)	ND (0.0097)	ND (0.57)	4.7	3.8	ND (0.95)	ND (0.72)	0.15 J	0.14 J	0.22 J	ND (0.57)	1.2
		6-May-10	S-99_050610		30	23	5 J	27	8 J	-	82	ND (10)	ND (5)	ND (5)	ND (5)	ND (0.018)	0.092 J	4.4	3.8	0.41	0.72	0.054	0.033 J	0.042	ND (0.057)	1.4
		21-Jul-10	99_072110		17	22	5	33	10	-	89	ND (1)	0.7 J	2 J	ND (0.5)	ND (0.0098)	0.17 J	4.6	4.1	0.50	0.87	0.097	0.066	0.089	ND (0.057)	1.4
		10-Jul-12	S-99_071712		5	22	5	28	5	-	77	1	1 J	2 J	ND (0.5)	ND (0.0097)	0.3 J	3	4	0.9	0.9	0.2 J	0.1 J	0.2 J	ND (0.1)	1.9
		3-Jun-14	S-99		1.9	21.8	4.9	31.5	3.2	-	77.2	ND (0.10)	0.83 J	1.5 J	ND (1.0)	ND (0.020)	ND (0.10)	1.78	1.48	0.281	0.378	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.9 J
		9-Dec-14	S-99-20141209		4.0	28.0	4.9	28.4	2.6	-	77.6	ND (0.10)	0.72 J	1.2 J	ND (2.0)	ND (0.020)	0.155	1.89	1.75 B	0.370 B	0.352	0.136 B	ND (0.10)	0.136	ND (0.10)	2.1 J
	S-101	12-Oct-04	S-101		1,100	7.5	16	68	ND (5.0)	-	13	74	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		22-Apr-05	S101-042205		1,400	14	22	89	ND (5)	-	26	41	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		6-Nov-08	S-101_110608		85	16	6	23	0.5 J	-	38	2 J	3	2 J	ND (0.5)	ND (0.010)	ND (10)	-	37 J	15 J	11 J	ND (10)	ND (10)	ND (10)	ND (10)	0.86 J
		23-Feb-09	S-101_022309		260	10	23	16	ND (3)	-	29	12 J	4 J	5 J	ND (3)	ND (0.0096)	ND (1.5)	13	11	4.2	2.4	0.90	ND (0.60)	0.57	ND (0.60)	0.38 J
		29-Jun-09	S-101_062909		330	4	3	3	ND (0.5)	-	24	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.010)	-	-	-	-	-	-	-	-	-	0.35 J
		9-Sep-09	S-101_090909		420	6	5	5	0.6 J	-	33	3 J	1 J	1 J	ND (0.5)	ND (0.0098)	1 J	7	5	5 J	3 J	1 J	ND (1)	ND (1)	ND (1)	0.70 J
		20-Nov-09	S-101_112009		490	7	ND (3)	3 J	ND (3)	-	23	ND (5)	ND (3)	ND (3)	ND (3)	ND (0.0098)	ND (0.057)	1.4	0.51	0.31 J	0.17	0.025 J	0.019 J	0.020 J	ND (0.057)	0.45 J
		9-Mar-10	101_030910		270	7	2	5	ND (0.5)	-	26	1 J	0.9 J	0.8 J	ND (0.5)	ND (0.0097)	0.065 J	1.6	0.57	0.28 J	0.16	0.035 J	0.024 J	0.030	0.083 J	0.43 J
		6-May-10	S-101_050610		260	6	ND (3)	4 J	ND (3)	-	21	ND (5)	ND (3)	ND (3)	ND (3)	ND (0.018)	ND (0.057)	1.4	0.61	0.23 J	0.13	0.028 J	0.028 J	0.026 J	0.069 J	0.45 J
		21-Jul-10	101_072110		350	8	4	9	ND (0.5)	-	37	3 J	2	2 J	ND (0.5)	ND (0.0099)	0.13 J	4.7	2.3	0.88	0.65	0.10	0.046	0.054	ND (0.060)	0.37 J
		10-Jul-12	S-101_071012		24	3	0.9 J	5	ND (0.5)	-	25	0.5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	0.2 J	6	1	0.9	0.9	0.1 J	ND (0.1)	0.1 J	ND (0.1)	0.23 J
		4-Jun-14	S-101		27.8	14.0	1.5	16.3	ND (1.0)	-	39.7	ND (0.10)	0.44 J	0.89 J	ND (1.0)	ND (0.020)	ND (0.10)	4.60	2.19	0.325	0.578	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		11-Dec-14	S-101-20141211		20.2	6.4	1.6	12.0	ND (1.0)	-	30.0	ND (0.10)	0.70 J	0.79 J	ND (1.0)	ND (0.037)	0.131	4.84	2.00	0.507	0.594	0.136	ND (0.10)	0.106	ND (0.10)	ND (3.0)

See notes on last page.

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Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

				BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved	
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
AOI 1	S-193	17-Mar-04	S-193		170	ND (5)	51	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		22-Apr-05	S193-042205		220	6	27	120	ND (5)	-	16	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		7-Nov-05	S-193		404	ND (10)	13	28	ND (10)	-	28	ND (10)	-	-	10	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	-	-	-	-	ND (100)
		10-Nov-05	S-193_11_10_2005		404	ND (10)	13	28	ND (10)	-	-	ND (10)	-	-	10	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		5-Dec-06	S-193		140	2.0 J	19.0	31.0	ND (0.5)	-	7.0	3.0 J	-	-	ND (1.0)	ND (0.0098)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.19 J
		19-Dec-07	S-193		270	4.0	7.0	13	-	-	16	2.0 J	-	-	ND (0.5)	ND (0.0095)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.38 J
		6-Nov-08	S-193_110608		930	13	22	64	5	-	19	ND (5)	40	ND (3)	ND (3)	ND (0.0097)	ND (1)	-	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	0.97 J
		23-Feb-09	S-193_022309		760	10	15	71	4 J	-	20	ND (5)	21	3 J	ND (3)	ND (0.0095)	ND (0.040)	0.96	0.050 J	ND (0.095)	ND (0.060)	ND (0.0095)	ND (0.0095)	ND (0.0076)	ND (0.057)	1.3
		29-Jun-09	S-193_062909		210	3	4	21	9	-	16	ND (1)	6	1 J	ND (0.5)	ND (0.0099)	-	-	-	-	-	-	-	-	-	0.33 J
		9-Sep-09	S-193_090909		760	9	37	120	30	-	17	8	44	15	ND (1)	ND (0.0097)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	0.37 J
		20-Nov-09	S-193_112009		930	11	19	81	9	-	16	ND (5)	25	11	ND (3)	ND (0.0098)	0.066 J	0.39	ND (0.12)	ND (0.095)	ND (0.065)	0.021 J	0.015 J	0.012 J	ND (0.057)	0.51 J
		9-Mar-10	193_030910		500	6	52	130	110	-	16	4 J	17	7	ND (0.5)	ND (0.0096)	ND (0.057)	0.12 J	ND (0.15)	ND (0.095)	ND (0.025)	ND (0.0095)	ND (0.0095)	ND (0.0076)	ND (0.057)	0.12 J
		6-May-10	S-193_050610		270	3 J	18	63	45	-	9 J	6 J	12	6 J	ND (3)	ND (0.018)	ND (0.058)	ND (0.35)	ND (0.038)	ND (0.096)	ND (0.025)	ND (0.0096)	ND (0.0096)	ND (0.0077)	ND (0.058)	0.17 J
		21-Jul-10	193_072110		350	3	28	120	34	-	7	8	50	16	ND (0.5)	ND (0.0097)	ND (0.057)	0.28 J	0.13 J	ND (0.095)	0.060 J	ND (0.0095)	ND (0.0095)	0.011 J	ND (0.057)	0.097 J
		10-Nov-10	S-193		1,000	12	20	110	37	-	20	7	28	14 J	ND (5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	0.53 J
		22-Nov-11	S-193		1,200	11	100	180	16	-	11	11	40	18	ND (1)	ND (0.0098)	0.30	0.53	0.28	ND (0.096)	-	-	-	-	-	0.12 J
		10-Jul-12	S-193_071012		330	5 J	4 J	38	15	-	16	1	5 J	5 J	ND (3)	ND (0.0098)	ND (0.1)	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.19 J
		4-Apr-13	S-193_040413		640	8.3	12.9	71.0	16.0	-	16.6	0.311	30.1	13.4	15.7	ND (0.020)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	1.1
		3-Jun-14	S-193		707	6.3	49.6	89.1	12.6	-	7.4	3.59	35.2	13.6	ND (2.5)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		15-Dec-14	S-193-20141215		1,350	10.2	46.9	138	35.5	-	13.5	4.42 J-	50.6	22.1	ND (5.0)	ND (0.020)	R	0.302 J-	0.262 J-	R	ND (0.10)	R	R	R	R	2.0 J
		19-May-15	S-193_20150519		1,000	8	34	140	15	-	10	6	46	20	ND (3)	ND (0.0097)	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.090 J
		18-May-16	S-193-20160518		240	5	9	38	10	-	16	1	19	11	ND (0.5)	0.029	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.82 J
		16-May-17	S-193-20170516		47	1	22	110	2	-	8	1	140	59	ND (0.5)	ND (0.0095)	ND (0.1)	0.3 J	0.4 J	0.2 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	3.1
		9-Jul-19	S-193_20190709		140	0.6 J	7	4 J	8	62	2 J	0.5	5 J	1 J	ND (2)	0.012 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-196	17-Mar-04	S-196		ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		7-Nov-05	S-196		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	-	-	-	-	ND (10)
		10-Nov-05	S-196_11_10_2005		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		18-Mar-04	S-196		ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		22-Apr-05	S196-042205		ND (5)	ND (5)	ND (5)	13	ND (5)	-	ND (5)	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		7-Nov-05	S-196		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	4	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	-	-	-	-	ND (10)
		10-Nov-05	S-196_11_10_2005		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		19-Dec-06	S-196		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.21 J
		19-Dec-07	S-196		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0096)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.066 J
		6-Nov-08	S-196_110608		ND (3)	ND (3)	ND (3)	ND (3)	ND (3)	-	ND (3)	ND (5)	ND (3)	ND (3)	ND (3)	ND (0.0096)	ND (10)	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	0.18 J
		23-Feb-09	S-196_022309		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.039)	ND (0.097)	0.059 J	ND (0.097)	ND (0.040)	ND (0.0097)	ND (0.0097)	ND (0.0078)	ND (0.058)	0.12 J
		29-Jun-09	S-196_062909		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.010)	-	-	-	-	-	-	-	-	-	0.12 J
		9-Sep-09	S-196_090909		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	0.10 J
		20-Nov-09	S-196_112009		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	0.063 J	ND (0.10)	ND (0.040)	ND (0.10)	ND (0.020)	0.015 J	0.029 J	0.023 J	ND (0.060)	ND (0.050)
		9-Mar-10	196_030910		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)											

See notes on
last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE µg/L	TOLUENE µg/L	ETHYLBENZENE µg/L	XYLENES, TOTAL (DIMETHYLBENZENE) µg/L	METHYL TERTIARY BUTYL ETHER µg/L	TERT-BUTYL ALCOHOL µg/L	ISOPROPYLBENZENE (CUMENE) µg/L	NAPHTHALENE µg/L	1,2,4-TRIMETHYLBENZENE µg/L	1,3,5-TRIMETHYLBENZENE µg/L	1,2-DICHLOROETHANE (EDC) µg/L	1,2-DIBROMOETHANE (EDB) µg/L	CHRYSENE µg/L	FLUORENE µg/L	PHENANTHRENE µg/L	PYRENE µg/L	ANTHRACENE µg/L	BENZO(A)ANTHRACENE µg/L	BENZO(A)PYRENE µg/L	BENZO(B)FLUORANTHENE µg/L	BENZO(G,H)PERYLENE µg/L	LEAD, Dissolved µg/L
AOI 1	S-197	18-Mar-04	S-197		ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		7-Nov-05	S-197		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	-	-	-	-	-	ND (10)
		10-Nov-05	S-197_11_10_2005		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	-	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	-
	S-199	17-Aug-18	S-199_20180817		10,800 SL	412 SL	872 SL	3,770 SL	20,200 SL	-	ND (200) SL	1,890 SL	998 SL	297 SL	ND (200) SL	ND (0.0100) SL	1.25 SL	21.0 SL	26.0 SL	3.67 SL	5.06 SL	1.13 SL	0.731 SL	0.915 SL	0.399 SL	6.57 SL
		11-Jul-19	S-199-SL_20190711		8,000 SL	1,300 SL	770 SL	2,700 SL	21,000 SL	47,000 SL	68 SL	5,400 SL	690 SL	220 SL	ND (20) SL	ND (0.0094) SL	8 J SL	76 SL	120 SL	27 SL	22 J SL	8 J SL	5 J SL	7 J SL	ND (5) SL	2.6 J SL
	S-230	18-Apr-06	S-230		890	180	79	180	ND (5)	-	10	20 *	-	-	-	-	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	-
		14-Sep-07	S-230_091407		2,600	ND (5)	32	64	ND (5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		25-Mar-09	S-230_032509		8,000	ND (20)	51	52	ND (20)	-	ND (40)	14	-	-	ND (20)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		7-May-09	S-230		400	ND (1)	2	5	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		25-Jun-09	S-230		1,200	6	23	23	ND (2)	-	5	ND (50)	-	-	ND (2)	ND (0.030)	ND (50)	ND (50)	ND (50)	ND (50)	-	-	-	-	-	ND (1.0)
		21-Jul-09	S-230_072109		1,900	120	12	41	ND (2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Aug-09	S-230_081809		1,000	3	11	15	ND (2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		17-Sep-09	S-230_091709		340	2	8	10	ND (1)	-	6	ND (50)	-	-	ND (1)	ND (0.029)	ND (50)	ND (50)	ND (50)	ND (50)	-	-	-	-	-	ND (1.0)
		22-Oct-09	S-230_102209		490	9	12	37	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		25-Nov-09	S-230_112509		540	8	7	17	ND (2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		17-Mar-10	S-230_031710		230	2	8	11	ND (1)	-	ND (2)	ND (4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		1-Jun-10	S-230_060110		610	3	19	17	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		7-Sep-10	S-230_090710		800	5	11	10	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		9-Nov-10	S-230_110910		51	ND (1)	3	3	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		14-Mar-11	S-230_031411		14	10	ND (1)	2	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-May-11	S-230-05162011		81	28	ND (1)	3	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		21-Jul-11	S-230_07212011		8,700	13	63	44	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		21-Dec-11	S-230_12212011		85	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		25-Jul-12	S-230_072512		3,700	9 J	12	7 J	ND (5)	-	ND (5)	0.9	ND (5)	ND (5)	ND (5)	ND (0.0098)	0.2 J	0.3 J	0.2 J	0.3 J	ND (0.1)	0.1 J	0.1 J	0.3 J	0.1 J	9.2
		9-Aug-12	S-230_080912		3,900	ND (10)	10	ND (10)	ND (10)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Oct-12	S-230_101812		57,000	98	180	140	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		15-Jan-13	S-230_011513		1,190	1.4	7.7	3.8	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		21-May-14	S-230		8,680	26.2	24.2	14.1 J	7.0 J	-	ND (20)	2.47	ND (40)	ND (40)	ND (20)	ND (0.020)	ND (0.10)	0.313	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.4 J
		17-Dec-14	S-230-20141217		1,720	ND (10)	5.1 J	ND (10)	ND (10)	-	ND (10)	0.758	ND (20)	ND (20)	ND (10)	ND (0.020)	ND (0.10)	0.417	0.272	0.213	0.126	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		26-Jun-18	S_230_20180626		3,380	4.24	18.0	12.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19-Jun-19	S-230_20190619		3,200	150	9	11 J	ND (1)	ND (50)	ND (2)	0.2 J	3 J	ND (2)	ND (10)	ND (0.0095)	0.5 J	0.1 J	0.3 J	0.7	ND (0.1)	0.3 J	0.3 J	0.5	0.3 J	ND (1.1)

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Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE µg/L	TOLUENE µg/L	ETHYLBENZENE µg/L	XYLENES, TOTAL (DIMETHYLBENZENE) µg/L	METHYL TERTIARY BUTYL ETHER µg/L	TERT-BUTYL ALCOHOL µg/L	ISOPROPYLBENZENE (CUMENE) µg/L	NAPHTHALENE µg/L	1,2,4-TRIMETHYLBENZENE µg/L	1,3,5-TRIMETHYLBENZENE µg/L	1,2-DICHLOROETHANE (EDC) µg/L	1,2-DIBROMOETHANE (EDB) µg/L	CHRYSENE µg/L	FLUORENE µg/L	PHENANTHRENE µg/L	PYRENE µg/L	ANTHRACENE µg/L	BENZO(A)ANTHRACENE µg/L	BENZO(A)PYRENE µg/L	BENZO(B)FLUORANTHENE µg/L	BENZO(G,H)PERYLENE µg/L	LEAD, Dissolved µg/L
AOI 1	S-231	14-Sep-07	S-231_091407		8,000	270	120	690	ND (20)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		12-Jun-08	S-231_061208		33,000	170	280	1,100	ND (50)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		25-Mar-09	S-231_032509		60,000	ND (200)	400	1,100	ND (200)	-	ND (400)	70	-	-	ND (200)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		7-May-09	S-231		42,000	84	75	640	ND (50)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		22-Jun-09	S-231_062209		28,000	ND (50)	140	600	ND (50)	-	ND (100)	-	-	-	ND (50)	ND (0.029)	-	-	-	-	-	-	-	-	-	ND (1.0)
		23-Jun-09	S-231		42,000	84	75	640	ND (50)	-	-	76	-	-	-	-	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-
		21-Jul-09	S-231_072109		31,000	67	190	750	ND (25)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Aug-09	S-231_081809		22,000	ND (50)	150	560	ND (50)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-Sep-09	S-231_091609		3,900	11	24	170	ND (5)	-	ND (10)	16	-	-	ND (5)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		22-Oct-09	S-231_102209		5,300	21	63	340	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		25-Nov-09	S-231_112509		9,600	43	96	350	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		10-Dec-09	S-231_121009		12,000	50	75	300	17	-	ND (20)	28	-	-	ND (10)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		17-Mar-10	S-231_031710		12,000	ND (50)	71	240	ND (50)	-	ND (100)	ND (200)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		7-Sep-10	S-231_090710		7,800	25	99	280	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		9-Nov-10	S-231_110910		6,700	22	82	260	ND (10)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11-Nov-10	S-231		9,500	460	86	280	16	-	14 J	54	110	75	ND (5)	ND (0.0096)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	0.61 J
		14-Mar-11	S-231_031411		190,000	76,000	910	5,400	ND (500)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		23-Nov-11	S-231		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.96)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0094)	0.28	ND (0.096)	0.32	0.39	-	-	-	-	-	ND (0.080)
		2-Apr-13	S-231		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		2-Apr-13	S-231_040213		1,570	33.7	105	1,560	ND (5.0)	-	21.7	30.4	479	200	ND (5.0)	ND (0.020)	ND (0.11)	0.780	0.834	0.321	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	-
		21-May-14	S-231		24.3	5.8	26.5	24.0	ND (1.0)	-	18.7	6.02	41.5	27.4	ND (1.0)	ND (0.020)	ND (0.10)	0.324	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.7 J
		12-Dec-14	S-231-20141212		232	7.4	22.5	22.3	1.1	-	14.9	9.51	36.4	27.2	ND (1.0)	ND (0.020)	ND (0.10)	0.230	0.132	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.9 J
		18-May-15	S-231_20150518		25	8	15	10	2	-	22	3	15	10	ND (0.5)	ND (0.0097)	0.4 J	0.3 J	0.6	0.5	ND (0.1)	0.3 J	0.2 J	0.3 J	0.2 J	0.11 J
		10-May-16	S-231-20160510		29	15	11	18	4	-	29	4	10	16	ND (1)	ND (0.029)	ND (0.5)	0.6	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 1	S-232	18-Apr-06	S-232		4,300	120	680	1,100	ND (50)	-	90	320 *	-	-	-	-	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-
		14-Sep-07	S-232_091407		320	11	69	79	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		12-Jun-08	S-232_061208		180	6	41	58	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		25-Mar-09	S-232_032509		720	2	29	53	ND (1)	-	6	9	-	-	ND (1)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		7-May-09	S-232		360	2	5	31	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		22-Jun-09	S-232_062209		13	ND (1)	1	ND (1)	2	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		21-Jul-09	S-232_072109		140	21	11	22	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Aug-09	S-232_081809		45	2	6	11	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-Sep-09	S-232_091609		170	1	4	14	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		22-Oct-09	S-232_102209		110	6	12	24	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19-Nov-09	S-232		6,800	39	130	410	26	-	21	42	140	82	ND (5)	ND (0.0097)	0.2	-	0.6	0.39 J	-	-	-	-	-	0.13 J
		25-Nov-09	S-232_112509		140	3	4	8	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		10-Dec-09	S-232_121009		31	1	3	4	3	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		17-Mar-10	S-232_031710		170	3	8	26	ND (1)	-	ND (2)	ND (4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		7-Sep-10	S-232_090710		9	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		9-Nov-10	S-232_110910		3	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11-Nov-10	S-232		39	6	2	3	4	-	0.7 J	ND (1)	1 J	1 J	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	0.10 J
		14-Mar-11	S-232_031411		3	3	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-May-11	S-232-05162011		34	65	ND (1)	9	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		21-Jul-11	S-232_07212011		5	2	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		21-Nov-11	S-232		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	1.4 J	ND (1.1)	1.5 J	1.9 J	-	-	-	-	-	ND (0.080)
		21-Dec-11	S-232_12212011		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		24-Jul-12	S-232_072412		4	0.7 J	0.7 J	ND (0.5)	ND (0.5)	-	1 J	1	0.6 J	0.6 J	ND (0.5)	ND (0.0099)	0.1 J	0.2 J	0.3 J	0.2 J	ND (0.09)	0.1 J	0.2 J	0.2 J	0.1 J	1.6
		9-Aug-12	S-232_080912		28	2	2	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Oct-12	S-232_101812		80	5	7	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		15-Jan-13	S-232_011513		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2-Apr-13	S-232		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		2-Apr-13	S-232_040213		30.1	3.5	5.8	3.8	0.76 J	-	3.0	0.929	0.83 J	2.0	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	-
		20-May-14	S-232		4.7	0.67 J	1.1	0.91 J	ND (1.0)	-	1.5	0.486	0.23 J	0.40 J	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		9-Dec-14	S-232-20141209		0.66	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	0.30 J	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	0.122 B	0.120 B	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.7 J
		18-May-15	S-232_20150518		2	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.1 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.1 J	ND (0.1)	0.1 J	0.2 J	ND (0.1)	ND (0.1)	0.1 J	0.2 J	ND (0.1)	0.17 J
		10-May-16	S-232-20160510		2	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
	S-268	19-Dec-07	S-268		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0096)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.93 J
		6-Nov-08	S-268_110608		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (1)	-	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	0.19 J
		23-Feb-09	S-268_022309		4	0.6 J	2	18	ND (0.5)	-	ND (0.5)	3 J	12	4	ND (0.5)	ND (0.0095)	ND (0.15)	0.28 J	0.67	ND (0.095)	0.18	ND (0.040)	0.012 J	0.015 J	ND (0.070)	0.31 J
		29-Jun-09	S-268_062909		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.010)	-	-	-	-	-	-	-	-	-	0.19 J
		9-Sep-09	S-268_090909		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.010)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	0.13 J
		20-Nov-09	S-268_112009		1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.057)	ND (0.095)	0.065 J	0.22 J	0.046 J	0.014 J	ND (0.0095)	ND (0.0076)	ND (0.057)	0.16 J
		9-Mar-10	268_030910		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.074 J	ND (0.095)	ND (0.060)	0.20 J	0.032 J	0.050	0.066	0.062	0.062 J	0.27 J
		6-May-10	S-268_050610		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.018)	0.069 J	ND (0.095)	ND (0.10)	0.18 J	0.043 J	ND (0.0095)	ND (0.0095)	0.0080 J	ND (0.057)	0.30 J
		21-Jul-10	268_072110		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	0.069 J	ND (0.096)	0.054 J	0.14 J	0.031 J	ND (0.0096)	ND (0.0096)	ND (0.0077)	ND (0.057)	0.30 J
		10-Nov-10	S-268		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	0.064 J
		22-Nov-11	S-268		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.99)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.079)	ND (0.099)	ND (0.079)	ND (0.099)	-	-	-	-	-	ND (0.080)
		11-Jul-12	S-268_071112		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.051 J
		4-Apr-13	S-268_040413		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.11)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	0.10 J
		4-Jun-14	S-268		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.3 J
		9-Dec-14	S-268-20141209		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		19-May-15	S-268_20150519		2	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		18-May-16	S-268-20160518		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)

See notes on last page.

Table 4
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Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

				BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	LEAD, Dissolved		
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
AOI 1	S-271	3-Nov-08		S-271_110308		2,500	60	450	1,100	340	-	94	620	430	210	ND (3)	ND (0.0097)	2 J	-	27	5	5	2 J	ND (0.9)	1 J	ND (0.9)	9.8
		19-Feb-09		S-271_021909		1,900	33	400	890	180	-	100	680	510	310	ND (10)	ND (0.0097)	1.9	14	20	8.9	3.8	1.7	1.4	1.0	0.99	10.1
		25-Jun-09		S-271_062509		2,000	55	330	550	110	-	97	430	290	180	ND (0.5)	ND (0.0096)	0.97	18	22	3.7	4.1	0.86	0.61	0.53	0.65	8.3
		8-Sep-09		S-271_090809		1,100	36	250	370	36	-	93	390	160	120	ND (1)	ND (0.0097)	ND (1)	18	19	2 J	4 J	ND (1)	ND (1)	ND (1)	ND (1)	7.4
		23-Nov-09		S-271_112309		1,200	50	210	300	12	-	85	330	120	100	ND (5)	ND (0.0097)	2.4	18	28	7.3	5.2	1.9	1.4	1.2	1.2	7.4
		8-Mar-10		271_030810		560	12	95	130	11	-	81	170	58	65	ND (0.5)	ND (0.0097)	0.62	18	17	2.7	3.3	0.51	0.31	0.29	0.19 J	5.1
		5-May-10		S-271_050510		980	29	110	140	38	-	76	210	58	66	ND (5)	ND (0.017)	0.59	16	18	2.3	2.8	0.40	0.27	0.21	0.20	6.4
		21-Jul-10		271_072110		890	23	91	110	160	-	73	170	47	54	ND (3)	ND (0.0098)	0.51	16	18	2.2	2.9	0.38	0.25	0.22	0.22	6.4
		18-Jul-12		S-271_071812		170	27	13	25	74	-	65	13	ND (3)	7 J	ND (3)	ND (0.0097)	0.2 J	15	16	1	3	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	4.6
		27-May-14		S-271		151	24.4	9.1	19.3	199	-	75.8	ND (0.10)	1.0 J	3.7	ND (1.0)	ND (0.020)	0.159	6.53	4.23	0.746	0.951	0.118	ND (0.10)	0.146	ND (0.10)	12.6
		15-Dec-14		S-271-20141215		404	44.6	12.3	39.4	7,030	-	81.4	11.0 J-	2.6 J	7.2 J	ND (10)	ND (0.020)	0.107 J-	7.98 J-	7.89 J-	0.742 J-	1.44 J-	R	R	R	R	10.8
		28-Jun-18		S-271_20180628		86.7	ND (50.0)	ND (50.0)	ND (150)	ND (50.0)	1,010 OE	74.2	-	ND (50.0)	ND (50.0)	ND (50.0)	ND (0.0100)	HT	-	-	-	-	-	-	-	-	-
		28-Jun-18		S-271-HS_20180628	Hydra Sleeve	67.1	ND (50.0)	ND (50.0)	ND (150)	ND (50.0)	1,160 OE	ND (50.0)	-	ND (50.0)	ND (50.0)	ND (50.0)	ND (0.0100)	HT	-	-	-	-	-	-	-	-	-
		18-Jun-19		S-271_20190618		140	33	10	49	32	2,500	88	ND (0.1)	1 J	11	ND (2)	ND (0.0094)	0.3 J	8	8	2	2	0.3 J	0.2 J	0.3 J	0.1 J	7.0
	S-273	4-Nov-08		S-273_110408		130	14	99	470	10 J	-	35	30 J	150	61	ND (5)	ND (0.0098)	ND (1)	-	7	3 J	2 J	ND (1)	ND (1)	ND (1)	ND (1)	3.5
		19-Feb-09		S-273_021909		46	4	11	81	0.8 J	-	8	6	40	19	ND (0.5)	ND (0.0096)	0.57	0.62	0.50	ND (2.0)	0.19	0.36	0.33	0.29	0.27	1.7
		25-Jun-09		S-273_062509		170	20	25	130	4	-	23	10	46	24	ND (0.5)	ND (0.0096)	0.41	2.6	1.7	0.86	0.46	0.24	0.25	0.24	0.27	3.0
		8-Sep-09		S-273_090809		140	5	39	150	1	-	19	6	53	28	ND (0.5)	ND (0.0097)	ND (1)	2 J	1 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1.7
		23-Nov-09		S-273_112309		120	8	15	66	1 J	-	22	5	21	11	ND (0.5)	ND (0.0098)	0.21	1.8	1.1	0.39	ND (0.21)	0.12	0.13	0.11	0.12 J	2.6
		8-Mar-10		273_030810		160	3	14	25	0.8 J	-	12	2 J	10	5	ND (0.5)	ND (0.0096)	0.16 J	0.63	0.74	0.48	0.22	0.11	0.070	0.070	ND (0.058)	0.62 J
		5-May-10		S-273_050510		510	9	41	99	ND (3)	-	15	ND (5)	16	10 J	ND (3)	ND (0.018)	0.068 J	1.8	0.92	0.24 J	0.20	0.026 J	0.018 J	0.012 J	ND (0.058)	1.5
		22-Jul-10		273_072210		330	6	62	130	0.9 J	-	22	2 J	29	20	ND (0.5)	ND (0.0099)	0.082 J	1.8	0.91	0.25 J	0.23	0.027 J	0.017 J	0.015 J	ND (0.057)	1.2
		18-Jul-12		S-273_071812		130	7	19	88	5	-	26	0.5	12	11	ND (3)	ND (0.0096)	ND (0.1)	3	2	0.3 J	0.3 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	1.8
		27-May-14		S-273		69.5	8.4	2.9	18.2	65.6	-	50.0	ND (0.10)	0.86 J	1.6 J	ND (1.0)	ND (0.020)	ND (0.10)	0.818	0.493	0.146	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	3.5
		12-Dec-14		S-273-20141212		376	12.4 J	ND (20)	38.8	2,150	-	16.2 J	ND (0.10)	4.7 J	5.7 J	ND (20)	ND (0.020)	ND (0.10)	1.51	0.807	0.156	0.160	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	3.6
		22-Jun-18		S-273_20180622		9.88	2.57	2.49	16.6	91.8	1,320	54.1	-	18.6	9.79	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-
		18-Jun-19		S-273_20190618		330	7	16	81	72	560	21	ND (0.1)	4 J	7	ND (2)	ND (0.0096)	ND (0.1)	0.3 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-276	29-Jun-18		S-276-20180629		6,040 SL	ND (200) SL	373 SL	1,500 SL	ND (200) SL	ND (1,000) SL	ND (200) SL	-	454 SL	243 SL	ND (200) SL	ND (0.0100)	HT SL	-	-	-	-	-	-	-	-	-
		10-Jul-19		S-276-SL_20190710		5,800 SL	69 SL	700 SL	2,100 SL	72 SL	300 SL	40 J SL	80 SL	380 SL	220 SL	ND (20) SL	ND (0.0095)	SL	3 SL	30 SL	54 SL	9 SL	ND (0.1) SL	2 SL	1 SL	2 SL	0.8 SL
	S-277	19-Feb-09		S-277		3,000	1,100	440	2,800	130,000	-	76	310	930	390	ND (10)	ND (0.0096)	ND (1.5)	9.9	16	ND (16)	ND (3.5)	ND (0.5)	0.15	0.13	0.13 J	8.3
		20-Feb-09		S-277_022009		3,000	1,100	440	2,800	130,000	-	76	310	930	390	ND (10)	ND (0.0096)	ND (1.5)	9.9	16	ND (16)	ND (3.5)	ND (0.50)	0.15	0.13	0.13 J	8.3
		26-Jun-09		S-277_062609		2,300	720	96	730	22,000	-	52	59	190	76	ND (5)	ND (0.016)	0.11 J	4.3	4.4	ND (0.095)	0.82	0.033 J	0.019 J	0.017 J	ND (0.057)	3.7
		8-Sep-09		S-277_090809		2,600	930	75	690	25,000	-	42	51	160	71	ND (5)	ND (0.0099)	ND (0.9)	4 J	5	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	4.3
		23-Nov-09		S-277_112309		1,100	320	75	420	2,500	-	73	36	100	53	ND (0.5)	ND (0.0099)	0.86	7.8	12	ND (0.099)	ND (2.5)	0.33	0.16	0.16	0.18 J	5.4
		29-Jun-18		S-277_20180629		4,020 SL	1,050 SL	139 SL	2,910 SL	4,320 SL	120,000 SL	ND (50.0) SL	-	614 SL	323 SL	ND (50.0) SL	ND (0.0100)	HT SL	-	-	-	-	-	-	-	-	-
		10-Jul-19		S-277-SL_20190710		3,000 SL	1,000 SL	510 SL	2,900 SL	1,800 SL	56,000 SL	62 SL	89 SL	410 SL	180 SL	ND (20) SL	ND (0.0095)	SL									

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved	
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
AOI 1	S-399	19-May-14		S-399	2.4	1.1	2.6	2.2	62.9	-	14.6	3.18	1.1 J	9.6	ND (1.0)	ND (0.020)	ND (0.10)	0.599	0.621	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.8 J	
		3-Dec-14		S-399-20141203	2.2	0.40 J	2.5	1.8	71.8	-	14.7	2.09	0.98 J	5.3	ND (1.0)	ND (0.020)	ND (0.10)	0.637	0.595	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)	
		19-Jun-18		S-399_20180619	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	22.9	2,620	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	0.119	0.234	ND (0.0500)	0.0654	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)	
		17-Jun-19		S-399_20190617	0.4 J	0.2 J	ND (0.2)	ND (0.5)	19	1,600	0.6 J	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	0.1 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)	
	S-418	9-Jul-15		S-418-20150709	88,300	15,700	1,210	3,770	254	-	86.5 J	86.5	1,100	309	ND (100)	ND (0.019)	ND (0.10)	0.505	0.585	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)	
		9-Jul-15		S-418-20150709 DUP	Field Duplicate	84,300	16,300	1,220	3,800	263	-	84.5 J	84.7 J-	1,080	306	ND (100)	ND (0.019)	R	0.547 J-	0.474 J-	R	R	R	R	R	ND (3.0)	
		3-Feb-16		AOI1_S-418_020316		34,300	7,690	1,260	3,580	159	-	95.3	117	2,070	286	ND (1.0)	ND (0.040)	ND (0.13)	0.76	0.46	0.040 J	0.14	0.095 J	0.83	ND (0.13)	ND (0.13)	3.2 J
		28-Jun-18		S-418_20180628		30,200	131	249	273	64.7	1,480	83.3	-	149	67.1	ND (10.0)	ND (0.0100)	HT	-	-	-	-	-	-	-	-	
		28-Jun-18		S-418-HS_20180628	Hydra Sleeve	7,620	ND (50.0)	282	502	195	3,070	50.5	-	519	124	ND (50.0)	ND (0.0100)	HT	-	-	-	-	-	-	-	-	
		19-Jun-19		S-418_20190619		23,000	87	160	180	45	1,000	72	43	93	45	ND (10)	ND (0.0095)	ND (0.1)	1	0.9	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
19-Jun-19		DUP2_20190619	Field Duplicate	23,000	83	140	170 J	45 J	1,100 J	60 J	35	83 J	40 J	ND (100)	ND (0.0094)	ND (0.1)	1	0.8	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)		
AOI 2	PGW-MW-8S	8-Apr-13		PGW-MW-8S_040813	2.4	1.9	0.78 J	8.4	2.1	-	35.8	ND (0.1)	0.94 J	1.5 J	ND (1)	ND (0.02)	6.45	7.17	14.1	16.8	3.57	4.75	3.33	2.89	1.52	ND (3)	
		29-May-14		PGW-MW8S	1.3	0.36 J	0.53 J	1.5	ND (1.0)	-	7.1	ND (0.10)	1.3 J	0.61 J	ND (1.0)	ND (0.020)	2.62	1.90	0.351	8.01	0.997	2.78	1.45	2.15	0.710	9.1	
	RW-108	10-Dec-09		RW-108_121009	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		11-May-16		RW-108-20160511	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.5)	ND (2)	ND (2)	ND (1)	ND (0.030)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	
		17-May-17		RW-108-20170517	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)	
		22-Jun-18		RW-108_20180622	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	1.42	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)	
	RW-109	8-Nov-05		RW-109_11_8_2005	4	1	ND (1)	3	ND (1)	-	-	1	-	-	ND (1)	ND (0.02)	ND (0.1)	0.6	ND (0.1)	0.1	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	
		5-Dec-06		RW-109	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0099)	ND (1.0)	1.0 J	2.0 J	ND (1.0)	-	-	-	-	-	0.15 J	
		18-Dec-07		RW-109	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	3.0 J	-	-	ND (0.5)	ND (0.0096)	ND (1.0)	ND (1.0)	1.0 J	ND (1.0)	-	-	-	-	-	0.094 J	
		7-Nov-08		RW-109_110708	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (1)	-	1 J	ND (1)	-	-	-	-	-	ND (0.050)	
		10-Dec-09		RW-109_121009	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		8-Nov-10		RW-109	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.9)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.9)	1 J	ND (0.9)	ND (0.9)	-	-	-	-	-	ND (0.052)	
		28-Nov-11		RW-109	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.97)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.078)	0.26 J	0.12 J	ND (0.097)	-	-	-	-	-	ND (0.080)	
		4-Apr-13		RW-109_040413	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	0.532	0.585	0.174	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.051 J	
		29-May-14		RW-109	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	0.591	0.632	0.301	0.121	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)	
		19-May-15		RW-109_20150519	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.2 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	0.7	0.8	0.2 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)	
	RW-600	5-Dec-06		RW-600	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	7.0	-	2.0 J	ND (1.0)	-	-	ND (1.0)	ND (0.0098)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND	ND	ND	-	0.071 J	
		7-Nov-08		RW-600_110708	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	9	-	2	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	ND (0.050)	
		11-Dec-09		RW-600_121109	2	38	2	37	3	-	9	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		23-Jul-10		RW-600_072310	ND (1)	ND (1)	ND (1)	ND (1)	2	-	4	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)	
	S-71	8-Dec-09		S-71_120809	ND (1)	1	ND (1)	3	280	-	2	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		15-Jul-10		S-71_071510	2	1	ND (1)	3	440	-	6	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)	
		11-Jun-13		S-71_06_11_2013	1.1	1.2	ND (1)	3.6	237	-	10.1	ND (0.13)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.13)	0.89	0.315	0.363	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (3)	
		19-Aug-16		S-71-20160819-WG	0.96 J	0.63 J	ND (1.0)	2.7 J	43.5	-	12.9	0.41	0.43 J	0.19 J	ND (1.0)	ND (0.040)	0.42	1.2	1.2	0.90	0.62	0.32	0.21	0.31	0.15	2.8 J	
		4-Oct-16		S-71-20161004-WG	1.2	1.2	ND (1.0)	2.8 J	16.8	-	17.3	0.50	0.70 J	0.42 J	ND (1.0)	ND (0.040)	0.47	1.5	1.6	1.1	0.56	0.32	0.24	0.47	0.098 J	ND (5.0)	
18-Jun-19		S-71_20190618	1	0.5 J	0.3 J	3 J	25	390	19	ND (0.1)	0.4 J	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	2	1	ND (0.1)	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)		

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PYRENE	LEAD, Dissolved
AOI 2	S-72	1-Jan-93	DM	S-72	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	-	-	-	-	-
		1-Jan-94	DM	S-72	ND (250)	ND (250)	ND (250)	ND (500)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-95	DM	S-72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-96	DM	S-72	ND (0.3)	32	110	180	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		19-Nov-97		S-72	5	22	22	97	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		12-Nov-98		S-72	69	14	ND (10)	12	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	2	3	ND (3)	-	-
		2-Dec-99		S-72	ND (20)	ND (20)	ND (20)	ND (40)	-	-	-	-	-	-	-	-	1	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		16-Nov-00		S-72	ND (100)	ND (100)	ND (100)	ND (200)	ND (100)	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-
		14-Nov-01		S-72	ND (1)	24	35	48	ND (1)	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
		7-Nov-08		S-72_110708	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	ND (0.050)
		15-Jul-10		S-72_071510	ND (1)	2	ND (1)	4	ND (1)	-	35	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	14	13	10	20	-	-	-	-	-	ND (1.0)
		8-Nov-10		S-72	21	4	0.6 J	12	0.9 J	-	68	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	3 J	4 J	5 J	6	-	-	-	-	-	0.091 J
		28-Nov-11		S-72	8	1	ND (0.5)	1	ND (0.5)	-	32	ND (10)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	15	7.0	3.9	ND (1.0)	-	-	-	-	-	3.8
		29-May-14		S-72	10.8	0.66 J	ND (1.0)	ND (1.0)	0.50 J	-	7.0	47.7	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	4.43	19.8	24.9	8.38	ND (0.50)	2.31	2.05	3.46	1.35	ND (3.0)
		11-May-16		S-72-20160511	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	9	ND (0.5)	ND (2)	ND (2)	ND (1)	ND (0.029)	3	3	2	4	1	1	2	3	1	ND (1.0)
		16-Aug-16		S-72-20160816-WG	4.3	2.7	ND (1.0)	5.1	0.39 J	-	44.2	1.2	0.17 J	ND (1.0)	ND (1.0)	ND (0.040)	2.3	5.4	8.8	1.1	1.4	ND (1.0)	0.15 J	0.33 J	ND (1.0)	ND (5.0)
		5-Oct-16		S-72-20161005-WG	7.7	4.3	ND (1.0)	7.4	ND (1.0)	-	56.0	3.6	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	5.0	7.5	9.8	8.9	6.9	2.3	2.5	6.2	2.1	ND (5.0)
	S-72D	7-Nov-05		S-72D_11_7_2005	ND (1)	ND (1)	ND (1)	ND (1)	1	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	0.3	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		5-Dec-06		S-72D	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	1.0 J	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	52	36	44	-	0.16 J
		9-Dec-09		S-72D_120909	15	ND (1)	ND (1)	1	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		23-Jul-10		S-72D_072310	ND (1)	ND (1)	ND (1)	1	1	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		7-Apr-11		S-72D_04072011	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
		7-Apr-11		S-72D_04072011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		28-Jun-11		S-72D_06282011	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
		28-Jun-11		S-72D_06282011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		29-May-12		S-72D_52912	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	-	-	-	-	-	ND (1.0)
		17-Aug-12		S-72D_081712	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.09)	0.1 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.0)
		25-Oct-12		S-72D_102512	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.5	-	ND (2.0)	ND (5.0)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	7.1
		27-Mar-13		S-72D_32713	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.5	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		23-Aug-16		S-72D-20160823-WG	ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	1.6	-	ND (1.0)	ND (0.10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)
		6-Oct-16		S-72D-20161006-WG	ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	1.8	-	ND (1.0)	0.085 J	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.10)	0.041 J	0.055 J	0.024 J	0.018 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)
		17-Jun-19		S-72D_20190617	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	3	ND (10)	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	S-73	1-Jan-93	DM	S-73	520	9	27	18	-	-	-	-	-	-	-	-	55	-	-	-	-	110	59 J	68 J	-	-
		1-Jan-94	DM	S-73	900	ND (250)	ND (250)	ND (500)	-	-	-	-	-	-	-	-	4 J	-	-	-	-	55	34	37	-	-
		28-Dec-95		S-73	430	34	ND	15 J	-	-	-	-	-	-	-	-	100	-	-	-	-	29	15	21	-	-
		1-Jan-96	DM	S-73	5.6	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	77	-	-	-	-	2	1	ND (1)	-	-
		19-Nov-97		S-73	840	49 J	61 J	55 J	-	-	-	-	-	-	-	-	39	-	-	-	-	13	7	7	-	-
		12-Nov-98		S-73	320	ND (10)	36	20	-	-	-	-	-	-	-	-	2	-	-	-	-	7	6	5	-	-
		2-Dec-99		S-73	400	ND (20)	110	31	-	-	-	-	-	-	-	-	14	-	-	-	-	23	15	13	-	-
		16-Nov-00		S-73	340	ND (10)	20	11	ND (10)	-	-	-	-	-	-	-	9	-	-	-	-	6	4	4	-	-
		14-Nov-01		S-73	220	ND (10)	10	10	ND (10)	-	-	-	-	-	-	-	31	-	-	-	-	4.7	2.9	3.7	-	-
		13-Nov-02		S-73	98	2	2	7	ND (1)	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-
		12-Nov-03		S-73	135	3.9	10.1	12.3	1.6	-	-	-	-	-	-	-	5.2	-	-	-	-	-	-	-	-	-
		21-Oct-04		S-73	100	ND (5.0)	11	14	ND (5.0)	-	99	ND (5.0)	-	-	ND (5.0)	ND (0.020)	3.7 J	56	80	12	-	-	-	-	-	ND (5.0)
		7-Nov-05		S-73_11_7_2005	53	ND (10)	ND (10)	13	ND (10)	-	-	ND (10)	-	-	ND (10)	ND (0.02)	1.6	40.9	38.6	4.7	-	1.6	0.8	1.5	0.3	-
	S-152	25-Jun-19		S-152_20190625	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 2	S-154	10-Nov-05	S-154_11_10_2005		2	ND (1)	ND (1)	3	5	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	0.2	ND (0.1)	0.1	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		18-Dec-07	S-154		29	12	2.0	39	-	-	5.0	3.0 J	-	-	ND (0.5)	ND (0.0095)	ND (0.9)	1.0 J	1.0 J	ND (0.9)	-	-	-	-	-	0.17 J
		18-Nov-09	S-154		35	22	8	73	47	-	14	3 J	12	5	ND (0.5)	ND (0.0097)	ND (49)	-	2.9	ND (0.11)	-	-	-	-	-	0.084 J
		11-Dec-09	S-154_121109		52	34	11	99	45	-	12	ND (50)	13	5	ND (1)	ND (0.029)	ND (50)	ND (50)	ND (50)	ND (50)	-	-	-	-	-	ND (1)
		23-Jul-10	S-154_072310		12	11	4	40	31	-	7	ND (5)	4	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		18-Nov-10	S-154		44	53	24	220	50	-	12	5.8	29	9	ND (0.5)	ND (0.0096)	ND (3.3)	2.2	1.3	ND (0.10)	-	-	-	-	-	ND (0.052)
		28-Nov-11	S-154		2	0.8 J	ND (0.5)	6	26	-	3	ND (0.97)	0.9 J	0.8 J	ND (0.5)	ND (0.0098)	ND (0.078)	1.5	0.46	ND (0.097)	-	-	-	-	-	ND (0.080)
		5-Apr-13	S-154_040513		30.9	27.0	12.9	138	33.2	-	10.8	1.66	19.8	6.9	ND (1.0)	ND (0.020)	ND (0.10)	0.707	0.428	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.16 J
		5-Jun-13	S-154_06_05_2013		5.4	7.4	3.1	35.2	28.1	-	12.4	ND (0.1)	3.8	1.6 J	ND (1)	ND (0.02)	ND (0.1)	0.816	0.497	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		29-May-14	S-154		9.6	15.5	7.8	80.4	42.2	-	7.4	0.830	10.2	3.4	ND (1.0)	ND (0.023)	ND (0.10)	0.442	0.309	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		19-May-15	S-154_20150519		4	4	2	20	120	-	6	1	3	1 J	ND (0.5)	ND (0.0096)	ND (0.1)	1	0.9	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.098 J
		11-May-16	S-154-20160511		2	1	ND (1)	7	34	-	5	0.6	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.5)	0.9	0.6	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
		18-Aug-16	S-154-20160818-WG		4.6	6.6	4.5	46.1	36.3	-	6.9	1.4	7.9	2.4	ND (1.0)	ND (0.040)	ND (0.10)	1.1	0.91	0.070 J	0.092 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)
		18-Aug-16	S-154-HS-20160818-WG	Hydra Sleeve	ND (1.0)	0.32 J	ND (1.0)	2.0 J	29.7	-	5.1	0.20 J	0.26 J	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.24)	0.51	0.23 J	0.042 J	0.045 J	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (5.0)
		18-Aug-16	S-154-20160818-WG-DUP	Field Duplicate	4.5	6.4	4.4	45.9	36.2	-	6.8	1.7	7.7	2.5	ND (1.0)	ND (0.040)	ND (0.12)	1.2	0.97	0.082 J	0.12 J	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (5.0)
		12-Oct-16	S-154-20161012-WG		3.4	5.1	3.9	41.4	35.6	-	7.3	0.94	8.1	2.5	ND (1.0)	ND (0.040)	0.011 J	0.92	0.69	0.080 J	0.14	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)
		12-Oct-16	S-154-HS-20161012-WG	Hydra Sleeve	ND (1.0)	ND (1.0)	ND (1.0)	1.0 J	30.3	-	4.0	1.2	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	0.011 J	0.94	0.67	0.076 J	0.13	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)
		16-May-17	S-154-20170516		ND (5)	7 J	ND (5)	44	19	-	6 J	ND (0.1)	6 J	ND (5)	ND (5)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		28-Jun-18	S-154_20180628		1.30	ND (1.00)	ND (1.00)	ND (3.00)	11.7	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	0.457	0.145	ND (0.0500)	0.106	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		28-Jun-18	S-154-HS_20180628	Hydra Sleeve	1.35	ND (1.00)	ND (1.00)	ND (3.00)	12.4	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	0.367	0.0809	ND (0.0500)	0.0807	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	S-249	14-Dec-09	S-249_121409		ND (1)	ND (1)	ND (1)	ND (1)	3	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		22-Jul-10	S-249_072210		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		18-Nov-10	S-249		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1	-	ND (0.5)	ND (0.96)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.061 J	ND (0.096)	0.040 J	ND (0.096)	-	-	-	-	-	ND (0.052)
		28-Nov-11	S-249		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.080)	ND (0.10)	ND (0.080)	ND (0.10)	-	-	-	-	-	ND (0.080)
		4-Apr-13	S-249_040413		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	0.37 J	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.19 J
		6-Jun-13	S-249_060613		ND (1)	ND (1)	ND (1)	ND (1)	1.1	-	ND (2)	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		29-May-14	S-249		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.025)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	4.3
		19-May-15	S-249_20150519		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.1 J	ND (0.1)	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	0.1 J	0.2 J	0.2 J	0.098 J
		11-May-16	S-249-20160511		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
		17-Aug-16	S-249-20160817-WG		ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	0.78 J	-	ND (1.0)	0.24	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	0.011 J	ND (0.11)	ND (0.11)	ND (5.0)
		5-Oct-16	S-249-20161005-WG		ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	0.050 B	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	0.021 J	ND (0.10)	0.029 B	0.041 B	0.020 J	0.034 J	0.031 J	0.062 J	0.027 J	ND (5.0)
		17-May-17	S-249-20170517		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		22-Jun-18	S-249_20180622		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0101)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		27-Jun-19	S-249_20190627		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
		27-Jun-19	DUP-4_20190627	Field Duplicate	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-294	15-Jul-10	S-294_071510		130	ND (10)	470	720	ND (10)	-	110	8,500	410	130	ND (10)	ND (0.029)	140	480	1,000	380	-	-	-	-	-	ND (1.0)
		4-Jun-13	S-294_06_04_2013		111	6	118	122	7.3	-	151	306	108	35	ND (1)	ND (0.02)	0.248	34.1	37.4	2.24	9.02 J	0.227	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		17-Aug-16	S-294-20160817-WG		79.9	6.2	148	127	3.1	-	141	635	122	41.2	ND (1.0)	0.044	7.8	64.7	106	26.4	22.3	6.7	4.2	8.0	1.3	2.6 J
		5-Oct-16	S-294-20161005-WG		52.0	2.8	111	140	2.1	-	101	1,210	145	49.1	ND (1.0)	0.085	47.8	149	347	139	84.8	44.1	24.4	41.1	3.9	ND (5.0)
		31-Jul-18	S-294-20180731		64.2	5.04	90.8	56.7	3.38	192	134	667	83.8	26.1	ND (1.00)	ND (0.0101)	1.95	74.9	74.2	10.3	16.5	2.14	1.16	1.42	0.529	ND (2.00)
		31-Jul-18	S-294-20180731 DUP	Field Duplicate	61.2	5.00	95.2	59.0	3.22	191	125	666	79.6	25.5	ND (1.00)	ND (0.0100)	2.42	71.4	71.3	11.7	16.4	2.42	1.43	1.88	0.645	ND (2.00)
		17-Jun-19	S-294_20190617		49	6	260	320	2	91	140	3,000	240	84	ND (2)	ND (0.0095)	4	82	110	16	21	3	2	3	0.9	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

				BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved		
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
AOI 2	S-294D	23-Jul-10	S-294D_072310		ND (1)	1	17	19	ND (1)	-	3	140	15	6	ND (1)	ND (0.029)	ND (5)	6	8	ND (5)	-	-	-	-	-	ND (1.0)	
		6-Apr-11	S-294D_04062011		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.8 J	-	0.8 J	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	1 J	ND (1)	-	-	-	-	-	-	
		6-Apr-11	S-294D_04062011 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		28-Jun-11	S-294D_06282011		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.8 J	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-
		28-Jun-11	S-294D_06282011 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		30-May-12	S-294D_53012		ND (0.5)	ND (0.5)	4	5	1	-	0.6 J	48	3	0.9 J	ND (0.5)	ND (0.0096)	0.6	2	4	1	-	-	-	-	-	-	ND (1.0)
		17-Aug-12	S-294D_081712		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.9 J	-	ND (0.5)	0.4 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.1 J	0.2 J	0.2 J	0.3 J	ND (0.09)	0.1 J	0.1 J	0.1 J	ND (0.09)	ND (1.0)	
		26-Oct-12	S-294D_102612		ND (1.0)	ND (1.0)	2.1	2.5	1.1	-	ND (2.0)	20.6	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (3.0)	
		1-Apr-13	S-294D_40113		88.6	4.5	107	107	5.4	-	117	521	96.0	30.4	ND (1.0)	ND (0.020)	0.487	48.7	57.1	2.97	11.3	0.514	0.282	0.345	0.168	3.2	
		23-Aug-16	S-294D-20160823-WG		ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
		23-Aug-16	S-294D-HS-20160823-WG	Hydra Sleeve	ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	ND (0.14)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (5.0)	
		12-Oct-16	S-294D-HS-20161012-WG	Hydra Sleeve	ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	0.063 J	ND (0.10)	0.039 J	0.083 J	ND (0.10)	0.057 J	0.060 J	0.13	0.065 J	ND (5.0)	
		12-Oct-16	S-394D-20161012-WG		ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	0.014 J	ND (0.10)	ND (0.10)	0.026 J	ND (0.10)	ND (0.10)	0.012 J	0.031 J	ND (0.10)	ND (5.0)	
		17-Jun-19	S-294D_20190617		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	3	ND (10)	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	0.4 J	ND (0.09)	0.3 J	0.6	ND (0.09)	ND (0.09)	0.3 J	0.6	0.3 J	ND (1.1)	
		S-302D	26-Jul-10	S-302D_072610		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
			7-Apr-11	S-302D_04072011		ND (0.5)	ND (0.5)	ND (0.5)	0.6 J	0.6 J	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.010)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
			7-Apr-11	S-302D_04072011 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
	28-Jun-11		S-302D_06282011		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.5 J	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	1 J	-	-	-	-	-	-	
	28-Jun-11		S-302D_06282011 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
	29-May-12		S-302D_52912		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.09)	ND (0.09)	ND (0.09)	0.7	-	-	-	-	-	ND (1.0)	
	17-Aug-12		S-302D_081712		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.6 J	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.09)	ND (0.09)	ND (0.09)	0.8	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.0)	
	25-Oct-12		S-302D_102512		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (5.0)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	5.5	
	28-Mar-13		S-302D_032813		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	0.68 J	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	0.521	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	5.0	
	23-Aug-16		S-302D-20160823-WG		ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
	23-Aug-16		S-302D-HS-20160823-WG	Hydra Sleeve	ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	ND (0.13)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (5.0)	
	12-Oct-16		S-302D-20161012-WG		ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.10)	ND (0.10)	ND (0.10)	0.052 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
	12-Oct-16		S-302D-HS-20161012-WG	Hydra Sleeve	ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.10)	ND (0.10)	ND (0.10)	0.055 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
	17-Jun-19		S-302D_20190617		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	2	400	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	0.5	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	17-Jun-19		DUP-1	Field Duplicate	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	3	450	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	0.5	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)	
	S-306		9-Jul-10	S-306_070910		740	52	490	300	ND (1)	-	73	670	40	52	ND (1)	ND (0.028)	ND (500)	ND (500)	850	ND (500)	-	-	-	-	-	ND (1.0)
			6-Jun-13	S-306_060613		270	11.4	5.1	50.6	2.7	-	53.5	ND (0.1)	6.7	8.6	ND (1)	ND (0.02)	ND (0.1)	6.41	9.33	0.349	1.1	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		19-Aug-16	S-306-20160819-WG		148	5.6	4.6	40.0	0.84 J	-	57.7	5.6	9.5	7.2	ND (1.0)	0.035 J	0.25	12.8	21.5	2.7	7.2	0.18	0.086 J	0.061 J	0.051 J	ND (5.0)	
		19-Aug-16	S-306-HS-20160819-WG	Hydra Sleeve	13.8	2.1	0.68 J	10.6	0.32 J	-	34.0	1.2	1.9	2.1	ND (1.0)	0.041	0.033 J	3.0	3.5	0.42	0.71	0.031 J	0.022 J	ND (0.15)	ND (0.15)	ND (5.0)	
		12-Oct-16	S-306-20161012-WG		185	5.1	6.2	43.2	1.1	-	52.3	2.8	12.6	7.4	ND (1.0)	0.028 J	0.17	5.8	11.7	0.93	1.6	0.070 J	0.030 J	0.029 J	0.020 J	ND (25.0)	
		12-Oct-16	S-306-HS-20161012-WG	Hydra Sleeve	43.1	1.8	1.2	8.8	0.42 J	-	17.6	1.3	1.7	1.4	ND (1.0)	0.035 J	ND (0.10)	2.1	3.6	0.36	0.39	ND (0.10)	0.011 J	ND (0.10)	ND (		

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Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

				BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved	
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
AOI 2	S-354	5-Jun-13		S-354_06_05_2013	0.48 J	0.77 J	0.48 J	1.6	ND (1)	-	26.2	ND (0.1)	0.53 J	ND (2)	ND (1)	ND (0.02)	ND (0.1)	1.65	0.57	0.289	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		16-Aug-16		S-354-20160816-WG	ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	9.4	1.2	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	0.35	2.1	0.94	0.33	1.1	ND (0.14)	0.059 J	0.10 J	0.032 J	7.1 J
		17-May-17		S-354-20170517	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	2 J	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0094)	0.2 J	0.4 J	0.1 J	0.3 J	0.2 J	ND (0.1)	ND (0.1)	0.1 J	ND (0.1)	0.094 J
		22-Jun-18		S-354_20180622	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		17-Jun-19		S-354_20190617	ND (0.2)	0.8 J	0.3 J	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	6	0.4 J	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	0.5	0.9	0.4 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-355	5-Jun-13		S-355_06_05_2013	1.2	1.7	0.97 J	5.1	11.1	-	90.5	ND (0.2)	1.4 J	0.47 J	ND (1)	ND (0.02)	ND (0.2)	3.06	3.75	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (3)
		22-Aug-16		S-355-20160822-WG	0.82 J SL	3.1 SL	ND (1.0) SL	14.2 SL	68.1 SL	-	42.7 SL	1.6 SL	0.22 J SL	0.59 J SL	ND (1.0) SL	ND (0.040) SL	0.19 SL	4.2 SL	5.6 SL	0.40 SL	1.7 SL	0.068 J SL	0.039 J SL	0.058 J SL	ND (0.11) SL	ND (5.0) SL
		3-Oct-16		S-355-20161003-WG	ND (1.0) SL	0.84 J SL	ND (1.0) SL	2.1 J SL	40.4 SL	-	11.1 SL	0.93 SL	ND (1.0) SL	ND (1.0) SL	ND (1.0) SL	ND (0.040) SL	0.16 SL	2.2 SL	2.1 SL	0.28 SL	2.2 SL	0.041 J SL	0.027 J SL	0.054 J SL	0.053 J SL	ND (5.0) SL
		2-Jul-19		S-355_SL_20190702	0.6 J SL	1 J SL	ND (0.2) SL	2 J SL	1 SL	23 J SL	46 SL	ND (0.1) SL	ND (0.3) SL	ND (0.3) SL	ND (2) SL	ND (0.0094) SL	ND (0.1) SL	17 SL	39 SL	2 SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (1.1) SL
	S-357	22-Aug-16		S-357-20160822-WG	1.1 SL	0.46 J SL	ND (1.0) SL	1.4 J SL	0.65 J SL	-	7.3 SL	0.62 J SL	0.54 J SL	0.19 J SL	ND (1.0) SL	ND (0.040) SL	4.6 SL	0.40 J SL	1.9 SL	8.1 SL	5.8 SL	2.2 SL	1.4 SL	1.3 SL	0.90 J SL	ND (5.0) SL
		4-Oct-16		S-357-20161004-WG	2.8 J SL	ND (5.0) SL	ND (5.0) SL	ND (15.0) SL	ND (5.0) SL	-	21.1 SL	2.1 SL	ND (5.0) SL	ND (5.0) SL	ND (5.0) SL	0.058 SL	15.5 SL	1.3 SL	3.9 SL	27.3 SL	13.4 SL	7.5 SL	4.6 SL	4.8 SL	2.2 SL	ND (5.0) SL
		2-Jul-19		S-357_SL_20190702	2 SL	0.9 J SL	0.4 J SL	3 J SL	1 SL	28 SL	10 SL	ND (0.1) SL	0.6 J SL	ND (0.3) SL	ND (2) SL	ND (0.0094) SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	0.9 SL	0.6 SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (1.1) SL
	S-422	10-Aug-16		S-422-20160810-WG	0.41 J	0.50 J	ND (1.0)	38.7	ND (1.0)	-	5.3	0.88	17.1	7.5	ND (1.0)	ND (0.040)	ND (0.11)	0.13	0.19	0.046 J	0.098 J	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (5.0)
		5-Oct-16		S-422-20161005-WG	0.72 J	0.33 J	ND (1.0)	2.3 J	ND (1.0)	-	6.7	0.26 B	5.3	6.9	ND (1.0)	ND (0.040)	ND (0.10)	0.077 B	0.11 B	0.052 B	0.086 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)
		18-Jun-19		S-422_20190618	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-423	16-Aug-16		S-423-20160816-WG	1.6	1.4	ND (1.0)	1.3 J	51.6	-	32.4	1.7 J-	0.62 J	ND (1.0)	ND (1.0)	ND (0.040)	3.9 J-	6.7 J-	9.2 J-	0.98 J-	1.5 J-	ND (0.11) J	ND (0.71) J	0.54 J-	0.076 J-	3.0 J
		5-Oct-16		S-423-20161005-WG	1.8	1.3	ND (1.0)	0.92 J	42.7	-	32.5	0.48	0.48 J	ND (1.0)	ND (1.0)	ND (0.040)	0.72	2.8	4.6	0.36	0.48	0.16	0.084 J	0.16	0.031 J	ND (5.0)
		3-Jul-18		S-423_20180703	ND (1.00) SL	1.60 SL	ND (1.00) SL	ND (3.00) SL	34.4 SL	-	64.5 SL	1.23 OE SL	1.07 SL	ND (1.00) SL	ND (1.00) SL	ND (0.0100) SL	0.155 SL	4.60 SL	3.90 SL	0.161 SL	0.206 SL	0.0797 SL	ND (0.0500) SL	ND (0.0500) SL	ND (0.0500) SL	ND (2.00) SL
		2-Jul-19		S-423_SL_20190702	0.7 J SL	1 SL	0.5 J SL	1 J SL	4 SL	54 SL	61 SL	ND (0.1) SL	0.6 J SL	ND (0.3) SL	ND (2) SL	ND (0.0094) SL	ND (0.1) SL	7 SL	11 SL	1 SL	1 SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	4.3 SL
	S-425	8-Nov-17		S-425-20171108-WG	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	3.33	1.12	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	0.515	1.21	0.450	0.983	0.924	0.411	0.168	0.194	0.115	ND (2.00)
		13-Dec-17		S-425-20171213-WG	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	1.54	0.422	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	0.360	0.515	0.391	0.867	0.835	0.421	0.210	0.210	0.137	ND (5.00)
		18-Jun-19		S-425_20190618	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	0.2 J	ND (10)	ND (0.3)	0.4 J	ND (0.3)	ND (0.3)	ND (2)	ND (0.0096)	0.9	ND (0.1)	0.7	1	0.6	0.6	0.7	0.7	0.4 J	ND (1.1)
	S-427	8-Nov-17		S-427-20171108-WG	61.0	ND (1.00)	ND (1.00)	ND (3.00)	16.4	-	ND (1.00)	0.425	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	0.441	2.79	1.99	2.87	ND (0.0500)	0.208	0.121	0.190	0.0968	ND (2.00)
		13-Dec-17		S-427-20171213-WG	24.9	9.97	ND (1.00)	ND (3.00)	3.24	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	0.456	1.39	2.07	3.38	ND (0.0500)	0.228	0.143	0.220	0.104	ND (5.00)
		18-Jun-19		S-427_20190618	0.3 J	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	1	ND (0.1)	5	8	11	0.8	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
AOI 3	BF-103R	12-Dec-07		BF-103R	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1.0	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0095)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND	ND	-	0.065 J	
		1-Dec-09		BF-103R_120109	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	1.4
		16-Jul-10		BF-103R_071610	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.030)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	1.2
		27-Aug-13		AOI3_BF-103R_082713	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		9-Jun-15		AOI3_BF-103R_060915	3.6	6.1	0.59 J	3.6	ND (1.0)	-	ND (1.0)	0.23 J	0.91 J	0.25 J	ND (1.0)	0.086	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
		31-Dec-15		AOI3_BF-103R_123115	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.11)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.019)	ND (0.11)	ND (0.11)	0.155	ND (0.11)	ND (0.11)	ND (0.056)	ND (0.056)	ND (0.11)	ND (0.11)	ND (3.0)
		26-Feb-19		BF-103R_20190226	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	-	-	-	ND (2)	ND (0.3)	-	-	-	-	-	-	-	-	-	-

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Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 3	S-1	1-Jan-85	DM	S-1	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-86	DM	S-1	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-88	DM	S-1	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		1-Jan-93	DM	S-1	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-94	DM	S-1	ND (50)	ND (50)	ND (50)	ND (100)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		28-Dec-95		S-1	2.7	ND	ND	0.8 J	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-96	DM	S-1	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		19-Nov-97		S-1	ND (1)	ND (1)	ND (1)	2	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	1	1	ND (1)	-	-
		12-Nov-98		S-1	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	1.2	ND (2)	ND (3)	-	-
		2-Dec-99		S-1	ND (1)	ND (1)	ND (1)	ND (2)	-	-	-	-	-	-	-	-	1	-	-	-	-	ND (10)	ND (20)	ND (30)	-	-
		16-Nov-00		S-1	ND (1)	ND (1)	ND (1)	ND (2)	10	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	-
		14-Nov-01		S-1	ND (1)	ND (1)	ND (1)	3	38	-	-	-	-	-	-	-	12	-	-	-	-	1.0 J	1.0 J	0.88 J	-	-
		13-Nov-03		S-1	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	1.1 J	-	-	-	-	-	-	-	-	-
		21-Oct-04		S-1	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (9.8)	ND (9.8)	ND (9.8)	-	-	-	-	-	ND (5.0)
		8-Nov-05		S-1_11_8_2005	ND (1)	ND (1)	ND (1)	ND (1)	23	-	-	ND (1)	-	-	ND (1)	ND (0.02)	0.5	ND (0.3)	ND (0.3)	1.5	-	0.5	0.5	1	ND (0.3)	-
		30-Nov-06		S-1	ND (0.5)	0.8 J	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1.0)	2.0 J	-	-	ND (1.0)	ND (0.0097)	1.0 J	ND (1.0)	ND (1.0)	2.0 J	-	ND	ND	ND	-	0.44 J
		11-Dec-07		S-1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0095)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND	ND	ND	-	0.63 J
		4-Nov-08		S-1_110408	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	0.067 J
		12-Nov-09		S-1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	1.4	-	0.78	3.2	-	-	-	-	-	1.9
		1-Dec-09		S-1_120109	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (47)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (47)	ND (47)	ND (47)	ND (47)	-	-	-	-	-	3.5
		21-Jul-10		S-1_072110	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		15-Nov-10		S-1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.96)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.7	0.94	0.33	2.1	-	-	-	-	-	0.10 J
		18-Nov-11		S-1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (9.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	6.9	1.6 J	ND (0.76)	6.1	-	-	-	-	-	0.24 J
		4-Apr-13		S-1_040413	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	0.242	0.502	ND (0.10)	0.678	0.282	0.233	0.258	0.227	0.260	0.52 J
		29-Aug-13		AOI3_S-1_082913	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		30-May-14		S-1	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	0.118	0.235	ND (0.10)	0.251	ND (0.10)	0.110	0.150	0.204	ND (0.10)	11.6
		15-Jun-15		AOI3_S-1_061515	ND (1.0)	541	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	0.093 J	ND (1.0)	ND (1.0)	ND (1.0)	0.097	0.26	0.76	0.18	0.82	0.67	0.30	0.32	0.53	0.18	ND (5.0)
		31-Dec-15		AOI3_S-1_123115	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.11)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.018)	0.239	ND (0.11)	ND (0.11)	0.317	0.316	0.157	0.261	0.311	0.254	ND (3.0)
		12-May-16		S-1-20160512	ND (1)	1	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)

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Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 3	S-3	1-Jan-85	DM	S-3	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-86	DM	S-3	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-88	DM	S-3	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		1-Jan-93	DM	S-3	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-94	DM	S-3	2 J	ND (5)	ND (5)	ND (10)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		28-Dec-95		S-3	1.3	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-96	DM	S-3	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		19-Nov-97		S-3	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		12-Nov-98		S-3	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		2-Dec-99		S-3	ND (1)	ND (1)	ND (1)	ND (2)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	2	2	ND (3)	-	-
		16-Nov-00		S-3	ND (1)	ND (1)	ND (1)	ND (2)	94	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		14-Nov-01		S-3	52	ND (2)	ND (2)	ND (4)	ND (2)	-	-	-	-	-	-	-	3	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		13-Nov-02		S-3	ND (1)	ND (1)	ND (1)	ND (1)	4	-	-	-	-	-	-	-	ND (2)	-	-	-	-	-	-	-	-	-
		13-Nov-03		S-3	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	4.3	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	-	-	-	-	-
		21-Oct-04		S-3	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	19	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (9.8)	ND (9.8)	ND (9.8)	-	-	-	-	-	ND (5.0)
		8-Nov-05		S-3_11_8_2005	ND (1)	ND (1)	ND (1)	ND (1)	13	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		30-Nov-06		S-3	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	0.7 J	-	ND (1.0)	4.0 J	-	-	ND (1.0)	ND (0.0096)	ND (1.0)	ND (1.0)	1.0 J	2.0 J	-	ND	ND	ND	-	0.43 J
		11-Dec-07		S-3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	6.0	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0095)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND	ND	ND	-	0.27 J
		6-Nov-08		S-3_110608	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	7	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	ND (0.050)
		19-Nov-09		S-3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.5 J	-	ND (0.5)	ND (1)	0.6 J	ND (0.5)	ND (0.5)	ND (0.0097)	0.16 J	-	0.13 J	0.35 J	-	-	-	-	-	0.29 J
		1-Dec-09		S-3_120109	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		21-Jul-10		S-3_072110	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		17-Nov-10		S-3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1	-	3	ND (1.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.11 J	ND (0.10)	0.092 J	0.13 J	-	-	-	-	-	10.5
		21-Nov-11		S-3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (1.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.081)	ND (0.10)	ND (0.081)	ND (0.10)	-	-	-	-	-	0.28 J
		3-Apr-13		S-3_040313	3.1	0.46 J	0.65 J	3.0	2.9	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.73 J
		29-Aug-13		S-3_082913	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	0.33 J	-	ND (2.0)	ND (0.11)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (3.0)
		30-May-14		S-3	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.53 J	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.025)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.3 J
		12-Jun-15		AOI3_S-3_061215	ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	2.4	-	ND (1.0)	0.053 J	ND (1.0)	ND (1.0)	ND (1.0)	0.063	0.011 J	ND (0.10)	ND (0.10)	0.019 J	ND (0.10)	0.022 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)
		18-Dec-15		AOI3_S-3_121815	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	2.4	-	ND (1.0)	ND (0.11)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.053)	ND (0.053)	ND (0.11)	ND (0.11)	ND (3.0)
		12-May-16		S-3-20160512	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
		22-May-17		S-3-20170522	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.13 J
		25-Jun-18		S-3_20180625	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	S-13	30-Nov-09		S-13_113009	ND (1)	3	35	140	1	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	2.3
		24-May-12		S-13_52412	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	33	-	ND (0.5)	0.1 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	0.2 J	-	-	-	-	-	ND (1.0)
		16-Aug-12		S-13_081612	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	42	-	ND (0.5)	0.2 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	0.2 J	ND (0.09)	ND (0.09)	0.5 J	ND (0.09)	0.2 J	0.2 J	0.3 J	0.2 J	1.3
		1-Nov-12		S-13_110112	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	47.4	-	ND (5.0)	ND (0.10)	ND (5.0)	ND (5.0)	ND (1.0)	ND (0.015) *	ND (0.10)	ND (0.10)	0.22	0.051 J	0.050 J	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.10)	ND (5.0)
		29-Mar-13		S-13_32913	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	47.6	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	5.3
		15-Jun-15		AOI3_S-13_061515	ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	156	-	ND (1.0)	0.12	ND (1.0)	ND (1.0)	ND (1.0)	0.051	ND (0.10)	ND (0.10)	0.021 J	ND (0.10)	0.025 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)
		29-Dec-15		AOI3_S-13_122915	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	94.3	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.019)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)
		25-Sep-18		S-13_20180925	ND (0.2)	-	-	-	240	1,500 E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		31-Oct-18		S-13_20181031	ND (0.2)	-	-	-	120	1,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19-Jun-19		S-13_20190619	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	400	1,200 E	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-20	30-Nov-09		S-20_113009	9	2	3	7	98	-	20	ND (5)	2	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		16-Jul-10		S-20_071610	ND (1)	ND (1)	ND (1)	3	97	-	15	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.030)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)
		22-Aug-13		AOI3-S-20_082213	1.4	1.8	0.31 J	4.1	71.7	-	16.0	ND (0.10)	0.21 J	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	0.713	0.644	ND (0.10)	0.374	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		11-Jun-15		AOI3_S-20_061115	1.8	4.0	0.88 J	9.2	81.8	-	18.0	2.4	2.2	0.81 J	ND (1.0)	0.074	ND (0.51)	1.1	0.80	0.19 J	0.51 J	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (5.0)
		16-Dec-15		AOI3_S-20_121615	1.9	2.2	0.45 J	7.7	71.8	-	20.3	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.019)	ND (0.10)	0.736	0.662	ND (0.10)	0.491	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)
		20-Jun-19		S-20_20190620	0.4 J	2	0.4 J	6	41	770	16	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	1	1	ND (0.1)	0.5	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERP. BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHRENE	BENZO(G,H)PYRENE	LEAD, Dissolved	
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
AOI 3	S-22	30-Nov-09		S-22_113009	33	44	4	110	66	-	9	ND (5)	4	12	ND (1)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		16-Jul-10		S-22_071610	6	7	ND (1)	17	48	-	ND (2)	ND (5)	ND (2)	2	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)	
		7-Apr-11		S-22_04072011	20	43	5	110	75	-	10	3 J	2 J	9	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	1 J	ND (1)	-	-	-	-	-	-	
		7-Apr-11		S-22_04072011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		29-Jun-11		S-22_06292011	28	53	7	140	49	-	10 J	1 J	ND (3)	10 J	ND (3)	ND (0.0096)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	-	-	-	-	-	-	
		29-Jun-11		S-22_06292011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		1-Jun-12		S-22D_6112	20	50	4	120	56	-	12	ND (0.09)	2	14	ND (0.5)	ND (0.0097)	ND (0.09)	1	1	ND (0.09)	-	-	-	-	-	ND (1.0)	
		21-Aug-12		S-22_082112	15	38	3	92	60	-	10	0.4 J	2 J	12	ND (0.5)	ND (0.0096)	ND (0.1)	0.9	0.7	ND (0.1)	0.3 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.0)	
		1-Nov-12		S-22_110112	13.2	33.3	2.0	57.5	72.3	-	10.1	0.28	1.2 J	7.5	ND (1.0)	ND (0.015) *	ND (0.10)	0.48	1.0	0.072 J	0.24	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.10)	ND (5.0)	
		25-Mar-13		S-22_32513	18.6	41.9	4.4	127	67.0	-	12.4	ND (0.10)	2.1	10.7	ND (1.0)	ND (0.020)	ND (0.10)	0.455	0.671	ND (0.10)	0.242	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)	
		11-Jun-15		AOI3_S-22_061115	16.2	28.7	2.9	42.6	79.1	-	9.1	1.9	2.3	7.1	ND (1.0)	0.080	ND (0.10)	0.43	0.72	ND (0.10)	0.44	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
		16-Dec-15		AOI3_S-22_121615	5.6	7.2	0.90 J	16.5	35.7	-	3.2	ND (0.10)	0.45 J	1.9 J	ND (1.0)	ND (0.021)	ND (0.10)	0.178	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)	
		9-Jul-19		S-22_20190709	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-25	1-Jan-85	DM	S-25	ND	ND	ND	5	-	-	-	-	-	-	-	-	ND	-	-	-	-	-	ND	ND	ND	-	-
		1-Jan-86	DM	S-25	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	-	ND	ND	ND	-	-
		1-Jan-88	DM	S-25	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		1-Jan-93	DM	S-25	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-94	DM	S-25	ND (5)	ND (5)	ND (5)	ND (10)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-96	DM	S-25	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		19-Nov-97		S-25	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		12-Nov-98		S-25	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	-	ND (10)	ND (2)	ND (3)	-	-
		2-Dec-99		S-25	ND (1)	ND (1)	ND (1)	ND (2)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		16-Nov-00		S-25	ND (1)	ND (1)	ND (1)	ND (2)	140	-	-	-	-	-	-	-	ND (1)	-	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		14-Nov-01		S-25	ND (10)	ND (10)	ND (10)	ND (20)	110	-	-	-	-	-	-	-	ND (1)	-	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		13-Nov-02		S-25	ND (1)	ND (1)	ND (1)	ND (1)	2	-	-	-	-	-	-	-	ND (2)	-	-	-	-	-	-	-	-	-	-
		13-Nov-03		S-25	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	61.7	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	-	-	-	-	-	-
		21-Oct-04		S-25	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	37	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (9.8)	ND (9.8)	ND (9.8)	-	-	-	-	-	-	ND (5.0)
		8-Nov-05		S-25_11_8_2005	ND (1)	ND (1)	ND (1)	ND (1)	43	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		30-Nov-06		S-25	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	0.8 J	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0097)	1.0 J	ND (1.0)	4.0 J	3.0 J	-	ND	ND	ND	-	0.13 J	
		13-Dec-07		S-25	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	5.0	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND	ND	ND	-	0.13 J	
		4-Nov-08		S-25_110408	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	11	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.9)	-	ND (0.9)	ND (0.9)	-	-	-	-	-	ND (0.050)	
		12-Nov-09		S-25	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (0.060)	-	ND (0.040)	ND (0.10)	-	-	-	-	-	ND (0.050)	
		25-Nov-09		S-25_112509	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		15-Nov-10		S-25	3	ND (0.5)	0.7 J	3	12	-	ND (0.5)	ND (1)	1 J	ND (0.5)	ND (0.5)	ND (0.0097)	0.11 J	ND (0.096)	ND (0.038)	ND (0.096)	-	-	-	-	-	-	0.070 J
		18-Nov-11		S-25	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	3	-	ND (0.5)	ND (0.98)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.078)	ND (0.098)	ND (0.078)	ND (0.098)	-	-	-	-	-	-	ND (0.080)
		3-Apr-13		S-25_040313	1.7	0.32 J	0.49 J	2.4	1.2	-	ND (2.0)	ND (0.10)	0.54 J	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.13 J
		29-Aug-13		AOI3_S-25_082913	ND (1.0)	0.86 J	ND (1.0)	ND (1.0)	1.5	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		30-May-14		S-25	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.49 J	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	6.2
		11-Jun-15		AOI3_S-25_061115	ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (1.0)	ND (1.0)	ND (1.0)	0.017 J	0.038 J	ND (0.10)	ND (0.10)	0.056 J	ND (0.10)	0.022 J	ND (0.10)	0.048 J	ND (0.10)	ND (5.0)	
		15-Dec-15		AOI3_S-25_121515	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.48 J	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)	
		12-May-16		S-25-20160512	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
		22-May-17		S-25-20170522	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.1 J	ND (0.1)	0.1 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.21 J
		26-Jun-18		S_25_20180626		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	2.09	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		26-Jun-18		S-25 DUP_20180626	Field Duplicate	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	2.09	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		9-Jul-19		S-25_20190709		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	0.1 J	ND (0.09)	ND (0.09)	0.2 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE µg/L	TOLUENE µg/L	ETHYLBENZENE µg/L	XYLENES, TOTAL (DIMETHYLBENZENE) µg/L	METHYL TERTIARY BUTYL ETHER µg/L	TERT-BUTYL ALCOHOL µg/L	ISOPROPYLBENZENE (CUMENE) µg/L	NAPHTHALENE µg/L	1,2,4-TRIMETHYLBENZENE µg/L	1,3,5-TRIMETHYLBENZENE µg/L	1,2-DICHLOROETHANE (EDC) µg/L	1,2-DIBROMOETHANE (EDB) µg/L	CHRYSENE µg/L	FLUORENE µg/L	PHENANTHRENE µg/L	PYRENE µg/L	ANTHRACENE µg/L	BENZO(A)ANTHRACENE µg/L	BENZO(A)PYRENE µg/L	BENZO(B)FLUORANTHENE µg/L	BENZO(G,H)PERYLENE µg/L	LEAD, Dissolved µg/L
AOI 3	S-66	1-Jan-85	DM	S-66		ND	ND	ND	ND	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-86	DM	S-66		ND	ND	ND	ND	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-88	DM	S-66		ND	ND	ND	ND	-	-	-	-	-	-	-	ND	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		1-Jan-93	DM	S-66		ND	ND	ND	ND	-	-	-	-	-	-	-	ND	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-94	DM	S-66		ND (5)	ND (5)	ND (5)	ND (10)	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-96	DM	S-66		ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		19-Nov-97		S-66		ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		12-Nov-98		S-66		ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		2-Dec-99		S-66		ND (1)	ND (1)	ND (1)	ND (2)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		16-Nov-00		S-66		ND (1)	ND (1)	ND (1)	ND (2)	10	-	-	-	-	-	-	ND (4)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		14-Nov-01		S-66		ND (1)	ND (1)	ND (1)	ND (2)	1	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		13-Nov-02		S-66		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	ND (2)	-	-	-	-	-	-	-	-	-
		12-Nov-03		S-66		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	ND (2.0)	-	-	-	-	ND	ND	ND	-	-
		19-Oct-04		S-66		ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (9.8)	ND (9.8)	ND (9.8)	-	ND	ND	ND	-	ND (5.0)
		15-Nov-10		S-66		DR	DR	DR	DR	DR	-	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR
		18-Nov-11		S-66		DR	DR	DR	DR	DR	-	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR
		2-Apr-13		S-66		DR	DR	DR	DR	DR	-	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR	DR
		29-May-14		S-66		ND (0.50)	0.88 J	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	-	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	-	-	-	-	-	-	-	-	-
		30-May-14		S-66		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (3.0)
	S-69	1-Jan-85	DM	S-69		ND	ND	ND	ND	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-86	DM	S-69		ND	ND	ND	ND	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-88	DM	S-69		ND	ND	ND	ND	-	-	-	-	-	-	-	ND	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		1-Jan-93	DM	S-69		ND	ND	ND	1	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-94	DM	S-69		21	ND (5)	ND (5)	ND (10)	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		28-Dec-95		S-69		ND	ND	ND	ND	-	-	-	-	-	-	-	ND	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-96	DM	S-69		ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		19-Nov-97		S-69		ND (1)	16	7	27	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		12-Nov-98		S-69		ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		2-Dec-99		S-69		ND (1)	ND (1)	ND (1)	ND (2)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		16-Nov-00		S-69		ND (1)	ND (1)	ND (1)	ND (2)	6.8	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		14-Nov-01		S-69		ND (1)	ND (1)	ND (1)	ND (2)	3	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		13-Nov-02		S-69		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	ND (2)	-	-	-	-	-	-	-	-	-
		12-Nov-03		S-69		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.9	-	-	-	-	-	-	ND (2.0)	-	-	-	-	-	-	-	-	-
		19-Oct-04		S-69		ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (9.9)	ND (9.9)	ND (9.9)	-	-	-	-	-	ND (5.0)

See notes on
last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

				BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PYRENE	LEAD, Dissolved			
Area of Interest	Sample Location	Sample Date	Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
AOI 3	S-69D	8-Nov-05		S-69D_11_8_2005		ND (1)	ND (1)	ND (1)	ND (1)	5	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	-	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	-	
		30-Nov-06		S-69D		ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	4.0 J	-	ND (1.0)	1.0 J	-	-	ND (1.0)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	1.0 J	-	-	-	-	-	0.25 J	
		7-Nov-08		S-69D_110708		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	0.064 J	
		1-Dec-09		S-69D_120109		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		22-Jul-10		S-69D_072210		ND (1)	ND (1)	ND (1)	ND (1)	2	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1.0)	
		7-Apr-11		S-69D_04072011		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	5	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	
		7-Apr-11		S-69D_04072011 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		29-Jun-11		S-69D_06292011		ND (1)	ND (1)	ND (1)	ND (1)	4	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	
		29-Jun-11		S-69D_06292011 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		29-May-12		S-69D_52912		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	5	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	-	-	-	-	-	ND (1.0)	
		17-Aug-12		S-69D_081712		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	6	-	ND (0.5)	0.3 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.0)	
		1-Nov-12		S-69D_110112		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	5.9	-	ND (5.0)	ND (0.10)	ND (5.0)	ND (5.0)	ND (1.0)	ND (0.015) *	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.10)	ND (5.0)	
		28-Mar-13		S-69D_032813		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	8.1	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)	
		9-Jun-15		AOI3_S-69D_060915		5.1	8.1	0.73 J	4.2	8.8	-	ND (1.0)	0.26 J	1.2	0.28 J	ND (1.0)	0.080	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	
		21-Dec-15		AOI3_S69D_122115		338	163	ND (1.0)	ND (1.0)	1.7	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.018)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)	
		26-Feb-19		S-69D_20190226		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	2	-	ND (0.3)	-	-	-	ND (2)	ND (0.3)	-	-	-	-	-	-	-	-	-	-	
		26-Jun-19		S-69D_20190626		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	3	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
		S-112	9-Nov-05		S-112_11_9_2005		6	ND (1)	ND (1)	ND (1)	25	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	5	4.2	0.2	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
			1-Dec-06		S-112		1.0 J	ND (0.7)	ND (0.8)	ND (0.8)	46	-	28	ND (1.0)	-	-	ND (1.0)	ND (0.0099)	ND (1.0)	12	18	2.0 J	-	-	-	-	-	0.13 J
			11-Dec-07		S-112		0.8 J	ND (0.5)	ND (0.5)	ND (0.5)	-	-	21	1.0 J	-	-	ND (0.5)	ND (0.0097)	ND (1.0)	10	16	1.0 J	-	-	-	-	-	0.11 J
	S-280	7-Jul-10		S-280_070710		41,000	6,900	ND (50)	ND (50)	ND (50)	-	ND (100)	6	ND (100)	ND (100)	ND (50)	ND (0.028)	ND (5)	7	12	ND (5)	-	-	-	-	-	ND (1.0)	
		8-Jun-15		AOI3_S-280_060815		6,570	ND (50.0)	ND (50.0)	ND (150)	ND (50.0)	-	ND (50.0)	0.15 J	ND (50.0)	ND (50.0)	ND (50.0)	ND (0.040)	0.048 J	ND (0.24)	0.37	0.21 J	0.038 J	0.058 J	ND (0.24)	ND (0.24)	0.35	ND (5.0)	
		16-Dec-15		AOI3_S-280_121615		28,500	35.1 J	ND (100)	ND (100)	ND (100)	-	ND (100)	ND (0.10)	ND (200)	ND (200)	ND (100)	ND (0.019)	ND (0.10)	ND (0.10)	0.176	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)	
		20-May-16		S-280-20160520		16,000	26 J	ND (25)	ND (25)	ND (25)	-	ND (25)	ND (0.1)	ND (25)	ND (25)	ND (25)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)	
		22-May-17		S-280-20170522		27,000	290	5	19	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)	
		25-Jun-18		S-280_20180625		37,200	ND (50.0)	ND (50.0)	ND (150)	ND (50.0)	-	ND (50.0)	ND (0.258)	ND (50.0)	ND (50.0)	ND (50.0)	ND (0.0102)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (2.00)	
		25-Jun-18		S-280DUP_20180625	Field Duplicate	39,900	ND (50.0)	ND (50.0)	ND (150)	ND (50.0)	-	ND (50.0)	ND (0.250)	ND (50.0)	ND (50.0)	ND (50.0)	ND (0.0100)	ND (0.0500)	ND (0.0500)	0.106	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	0.0563	ND (2.00)	
		27-Feb-19		S-280_20190227		41,000	110	ND (10)	ND (25)	ND (10)	-	ND (15)	-	-	-	ND (100)	ND (15)	-	-	-	-	-	-	-	-	-	-	
		26-Jun-19		S-280_20190626		52,000	68 J	ND (20)	ND (50)	ND (20)	ND (1,000)	ND (30)	2	ND (30)	ND (30)	ND (200)	ND (0.0095)	ND (0.09)	0.1 J	0.3 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)	
	S-280D	23-Jul-10		S-280D_072310		ND (1)	ND (1)	ND (1)	ND (1)	2	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		7-Apr-11		S-280D_04072011		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	
		7-Apr-11		S-280D_04072011 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		28-Jun-11		S-280D_06282011		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	
		28-Jun-11		S-280D_06282011 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		29-May-12		S-280D_52912		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.7 J	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	-	-	-	-	-	-	ND (1.0)
		17-Aug-12		S-280D_081712		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.8 J	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.0)	
		31-Oct-12		S-280D_103112		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (5.0)	ND (0.10)	ND (5.0)	ND (5.0)	ND (1.0)	ND (0.014) *	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.10)	2.9 J	
		26-Mar-13		S-280D_32613		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	0.97 J	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)	
		8-Jun-15		AOI3_S-280D_060815		ND (1.0)	1.5	0.81 J	5.1	ND (1.0)	-	ND (1.0)	0.17	1.7	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
		15-Dec-15		AOI3_S-280D_121515		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.67 J	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.019)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)	
		26-Feb-19		S-280D_20190226		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	0.4 J	-	ND (0.3)	-	-	-	ND (2)	ND (0.3)	-	-	-	-	-	-	-	-	-	-	
		20-Jun-19		S-280D_20190620		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PYRENE	LEAD, Dissolved	
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
AOI 3	S-284D	23-Jul-10		S-284D_072310	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		7-Apr-11		S-284D_04072011	ND (0.5)	ND (0.5)	ND (0.5)	0.5 J	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	
		7-Apr-11		S-284D_04072011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		29-Jun-11		S-284D_06292011	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	
		29-Jun-11		S-284D_06292011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		25-May-12		S-284D_52512	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	0.7 J	3	1 J	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.09)	0.4 J	0.2 J	0.1 J	-	-	-	-	-	-	ND (1.0)
		17-Aug-12		S-284D_081712	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	0.7 J	2	1 J	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.09)	0.2 J	0.1 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.0)	
		31-Oct-12		S-284D_103112	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	1.4 J	2.7	2.4 J	0.65 J	ND (1.0)	ND (0.014) *	ND (0.10)	0.23	0.12	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.10)	ND (5.0)	
		28-Mar-13		S-284D_032813	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	1.3 J	1.92	2.9	0.96 J	ND (1.0)	ND (0.020)	ND (0.10)	0.184	0.154	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)	
		9-Jun-15		AOI3_S-284D_060915	7.9	7.5	0.36 J	2.1 J	ND (1.0)	-	ND (1.0)	ND (1.0)	0.77 J	0.23 J	ND (1.0)	0.057	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	
		23-Dec-15		AOI3_S-284D_122315	62.0	48.6	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.019)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)	
		26-Feb-19		S-284D_20190226	0.3 J	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	-	-	-	ND (2)	ND (0.3)	-	-	-	-	-	-	-	-	-	-	
		19-Jun-19		S-284D_20190619	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	0.6 J	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-411	16-Dec-15		AOI3_S-411_121615	1,020	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	-	ND (5.0)	ND (0.10)	ND (10)	ND (10)	ND (5.0)	ND (0.019)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)
		8-Apr-16		S-411-20160408-WG	2.7	ND (1.0)	ND (1.0)	ND (3.0)	ND (1.0)	-	ND (1.0)	0.44	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040)	ND (0.11)	0.040 J	0.097 J	ND (0.11)	0.017 J	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (5.0)	
		27-Jun-18		S-411_20180627	3.14	ND (1.00)	ND (1.00)	ND (3.00)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		27-Feb-19		S-411_20190227	7	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	-	-	-	ND (2)	ND (0.3)	-	-	-	-	-	-	-	-	-	-	
		26-Jun-19		S-411_20190626	0.9 J	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
		AOI 4	RW-701	19-Oct-10		RW-701_101910	13,000	9,900	1,400	8,200	ND (50)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13-Dec-12				RW-701-121312	10,700	9,260	1,140	6,090	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (3.0)	
26-Feb-14				RW 701	13,900	10,400	1,160	7,290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18-Mar-15				RW-701_20150318	2,800	1,300	830	5,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15-Feb-16				AOI4_RW-701_021516	14,100	8,370	1,380	7,360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17-Aug-16				RW-701-20160817-WG	13,300	8,430	1,160	6,100	4,980	-	ND (50.0)	323	714	209	ND (50.0)	0.491 *	ND (0.0500)	6.45	14.6	0.572	0.995	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)	
12-Oct-16				RW-701-20161012-WG	13,300	6,790	1,250	6,410	5,070	-	ND (500)	734	840	ND (500)	ND (500)	0.537 *	ND (2.50)	105	452	27.8	ND (2.50)	ND (2.50)	ND (2.50)	ND (2.50)	ND (2.50)	ND (2.00)	
17-May-17				RW-701-20170517	16,000	9,100	1,300	6,900	5,100	-	35 J	470	870	250	ND (10)	0.64	0.5 J	91	230	11	35	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	0.17 J	
29-Jun-18				RW-701_20180629	4,570 SL	2,120 SL	554 SL	3,580 SL	ND (200) SL	ND (1,000) HT SL	ND (200) SL	271 SL	615 SL	201 SL	ND (200) SL	ND (0.0100) SL	0.149 SL	48.7 SL	126 SL	6.99 SL	30.6 SL	0.0935 SL	ND (0.0515) SL	ND (0.0515) SL	ND (0.0515) SL	ND (2.00) SL	
29-Jun-18				RW-701_HS_20180629	Hydra Sleeve	4,250 SL	1,380 SL	489 SL	3,160 SL	ND (200) SL	ND (1,000) HT SL	ND (200) SL	12.7 SL	515 SL	ND (200) SL	ND (200) SL	ND (0.0100) SL	ND (0.100) SL	0.372 SL	0.560 SL	0.169 SL	ND (0.100) SL	ND (0.100) SL	ND (0.100) SL	ND (0.100) SL	ND (2.00) SL	
20-Jun-19				RW-701_20190620	1,500	740	230	1,600	180	99 J	14 J	10	380	140	ND (10)	ND (0.027)	0.2 J	18	39	2	6	0.2 J	0.1 J	0.2 J	0.1 J	ND (1.1)	
RW-703	19-Oct-10			RW-703_101910	15,000	12,000	1,500	8,300	340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14-Dec-12			RW-703_12142012	16,400	14,400	2,350	16,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (3.0)	
	26-Feb-14			RW 703	19,200	8,820	616	5,810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	18-Mar-15			RW-703_20150318	9,500	4,800	550	4,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	15-Feb-16			AOI4_RW-703_021516	20,900	11,000	774	6,750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	17-Aug-16			RW-703-20160817-WG	20,700	10,700	989	7,070	1,090	-	31.7	233	1,020	320	ND (25.0)	ND (0.0100) *	ND (0.100)	5.47	15.2	2.25	2.24	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (2.00)	
	12-Oct-16			RW-703-20161012-WG	18,800	9,910	606	5,720	1,110	-	ND (50.0)	232	593	175	ND (50.0)	ND (0.0100) *	ND (0.0500)	5.76	9.64	0.296	0.755	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)	
	20-Jun-19			RW-703_20190620	1,600	1,400	45	1,900	ND (1)	ND (50)	3 J	41	350	150	ND (10)	ND (0.014)	ND (0.1)	16	37	2	6	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
RW-708	21-Oct-10			RW-708_102110	7,400	9,700	2,800	10,000	ND (20)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	13-Dec-12			RW-708-121312	7,360	4,250	1,290	6,760	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (3.0)	
	4-Apr-14			RW-708_040314	656	3,630	640	3,820	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	18-Mar-15			RW-708_20150318	3,900	5,600	1,000	5,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	16-Feb-16			AOI4_RW-708_021616	2,530	4,060	690	3,690	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	13-Oct-16			RW-708-20161013-WG	2,640	2,420	905	5,070	ND (250)	-	ND (250)	507	1,220	379	ND (250)	ND (0.0100) *	0.0999	12.6	36.9	2.33	4.12	0.0682	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)	
	20-Jun-19			RW-708_20190620	510	90	260	1,700	ND (0.2)	12 J	12	91	560	230	ND (2)	ND (0.0095)	ND (0.1)	5	8	0.8	1	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	LEAD, Dissolved
AOI 4	RW-715	21-Oct-10		RW-715_102110	1,500	2,700	650	4,200	ND (5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		13-Dec-12		RW-715-121312	936	351	582	2,110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (3.0)
		1-Apr-14		RW-715_040114	7.8	2.1	9.4	15.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Mar-15		RW-715_20150318	11	1	4	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19-Feb-16		AOI4_RW-715_021916	77.2	58.0	26.6	137	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-Aug-16		RW-715-20160816-WG	1.75	ND (5.00)	ND (1.00)	4.41	ND (1.00)	-	2.22	0.918	1.37	1.08	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		12-Oct-16		RW-715-20161012-WG	115	20.7	8.82	46.4	6.01	-	9.86	5.13	6.35	2.95	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		26-Jun-18		RW-715_20180626	47.8	3.06	2.23	4.08	1.58	-	1.81	1.45	1.53	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		20-Jun-19		RW-715_20190620	0.8 J	0.3 J	ND (0.2)	0.6 J	1	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-38	1-Jan-85	DM	S-38	1,200	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-86	DM	S-38	1,300	160	ND	210	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-88	DM	S-38	930	260	240	280	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		1-Jan-93	DM	S-38	310	120	60	94	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-94	DM	S-38	1 J	ND (5)	ND (5)	ND (10)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		28-Dec-95		S-38	300	42	80	100	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-96	DM	S-38	9.3	5.5	3.9	4.4	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		19-Nov-97		S-38	1,300	720	220	500	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		12-Nov-98		S-38	700	410	220	430	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		2-Dec-99		S-38	89	3	3	5	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		16-Nov-00		S-38	8.5	5.1	2.5	2.5	ND (1)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		14-Nov-01		S-38	1,100	180	260	150	ND (100)	-	-	-	-	-	-	-	1	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		12-Nov-02		S-38	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (2)	-	-	-	-	-	-	-	-	-
		13-Nov-03		S-38	66.6	5.2	23.7	14.2	ND (1.0)	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	-	-	-	-	-
		21-Oct-04		S-38	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		3-May-05		S38-050305	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		8-Nov-05		S-38_11_8_2005	16	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		29-Nov-06		S-38	7.0	3.0 J	17	6.0	ND (0.5)	-	6.0	4.0 J	-	-	ND (1.0)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.18 J
		6-Dec-07		S-38	26	7.0	19	29	-	-	6.0	4.0	-	-	ND (0.5)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	ND (0.047)
		5-Nov-08		S-38_110508	140	21	72	41	ND (0.5)	-	27	14	10	9	ND (0.5)	ND (0.0097)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	ND (0.050)
		13-Nov-09		S-38	3	ND (0.5)	2	1 J	ND (0.5)	-	2 J	ND (1)	1 J	0.6 J	ND (0.5)	ND (0.0097)	0.080 J	-	0.069 J	0.10 J	-	-	-	-	-	0.11 J
		12-Nov-10		S-38	12	3	16	32	ND (0.5)	-	15	4 J	71	32	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	0.14 J
		18-Nov-11		S-38	ND (5.0)	ND (5.0)	4	10	ND (5.0)	-	5	6.4	31	14	ND (0.5)	ND (0.0097)	0.14 J	ND (0.63)	0.31	ND (0.096)	-	-	-	-	-	0.13 J
		3-Apr-13		S-38_040313	1.9	2.2	10.6	23.9	ND (1.0)	-	7.5	1.66	41.3	16.7	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.4
		13-Jun-13		S-38_06_13_2013	0.29 J	ND (1)	0.37 J	0.43 J	ND (1)	-	ND (2)	ND (0.1)	1.2 J	0.49 J	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		30-May-14		S-38	0.55	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	0.180	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	8.1
		18-May-15		S-38_20150518	160	64	79	88	ND (0.5)	-	16	20	33	11	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.095 J
		18-May-16		S-38-20160518	180	96	79	83	ND (0.5)	-	13	26	17	7	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		16-Aug-16		S-38-20160816-WG	198	59.9	49.4	30.6	ND (1.00)	-	10.5	19.2	4.08	5.78	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		10-Oct-16		S-38-20161010-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		17-May-17		S-38-20170517	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	1	0.3 J	0.1 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.099 J
		26-Jun-18		S-38_20180626	72.3	45.4	30.9	30.4	ND (1.00)	-	4.68	6.48	7.22	3.46	ND (1.00)	ND (0.0101)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		28-Jun-19		S-38_20190628	120	230	110	150	ND (1)	92 J	17 J	25	28	12 J	ND (10)	ND (0.0094)	ND (0.1)	0.1 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

				BENZENE	TOUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHRENE	BENZO(G,H)PERYLENE	LEAD, Dissolved		
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
AOI 4	S-38D2	21-Oct-04		S-38 I	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	ND	ND	ND	-	ND (5.0)	
		3-May-05		S38I-050305	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-	
		7-Apr-11		S-38D2_04072011	ND (0.5)	0.8 J	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.9)	ND (0.5)	ND (0.5)	2	ND (0.0099)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	-	-	-	-	-	-	
		7-Apr-11		S-38D2_04072011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		29-Jun-11		S-38D2_06292011	110	14	12	20	ND (1)	-	2 J	ND (0.9)	ND (1)	ND (1)	1 J	ND (0.0095)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	-	-	-	-	-	-
		29-Jun-11		S-38D2_06292011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		24-May-12		S-38D2_52412	43	4	2	4	ND (0.5)	-	0.7 J	0.3 J	ND (0.5)	ND (0.5)	1	ND (0.0098)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	-	-	-	-	-	2.6
		16-Aug-12		S-58D2_081612	60	7	6	12	ND (0.5)	-	1 J	0.5 J	ND (0.5)	ND (0.5)	2	ND (0.0096)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.0)	
		25-Oct-12		S-38D2_102512	12.7	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (5.0)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	3.7	
		5-Feb-13		B-38D2_020513	57.5	7.6	6.9	11.2	ND (1.0)	-	ND (2.0)	-	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	-	-	-	-	-	-	-	-	-	ND (3.0)	
		25-Mar-13		S-38D2_32513	106	15.1	13.3	23.9	ND (1.0)	-	2.5	0.434	0.29 J	0.38 J	1.4	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.7 J	
		18-Aug-16		S-38D2-20160818-WG	7.36	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	0.319 B	ND (1.00)	ND (1.00)	1.57	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)	
		10-Oct-16		S-38D2-20161010-WG	2.58	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	1.02	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)	
		20-Jun-19		S-38D2_20190620	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-39	1-Jan-93	DM	S-39	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		1-Jan-94	DM	S-39	1 J	ND (5)	ND (5)	ND (10)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		28-Dec-95		S-39	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		1-Jan-96	DM	S-39	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		19-Nov-97		S-39	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		12-Nov-98		S-39	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-	
		2-Dec-99		S-39	ND (1)	ND (1)	ND (1)	ND (2)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-	
		16-Nov-00		S-39	ND (1)	ND (1)	ND (1)	ND (2)	1.7	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		14-Nov-01		S-39	ND (1)	ND (1)	ND (1)	ND (2)	1	-	-	-	-	-	-	-	ND (1)	-	-	-	-	-	-	-	-	-	
		12-Nov-02		S-39	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (2)	-	-	-	-	-	-	-	-	-	
		20-Oct-04		S-39	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)	
		3-May-05		S39-050305	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-	
		8-Nov-05		S-39_11_8_2005	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	
		29-Nov-06		S-39	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (2.0)	ND (2.0)	-	0.16 J	
		6-Dec-07		S-39	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND	ND	ND	-	ND (0.047)	
		7-Nov-08		S-39_110708	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	ND (0.050)	
		13-Nov-09		S-39	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (0.059)	-	ND (0.039)	ND (0.098)	-	-	-	-	-	ND (0.050)	
		11-Nov-10		S-39	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.052)	
		18-Nov-11		S-39	2	ND (0.5)	0.7 J	2	ND (0.5)	-	ND (0.5)	ND (0.98)	0.8 J	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.078)	ND (0.098)	ND (0.078)	ND (0.098)	-	-	-	-	-	0.080 J	
		2-Apr-13		S-39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)	
		2-Apr-13		S-39_040213	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	-	
		13-Jun-13		S-39_06_13_2013	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		19-May-14		S-39	ND (0.50)	ND (1.0)	ND (0.50)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.8 J
		18-May-15		S-39_20150518	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		12-May-16		S-39-20160512	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
		10-Aug-16		S-39-20160810-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		11-Oct-16		S-39-20161011-WG	ND (1.00)	ND (5.																					

See notes on
last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 4	S-40	1-Jan-85	DM	S-40	2,800	ND	1,200	6,100	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-86	DM	S-40	600	ND	210	1,520	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-88	DM	S-40	2,000	ND	2,900	4,100	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		1-Jan-93	DM	S-40	78	6	12	16	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-94	DM	S-40	280	55 J	140 J	75 J	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		28-Dec-95		S-40	150	23	29	51.2	-	-	-	-	-	-	-	-	ND	-	-	-	-	1	ND (1)	1	-	-
		1-Jan-96	DM	S-40	12	1.8	3.4	1.9	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		19-Nov-97		S-40	350	ND (100)	ND (100)	56 J	-	-	-	-	-	-	-	-	1	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		12-Nov-98		S-40	630	ND (100)	ND (100)	ND (100)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	2	ND (2)	ND (3)	-	-
		2-Dec-99		S-40	1,000	ND (100)	ND (100)	ND (200)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	2	ND (2)	ND (3)	-	-
		16-Nov-00		S-40	600	ND (100)	ND (100)	ND (200)	ND (100)	-	-	-	-	-	-	-	3	-	-	-	-	ND (13)	ND (10)	ND (14)	-	-
		14-Nov-01		S-40	1,200	76	68	ND (100)	1,200	-	-	-	-	-	-	-	4	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		12-Nov-02		S-40	240	9	7	8	ND (5)	-	-	-	-	-	-	-	ND (15)	-	-	-	-	-	-	-	-	-
		13-Nov-03		S-40-1	987	36.9	19.5	20.9	ND (5.0)	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	-	-	-	-	-
		3-May-05		S40-050305	370	14	21	10	ND (5)	-	40	ND (10)	-	-	ND (5)	ND (0.03)	ND (10)	ND (10)	16	ND (10)	-	-	-	-	-	-
		8-Nov-05		S-40_11_8_2005	436	17	28	56	ND (10)	-	-	12	-	-	ND (10)	ND (0.02)	ND (0.1)	0.9	1.1	0.1	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		6-Dec-06		S-40	220	9.0	8.0	5.0 J	ND (0.5)	-	17.0	ND (1.0)	-	-	ND (1.0)	ND (0.0097)	ND (1.0)	3.0 J	5.0 J	ND (1.0)	-	-	-	-	-	0.18 J
		18-Dec-07		S-40	3.0	ND (0.5)	ND (0.5)	ND (0.5)	-	-	1.0 J	ND (1.0)	-	-	ND (0.5)	ND (0.0095)	ND (0.9)	1.0 J	2.0 J	ND (0.9)	-	-	-	-	-	0.12 J
		7-Nov-08		S-40_110708	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	0.34 J
		13-Nov-09		S-40	5	0.5 J	0.7 J	ND (0.5)	ND (0.5)	-	4	ND (1)	ND (0.5)	0.5 J	ND (0.5)	ND (0.0099)	0.37	-	1.6	ND (0.10)	-	-	-	-	-	0.25 J
		11-Nov-10		S-40	72	3	2	1	ND (0.5)	-	12	ND (1)	ND (0.5)	0.7 J	ND (0.5)	ND (0.0095)	1 J	6	12	2 J	-	-	-	-	-	0.074 J
		28-Nov-11		S-40	ND (0.5)	2	ND (0.5)	ND (0.5)	ND (0.5)	-	0.6 J	ND (9.6)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	6.0	6.7	9.2	ND (0.096)	-	-	-	-	-	ND (0.080)
		8-Apr-13		S-40_040813	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.1)	0.135	0.255	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		17-Jun-13		S-40_06_17_2013	0.58 J	ND (1)	ND (1)	ND (1)	ND (1)	-	1.3 J	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	0.31	0.586	1.27	0.418	0.307	0.236	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		18-May-15		S-40_20150518	10	2	ND (0.5)	ND (0.5)	ND (0.5)	-	6	0.6	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	0.4 J	0.6	0.2 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.19 J
		19-May-16		S-40-20160519	18	4	1	1	ND (0.5)	-	16	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.2 J	1	2	0.4 J	0.5 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
	S-120	20-Oct-04		S-120	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		3-May-05		S120-050305	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		29-Nov-06		S-120	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.16 J
		14-Dec-07		S-120	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0095)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	-	-	-	-	-	0.10 J
		5-Nov-08		S-120_110508	0.5 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	ND (0.050)
		13-Nov-09		S-120	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.057)	-	ND (0.038)	ND (0.095)	-	-	-	-	-	ND (0.050)
		11-Nov-10		S-120	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.052)
		18-Nov-11		S-120	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.95)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.076)	ND (0.095)	ND (0.076)	ND (0.095)	-	-	-	-	-	ND (0.080)
		2-Apr-13		S-120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		2-Apr-13		S-120_040213	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	1.39	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	-
		12-Jun-13		S-120_06_12_2013	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		21-May-14		S-120	7.8	1.1	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		18-May-15		S-120_20150518	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		18-May-16		S-120-20160518	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		12-Aug-16		S-120-20160812-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		11-Oct-16		S-120-20161011-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		11-Oct-16		S-120-20161011-WG-DUP	Field Duplicate	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	LEAD, Dissolved
AOI 4	S-122	20-Oct-04	S-122		ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		3-May-05	S122-050305		ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		29-Nov-06	S-122		ND (0.5)	ND (0.7)	1.0 J	2.0 J	ND (0.5)	-	4.0 J	2.0 J	-	-	ND (1.0)	ND (0.0098)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.13 J
		6-Dec-07	S-122		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0096)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.14 J
		5-Nov-08	S-122_110508		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	ND (0.050)
		13-Nov-09	S-122		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.059)	-	ND (0.039)	ND (0.098)	-	-	-	-	-	ND (0.050)
		12-Nov-10	S-122		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	1 J	ND (1)	2	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.052)
		18-Nov-11	S-122		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.95)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.076)	0.10 J	ND (0.076)	ND (0.095)	-	-	-	-	-	ND (0.080)
		2-Apr-13	S-122		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		2-Apr-13	S-122_040213		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	-
		13-Jun-13	S-122_06_13_2013		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		19-May-14	S-122		ND (0.50)	ND (1.0)	ND (0.50)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		18-May-15	S-122_20150518		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.2 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		12-May-16	S-122-20160512		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)
	S-218D	9-Aug-16	S-122-20160809-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	OE ND (2.00)
		13-Oct-16	S-122-20161013-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		13-Oct-16	S-122-20161013-WG-DUP	Field Duplicate	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		26-Apr-16	S-218D-20160426		ND (0.5)	6	ND (0.5)	ND (0.5)	65	-	ND (1)	ND (0.1)	ND (1)	ND (1)	ND (0.5)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	12.7 J
		30-Aug-16	S-218D-HS-20160830-WG	Hydra Sleeve	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	92.5	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		31-Aug-16	S-218D-20160831-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	53.7	-	ND (1.00)	0.529	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	0.192	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		11-Oct-16	S-218D-20161011-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	55.3	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		11-Oct-16	S-218D-HS-20161011-WG	Hydra Sleeve	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	51.1	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		28-Jun-18	S-218D_20180628		-	-	-	-	48.6	ND (5.00) OE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		28-Jun-18	S-218D-HS_20180628	Hydra Sleeve	-	-	-	-	50.6	ND (5.00) OE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		26-Jun-19	S-218D_20190626		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	41	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-222	1-Aug-05	S-222-080105		ND (5)	ND (5)	ND (5)	10	ND (5)	-	ND (5)	ND (6)	-	-	ND (5)	ND (0.029)	ND (6)	ND (6)	ND (6)	ND (6)	-	-	-	-	-	-
		8-Nov-05	S-222_11_8_2005		12	5	6	13	ND (1)	-	-	12	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		30-Nov-06	S-222		0.8 J	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0098)	ND (1.0)	ND (1.0)	3.0 J	3.0 J	-	-	-	-	-	0.16 J
		6-Dec-07	S-222		3.0	1.0	ND (0.5)	0.5 J	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0098)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.11 J
		5-Nov-08	S-222_110508		3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	0.050 J
		12-Nov-09	S-222		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (0.058)	-	ND (0.080)	ND (0.096)	-	-	-	-	-	ND (0.050)
		15-Nov-10	S-222		15	2	4	16	ND (0.5)	-	ND (0.5)	ND (0.96)	4	1 J	ND (0.5)	ND (0.0097)	ND (0.058)	ND (0.096)	0.044 J	ND (0.096)	-	-	-	-	-	ND (0.052)
		18-Nov-11	S-222		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.95)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.076)	ND (0.095)	ND (0.076)	ND (0.095)	-	-	-	-	-	0.87 J
		3-Apr-13	S-222_040313		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.3
		18-Jun-13	S-222_06_18_2013		0.91 J	0.43 J	0.23 J	0.86 J	ND (1)	-	ND (2)	0.291	0.79 J	ND (2)	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		21-May-14	S-222		29.7	6.8	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		18-May-15	S-222_20150518		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		18-May-16	S-222-20160518		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		17-Aug-16	S-222-20160817-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		13-Oct-16	S-222-20161013-WG		ND (1.00)	ND (5.00)	1.16	4.73	ND (1.00)	-	ND (1.00)	0.704	2.42	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	0.482	0.468	0.0905	0.150	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		17-May-17	S-222-20170517		3	2	2	8	ND (0.5)	-	ND (0.5)	0.3 J	2 J	0.6 J	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
AOI 4	S-223	1-Aug-05	S-223-080105		6,100	9,600	1,300	6,900	ND (50)	-	ND (50)	430	-	-	ND (50)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-
		29-Nov-06	S-223		4,300	2,800	930	4,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		14-Dec-07	S-223		4,700	2,000	900	4,500	-	-	33	380	-	-	ND (5.0)	ND (0.0094)	ND (1.0)	2.0 J	2.0 J	ND (1.0)	-	-	-	-	-	0.060 J
		5-Nov-08	S-223_110508		8,100	1,700	1,100	5,100	ND (5)	-	38	380	1,000	330	ND (5)	ND (0.010)	ND (1)	-	1 J	ND (1)	-	-	-	-	-	0.10 J
		12-Nov-09	S-223		3,900	460	850	3,700	ND (3)	-	36	330	1,000	360	ND (3)	ND (0.0099)	0.47	-	2.3	ND (0.095)	-	-	-	-	-	0.098 J
		15-Nov-10	S-223		3,300	410	890	3,800	ND (3)	-	32	170	920	360	ND (3)	ND (0.0097)	0.14 J	3.4	0.86	1.1	-	-	-	-	-	0.095 J
		18-Nov-11	S-223		1,100	110	440	1,900	ND (5)	-	25	170	780	350	ND (5)	ND (0.0096)	ND (0.077)	3.7	1.4	ND (0.096)	-	-	-	-	-	ND (0.080)
		14-Dec-12	S-223_12142012		6,270	408	1,250	5,490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (3.0)
		3-Apr-13	S-223_040313		5,530	337	866	4,040	ND (40)	-	29.3 J	130	1,070	351	ND (40)	ND (0.020)	ND (0.10)	0.625	0.601	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.26 J
		18-Jun-13	S-223_06_18_2013		7,400	2,850	709	2,930	ND (50)	-	23.3 J	159	766	269	ND (50)	ND (0.02)	ND (0.1)	0.772	0.663	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		15-Jan-14	S-223_010714		6,280	2,030	960	3,860	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		4-Apr-14	S223_040414		2,320	1,020	259	1,370	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		30-May-14	S-223		1,470	108	396	1,300	ND (10)	-	23.0	38.6	812	314	ND (10)	ND (0.020)	ND (0.10)	0.940	0.770	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	6.8
		12-Aug-14	S223_081214		4,240	294	713	2,820	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		6-Oct-14	S-223_100614		3,000	219	642	2,870	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		6-Jan-15	S-223-20150106		11,400	5,410	871	3,980	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-Apr-15	S-223-20150416		1,100	190	330	1,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		21-Jul-15	S-223_20150721		3,600	570	400	1,900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19-Oct-15	S-223-20151019		5,900	1,700	440	2,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		8-Feb-16	S-223-20160208		1,300	200	250	940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		26-Apr-16	S-223-20160426		2,300	480	380	1,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19-May-16	S-223-20160519		2,200	330	440	1,500	ND (10)	-	16 J	87	490	170	ND (10)	ND (0.0097)	ND (0.1)	0.8	0.2 J	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		17-Aug-16	S-223-20160817-WG		1,520	183	496	1,500	ND (5.00)	-	17.7	34.2	533	187	ND (5.00)	ND (0.0100) *	ND (0.0500)	0.764	0.170	ND (0.0500)	0.0978	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		13-Oct-16	S-223-20161013-WG		401	69.1	193	550	ND (10.0)	-	ND (10.0)	1.41	280	105	ND (10.0)	ND (0.0100) *	ND (0.0500)	0.171	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		17-May-17	S-223-20170517		37	9	26	87	ND (0.5)	-	1 J	0.1 J	50	21	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.40 J
		25-Jan-18	S-223_20180125		1,700	190	400	1,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2-Apr-18	S-223-20180402		1,800	150	530	1,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		27-Jun-18	S-223_20180627		1,830	136	739	1,740	ND (1.00)	-	25.5	56.6	822	241	ND (1.00)	ND (0.0100)	ND (0.0500)	0.701	ND (0.0500)	ND (0.0500)	0.0826	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		27-Jun-18	S-223_DUP_20180627	Field Duplicate	1,850	145	764	1,790	ND (1.00)	-	27.1	78.1	807	245	ND (1.00)	ND (0.0100)	ND (0.0500)	0.707	0.0986	ND (0.0500)	0.0799	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		28-Nov-18	S-223_20181128		1,500	220	370	980	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Jan-19	S-223-20190118-WG		1,680	221	601	1,400	ND (50.0)	ND (250)	ND (50.0)	-	664	232	ND (50.0)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-
		28-Jun-19	S-223_20190628		2,200	310	410	990	ND (2)	170 J	15 J	99	600	210	ND (20)	0.014 J	ND (0.1)	1	0.6	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
AOI 4	S-224	1-Aug-05	S-224-080105		2,000	2,800	690	3,500	ND (10)	-	44	100	-	-	ND (10)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-
		29-Nov-06	S-224		1,200	1,400	500	2,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		14-Dec-12	S-224_12142012		527	169	501	1,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (3.0)
		15-Jan-14	S-224_010714		405	127	289	697	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		4-Apr-14	S224_040414		110	45.0	182	363	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		12-Aug-14	S224_081214		114	35.0	81.9	197	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		6-Oct-14	S-224_100614		431	104	329	711	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		6-Jan-15	S-224-20150106		255	150	213	457	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-Apr-15	S-224-20150416		480	84	300	370	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		21-Jul-15	S-224_20150721		200	47	160	290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19-Oct-15	S-224-20151019		88	30	130	190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		8-Feb-16	S-224-20160208		630	110	380	520	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		26-Apr-16	S-224-20160426		240	64	300	480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-Aug-16	S-224-20160816-WG		317	57.3	192	290	ND (1.00)	-	17.9	41.2	136	28.9	ND (1.00)	ND (0.0100) *	ND (0.0500)	0.986	0.942	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		11-Oct-16	S-224-20161011-WG		169	41.0	7.14	241	ND (1.00)	-	13.6	17.2	101	26.0	ND (1.00)	ND (0.0100) *	ND (0.0500)	0.502	0.497	0.0599	0.0746	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		25-Jan-18	S-224_20180125		160	43	170	260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2-Apr-18	S-224-20180402		370	110	410	330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		28-Nov-18	S-224_20181128		240	49	170	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Jan-19	S-224-20190118-WG		107	51.5	104	317	ND (1.00)	209	8.25	-	131	37.3	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-
	S-239	29-Nov-06	S-239		12	260	310	1,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		14-Dec-12	S-239_12142012		2.1	13.0	21.2	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (3.0)
		17-Jun-13	S-239_06_17_2013		ND (1)	0.53 J	3.3	9.8	ND (1)	-	ND (2)	ND (0.1)	7	2.3	ND (1)	ND (0.02)	0.241	ND (0.1)	0.195	0.323	ND (0.1)	0.18	0.193	0.242	0.18	ND (3)
		15-Jan-14	S-239_010714		ND (1.0)	ND (1.0)	ND (1.0)	0.74 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		4-Apr-14	S239_040414		0.49 J	ND (1.0)	0.79	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		29-May-14	S-239		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	0.95 J	0.35 J	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	3.7
		12-Aug-14	S239_081214		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		6-Oct-14	S-239_100614		ND (0.50)	ND (1.0)	ND (1.0)	0.72 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		6-Jan-15	S-239-20150106		ND (0.50)	0.26 J	0.51 J	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-Apr-15	S-239-20150416		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		21-Jul-15	S-239_20150721		5	3	4	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19-Oct-15	S-239-20151019		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		8-Feb-16	S-239-20160208		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		26-Apr-16	S-239-20160426		ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		17-Aug-16	S-239-20160817-WG		2.71	ND (5.00)	2.06	9.29	ND (1.00)	-	ND (1.00)	0.739	2.26	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	0.119	0.0656	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		13-Oct-16	S-239-20161013-WG		1.15	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		25-Jan-18	S-239_20180125		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2-Apr-18	S-239-20180402		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		28-Nov-18	S-239_20181128		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Jan-19	S-239-20190118-WG		25.1	21.9	67.3	196	ND (1.00)	ND (5.00)	3.72	-	86.7	28.8	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-
	S-369	16-Aug-16	S-369-20160816-WG		2,370	ND (125)	ND (25.0)	ND (75.0)	ND (25.0)	-	71.7	11.9	ND (25.0)	ND (25.0)	ND (25.0)	ND (0.0100) *	0.0860	2.39	3.12	0.364	0.576	0.0811	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		10-Oct-16	S-369-20161010-WG		1,870	ND (100)	ND (20.0)	ND (60.0)	ND (20.0)	-	62.4	10.4	ND (20.0)	ND (20.0)	ND (20.0)	ND (0.0100) *	0.153	3.74	4.65	0.678	0.518	0.152	0.0695	0.0654	ND (0.0500)	ND (2.00)
		17-May-17	S-369-20170517		1,900	62	17	42	47	-	71	3	ND (5)	5 J	ND (5)	ND (0.0097)	0.1 J	2	2	0.4 J	0.6	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	0.67 J
		27-Jun-18	S-369_20180627		1,460	54.5	13.3	33.2	62.3	-	72.8	3.13	ND (1.00)	3.73	ND (1.00)	ND (0.0100)	ND (0.0500)	2.08	1.26	0.0772	0.236	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		19-Jun-19	S-369_20190619		740	40	12	24 J	11	1,100	68	ND (0.1)	ND (2)	3 J	ND (10)	ND (0.0095)	ND (0.1)	2	1	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-374	8-Nov-18	S-374-20181108-WG		177	1,820	1,360	4,170	ND (1.0)	-	93.4	-	1,040	179	ND (1.0)	0.053	-	-	-	-	-	-	-	-	-	-
		16-Jan-19	S-374-20190116-WG		312	903	1,530	4,060	ND (20.0)	ND (100)	102	-	1,110	237	ND (20.0)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-
		19-Jun-19	S-374_20190619		200	240	1,000	2,100	ND (1)	ND (50)	100	120	1,000	240	ND (10)	0.021 J	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-375	8-Nov-18	S-375-20181108-WG		1,900	3,340	641	4,820	0.58 J	-	31.7	-	743	231	ND (1.0)	0.075	-	-	-	-	-	-	-	-	-	-
		16-Jan-19	S-375-20190116-WG		1,090	2,920	1,190	6,270	ND (1.00)	ND (5.00)	43.7	-	823	239	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-
		19-Jun-19	S-375_20190619		440	1,000	990	4,400	ND (0.2)	60	46	230	760	250	ND (2)	ND (0.019)	ND (0.1)	0.3 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHRENE	BENZO(G,H,I)PERYLENE	LEAD, Dissolved	
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
AOI 4	S-376	8-Nov-18		S-376-20181108-WG	101	1,660	302	3,930	3.4	-	14.2	-	759	284	ND (1.0)	0.079	-	-	-	-	-	-	-	-	-	-	
		16-Jan-19		S-376-20190116-WG	198	2,310	1,160	6,220	ND (10.0)	ND (50.0)	26.9	-	1,210	373	ND (10.0)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	
		9-Jul-19		S-376_SL_20190709	150 SL	2,000 SL	970 SL	6,100 SL	ND (1) SL	69 J SL	25 J SL	250 SL	1,300 SL	420 SL	ND (10) SL	ND (0.0094) SL	ND (0.1) SL	0.2 J SL	0.3 J SL	0.3 J SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (1.1) SL	
	S-377	12-Nov-18		S-377-20181112-WG	966	267	290	873	ND (1.00)	-	41.8	-	405	194	ND (1.00)	ND (1.00)	-	-	-	-	-	-	-	-	-	-	
		17-Jan-19		S-377-20190117-WG	109	61.0	221	494	ND (5.00)	ND (25.0)	37.8	-	284	129	ND (5.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	
		19-Jun-19		S-377_20190619	860	240	110	410	12	130	28	33	89	77	ND (10)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-378	12-Nov-18		S-378-20181112-WG	1,890	504	1,040	1,520	10.6	-	57.0	-	898	337	ND (10.0)	ND (10.0)	-	-	-	-	-	-	-	-	-	-	
		17-Jan-19		S-378-20190117-WG	1,390	325	1,090	1,270	ND (5.00)	130	55.0	-	722	289	ND (5.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	
		19-Jun-19		S-378_20190619	3,000	450	1,300	1,300	ND (1)	130	48	320	890	320	ND (10)	ND (0.0095)	ND (0.1)	0.1 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-380	12-Jun-13		S-380_06_12_2013	2.1	0.27 J	0.26 J	0.45 J	ND (1)	-	ND (2)	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.1)	0.3	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)	
		12-Aug-16		S-380-20160812-WG	ND (1.00)	14.7	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	0.0698	ND (0.0500)	0.0745 B	0.126	ND (0.0500)	0.0689 B	0.0617	0.0939	0.0561	ND (2.00)	
		10-Oct-16		S-380-20161010-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)	
		10-Oct-16		S-380-20161010-WG-DUP	Field Duplicate	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	0.0609	0.0809	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		17-May-17		S-380-20170517		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.3 J	ND (0.1)	0.3 J	0.4 J	ND (0.1)	0.2 J	0.2 J	0.3 J	0.2 J	0.16 J
		26-Jun-18		S-380_20180626		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	0.0625	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	AOI 5	A-4	22-Oct-04		A-4	1.2	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	5.5 J	10	17	13	-	-	-	-	-	ND (5.0)
17-Jul-14				A-4_071714	ND (0.50)	0.25 J	ND (1.0)	ND (1.0)	ND (1.0)	-	0.77 J	ND (1.0)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	45.5	28.9	62.5	215	ND (1.0)	33.0	77.2	84.8	29.4	30.6	
15-Oct-14				A-4_101514	0.27 J	0.28 J	ND (1.0)	0.98 J	ND (1.0)	-	4.6	ND (0.50)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	18.9	19.0	38.2	45.8	15.3	19.6	13.0	19.0	7.55	21.8	
11-Jul-19				A-4_20190711	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
A-17		1-Jan-95	DM	A-17	WI	WI	WI	WI	WI	-	WI	WI	-	-	WI	WI	WI	WI	WI	WI	-	-	-	-	-	WI	
		1-Jan-96	DM	A-17	ND (1)	ND (1)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		1-Jan-97	DM	A-17	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		1-Jan-98	DM	A-17	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		1-Jan-99	DM	A-17	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		1-Jan-00	DM	A-17	ND (1)	ND (1)	ND (1)	ND (1)	4	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-	
		1-Jan-01	DM	A-17	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	2	-	-	-	-	2	2	ND (3)	-	-	
		1-Jan-02	DM	A-17	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (2)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		13-Nov-03		A-17	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-	
		27-Oct-04		A-17	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)	
		9-Nov-05		A-17_11_9_2005	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	0.2	ND (0.1)	-	
		6-Dec-06		A-17	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	-	-	-	-	-	ND (0.0099)	-	-	-	-	-	-	-	-	-	0.14 J	
		6-Dec-06		A-17_1262006	-	-	-	-	-	-	ND (1)	ND (1) *	-	-	ND (1)	-	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	
		6-Dec-07		A-17	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.19 J	
		3-Nov-08		A-17_110308	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.7 J	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	ND (0.050)	
		17-Nov-10		A-17	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.49	0.73	0.5	1.2	-	-	-	-	-	3.1	
		16-Nov-11		A-17	WELDESTROYED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A-19D		11-Apr-11		A-19D_04112011	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	43	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	
		11-Apr-11		A-19D_04112011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		1-Jul-11		A-19D_07012011	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	40	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	
		1-Jul-11		A-19D_07012011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		31-May-12		A-19D_53112	ND (1)	ND (1)	ND (1)	ND (1)	64	-	ND (2)	ND (0.5)	ND (2)	ND (2)	ND (1)	ND (0.030)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	-	-	-	ND (1.0)	
		20-Aug-12		A-19D_082012	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	53	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.0)	
		26-Oct-12		A-19D_102612	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	49.8	-	ND (2.0)	ND (5.0)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (3.0)	
	29-Mar-13		A-19D_032913	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	56.7	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (1.0)	7.2		
28-Jun-19		A-19D_20190628	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	20	330	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)			

See notes on
last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE µg/L	TOLUENE µg/L	ETHYLBENZENE µg/L	XYLENES, TOTAL (DIMETHYLBENZENE) µg/L	METHYL TERTIARY BUTYL ETHER µg/L	TERT-BUTYL ALCOHOL µg/L	ISOPROPYLBENZENE (CUMENE) µg/L	NAPHTHALENE µg/L	1,2,4-TRIMETHYLBENZENE µg/L	1,3,5-TRIMETHYLBENZENE µg/L	1,2-DICHLOROETHANE (EDC) µg/L	1,2-DIBROMOETHANE (EDB) µg/L	CHRYSENE µg/L	FLUORENE µg/L	PHENANTHRENE µg/L	PYRENE µg/L	ANTHRACENE µg/L	BENZO(A)ANTHRACENE µg/L	BENZO(A)PYRENE µg/L	BENZO(B)FLUORANTHENE µg/L	BENZO(G,H,I)PERYLENE µg/L	LEAD, Dissolved µg/L
AOI 5	A-21D	5-Dec-06		A-21D_1252006	ND (1)	ND (1)	ND (1)	ND (3)	ND (1)	-	ND (1)	ND (1) *	-	-	ND (1)	-	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.8)
		7-May-07		A-21D_050707	ND (5)	ND (5)	ND (5)	ND (5)	0.57 J	-	ND (5)	ND (1)	-	-	ND (5)	ND (0.05)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.8)
		11-Apr-11		A-21D_04112011	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
		11-Apr-11		A-21D_04112011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		1-Jul-11		A-21D_07012011	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
		1-Jul-11		A-21D_07012011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		30-May-12		A-21D_53012	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	0.1 J	ND (0.1)	-	-	-	-	-	ND (1.0)
		21-Aug-12		A-21D_082112	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	0.2 J	0.1 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.0)
		1-Nov-12		A-21D_111112	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	2.1	-	ND (5.0)	ND (0.10)	ND (5.0)	ND (5.0)	ND (1.0)	ND (0.014) *	ND (0.10)	ND (0.10)	0.13	0.041 J	0.042 J	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.10)	ND (5.0)
		29-Mar-13		A-21D_32913	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	2.3	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	0.173	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	7.6
		10-Jul-19		A-21D_20190710	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	3	22 J	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	0.3 J	0.1 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	A-133	3-May-07		A-133_050307	1.2 J	ND (5)	ND (5)	ND (5)	ND (5)	-	12	ND (10) D	-	-	ND (5)	ND (0.05)	130 D	170 D	200 D	110 D	-	-	-	-	-	ND (0.8)
		17-Nov-10		A-133	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	3	ND (20)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	71	48	49	ND (170)	-	-	-	-	-	ND (0.052)
		16-Nov-11		A-133	ND (0.5)	0.5 J	ND (0.5)	ND (0.5)	ND (0.5)	-	2	ND (400)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	2,200	760	1,000	ND (4,000)	-	-	-	-	-	4.2
		8-Apr-13		A-133_040813	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	0.574	ND (0.1)	ND (0.1)	0.959	ND (0.1)	0.173	0.269	ND (0.1)	ND (0.1)	ND (3)
		2-Jun-14		A-133	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	0.39 J	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	23.6	8.11	9.18	24.1	2.58	7.36	11.1	4.40	6.58	3.4
		24-Jul-14		A-133_072414	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	0.60 J	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	0.644	0.351	ND (0.10)	1.09	ND (0.10)	0.210	0.192	0.111	ND (0.10)	ND (3.0)
		21-Oct-14		A-133_102114	0.38 J	0.86 J	ND (1.0)	ND (1.0)	ND (1.0)	-	0.49 J	0.125	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	1.19	0.321	0.195	2.09	0.621	1.35	1.18	1.43	0.877	ND (3.0)
		21-May-15		A-133_20150521	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.1 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	3	2	0.6	3	0.5	0.8	1	0.5 J	0.7	0.10 J
		19-May-16		A-133-20160519	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.9	ND (0.1)	ND (0.1)	1	ND (0.1)	0.2 J	0.4 J	0.2 J	0.2 J	ND (0.13)
		19-May-16		A-133-20160519-DUP	Field Duplicate	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.0097)	1	ND (0.1)	ND (0.1)	1	ND (0.1)	0.2 J	0.3 J	0.2 J	0.2 J	ND (0.13)
		22-May-17		A-133-20170522	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	1	ND (0.1)	ND (0.1)	1	ND (0.1)	0.3 J	0.5 J	0.2 J	0.6	ND (0.090)
		27-Jun-18		A-133_20180627	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (2.50)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	6.55	1.43	ND (0.500)	9.83	ND (0.500)	2.49	2.38	1.50	2.14	ND (2.00)
	A-134	5-Dec-06		A-134_1252006	24	9.9	0.85 J	18	ND (1)	-	63	0.69 J *	-	-	ND (1)	-	ND (1)	6.8	3	8.1	-	-	-	-	-	ND (0.8)
		3-May-07		A-134_050307	50	13	1.5 J	28	ND (5)	-	83	ND (1)	-	-	ND (5)	ND (0.05)	ND (1)	9	3.7	ND (1)	-	-	-	-	-	ND (0.8)
		24-Jul-14		A-134_072414	7.0	6.8	0.62 J	15.9	ND (1.0)	-	71.6	ND (0.10)	1.8 J	1.1 J	ND (1.0)	ND (0.020)	0.152	16.7	14.8	1.42	2.91	0.196	0.127	0.147	ND (0.10)	ND (3.0)
		13-Oct-14		A-134_101314	64.6	73.5	3.7	26.1	ND (1.0)	-	49.6	ND (0.10)	2.4	2.0	ND (1.0)	ND (0.020)	0.731	19.6	22.5	4.05	4.68	1.27	0.660	0.747	0.225	5.3
		27-Jun-18		A-134_20180627	10.7	6.26	ND (1.00)	11.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		27-Jun-19		A-134_20190627	26	16	2	27	ND (0.2)	-	110	ND (0.09)	5	3 J	ND (2)	ND (0.0094)	ND (0.09)	2	ND (0.09)	1	0.4 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	A-136	1-Jan-95	DM	A-136	ND	ND	ND	0.8 J	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-96	DM	A-136	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-97	DM	A-136	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	2	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-98	DM	A-136	2	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-99	DM	A-136	ND (20)	ND (20)	ND (20)	ND (20)	-	-	-	-	-	-	-	-	9	-	-	-	-	7	5	6	-	-
		3-Nov-08		A-136_110308	ND (0.5)	ND (0.5)	ND (0.5)	0.6 J	ND (0.5)	-	7	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	6	-	7	15	-	-	-	-	-	0.41 J
		1-Aug-14		A-136_080114	ND (0.50) SL	ND (1.0) SL	ND (1.0) SL	1.1 SL	ND (1.0) SL	-	19.5 SL	ND (0.11) SL	0.48 J SL	ND (2.0) SL	ND (1.0) SL	ND (0.020) SL	1.53 SL	2.79 SL	1.24 SL	7.00 SL	1.28 SL	1.39 SL	1.07 SL	1.52 SL	0.900 SL	1.4 J SL
		17-Oct-14		A-136_101714	ND (0.50)	ND (1.0)	ND (1.0)	0.76 J	ND (1.0)	-	8.4	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	2.01	3.22	2.23	4.22	1.41	1.65	0.651	1.23	0.459	3.4
		21-Jan-16		AOI5_A-136_012116	ND (0.50) SL	ND (1.0) SL	ND (1.0) SL	1.0 SL	ND (1.0) SL	-	12.6 SL	ND (0.10) SL	ND (2.0) SL	ND (2.0) SL	ND (1.0) SL	ND (0.019) SL	0.441 SL	2.09 SL	0.592 SL	1.52 SL	0.817 SL	0.452 SL	0.227 SL	0.400 SL	0.168 SL	ND (3.0) SL

See notes on
last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 5	A-137	1-Jan-95	DM	A-137	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-96	DM	A-137	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	2	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-97	DM	A-137	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	2	-	-	-	-	1	ND (1)	2	-	-
		1-Jan-98	DM	A-137	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-99	DM	A-137	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	2	-	-	-	-	2	2	2	-	-
		1-Jan-00	DM	A-137	ND (1)	ND (1)	ND (1)	ND (1)	250	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		1-Jan-01	DM	A-137	ND (1)	ND (1)	ND (1)	ND (1)	5	-	-	-	-	-	-	-	2	-	-	-	-	2	ND (2)	ND (3)	-	-
		1-Jan-02	DM	A-137	ND (1)	ND (1)	ND (1)	ND (1)	6	-	-	-	-	-	-	-	2	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		13-Nov-03		A-137	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		22-Oct-04		A-137	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	0.45 J	ND (9.9)	ND (9.9)	ND (9.9)	-	-	-	-	-	ND (5.0)
		9-Nov-05		A-137_11_9_2005	ND (1)	ND (1)	ND (1)	ND (1)	4	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	0.2	0.2	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		4-Dec-06		A-137	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	1.0 J	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0096)	1.0 J	ND (1.0)	2.0 J	3.0 J	-	-	-	-	-	0.25 J
		7-May-07		A-137_050707	ND (5)	ND (5)	ND (5)	ND (5)	0.6 J	-	ND (5)	ND (1)	-	-	ND (5)	ND (0.05)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.8)
		6-Dec-07		A-137	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0097)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	-	-	-	-	-	0.25 J
		3-Nov-08		A-137_110308	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	0.17 J
		17-Nov-10		A-137	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	3	-	ND (0.5)	ND (1.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	0.085 J	0.16 J	0.41	0.25 J	-	-	-	-	-	0.50 J
		16-Nov-11		A-137	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (0.97)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.078)	0.17 J	0.46	0.22 J	-	-	-	-	-	3.8
		8-Apr-13		A-137_040813	ND (1)	ND (1)	ND (1)	ND (1)	0.84 J	-	ND (2)	ND (0.11)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (3)
		2-Jun-14		A-137	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.43 J	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	0.245	0.138	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.9 J
		17-Jul-14		A-137_071714	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.80 J	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	0.310	0.153	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		15-Oct-14		A-137_101514	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.89 J	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	0.215	0.137	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		21-May-15		A-137_20150521	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.7 J	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	0.1 J	0.3 J	0.3 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.30 J
		19-May-16		A-137-20160519	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	0.3 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		22-May-17		A-137-20170522	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.8 J	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	0.1 J	0.4 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		27-Jun-18		A-137_20180627	ND (1.00)	1.97	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	0.663	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	0.231	0.629	0.226	0.123	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	A-138	24-Apr-09		A-138	-	-	-	-	-	-	420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		17-Nov-10		A-138	6	ND (0.5)	10	27	1 J	-	7,900	1.1 J	3	3	ND (0.5)	ND (0.0097)	0.16 J	1.5	1.5	ND (0.70)	-	-	-	-	-	0.17 J
		21-Nov-11		A-138	4 J	ND (0.5)	3 J	12	ND (0.5)	-	1,700	ND (9.6)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	2.9	ND (0.96)	2.6	2.2 J	-	-	-	-	-	0.21 J
		8-Apr-13		A-138_040813	0.76 J	ND (1)	ND (1)	0.33 J	1.1	-	104	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	0.152	ND (0.1)	0.235	0.174	ND (0.1)	0.151	ND (0.1)	0.166	ND (0.1)	ND (3)
	A-139	7-May-07		A-139_050707	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)	ND (1)	-	-	ND (5)	ND (0.05)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.8)
		24-Jan-12		A-139	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.080)	ND (0.10)	ND (0.080)	ND (0.10)	-	-	-	-	-	1.3
		2-Jun-14		A-139	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.6 J
		21-Oct-14		A-139_102114	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	25.7
		21-May-15		A-139_20150521	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	94.6
		6-Jul-18		A-139_20180706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64.9
		6-Jul-18		A-139-HS_20180706	Hydra Sleeve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57.7
		25-Sep-18		A-139_20180925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.1)
		31-Oct-18		A-139_20181031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	82.4
		27-Jun-19		A-139_20190627	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	28.5
	A-140	7-May-07		A-140_050707	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)	ND (1)	-	-	ND (5)	ND (0.05)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.8)
		17-Nov-10		A-140	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.6 J	-	ND (0.5)	ND (0.97)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.058)	ND (0.097)	ND (0.039)	ND (0.097)	-	-	-	-	-	0.093 J
		16-Nov-11		A-140	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.98)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.078)	ND (0.098)	ND (0.078)	ND (0.098)	-	-	-	-	-	ND (0.080)
		8-Apr-13		A-140_040813	ND (1)	ND (1)	ND (1)	0.73 J	0.24 J	-	ND (2)	ND (0.11)	0.39 J	ND (2)	ND (1)	ND (0.02)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (3)
		2-Jun-14		A-140	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		21-Oct-14		A-140_102114	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.11)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (3.0)
		21-May-15		A-140_20150521	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		27-Jun-19		A-140_20190627	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	A-182	22-Jul-14		A-182-072214	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	0.40 J	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	0.107	ND (0.10)	0.114	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		10-Oct-14		A-182_101014	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	0.52 J	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.022)	0.699	1.94	1.62	2.31	0.421	0.979	0.463	0.600	0.316	ND (3.0)
		28-Jun-19		A-182_20190628	0.7 J	0.4 J	ND (0.2)	2 J	0.5 J	-	1 J	ND (0.1)	1 J	0.7 J	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)

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Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE µg/L	TOLUENE µg/L	ETHYLBENZENE µg/L	XYLENES, TOTAL (DIMETHYLBENZENE) µg/L	METHYL TERTIARY BUTYL ETHER µg/L	TERT-BUTYL ALCOHOL µg/L	ISOPROPYLBENZENE (CUMENE) µg/L	NAPHTHALENE µg/L	1,2,4-TRIMETHYLBENZENE µg/L	1,3,5-TRIMETHYLBENZENE µg/L	1,2-DICHLOROETHANE (EDC) µg/L	1,2-DIBROMOETHANE (EDB) µg/L	CHRYSENE µg/L	FLUORENE µg/L	PHENANTHRENE µg/L	PYRENE µg/L	ANTHRACENE µg/L	BENZO(A)ANTHRACENE µg/L	BENZO(A)PYRENE µg/L	BENZO(B)FLUORANTHENE µg/L	BENZO(G,H)PERYLENE µg/L	LEAD, Dissolved µg/L
AOI 5	RWBH-2	12-Jul-19	RWBH-2-SL_20190712		2 J SL	ND (1) SL	ND (1) SL	ND (3) SL	ND (1) SL	-	5 J SL	ND (0.1) SL	ND (2) SL	2 J SL	ND (10) SL	ND (0.0095) SL	0.4 J SL	7 SL	6 SL	1 SL	1 SL	0.3 J SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (1.1) SL
	WP-14	8-May-07	WP-14_050807		ND (5)	ND (5)	ND (5)	ND (5)	0.69 J	-	ND (5)	ND (1)	-	-	ND (5)	ND (0.05)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	2.3
		17-Nov-10	WP-14		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (100)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	40	16 J	53	100	-	-	-	-	-	0.45 J
		28-Nov-11	WP-14		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (9.8)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.010)	ND (4.5)	1.7 J	2.3	7.4	-	-	-	-	-	0.34 J
		8-Apr-13	WP-14_040813		ND (1)	ND (1)	ND (1)	ND (1)	0.26 J	-	ND (2)	0.228	ND (2)	ND (2)	ND (1)	ND (0.02)	0.576	0.228	0.54	1.17	0.249	0.586	0.463	0.432	0.27	ND (3)
		2-Jun-14	WP-14		ND (5.0)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)	ND (0.10)	ND (20)	ND (20)	ND (10)	ND (0.020)	ND (0.10)	4.94	1.65	1.34	0.631	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.0 J
		25-Jul-14	WP-14_072514		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	1.03	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	2.78	1.16	1.84	6.16	1.12	3.47	2.18	2.96	1.20	6.2
		9-Oct-14	WP-14_100914		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.32 J	-	ND (1.0)	0.154	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	0.269	0.297	0.345	1.15	0.264	0.398	0.167	0.210	ND (0.10)	ND (3.0)
		21-May-15	WP-14_20150521		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.2 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	0.7	0.1 J	0.5 J	0.8	0.2 J	0.6	0.7	0.7	0.5	0.97 J
		20-May-16	WP-14_20160520		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.4 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.7	0.5	0.6	1	0.3 J	0.6	0.7	0.7	0.6	0.31 J
		22-May-17	WP-14_20170522		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	1	0.4 J	1	2	0.5 J	1	2	2	1	0.40 J
		27-Jun-18	WP-14_20180627		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	0.724	0.767	0.245	0.109	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	WP-A	9-Nov-05	WP-A_11_9_2005		ND (1)	ND (1)	ND (1)	ND (1)	21	-	-	ND (1)	-	-	ND (1)	ND (0.02)	9	38.2	13.2	51.5	-	14.7	13.4	17.9	18.1	-
		4-Dec-06	WP-A		ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	1.0 J	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0097)	1.0 J	4.0 J	ND (1.0)	7.0	-	-	-	-	-	0.20 J
		7-May-07	WP-A_050707		ND (5)	ND (5)	ND (5)	ND (5)	0.62 J	-	ND (5)	ND (1)	-	-	ND (5)	ND (0.05)	3.6	ND (1)	ND (1)	11	-	-	-	-	-	1.5 J
		31-Jul-14	WP-A-073114		ND (0.50) SL	ND (1.0) SL	ND (1.0) SL	ND (1.0) SL	ND (1.0) SL	-	ND (1.0) SL	ND (0.50) SL	ND (2.0) SL	ND (2.0) SL	ND (1.0) SL	ND (0.020) SL	23.4 SL	2.34 SL	1.83 SL	65.2 SL	6.75 SL	9.79 SL	18.5 SL	18.2 SL	23.8 SL	3.9 SL
		21-Jan-16	AOI5_WPA_012116		ND (0.50) SL	ND (1.0) SL	ND (1.0) SL	ND (1.0) SL	ND (1.0) SL	-	ND (1.0) SL	ND (0.11) SL	ND (2.0) SL	ND (2.0) SL	ND (1.0) SL	ND (0.019) SL	2.99 SL	0.133 SL	0.153 SL	8.73 SL	0.720 SL	1.62 SL	2.26 SL	2.21 SL	2.65 SL	ND (3.0) SL
		11-Jul-19	WP-A_SL_20190711		ND (0.2) SL	ND (0.2) SL	ND (0.2) SL	ND (0.5) SL	ND (0.2) SL	-	0.6 J SL	ND (0.1) SL	ND (0.3) SL	ND (0.3) SL	ND (2) SL	ND (0.0094) SL	1 SL	ND (0.1) SL	ND (0.1) SL	4 SL	ND (0.1) SL	0.6 SL	0.9 SL	0.9 SL	0.4 J SL	ND (1.1) SL
	WP-C	3-May-07	WP-C_050307		ND (5)	ND (5)	ND (5)	0.95 J	ND (5)	-	2 J	ND (1)	-	-	ND (5)	ND (0.05)	ND (1)	1.1	ND (1)	ND (1)	-	-	-	-	-	ND (0.8)
		6-Dec-07	WP-C		ND (0.5)	ND (0.5)	ND (0.5)	2.0	-	-	4.0	ND (1.0)	-	-	ND (0.5)	ND (0.0097)	3.0 J	4.0 J	ND (1.0)	4.0 J	-	-	-	-	-	2
	B-39	8-Jan-13	B39_010813		44.0	3.1	ND (1.0)	3.8	ND (1.0)	-	30.1	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	6.78	36.6	74.9	24.1	14.2	8.27	6.03	6.09	2.89	5.7
		11-May-16	GW-11109613-B39-05-11-16-MM-043		3	0.7 J	ND (1)	4	ND (1)	-	11	8.0	ND (2)	ND (2)	ND (1)	ND (0.029)	2.6	14	25	6.4	5.8	3.0	2.5	3.1	1.5	16.7
		24-Aug-16	GW-11109613-B-39-082416-AC-022		4	2	ND (1)	5	ND (1)	-	26	4.4	1 J	ND (2)	ND (1)	0.057	0.43	5.5	6.0	1.1	1.6	0.48	0.34	0.47	0.16	2.1
		24-Aug-16	GW-11109613-B-39-082416-KC-023		3	2	ND (1)	4	ND (1)	-	17	ND (0.064)	0.6 J	ND (2)	ND (1)	ND (0.028)	0.090	3.0	0.86	0.35	0.41	0.086	0.071	0.083	0.057	4.7
		8-Jul-19	B-39-SL_20190708		5 SL	3 SL	0.6 J SL	5 J SL	ND (0.2) SL	-	31 SL	2 SL	0.4 J SL	ND (0.3) SL	ND (2) SL	ND (0.0094) SL	2 SL	9 SL	13 SL	4 SL	4 SL	2 SL	1 SL	2 SL	0.7 SL	272 SL
	B-43	23-May-16	B-43-20160523		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	4	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	3	0.9	ND (0.1)	7	0.7	2	2	2	1	ND (0.13)
		22-Aug-16	GW-11109613-B-43-082216-KC-005		ND (1)	ND (1)	ND (1)	0.6 J	ND (1)	-	6	ND (0.063)	ND (2)	ND (2)	ND (1)	ND (0.028)	1.0	0.34	0.24	2.9	0.22	0.89	0.66 J	0.75 J	0.32 J	2.8
		22-May-17	B-43-20170522		ND (0.5)	ND (0.5)	ND (0.5)	2	ND (0.5)	-	7	1	0.8 J	ND (0.5)	ND (0.5)	ND (0.020)	0.3 J	0.3 J	1	2	0.4 J	0.4 J	0.3 J	0.3 J	0.1 J	ND (0.090)
		27-Jun-18	B-43_20180627		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	2.35	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	0.326	ND (0.0500)	ND (0.0500)	1.52	ND (0.0500)	0.327	0.253	0.311	0.160	ND (2.00)
		27-Jun-19	B-43_20190627		8	0.5 J	ND (0.2)	ND (0.5)	ND (0.2)	-	3 J	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	0.6	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	B-45	25-May-05	B45-052505		ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	5	ND (1)	-	-	ND (5)	ND (0.029)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
		10-Nov-05	B-45_11_10_2005		3	ND (1)	1	8	ND (1)	-	-	2	-	-	ND (1)	ND (0.02)	0.2	ND (0.2)	ND (0.2)	0.4	-	0.2	0.2	0.3	ND (0.2)	-
		8-Jun-06	B45-060806		ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)	ND (5)	-	-	ND (5)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-
		18-Dec-07	B-45		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND	ND	ND	-	ND (0.047)
		4-Nov-08	B-45_110408		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.010)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	ND (0.050)
		7-Jan-13	B-45_010713		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	0.115	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		5-May-16	GW-11109613-B45-05-05-16-RM-014		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.061)	ND (2)	ND (2)	ND (1)	ND (0.029)	0.050 J	0.042 J	0.065	0.085	0.042 J	0.021 J	0.030 J	0.043 J	0.033 J	0.14 J
	B-95	8-Jun-11	B-95 GP U 677-MW		ND (0.5)	ND (0.5)	ND (0.5)	0.5 J	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	0.18 J	-	0.18 J	1.2	-	-	-	-	-	ND (0.052)
		23-May-16	B-95-20160523		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.4 J	ND (0.1)	ND (0.1)	0.7	ND (0.1)	0.2 J	0.3 J	0.2 J	0.2 J	ND (0.13)

See notes on
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Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERP-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PYRENE	LEAD, Dissolved		
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
AOI 6	B-131	1-Jan-95	DM	B-131	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-		
		1-Jan-96	DM	B-131	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	-	-	-	-	-		
		1-Jan-97	DM	B-131	12	1	2	11	-	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		1-Jan-98	DM	B-131	ND (1)	ND (1)	ND (1)	1	-	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		1-Jan-99	DM	B-131	19	ND (1)	ND (1)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-00	DM	B-131	ND (1)	ND (1)	ND (1)	ND (1)	1.1	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-	
		1-Jan-01	DM	B-131	ND (1)	ND (1)	ND (1)	ND (1)	2	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-	
		1-Jan-02	DM	B-131	5	1	ND (1)	2	ND (1)	-	-	-	-	-	-	-	-	ND (2)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		13-Nov-03		B-131	4.2	ND (1.0)	ND (1.0)	0.93 J	ND (1.0)	-	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	0.60 J	ND (2.0)	ND (2.0)	-	-	
		21-Oct-04		B-131	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	10	ND (5.0)	-	-	ND (5.0)	ND (0.020)	0.35 J	ND (9.8)	ND (9.8)	ND (9.8)	-	-	-	-	-	ND (5.0)		
		24-May-05		B131-052405	20	ND (5)	ND (5)	ND (5)	ND (5)	-	13	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-	-	
		9-Nov-05		B-131_11_9_2005	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	0.4	0.5	0.4	3.3	-	0.3	ND (0.1)	0.1	ND (0.1)	-	-	
		6-Jun-06		B131-060606	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	17	ND (5)	-	-	ND (5)	ND (0.029)	ND (5)	ND (5)	ND (5)	6	-	-	-	-	-	-	-	
		4-Dec-06		B-131	4.0 J	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	11	ND (1.0)	-	-	ND (1.0)	ND (0.0098)	2.0 J	2.0 J	1.0 J	8.0	-	-	-	-	-	-	0.14 J	
		18-Dec-07		B-131	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	9.0	ND (1.0)	-	-	ND (0.5)	ND (0.0096)	ND (1.0)	2.0 J	ND (1.0)	4.0 J	-	-	-	-	-	-	0.091 J	
		4-Nov-08		B-131_110408	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	6	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	-	ND (1)	5	-	-	-	-	-	-	ND (0.050)	
		9-Nov-10		B-131	ND (0.5)	ND (0.5)	ND (0.5)	0.5 J	ND (0.5)	-	10	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	3 J	ND (1)	5	-	-	-	-	-	-	ND (0.052)	
		16-Nov-11		B-131	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	5	ND (0.96)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	5.4	4.0	0.65	19	-	-	-	-	-	-	ND (0.080)	
		8-Jan-13		B131_010813	19.7	ND (1.0)	ND (1.0)	1.1	ND (1.0)	-	10.6	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	0.331	1.41	0.496	3.00	0.916	0.356	ND (0.10)	ND (0.10)	ND (0.10)	3.5		
		8-Apr-13		B-131_040813	1.1	0.61 J	0.32 J	0.62 J	ND (1)	-	13	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	0.132	1.08	0.43	1.13	0.477	0.169	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)		
		2-Jun-14		B-131	0.29 J	0.30 J	ND (1.0)	0.56 J	ND (1.0)	-	12.1	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	0.206	1.74	0.333	2.51	0.747	0.258	ND (0.10)	ND (0.10)	ND (0.10)	1.6 J		
		20-May-15		B-131_20150520	2	0.9 J	ND (0.5)	0.6 J	ND (0.5)	-	11	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.4 J	2	0.4 J	3	0.7	0.4 J	0.2 J	0.2 J	ND (0.1)	0.13 J		
		5-May-16		GW-11109613-B131-05-05-16-RM-012	1	ND (1)	ND (1)	0.6 J	ND (1)	-	8	ND (0.061)	ND (2)	ND (2)	ND (1)	ND (0.029)	0.29	1.9	0.66	2.3	0.76	0.37	0.090	0.12	0.021 J	ND (1.0)		
	B-132D	11-Apr-11		B-132D_04112011	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-		
		11-Apr-11		B-132D_04112011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)		
		1-Jul-11		B-132D_07012011	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-		
		1-Jul-11		B-132D_07012011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)		
		31-May-12		B-132D_53112	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.09)	ND (0.09)	0.3 J	ND (0.09)	-	-	-	-	-	ND (1.0)		
		20-Aug-12		B-132D_082012	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	0.1 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	0.3 J	0.1 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.0)		
		1-Nov-12		B-132D_11112	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	2.0	-	ND (5.0)	0.047 J	ND (5.0)	ND (5.0)	ND (1.0)	ND (0.015) *	ND (0.10)	ND (0.10)	0.17	ND (0.10)	0.055 J	ND (0.051)	ND (0.10)	ND (0.051)	ND (0.10)	ND (5.0)		
		29-Mar-13		B-132D_32913	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	2.1	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	0.180	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	6.4		
		3-May-16		GW-11109613-B132D-05-03-16-RM-002	ND (1)	ND (1)	ND (1)	ND (1)	2	-	ND (2)	0.082	ND (2)	ND (2)	ND (1)	ND (0.028)	0.015 J	0.018 J	0.18	0.033 J	0.088	0.018 J	0.017 J	0.018 J	0.013 J	ND (1.0)		
		27-Jun-19		B-132DAOI6_20190627	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	2	11 J	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)		
	B-150	17-Oct-02		MW-3	610,000	59,000	ND (5,000)	ND (5,000)	ND (5,000)	-	ND (5,000)	ND (5,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		19-Nov-02		MW-3	500,000	62,000	ND (5,000)	ND (5,000)	ND (5,000)	-	ND (5,000)	ND (5,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		11-May-16		GW-11109613-B150-05-11-16-AC-046	480,000	55,000	320	1,400	ND (200)	-	12,000	52	ND (400)	ND (400)	ND (200)	ND (0.029)	0.53	2.8	4.5	0.93	0.86	0.52	0.40 J	0.53	0.22 J	ND (1.0)		
		24-Aug-16		GW-11109613-B-150-082416-AC-019	320,000	33,000	270	1,100	ND (50)	-	7,500	31	76 J	31 J	ND (50)	ND (0.028)	ND (0.50)	0.90	1.2	0.15 J	0.15 J	0.10 J	ND (0.50)	ND (0.50)	ND (0.50)	0.12 J		
		5-Jul-18		B-150_20180705	436,000 SL	55,600 SL	ND (1,000) SL	ND (3,000) SL	ND (1,000) SL	-	10,600 SL	175 SL	ND (1,000) SL	ND (1,000) SL	ND (1,000) SL	ND (0.0100) SL	6.60 SL	23.7 SL	44.5 SL	13.6 SL	7.75 SL	6.31 SL	4.43 SL	5.53 SL	2.34 SL	ND (2.00) SL		
		11-Jul-19		B-150-SL_20190711	170,000 SL	23,000 SL	320 SL	1,100 SL	ND (20) SL	-	8,000 SL	77 SL	150 J SL	56 J SL	ND (200) SL	ND (0.0095) SL	0.1 J SL	1 SL	2 SL	0.4 J SL	0.3 J SL	0.1 J SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (1.1) SL		
	B-153	9-Jun-06		B153-060906	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	9	ND (5)	-	-	ND (5)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-		
		4-Jan-13		B-153_010413	ND (1.0)	ND (1.0)	ND (1.0)	1.4	ND (1.0)	-	ND (2.0)	0.466	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	0.192	ND (0.10)	0.213	0.190	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)		
		4-May-16		GW-11109613-B153-05-04-16-RM-010	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.061)	ND (2)	ND (2)	ND (1)	ND (0.029)	0.058	0.018 J	0.043 J	0.27	0.099	0.052	0.038 J	0.040 J	0.018 J	ND (1.0)		
	B-156	8-Jun-06		B156-060806	390	22	6	39	ND (5)	-	84	ND (5)	-	-	ND (5)	ND (0.029)	ND (5)	16	17	ND (5)	-	-	-	-	-	-		
		7-Jan-13		B-156_010713	301	21.0	5.5	33.2	ND (1.0)	-	101	1.65	5.5	5.6	ND (1.0)	ND (0.020)	0.161	8.16	9.87	0.883	1.79	0.184	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)		
		10-May-16		GW-11109613-B154-05-10-16-MM-036	49	13	4	22	ND (1)	-	120	3.3	4	5	ND (1)	ND (0.029)	1.4	10	17	3.4	4.7	1.7	1.4					

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 7	C-51	9-Nov-05	C-51_11_9_2005		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	0.1	2.3	0.1	0.8	-	ND (0.1)	ND (0.1)	0.1	ND (0.1)	-
		5-Dec-06	C-51		ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0097)	4.0 J	1.0 J	2.0 J	8.0	-	-	-	-	-	0.16 J
		17-Dec-07	C-51		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0097)	ND (1.0)	2.0 J	ND (1.0)	2.0 J	-	-	-	-	-	0.11 J
		5-Nov-08	C-51_110508		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	-	ND (1)	2 J	-	-	-	-	-	0.059 J
		11-Nov-09	C-51		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.6	-	0.65	3.0	-	-	-	-	-	ND (0.050)
		12-Jan-10	C-51_011210		ND (0.5)	ND (0.5)	0.6 J	2	ND (0.5)	-	ND (0.5)	ND (1)	0.7 J	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	2 J	ND (1)	2 J	-	-	-	-	-	ND (0.050)
		14-Jul-10	C-51_071410		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	3 J	ND (1)	2 J	-	-	-	-	-	ND (0.050)
		27-Jul-16	GW-11109614-C-51-072716-JM-024		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	0.041 J	ND (2)	ND (2)	ND (1)	ND (0.028)	0.059	0.99	0.096	0.87	0.15	0.060	0.019 J	0.031 J	0.015 J	ND (1.0)
		27-Jul-16	GW-11109614-C-51D-072716-JM-026	Field Duplicate	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	0.070	ND (2)	ND (2)	ND (1)	ND (0.028)	0.13	1.8	0.22	1.7	0.32	0.12	0.053	0.071	0.041 J	ND (1.0)
	C-62	15-Jan-10	C-62_011510		ND (0.5)	ND (0.5)	ND (0.5)	2	ND (0.5)	-	0.9 J	ND (0.9)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.9)	ND (0.9)	2 J	ND (0.9)	-	-	-	-	-	0.076 J
		20-Jul-10	C-62_072010		ND (0.5)	ND (0.5)	ND (0.5)	0.6 J	ND (0.5)	-	0.5 J	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	1 J	2 J	1 J	-	-	-	-	-	0.17 J
		27-Jul-16	GW-11109614-C-62-072716-JM-028		ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (10)	ND (0.061)	ND (10)	ND (10)	ND (5)	ND (0.028)	0.28	0.64	1.2	0.46	0.33	0.26	0.30	0.34	0.22	0.19 J
		23-May-17	C-62-20170523		ND (0.5)	ND (0.5)	ND (0.5)	0.8 J	ND (0.5)	-	0.9 J	9	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	0.4 J	0.9	1	0.7	0.4 J	0.4 J	0.5 J	0.5 J	0.4 J	0.29 J
		26-Jun-18	C-62_20180626		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	6.58	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	0.515	0.344	0.0542	0.113	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	C-104	1-Jan-95	DM C-104		ND	ND	ND	1.3 J	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-96	DM C-104		ND (0.3)	ND (0.3)	3.8	ND (0.6)	-	-	-	-	-	-	-	-	4	-	-	-	-	2	ND (1)	ND (1)	-	-
		1-Jan-97	DM C-104		ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	6	-	-	-	-	4	2	3	-	-
		1-Jan-98	DM C-104		ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-99	DM C-104		ND (1)	ND (1)	ND (1)	1	-	-	-	-	-	-	-	-	2	-	-	-	-	1	ND (1)	ND (1)	-	-
		1-Jan-00	DM C-104		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		1-Jan-01	DM C-104		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	20	-	-	-	-	17	12	9	-	-
		1-Jan-02	DM C-104		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (2)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		13-Nov-03	C-104		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		21-Oct-04	C-104		ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	2.8 J	ND (9.9)	ND (9.9)	ND (9.9)	-	-	-	-	-	ND (5.0)
		9-Nov-05	C-104_11_9_2005		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	0.5	3.7	0.3	2.4	-	0.6	0.2	0.3	ND (0.1)	-
		5-Dec-06	C-104		ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0096)	7.0 J	9.0 J	ND (5.0)	15.0 J	-	-	-	-	-	0.13 J
		12-Dec-07	C-104		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	0.7 J	ND (1.0)	-	-	ND (0.5)	ND (0.0095)	13	12	5.0	34	-	-	-	-	-	0.12 J
		5-Nov-08	C-104_110508		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	0.6 J	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.010)	15 J	-	ND (10)	39 J	-	-	-	-	-	0.51 J
		11-Nov-09	C-104		ND (3.0)	ND (3.0)	ND (3.0)	ND (3.0)	ND (3.0)	-	ND (3.0)	ND (5.0)	ND (3.0)	ND (3.0)	ND (3.0)	ND (0.0096)	0.20 J	-	0.14 J	1.7	-	-	-	-	-	0.076 J
		14-Jan-10	C-104_011410		ND (0.5)	ND (0.5)	ND (0.5)	0.6 J	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	1 J	6	ND (1)	5 J	-	-	-	-	-	ND (0.050)
		19-Jul-10	C-104_071910		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	0.5 J	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (1)	9	1 J	3 J	-	-	-	-	-	ND (0.050)
		9-Nov-10	C-104		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	0.5 J	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	8	ND (1)	2 J	-	-	-	-	-	0.078 J
		16-Nov-11	C-104		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.97)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.17 J	0.24 J	ND (0.078)	1.7	-	-	-	-	-	3.8
		8-Apr-13	C-104_040813		ND (1)	ND (1)	ND (1)	0.62 J	ND (1)	-	ND (2)	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.1)	2.35	0.633	0.641	0.364	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		3-Jun-14	C-104		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	0.202	ND (0.10)	0.161	0.429	ND (0.10)	0.260	0.201	0.240	0.122	2.3 J
		21-May-15	C-104_20150521		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.2 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	1	7	3	3	1	0.8	0.6	0.5 J	0.3 J	ND (0.082)
		24-May-16	C-104-20160524		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.1 J	6	0.3 J	2	0.5 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		26-Jul-16	GW-11109614-C-104-072616-AC-015		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.061)	ND (2)	ND (2)	ND (1)	ND (0.028)	0.17	3.2	0.25	1.9	0.47	0.15	0.036 J	0.044 J	0.014 J	ND (1.0)
		23-May-17	C-104-20170523		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	0.3 J	5	1	2	0.6	0.2 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.090)
		26-Jun-18	C-104_20180626		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	0.103	3.39	0.285	1.56	0.480	0.0909	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	C-106	1-Aug-16	GW-11109614-C-106-080116-AC-042		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	0.15	ND (2)	ND (2)	ND (1)	ND (0.029)	0.33	0.76	1.5	0.93	0.40	0.26	0.19	0.27	0.049 J	0.10 J
		9-Jul-19	C-106-SL_20190709		ND (0.2) SL	ND (0.2) SL	ND (0.2) SL	ND (0.5) SL	ND (0.2) SL	-	ND (0.3) SL	ND (0.1) SL	ND (0.3) SL	ND (0.3) SL	ND (2) SL	ND (0.0094) SL	0.8 SL	1 SL	0.9 SL	2 SL	0.5 SL	0.7 SL	0.4 J SL	0.5 SL	0.3 J SL	ND (1.1) SL

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 7	C-127	1-Jan-95	DM	C-127	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-96	DM	C-127	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-97	DM	C-127	ND (1)	1	ND (1)	ND (1)	-	-	-	-	-	-	-	-	11	-	-	-	-	6	3	4	-	-
		1-Jan-98	DM	C-127	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-99	DM	C-127	ND (1)	ND (1)	ND (1)	1	-	-	-	-	-	-	-	-	4	-	-	-	-	3	2	2	-	-
		1-Jan-00	DM	C-127	ND (1)	ND (1)	ND (1)	ND (1)	10	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		1-Jan-01	DM	C-127	ND (1)	1	2	2	8	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		13-Nov-03		C-127	ND (1)	ND (1)	ND (1)	ND (1)	16	-	-	-	-	-	-	-	ND (2)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		21-Oct-04		C-127	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	23	-	7.1	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (9.8)	ND (9.8)	ND (9.8)	-	-	-	-	-	ND (5.0)
		9-Nov-05		C-127_11_9_2005	ND (1)	ND (1)	ND (1)	ND (1)	21	-	-	ND (1)	-	-	ND (1)	ND (0.02)	0.2	2.3	0.4	1.5	-	0.4	0.1	0.2	ND (0.1)	-
		5-Dec-06		C-127	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	27.0	-	5.0	ND (1.0)	-	-	ND (1.0)	ND (0.0096)	3.0 J	8.0	2.0 J	9.0	-	-	-	-	-	0.13 J
		12-Dec-07		C-127	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	22	-	3.0	ND (1.0)	-	-	ND (0.5)	ND (0.0096)	1.0 J	5.0	ND (0.9)	4.0 J	-	-	-	-	-	0.18 J
		5-Nov-08		C-127_110508	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	19	-	3	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	3 J	-	ND (1)	9	-	-	-	-	-	0.51 J
		11-Nov-09		C-127	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	10	-	6.0	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	0.46	-	0.93	3.3	-	-	-	-	-	ND (0.050)
		13-Jan-10		C-127_011310	ND (0.5)	ND (0.5)	ND (0.5)	0.7 J	5	-	3	ND (0.9)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.9)	4 J	ND (0.9)	3 J	-	-	-	-	-	0.070 J
		15-Jul-10		C-127_071510	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	6	-	7	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	5	ND (1)	2 J	-	-	-	-	-	ND (0.050)
		9-Nov-10		C-127	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	12	-	10	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	6	ND (1)	2 J	-	-	-	-	-	0.073 J
		16-Nov-11		C-127	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	10	-	9	ND (0.96)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.90)	7.9	ND (0.75)	2.5	-	-	-	-	-	ND (0.080)
		8-Apr-13		C-127_040813	ND (1)	ND (1)	ND (1)	0.57 J	7.5	-	2.2	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.1)	1.64	ND (0.1)	0.59	0.285	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		3-Jun-14		C-127	ND (0.50)	ND (1.0)	ND (1.0)	0.22 J	4.4	-	3.6	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	2.15	0.225	0.440	0.281	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		21-May-15		C-127_20150521	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	6	-	2	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.2 J	4	0.1 J	1	0.5 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		24-May-16		C-127-20160524	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	5	-	4	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	3	0.3 J	0.7	0.4 J	0.1 J	0.1 J	ND (0.1)	0.6	ND (0.13)
		26-Jul-16		GW-11109614-C-127-072616-AC-020	ND (1)	ND (1)	ND (1)	ND (1)	5	-	6	ND (0.063)	ND (2)	ND (2)	ND (1)	ND (0.028)	0.13	1.1	0.30	0.92	0.59	0.11	0.079	0.058	0.36	ND (1.0)
		23-May-17		C-127-20170523	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	5	-	3	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	3	0.1 J	0.9	0.5 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		26-Jun-18		C-127_20180626	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	4.11	-	1.37	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	0.0880	3.14	ND (0.0500)	1.07	0.456	0.0591	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	C-129	12-Jul-10		C-129_071210	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	2.5
		9-Nov-10		C-129	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	0.082 J
		17-Nov-11		C-129	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.97)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.73	ND (0.097)	0.24	0.34 J	-	-	-	-	-	1.0
		8-Apr-13		C-129_040813	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		3-Jun-14		C-129	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.2 J
		21-May-15		C-129_20150521	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.13 J
		24-May-16		C-129-20160524	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		1-Aug-16		GW-11109614-C-129-080116-AC-041	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	0.18	ND (2)	ND (2)	ND (1)	ND (0.029)	0.015 J	ND (0.051)	ND (0.061)	0.040 J	0.031 J	0.014 J	ND (0.051)	0.013 J	0.011 J	0.42 J
		23-May-17		C-129-20170523	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.1 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	0.5 J	0.1 J	0.4 J	0.6	0.2 J	0.4 J	0.4 J	0.5 J	0.4 J	0.39 J
		26-Jun-18		C-129_20180626	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	C-129D	12-Jul-10		C-129D_071210	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.7 J	-	ND (0.5)	1 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (1)	ND (1)	2 J	ND (1)	-	-	-	-	-	ND (0.050)
		8-Apr-11		C-129D_04082011	ND (1)	ND (1)	ND (1)	ND (1)	2	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.028)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-
		8-Apr-11		C-129D_04082011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		29-Jun-11		C-129D_06292011	ND (1)	ND (1)	ND (1)	ND (1)	2	-	ND (2)	ND (5)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-
		29-Jun-11		C-129D_06292011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		31-May-12		C-129D_53112	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	0.2 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.09)	0.1 J	2	0.3 J	-	-	-	-	-	ND (1.0)
		21-Aug-12		C-129D_082112	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	1	0.3 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.0)
		1-Nov-12		C-129D_110112	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	2.0	-	ND (5.0)	ND (0.10)	ND (5.0)	ND (5.0)	ND (1.0)	ND (0.015) *	ND (0.10)	ND (0.10)	0.22	0.11	0.043 J	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.10)	ND (5.0)
		2-Apr-13		C-129D_40213	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	0.82 J	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	0.207	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.5 J
		21-Jul-16		GW-11109614-C-129D-072116-AC-004	ND (1)	ND (1)	ND (1)	ND (1)	1	-	ND (2)	ND (0.061)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.051)	0.035 J	ND (0.061)	0.14	0.016 J	ND (0.051)	ND (0.051)	ND (0.051)	ND (0.051)	ND (1.0)
		19-Aug-16		GW-11109614-C129D-081916-AC-01	0.6 J	ND (1)	ND (1)	ND (1)	0.6 J	-	ND (2)	0.095	ND (2)	ND (2)	ND (1)	ND (0.028)	ND (0.050)	0.11	0.13	0.071	0.041 J	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (1.0)
		26-Feb-19		C-129D_20190226	0.2 J	ND (0.2)	ND (0.2)	ND (0.5)	0.3 J	-	ND (0.3)	-	-	-	ND (2)	ND (0.3)	-	-	-	-	-	-	-	-	-	-
		11-Jul-19		C-129D_20190711	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	0.5 J	54	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	0.1 J	0.2 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
AOI 7	C-144D	19-Jul-10		C-144D_071910	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.9 J	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	ND (0.050)	
		5-Jul-11		C-144D_07052011	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.9 J	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	
		5-Jul-11		C-144D_07052011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)	
		31-May-12		C-144D_53112	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1 J	-	ND (0.5)	0.2 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.09)	0.4 J	0.2 J	0.2 J	-	-	-	-	-	ND (1.0)
		21-Aug-12		C-144D_082112	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1 J	-	ND (0.5)	0.1 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.1 J	0.3 J	0.1 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.0)
		1-Nov-12		C-144D_110112	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.88 J	-	ND (5.0)	ND (0.10)	ND (5.0)	ND (5.0)	ND (1.0)	ND (0.015) *	ND (0.10)	0.19	ND (0.050)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.10)	3.7 J
		2-Apr-13		C-144D_40213	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	2.4	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	0.203	0.173	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		20-Jul-16		GW-11109614-C-144D-072016-AC-001	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.060)	ND (2)	ND (2)	ND (1)	ND (0.029)	ND (0.050)	ND (0.050)	ND (0.060)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (1.0)
		11-Jul-19		C-144D_20190711	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	C-146	13-Jan-12		C-146_01132012	ND (1)	ND (1)	ND (1)	92	ND (1)	-	14	8	35	24	ND (1)	ND (0.029)	0.6	0.7	0.7	2	-	-	-	-	-	2.7
		1-Aug-16		GW-11109614-C-146-080116-JM-037	ND (5)	ND (5)	ND (5)	8	ND (5)	-	130	830	46	14	ND (5)	ND (0.029)	210	320	1,000	370	220	190	130	170	38	0.97 J
		23-Jul-18		C-146_20180723	ND (1.00) SL	ND (1.00) SL	ND (1.00) SL	ND (3.00) SL	ND (1.00) SL	-	61.6 SL	19.1 SL	3.87 SL	ND (1.00) SL	ND (1.00) OE SL	ND (0.0100) SL	21.0 SL	38.9 SL	96.2 SL	54.4 SL	23.8 SL	19.3 SL	11.8 SL	15.7 SL	5.64 SL	ND (2.00) SL
		25-Sep-18		C-146_20180925	-	-	-	-	-	-	-	24	-	-	-	-	1	5	10	3	2	1	0.7	0.8	0.3 J	-
		31-Oct-18		C-146_20181031	-	-	-	-	-	-	-	29	-	-	-	-	4	10	20	8	4	3	2	2	1	-
		9-Jul-19		C-146_20190709	0.4 J	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	19	9	0.6 J	ND (0.3)	ND (2)	ND (0.0095)	15	22	72	34	14	12	9	10	3	ND (1.1)
	C-168	26-Jul-16		GW-11109614-C-168-072616-AC-019	600	14	79	470	ND (1)	-	22	ND (0.32)	170	65	ND (1)	0.027 J	1.6	3.9	3.0	3.5	0.96	1.6	1.1	1.4	0.53	0.62 J
		3-Jul-18		C-168_20180703	730	36.6	10.3	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		9-Jul-19		C-168-SL_20190709	110 SL	25 SL	2 SL	13 SL	ND (0.2) SL	-	0.4 J SL	6 SL	2 J SL	0.5 J SL	ND (2) SL	ND (0.0094) SL	ND (0.1) SL	2 SL	3 SL	2 SL	0.6 SL	0.4 J SL	0.4 J SL	0.4 J SL	0.2 J SL	ND (1.1) SL
AOI 8	N-1	1-Jan-85	DM	N-1	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-86	DM	N-1	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (2)	-	-	-	-	ND	ND	ND	-	-
		1-Jan-88	DM	N-1	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-93	DM	N-1	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-94	DM	N-1	ND (5)	ND (5)	ND (5)	ND (10)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		1-Jan-95	DM	N-1	ND	ND	0.5 J	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		4-Jan-96		N-1	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	2	-	-	-	-	2	2	2	-	-
		1-Jan-97	DM	N-1	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-98	DM	N-1	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Dec-99		N-1	ND (1)	ND (1)	ND (1)	ND (2)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		15-Nov-00		N-1	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		15-Nov-01		N-1	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		12-Nov-02		N-1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (2)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		13-Nov-03		N-1	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		20-Oct-04		N-1	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		7-Nov-05		N-1_11_7_2005	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-
		19-Dec-06		N-1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.15 J
		4-Dec-07		N-1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0098)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.089 J
		6-Feb-08		N-1_2/6/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		15-Jul-08		N-1_7/15/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		4-Nov-08		N-1_110408	ND (0.5)	ND (0.5)	ND (0.5)	0.5 J	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.9)	-	ND (0.9)	ND (0.9)	-	-	-	-	-	ND (0.050)
		16-Nov-09		N-1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.068 J	-	0.050 J	ND (0.10)	-	-	-	-	-	ND (0.050)
		8-Nov-10		N-1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.052)
		17-Nov-11		N-1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.96)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.10 J	ND (0.096)	0.13 J	0.27 J	-	-	-	-	-	1.5
		4-Apr-13		N-1_040413	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)															

See notes on
last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
AOI 8	N-2	4-Apr-13		N-2_040413	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	12.3	-	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	-	-	-	-	-	-	-	-	-	0.39 J
		2-Jun-14		N-2	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	1.8	0.117	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	0.766	0.268	0.394	1.27	0.498	0.807	0.959	1.34	1.43	4.1
		19-May-15		N-2_20150519	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.7	0.2 J	0.2 J	1	0.3 J	0.6	0.8	0.8	0.9	ND (0.082)
		17-Mar-16		N-2-20160317	ND (1)	ND (5)	ND (1)	ND (3)	ND (1)	-	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (0.01)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (2)
		23-May-16		N-2-20160523	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.4 J	0.6	0.1 J	1	0.2 J	0.4 J	0.5 J	0.5 J	0.4 J	ND (0.13)
		22-Aug-16		N-2-20160822-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.500)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	0.485	0.504	0.377	1.38	0.492	0.601	0.803	0.913	0.950	ND (2.00)
		7-Sep-16		N-2-20160907-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	1.19	0.277	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	0.263	1.42	0.482	1.20	1.00	0.308	0.225	0.274	0.162	ND (2.00)
		14-Oct-16		N-2-20161014-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	0.252	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	0.102	0.828	0.171	0.669	0.502	0.128	0.0703	0.0811	ND (0.0500)	ND (2.00)
		23-May-17		N-2-20170523	4	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	0.9 J	0.3 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	9	2	3	15	3	9	10	11	6	0.18 J
		29-Jun-18		N-2_20180629	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	0.526	0.115	0.509	0.218	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		26-Jun-19		N-2_20190626	ND (0.2)	0.2 J	ND (0.2)	ND (0.5)	ND (0.2)	-	4 J	0.4 J	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	1	0.4 J	0.8	0.3 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	N-3	20-Oct-04		N-3	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		7-Feb-08		N-3_2/7/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (50)	-	-	ND (1)	ND (0.029)	ND (50)	ND (50)	ND (50)	170	-	-	-	-	-	ND (1)
		15-Jul-08		N-3_7/15/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	1.1
		17-Nov-09		N-3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	0.86	-	0.65	2.1	-	-	-	-	-	0.15 J
		8-Nov-10		N-3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	10	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	10	3 J	11	33	-	-	-	-	-	0.24 J
		20-Sep-11		N-3_09-20-2011	7.2	7	6.5	52	ND (2.0)	-	ND (2.0)	13	17	7	ND (1.0)	ND (0.05)	-	-	-	-	-	-	-	-	-	2.2
		17-Nov-11		N-3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (4.8)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1.9)	0.90 J	2.1	1.8 J	-	-	-	-	-	0.13 J
		4-Apr-13		N-3_040413	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	-	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	-	-	-	-	-	-	-	-	-	30.5
		2-Jun-14		N-3	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	2.23	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	2.69	0.297	0.662	6.08	1.59	2.43	1.53	2.26	0.971	2.4 J
		19-May-15		N-3_20150519	3	3	0.9 J	4	ND (0.5)	-	0.6 J	5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	10	1	2	13	5	7	6	6	2	2.4
		17-Mar-16		N-3-20160317	ND (1)	ND (5)	ND (1)	ND (3)	ND (1)	-	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (0.01)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (2)
		27-May-16		N-3-20160527	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	0.9	0.3 J	0.7	1	0.5	0.7	0.9	0.8	0.6	1.6
		22-Aug-16		N-3-20160822-WG	24.0	32.8	7.17	42.7	ND (1.00)	-	6.53	6.53	ND (1.00)	4.27	ND (1.00)	ND (0.0100) *	0.572	0.293	0.380	1.94	0.883	0.585	0.496	0.533	0.341	ND (2.00)
		17-Oct-16		N-3-20161017-WG	11.5	16.7	2.01	27.8	ND (1.00)	-	ND (1.00)	1.92	ND (1.00)	2.92	ND (1.00)	ND (0.0100) *	0.132	0.128	0.153	0.577	0.230	0.138	0.105	0.109	0.0818	ND (2.00)
		23-May-17		N-3-20170523	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.8	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	2	0.5 J	1	2	0.8	1	1	1	1	0.87 J
		29-Jun-18		N-3_20180629	6.75	9.30	3.36	8.84	ND (1.00)	-	4.42	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		26-Jun-19		N-3_20190626	ND (0.2)	0.4 J	0.7 J	1 J	ND (0.2)	-	0.6 J	1	ND (0.3)	1 J	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	N-7	1-Jan-93	DM	N-7	ND	ND	ND	8	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-94	DM	N-7	ND (250)	ND (250)	480	ND (500)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		1-Jan-95	DM	N-7	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		4-Jan-96		N-7	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-97	DM	N-7	1	3	4	3	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-98	DM	N-7	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Dec-99		N-7	ND (1)	ND (1)	ND (1)	ND (2)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		15-Nov-00		N-7	ND (1)	1.7	ND (1)	ND (2)	1.2	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		15-Nov-01		N-7	28	4	2	6	ND (1)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		12-Nov-02		N-7	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (2)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		13-Nov-03		N-7	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		20-Oct-04		N-7	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		7-Nov-05		N-7_11_7_2005	ND (1)	ND (1)	ND (1)	2	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	1.1	0.7	ND (0.1)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
AOI 8	N-8	20-Oct-04	N-8		ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		6-Dec-06	N-8		ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0097)	ND (10.0)	ND (10.0)	ND (10.0)	ND (10.0)	-	-	-	-	-	0.14 J
		4-Dec-07	N-8		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0098)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	1.7
		7-Feb-08	N-8 2/7/2008		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		16-Jul-08	N-8 07/16/08		1	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		4-Nov-08	N-8 110408		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	-	ND (1)	ND (1)	-	-	-	-	-	0.053 J
		16-Nov-09	N-8		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.059)	-	ND (0.039)	ND (0.098)	-	-	-	-	-	ND (0.050)
		8-Nov-10	N-8		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	0.074 J
		17-Nov-11	N-8		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.97)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.077)	ND (0.097)	ND (0.077)	ND (0.097)	-	-	-	-	-	ND (0.080)
		5-Apr-13	N-8_040513		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (1.0)
		2-Jun-14	N-8		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.3 J
		20-May-15	N-8_20150520		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		24-May-16	N-8-20160524		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		23-Aug-16	N-8-20160823-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		17-Oct-16	N-8-20161017-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		24-May-17	N-8-20170524		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		29-Jun-18	N-8_20180629		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	1.98	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	N-9	7-Feb-08	N-9 2/7/2008		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		16-Jul-08	N-9 07/16/08		8	1	2	6	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		5-Apr-11	N-9_4-5-11		ND (0.5)	0.5 J	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
		5-Apr-11	N-9_4-5-11 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		27-Jun-11	N-9_06272011		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
		27-Jun-11	N-9_06272011 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		25-May-12	N-9_52512		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	-	-	-	-	-	ND (1.0)
		17-Aug-12	N-9_81712		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	0.1 J	0.1 J	ND (0.09)
		31-Oct-12	N-9_103112		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (5.0)	0.24	ND (5.0)	ND (5.0)	ND (1.0)	ND (0.015) *	ND (0.10)	0.61	1.6	0.25	0.33	0.17	ND (0.10)	ND (0.050)	ND (0.10)	ND (5.0)
		26-Mar-13	N-9_32613		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.15)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.15)	ND (3.0)
		26-Aug-16	N-9-20160826-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		17-Oct-16	N-9-20161017-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		24-Jun-19	N-9_20190624		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	N-13	7-Feb-08	N-13_2/7/2008		ND (1)	ND (1)	ND (1)	ND (1)	2	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		23-Jul-08	N-13_7/23/2008		ND (1)	ND (1)	ND (1)	ND (1)	2	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		6-Apr-11	N-13_04062011		0.5 J	1 J	ND (0.5)	ND (0.5)	1	-	-	3	ND (1)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
		6-Apr-11	N-13_04062011 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		27-Jun-11	N-13_06272011		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.9 J	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
		27-Jun-11	N-13_06272011 FILTERED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		24-May-12	N-13_52412		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.8 J	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	-	-	-	-	ND (1.0)
		21-Aug-12	N-13_082112		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.9 J	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.0)
		31-Oct-12	N-13_103112		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.83 J	-	ND (5.0)	0.10	ND (5.0)	ND (5.0)	ND (1.0)	ND (0.014) *	ND (0.10)	0.22	0.51	0.061 J	0.11	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.10)	ND (5.0)
		29-Mar-13	N-13_032913		0.30 J	0.24 J	ND (1.0)	ND (1.0)	1.0	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	4.1
		26-Aug-16	N-13-20160826-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		14-Oct-16	N-13-20161014-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	0.0977	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		24-Jun-19	N-13_20190624		25	8	0.7 J	9	ND (0.2)	-	5 J	ND (0.1)	0.4 J	0.4 J	ND (2)	ND (0.0094)	ND (0.1)	5	4	0.3 J	0.7	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROP YLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved	
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
AOI 8	N-28	1-Jan-85	DM	N-28	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		1-Jan-86	DM	N-28	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		1-Jan-88	DM	N-28	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		1-Jan-93	DM	N-28	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	11	15	-	-	
		1-Jan-94	DM	N-28	ND (5)	ND (5)	ND (5)	ND (10)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-	
		1-Jan-95	DM	N-28	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		4-Jan-96		N-28	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		1-Jan-97	DM	N-28	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		1-Jan-98	DM	N-28	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		1-Dec-99		N-28	ND (1)	ND (1)	ND (1)	ND (2)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		15-Nov-00		N-28	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-	
		15-Nov-01		N-28	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	-	-	-	-	-	-	-	3	-	-	-	-	3	4	3	-	-	
		12-Nov-02		N-28	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (2)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-	
		13-Nov-03		N-28	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-	
		20-Oct-04		N-28	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)	
		7-Nov-05		N-28_11_7_2005	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	0.1	ND (0.1)	-	-
		19-Dec-06		N-28	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	1.0 J	-	-	-	-	-	-	0.53 J
		4-Dec-07		N-28	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0095)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	0.29 J
		6-Feb-08		N-28_2/6/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	ND (1)
		16-Jul-08		N-28_07/16/08	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	1
		3-Nov-08		N-28_110308	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (0.9)	-	ND (0.9)	ND (0.9)	-	-	-	-	-	1.2
		16-Nov-09		N-28	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	0.17 J	-	0.15 J	0.38 J	-	-	-	-	-	0.28 J
		8-Nov-10		N-28	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	3 J	ND (1)	3 J	4 J	-	-	-	-	-	0.47 J
		17-Nov-11		N-28	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.95)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	0.087 J	ND (0.095)	ND (0.076)	ND (0.095)	-	-	-	-	-	0.40 J
		5-Apr-13		N-28_040513	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	15.6
	N-30	22-Jul-08		N-30_7/22/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	-	ND (1)
		5-Apr-11		N-30_4-5-11	ND (0.5)	2	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (1.0)
		5-Apr-11		N-30_4-5-11 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		28-Jun-11		N-30_06282011	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.9)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	-	-	-	-	-	-	ND (1.0)
		28-Jun-11		N-30_06282011 FILTERED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		23-May-12		N-30_52312	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	-	-	-	-	-	ND (1.0)
		15-Aug-12		N-30_081512	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	0.1 J	ND (0.09)	ND (0.09)	0.1 J	ND (0.09)	0.1 J	0.1 J	0.1 J	0.1 J	ND (0.09)	ND (1.0)
		26-Aug-16		N-30-20160826-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		7-Sep-16		N-30-20160907-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		18-Oct-16		N-30-20161018-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		24-Jun-19		N-30_20190624	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	-	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERP-BUTYL ALCOHOL	ISOPROP YLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHRENE	BENZO(G,H)IPERYLENE	LEAD, Dissolved	
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
AOI 8	N-37	1-Jan-85	DM	N-37	ND	ND	ND	ND	-	-	-	-	-	-	-	-	62	-	-	-	-	55	49	32	-	-	
		1-Jan-86	DM	N-37	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		1-Jan-88	DM	N-37	ND	ND	ND	ND	-	-	-	-	-	-	-	-	21	-	-	-	-	28	ND	ND	-	-	
		1-Jan-93	DM	N-37	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		1-Jan-94	DM	N-37	ND (50)	ND (50)	ND (50)	ND (100)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	2 J	1 J	ND (10)	-	-	
		1-Jan-95	DM	N-37	ND	ND	ND	0.9 J	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-	
		4-Jan-96		N-37	ND (0.3)	ND (0.3)	7.8	ND (0.6)	-	-	-	-	-	-	-	-	7	-	-	-	-	8	6	4	-	-	
		1-Jan-97	DM	N-37	ND (1)	1	ND	2	-	-	-	-	-	-	-	-	5	-	-	-	-	8	4	2	-	-	
		1-Jan-98	DM	N-37	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	3	-	-	-	-	4	4	2	-	-	
		1-Dec-99		N-37	ND (1)	ND (1)	ND (1)	ND (2)	-	-	-	-	-	-	-	-	2	-	-	-	-	2	2	1	-	-	
		15-Nov-00		N-37	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-	
		15-Nov-01		N-37	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	-	-	-	-	-	-	-	4	-	-	-	-	7	5	ND (3)	-	-	
		12-Nov-02		N-37	2	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (2)	-	-	-	-	3	3	ND (1)	-	-	
		14-Nov-03		N-37	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-	
		19-Oct-04		N-37	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (9.9)	ND (9.9)	ND (9.9)	-	-	-	-	-	ND (5.0)	
		7-Nov-05		N-37_11_7_2005	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	0.1	ND (0.1)	ND (0.1)	0.1	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	-	
		1-Dec-06		N-37	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0097)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.12 J	
		5-Dec-07		N-37	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0095)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.13 J	
		7-Feb-08		N-37_2/7/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		24-Jul-08		N-37_7/24/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		3-Nov-08		N-37_110308	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.9)	-	ND (0.9)	ND (0.9)	-	-	-	-	-	0.19 J	
		11-Nov-09		N-37	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.55	-	ND (0.40)	0.8	-	-	-	-	-	0.075 J	
		8-Nov-10		N-37	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.052)	
		17-Nov-11		N-37	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.95)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.076)	0.21 J	ND (0.076)	ND (0.13)	-	-	-	-	-	2.6	
		4-Apr-13		N-37_040413	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	0.25 J	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.048 J
		4-Jun-14		N-37	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.1 J
		20-May-15		N-37_20150520	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		26-May-16		N-37-20160526	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		25-Aug-16		N-37-20160825-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		18-Oct-16		N-37-20161018-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	0.0590	ND (2.00)
		24-May-17		N-37-20170524	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.1 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		27-Jun-18		N-37_20180627	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 8	N-57	1-Jan-85	DM	N-57	330	ND	2,100	17,100	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-86	DM	N-57	300	ND	1,300	10,900	-	-	-	-	-	-	-	-	21	-	-	-	-	14	16	16	-	-
		1-Jan-88	DM	N-57	ND	ND	ND	1,600	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-93	DM	N-57	20	2	4	567	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-94	DM	N-57	110 J	ND (250)	720	4,140	-	-	-	-	-	-	-	-	5 J	-	-	-	-	ND (10)	2 J	ND (10)	-	-
		1-Jan-95	DM	N-57	89	ND	ND	3,040	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		4-Jan-96		N-57	190	2.8	13	2,000	-	-	-	-	-	-	-	-	1	-	-	-	-	1	2	ND (1)	-	-
		1-Jan-97	DM	N-57	180	ND (100)	ND (100)	1,900	-	-	-	-	-	-	-	-	2	-	-	-	-	2	2	1	-	-
		1-Jan-98	DM	N-57	82 J	ND (100)	ND (100)	1,600	-	-	-	-	-	-	-	-	8	-	-	-	-	8	12	3	-	-
		1-Dec-99		N-57	120	ND (100)	ND (100)	660	-	-	-	-	-	-	-	-	13	-	-	-	-	10	15	9	-	-
		15-Nov-00		N-57	110	ND (100)	ND (100)	440	260	-	-	-	-	-	-	-	12	-	-	-	-	9	14	7	-	-
		15-Nov-01		N-57	75	ND (10)	ND (10)	240	ND (10)	-	-	-	-	-	-	-	3	-	-	-	-	2	ND (2)	ND (3)	-	-
		12-Nov-02		N-57	6	ND (1)	2	203	ND (1)	-	-	-	-	-	-	-	2	-	-	-	-	1	3	ND (1)	-	-
		14-Nov-03		N-57	24.1	1.1	1.1	32.3	ND (1.0)	-	-	-	-	-	-	-	0.63 J	-	-	-	-	ND (2.0)	0.70 J	0.58 J	-	-
		19-Oct-04		N-57	38	ND (5.0)	ND (5.0)	140	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (9.8)	ND (9.8)	ND (9.8)	-	-	-	-	-	ND (5.0)
		7-Nov-05		N-57_11_7_2005	2	ND (1)	1	57	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	7.9	5.2	ND (1.2)	14.5	-	16.9	22.4	20.3	17.1	-
		1-Dec-06		N-57	ND (0.5)	ND (0.7)	ND (0.8)	24	ND (0.5)	-	2.0 J	ND (1.0)	-	-	ND (1.0)	ND (0.0097)	1.0 J	ND (1.0)	ND (1.0)	1.0 J	-	-	-	-	-	0.14 J
		5-Dec-07		N-57	ND (0.5)	ND (0.5)	0.5 J	19	-	-	1.0 J	ND (1.0)	-	-	ND (0.5)	ND (0.0096)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.21 J
		7-Feb-08		N-57_2/7/2008	2	ND (1)	2	230	ND (1)	-	4	ND (5)	-	-	ND (1)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		25-Jul-08		N-57_7/25/2008	ND (5)	ND (5)	ND (5)	120	ND (5)	-	ND (10)	ND (24)	-	-	ND (5)	ND (0.029)	ND (24)	ND (24)	ND (24)	ND (24)	-	-	-	-	-	ND (1)
		4-Nov-08		N-57_110408	ND (0.5)	0.6 J	0.6 J	93	ND (0.5)	-	3	ND (1)	3	0.5 J	ND (0.5)	ND (0.0097)	1 J	-	ND (0.9)	ND (0.9)	-	-	-	-	-	0.11 J
		11-Nov-09		N-57	ND (0.5)	0.7 J	ND (0.5)	230	ND (0.5)	-	2	ND (1)	8.0	1 J	ND (0.5)	ND (0.0098)	ND (0.20)	-	ND (0.20)	ND (0.50)	-	-	-	-	-	0.090 J
		8-Nov-10		N-57	0.5 J	1	0.7 J	600	ND (0.5)	-	4	2 J	13	4	ND (0.5)	ND (0.0099)	ND (1)	1 J	ND (1)	ND (1)	-	-	-	-	-	0.070 J
		17-Nov-11		N-57	ND (0.5)	ND (0.5)	ND (0.5)	280	ND (0.5)	-	1 J	ND (4.8)	3	1 J	ND (0.5)	ND (0.0096)	ND (0.38)	ND (0.48)	ND (0.38)	ND (0.48)	-	-	-	-	-	ND (0.080)
		4-Apr-13		N-57_040413	ND (5.0)	ND (5.0)	ND (5.0)	384	ND (5.0)	-	ND (10)	ND (0.10)	5.6 J	ND (10)	ND (5.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.064 J
		2-Jun-14		N-57	ND (0.50)	0.54 J	ND (1.0)	267	ND (1.0)	-	1.2	ND (0.10)	5.8	2.0	ND (1.0)	ND (0.020)	0.313	ND (0.10)	ND (0.10)	0.357	ND (0.10)	0.180	0.739	0.283	1.34	ND (3.0)
		20-May-15		N-57_20150520	ND (5)	ND (5)	ND (5)	250	ND (5)	-	ND (5)	0.2 J	ND (5)	ND (5)	ND (5)	ND (0.0096)	1	0.4 J	0.3 J	0.9	0.2 J	0.6	2	1	2	0.30 J
		26-May-16		N-57-20160526	ND (0.5)	ND (0.5)	ND (0.5)	56	ND (0.5)	-	0.7 J	ND (0.1)	1 J	ND (0.5)	ND (0.5)	ND (0.0097)	0.3 J	ND (0.1)	0.1 J	0.3 J	ND (0.1)	0.2 J	0.4 J	0.3 J	0.5 J	0.23 J
		24-Aug-16		N-57-20160824-WG	ND (1.00)	ND (5.00)	ND (1.00)	250	ND (1.00)	-	1.61	ND (0.250)	3.83	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	0.188	0.101	0.439	0.163	0.127	0.479	0.238	0.678 J+	ND (2.00)
		19-Oct-16		N-57-20161019-WG	ND (1.00)	ND (5.00)	ND (1.00)	118	ND (1.00)	-	1.63	ND (0.250)	2.67	ND (1.00)	ND (1.00)	ND (0.0100) *	0.0562	0.120	ND (0.0500)	0.234	0.0702	0.0689	0.168	0.0793	0.329	ND (2.00)
		24-May-17		N-57-20170524	ND (5)	ND (5)	ND (5)	290	ND (5)	-	ND (5)	0.1 J	ND (5)	ND (5)	ND (5)	ND (0.0096)	0.9	0.4 J	0.2 J	1	ND (0.1)	0.6	1	0.7	2	0.091 J
		13-Jul-18		N-57_20180713	ND (1.00)	ND (1.00)	ND (1.00)	36.4	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	0.0684	ND (0.0500)	0.201	ND (0.0500)	0.0903	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 8	N-60	1-Jan-85	DM	N-60	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-86	DM	N-60	6	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-88	DM	N-60	96	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-93	DM	N-60	13	ND	ND	ND	-	-	-	-	-	-	-	-	13	-	-	-	-	ND	ND	ND	-	-
		1-Jan-94	DM	N-60	ND (250)	ND (250)	ND (250)	ND (500)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		1-Jan-95	DM	N-60	ND	ND	ND	ND	-	-	-	-	-	-	-	-	2 J	-	-	-	-	2 J	ND	ND	-	-
		11-Jan-96		N-60	16	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-97	DM	N-60	7	5	ND (1)	ND (1)	-	-	-	-	-	-	-	-	6	-	-	-	-	3	2	2	-	-
		1-Jan-98	DM	N-60	9	3	ND (1)	6	-	-	-	-	-	-	-	-	10	-	-	-	-	8	7	5	-	-
		1-Dec-99		N-60	ND (100)	ND (100)	ND (100)	ND (200)	-	-	-	-	-	-	-	-	3	-	-	-	-	3	2	1	-	-
		15-Nov-00		N-60	ND (1)	ND (1)	ND (1)	ND (2)	960	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		15-Nov-01		N-60	4	1	ND (1)	ND (2)	ND (1)	-	-	-	-	-	-	-	9	-	-	-	-	8	4	3	-	-
		12-Nov-02		N-60	3	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	2	-	-	-	-	2	2	ND (1)	-	-
		14-Nov-03		N-60	0.99 J	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		19-Oct-04		N-60	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	1.9 J	ND (9.9)	ND (9.9)	ND (9.9)	-	-	-	-	-	ND (5.0)
		7-Nov-05		N-60_11_7_2005	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	7.8	3.3	2.2	8.6	-	17.4	ND (1.2)	9.3	ND (1.2)	-
		1-Dec-06		N-60	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0096)	9.0	2.0 J	ND (1.0)	8.0	-	-	-	-	-	0.18 J
		5-Dec-07		N-60	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0096)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	0.42 J
		7-Feb-08		N-60_2/7/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	11	ND (5)	ND (5)	11	-	-	-	-	-	ND (1)
		25-Jul-08		N-60_7/25/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.03)	14	ND (5)	ND (5)	12	-	-	-	-	-	ND (1)
		4-Nov-08		N-60_110408	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	5	-	ND (1)	4 J	-	-	-	-	-	0.24 J
		11-Nov-09		N-60	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	4.0	-	0.56	3.8	-	-	-	-	-	0.095 J
		8-Nov-10		N-60	0.6 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	4 J	1 J	ND (1)	3 J	-	-	-	-	-	0.57 J
		17-Nov-11		N-60	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (4.8)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	6.0	0.81 J	0.50 J	2.2	-	-	-	-	-	3.9
		4-Apr-13		N-60_040413	ND (2.0)	0.66 J	ND (2.0)	ND (2.0)	2.9	-	ND (4.0)	ND (0.10)	ND (4.0)	ND (4.0)	ND (2.0)	ND (0.020)	ND (0.10)	0.263	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.072 J

See notes on last page.

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Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 8	N-64	1-Jan-93	DM	N-64	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		1-Jan-94	DM	N-64	ND (250)	ND (250)	90 J	ND (500)	-	-	-	-	-	-	-	-	ND (10)	-	-	-	-	ND (10)	ND (10)	ND (10)	-	-
		1-Jan-95	DM	N-64	ND	ND	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	-	-
		11-Jan-96		N-64	ND (0.3)	ND (0.3)	ND (0.4)	ND (0.6)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-97	DM	N-64	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		1-Jan-98	DM	N-64	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	-	1	-	-	-	-	1	ND (1)	ND (1)	-	-
		1-Dec-99		N-64	ND (1)	ND (1)	ND (1)	ND (2)	-	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		15-Nov-00		N-64	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	-	-	-	-	-	-	-	ND (1)	-	-	-	-	ND (1)	ND (2)	ND (3)	-	-
		15-Nov-01		N-64	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	-	-	-	-	-	-	-	4	-	-	-	-	3	3	ND (3)	-	-
		12-Nov-02		N-64	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-	ND (2)	-	-	-	-	ND (1)	ND (1)	ND (1)	-	-
		14-Nov-03		N-64	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	-	-
		19-Oct-04		N-64	ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	-	-	-	-	-	-	-	-	-	ND (5.0)
		7-Nov-05		N-64_11_7_2005	ND (1)	ND (1)	ND (1)	1	ND (1)	-	-	ND (1)	-	-	ND (1)	ND (0.02)	ND (0.1)	2.7	0.5	0.5	-	0.2	ND (0.1)	ND (0.1)	ND (0.1)	-
		1-Dec-06		N-64	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1.0)	ND (1.0)	-	-	ND (1.0)	ND (0.0097)	ND (1.0)	6.0	2.0 J	2.0 J	-	-	-	-	-	0.18 J
		5-Dec-07		N-64	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0096)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	2.9
		8-Feb-08		N-64_2/8/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		23-Jul-08		N-64_7/23/2008	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		3-Nov-08		N-64_110308	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.9)	-	ND (0.9)	ND (0.9)	-	-	-	-	-	18.1
		16-Nov-09		N-64	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.14 J	-	0.85	0.96	-	-	-	-	-	0.36 J
		8-Nov-10		N-64	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.9)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.9)	2 J	ND (0.9)	ND (0.9)	-	-	-	-	-	12.8
		17-Nov-11		N-64	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.98)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.12 J	7.6	1.7	0.74	-	-	-	-	-	0.37 J
		5-Apr-13		N-64_040513	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.1)	0.22 J	ND (2)	ND (1)	ND (0.02)	ND (0.1)	3.16	0.873	0.177	0.738	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		2-Jun-14		N-64	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	0.43 J	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	0.113	4.92	1.02	0.493	1.08	0.112	ND (0.10)	0.127	ND (0.10)	11.8
		20-May-15		N-64_20150520	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	3	0.8	0.3 J	0.8	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		26-May-16		N-64-20160526	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0094)	0.3 J	4	2	0.6	1	0.3 J	0.2 J	0.2 J	0.1 J	0.14 J
		25-Aug-16		N-64-20160825-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	4.08	1.56	0.359	1.21	0.0526	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		19-Oct-16		N-64-20161019-WG	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	0.395	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	4.61	1.61	0.248	1.00	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
AOI 8	N-69	20-Oct-04	N-69		ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	6.9	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		6-Feb-08	N-69_2/6/2008		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	5	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		18-Jul-08	N-69_7/18/2008		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	2	ND (5)	-	-	ND (1)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		28-Feb-14	N-69_022814		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		12-Jun-14	N-69_061214		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		7-Aug-14	N-69_080714		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-Dec-14	N-69_121614		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11-Mar-15	MW-4_031115		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		24-Apr-15	MW-4_042415		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11-Sep-15	N-69_20150911		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		30-Oct-15	MW-4_103015		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3-Feb-16	MW-4_020316		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		9-May-16	MW-4-20160509-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		23-Aug-16	N-69-20160823-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	2.27	0.264	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	0.339	0.157	0.0773	0.131	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		12-Sep-16	MW-4_20160912-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Oct-16	N-69-20161018-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	3.62	0.298	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	0.307	0.191	0.0708	0.0895	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		6-Dec-16	MW-4-20161206-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		9-Feb-17	N-69-20170209		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		27-Apr-17	N-69-20170427-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19-Jul-17	N-69-20170719-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		21-Dec-17	N-69-20171221-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		22-Mar-18	N-69-20180322-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		20-Jun-18	N-69-20180620-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		15-Aug-18	N-69-20180815-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18-Dec-18	N-69-20181218-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		22-Feb-19	N-69-20190222-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16-Apr-19	N-69-20190416-WG		ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N-74	2-Jul-19	N-74-SL_20190702		ND (0.2)	ND (0.2)	0.2 J	ND (0.5)	ND (0.2)	-	0.4 J	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	N-75	7-Feb-08	N-74_2/7/2008		25	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		25-Jul-08	N-74_7/25/2008		4	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		22-May-15	N-74_20150522		10	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	0.5 J	2	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	2	1	0.4 J	0.6	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.085 J
		27-May-16	N-74-20160527		26	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	0.6 J	1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	3	0.5 J	0.5 J	0.6	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		24-Aug-16	N-74-20160824-WG		13.8	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	1.22	ND (1.00)	ND (1.00)	ND (1.00) OE	ND (0.0100) *	ND (0.0500)	3.19	0.490	0.443	0.694	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500) OE	ND (2.00)
		19-Oct-16	N-74-20161019-WG		21.4	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	1.07	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	2.09	0.379	0.250	0.410	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		24-May-17	N-74-20170524		6	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.7	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	2	0.4 J	0.4 J	0.5 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		29-Jun-18	N-75_20180629		9.62	ND (1.00)	ND (1.00)	ND (3.00)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		29-Jun-18	N-75_HS_20180629	Hydra Sleeve	20.4	ND (1.00)	ND (1.00)	ND (3.00)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		26-Jun-19	N-75_20190626		6 J	ND (2)	ND (2)	ND (5)	ND (2)	-	ND (3)	0.7	ND (3)	ND (3)	ND (20)	ND (0.0094)	ND (0.09)	3	ND (0.09)	0.8	0.5	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	N-82	29-Aug-16	N-82-20160829-WG		22,100 SL	6,390 SL	3,230 SL	3,880 SL	ND (50.0) SL	-	84.4 SL	6,820 SL	331 SL	94.7 SL	ND (50.0) SL	ND (0.0100) SL	1.27 SL	21.8 SL	31.1 SL	5.21 SL	9.34 SL	1.15 SL	0.703 SL	0.833 SL	0.283 SL	ND (2.00) SL
		19-Oct-16	N-82-20161019-WG		16,600 SL	3,840 SL	3,260 SL	3,770 SL	ND (100) SL	-	105 SL	11,800 SL	588 SL	201 SL	ND (100) SL	ND (0.0100) OE SL *	35.8 SL	227 SL	335 SL	146 SL	77.4 SL	34.2 SL	24.4 SL	29.4 SL	10.2 SL	ND (2.00) SL
		12-Dec-16	N-82		15,200 SH SL	1,390 SL	3,420 SL	3,560 SL	ND (100) SL	-	104 SL	12,000 SL *	412 SL	108 SL	ND (100) SL	ND (0.0100) SL	2.46 SL	41.2 SL	47.7 SL	8.01 SL	9.70 SL	2.42 SL	1.50 SL	1.85 SL	0.802 SL	ND (2.00) SL
		13-Jul-18	N-82_20180713		13,000 SL	4,320 SL	4,550 SL	3,570 SL	ND (50.0) SL	-	153 SL	9,820 SL	612 SL	176 SL	ND (50.0) SL	ND (0.0100) SL	0.787 SL	43.3 SL	35.9 SL	3.72 SL	6.51 SL	0.765 SL	ND (0.500) SL	0.505 SL	ND (0.500) SL	ND (2.00) SL
		3-Jul-19	N-82-SL_20190703		2,500 SL	1,000 SL	2,700 SL	1,700 SL	ND (1) SL	-	130 SL	4,500 SL	540 SL	150 SL	ND (10) SL	ND (0.0095) SL	5 SL	44 SL	58 SL	14 SL	13 SL	5 SL	3 SL	3 SL	1 SL	ND (1.1) SL

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
AOI 8	N-85	19-Oct-04	N-85		ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	26	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		6-Feb-08	N-85_2/6/2008		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	2	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		16-Jul-08	N-85_07/16/08		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	2	ND (50)	-	-	ND (1)	ND (0.03)	ND (50)	ND (50)	ND (50)	ND (50)	-	-	-	-	-	ND (1)
		5-Jun-14	N-85		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.34 J	-	0.30 J	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.5 J
		20-May-15	N-85_20150520		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	0.4 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.13 J
		26-May-16	N-85-20160526		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0093)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		23-Aug-16	N-85-20160823-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.500)	0.218	0.161	ND (0.500)	0.363	ND (0.500)	ND (0.500)	ND (0.500)	ND (0.500)	ND (2.00)
		17-Oct-16	N-85-20161017-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	0.266	0.350	0.141	0.0896	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		24-May-17	N-85-20170524		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	0.7 J	0.1 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	0.3 J	0.1 J	0.2 J	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		2-Jul-18	N-85_20180702		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	11.3	0.327	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0101)	ND (0.0500)	0.537	0.283	ND (0.0500)	0.0890	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	N-98	14-Jul-08	N-98_07/14/08		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		20-Sep-11	N-98_09-20-2011		ND (1.0)	ND (2.0)	ND (2.0)	ND (6.0)	ND (2.0)	-	ND (2.0)	ND (8.0)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.05)	-	-	-	-	-	-	-	-	-	ND (0.48)
		5-Apr-13	N-98_040513		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (0.1)	ND (2)	ND (2)	ND (1)	ND (0.02)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (3)
		4-Jun-14	N-98		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		20-May-15	N-98_20150520		ND (0.5)	ND (0.5)	ND (0.5)	0.7 J	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.32 J
		18-Mar-16	N-98-20160318		ND (1)	ND (5)	ND (1)	ND (3)	ND (1)	-	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (0.01)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (2)
		24-May-16	N-98-20160524		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		23-Aug-16	N-98-20160823-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	0.0869	0.0534	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		14-Oct-16	N-98-20161014-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	0.0881	0.0594	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		24-May-17	N-98-20170524		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		29-Jun-18	N-98_20180629		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	N-99	23-Jul-08	N-99_7/23/2008		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (50)	-	-	ND (1)	ND (0.029)	ND (50)	ND (50)	ND (50)	ND (50)	-	-	-	-	-	ND (1)
		17-Nov-09	N-99		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.058)	-	ND (0.038)	ND (0.096)	-	-	-	-	-	ND (0.050)
		10-Nov-10	N-99		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.052)
		17-Nov-11	N-99		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.96)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.076)	ND (0.096)	ND (0.076)	ND (0.096)	-	-	-	-	-	ND (0.080)
		5-Apr-13	N-99_040513		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.036 J
		4-Jun-14	N-99		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	2.7 J
		20-May-15	N-99_20150520		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		26-May-16	N-99-20160526		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0093)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		23-Aug-16	N-99-20160823-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		14-Oct-16	N-99-20161014-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		24-May-17	N-99-20170524		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	0.3 J	0.3 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		29-Jun-18	N-99_20180629		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	N-100	14-Jul-08	N-100_07/14/08		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (2)	ND (5)	-	-	ND (1)	ND (0.029)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)
		4-Apr-13	N-100_040413		ND (1.0)	0.79 J	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.091 J
		2-Jun-14	N-100		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		19-May-15	N-100_20150519		5	ND (0.5)	4	11	ND (0.5)	-	ND (0.5)	0.7	4	1 J	ND (0.5)	ND (0.0097)	ND (0.1)	0.2 J	0.3 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.46 J
		23-May-16	N-100-20160523		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		22-Aug-16	N-100-20160822-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		22-Aug-16	N-100-20160822-WG-DUP	Field Duplicate	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		14-Oct-16	N-100-20161014-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		14-Oct-16	N-100-20161014-WG-DUP	Field Duplicate	ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
AOI 8	N-111	24-Jul-08	N-111_7/24/2008		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	8	ND (50)	-	-	ND (1)	ND (0.03)	110	170	380	160	-	-	-	-	-	ND (1)
		11-Nov-09	N-111		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	4	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	5.5	-	8.6	ND (19)	-	-	-	-	-	ND (0.050)
		10-Nov-10	N-111		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	4	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	1 J	5	2 J	3 J	-	-	-	-	-	0.52 J
		17-Nov-11	N-111		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.8 J	-	4	ND (0.95)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	0.21	4.4	ND (0.55)	ND (2.1)	-	-	-	-	-	ND (0.080)
		4-Apr-13	N-111_040413		ND (1.0)	ND (1.0)	ND (1.0)	0.98 J	0.58 J	-	6.9	ND (0.10)	0.87 J	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	1.89	0.399	0.177	0.240	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.083 J
		2-Jun-14	N-111		ND (0.50)	ND (1.0)	ND (1.0)	0.73 J	0.48 J	-	3.2	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	0.546	2.17	ND (0.10)	0.973	0.452	0.332	0.351	0.258	0.332	1.6 J
		20-May-15	N-111_20150520		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	4	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.1 J	4	0.2 J	0.4 J	0.4 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.082)
		26-May-16	N-111-20160526		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	1 J	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.5 J	3	ND (0.1)	0.9	0.5 J	0.3 J	0.3 J	0.2 J	0.2 J	ND (0.13)
		26-May-16	N-111-20160526-DUP	Field Duplicate	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	2 J	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.3 J	3	ND (0.1)	0.8	0.4 J	0.2 J	0.3 J	0.2 J	0.3 J	ND (0.13)
		24-Aug-16	N-111-20160824-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	3.58	0.302	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	0.0666	3.79	ND (0.0500)	0.616	0.636	0.0782	0.0683	ND (0.0500)	ND (0.0500) OE	ND (2.00)
		19-Oct-16	N-111-20161019-WG		ND (1.00)	ND (5.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	3.80	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) *	0.201	3.09	ND (0.0500)	0.880	0.706	0.171	0.150	0.101	0.139	ND (2.00)
		24-May-17	N-111-20170524		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	3	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	2	ND (0.1)	0.6	0.3 J	ND (0.1)	0.2 J	0.2 J	0.3 J	ND (0.090)
		2-Jul-18	N-111_20180702		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	4.85	0.278	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	3.65	ND (0.0500)	0.367	0.370	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	N-112	24-Jul-08	N-112_7/24/2008		ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	22	ND (50)	-	-	ND (1)	ND (0.029)	290	380	1,400	760	-	-	-	-	-	ND (1)
		29-Aug-16	N-112-20160829-WG		140 SL	82.3 SL	43.1 SL	52.6 SL	ND (1.00) SL	-	3.13 SL	66.6 SL	3.23 SL	ND (1.00) SL	ND (1.00) SL	ND (0.0100) SL *	5.56 SL	8.26 SL	13.1 SL	20.2 SL	6.35 SL	4.94 SL	2.76 SL	2.04 SL	2.15 SL	ND (2.00) SL
		14-Oct-16	N-112-20161014-WG		2.32 SL	ND (5.00) SL	5.52 SL	28.4 SL	ND (1.00) SL	-	5.77 SL	6.85 SL	9.19 SL	4.18 SL	ND (1.00) SL	ND (0.0100) SL *	3.95 SL	5.46 SL	9.82 SL	12.9 SL	3.20 SL	2.48 SL	1.06 SL	0.684 SL	0.557 B SL	ND (2.00) SL
		6-Jul-18	N-112_20180706		ND (1.00) SL	ND (1.00) SL	ND (1.00) SL	ND (3.00) SL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		9-Jul-19	N-112_SL_20190709		ND (0.2) SL	ND (0.2) SL	ND (0.2) SL	ND (0.5) SL	ND (0.2) SL	-	2 J SL	ND (0.1) SL	ND (0.3) SL	ND (0.3) SL	ND (2) SL	ND (0.0095) SL	8 SL	9 SL	9 SL	19 SL	5 SL	4 SL	2 SL	1 SL	0.8 SL	ND (1.1) SL
	N-133	23-Jul-08	N-133_7/23/2008		10,000	ND (10)	11	17	ND (10)	-	ND (20)	31 *	-	-	ND (10)	ND (0.029)	ND (5)	ND (5)	9	6	-	-	-	-	-	ND (1)
		4-Jun-14	N-133		7,100	ND (25)	11.5 J	23.6 J	ND (25)	-	ND (25)	15.8	9.8 J	ND (50)	ND (25)	ND (0.020)	ND (0.10)	0.609	1.27	0.273	0.113	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	5.4
		29-Jun-18	N-133_20180629		11,500	5.41	17.4	35.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		29-Jun-18	N-133_HS_20180629	Hydra Sleeve	11,000	5.43	18.4	38.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		8-Jul-19	N-133_20190708		8,500	3 J	15	30	ND (1)	-	8 J	12	10 J	3 J	ND (10)	ND (0.0095)	ND (0.1)	0.5	0.6	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	N-151	20-Oct-16	N-151-20161020-WG		ND (1.00) SL	6.94 SL	5.16 SL	114 SL	ND (1.00) SL	-	8.82 SL	0.394 SL	22.3 SL	7.37 SL	ND (1.00) SL	ND (0.0100) SL *	0.706 SL	0.539 SL	1.71 SL	1.03 SL	0.372 SL	0.509 SL	0.164 SL	ND (0.0500) SL	0.0804 SL	ND (2.00) SL
		8-Jul-19	N-151_SL_20190708		ND (0.2) SL	0.2 J SL	0.8 J SL	13 SL	ND (0.2) SL	-	5 SL	ND (0.1) SL	1 J SL	ND (0.3) SL	ND (2) SL	ND (0.0094) SL	ND (0.1) SL	0.6 SL	0.4 J SL	0.7 SL	ND (0.1) SL	0.3 J SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (1.1) SL
	N-156	19-Oct-16	N-156-20161019-WG		3.51	ND (5.00)	ND (1.00)	4.07	ND (1.00)	-	8.97	9.20	10.3	8.64	ND (1.00)	ND (0.0100) *	0.495	64.8	52.1	3.64	9.52	0.576	0.210	0.227	0.0805	ND (2.00)
		17-Jan-17	N_156_20170117		6.95	ND (1.00)	2.70	11.3	ND (1.00)	-	26.3	29.8 *	29.1	19.5	ND (1.00)	ND (0.0100)	0.283	64.3	82.6	4.14	12.3	0.452	0.0839	0.118	ND (0.0500)	ND (2.00)
		24-May-17	N-156-20170524		8	0.7 J	2	10	ND (0.5)	-	29	13	29	20	ND (0.5)	ND (0.0095)	0.3 J	55	54	3	8	0.3 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		3-Jul-18	N-156_20180703		5.26	ND (1.00)	1.05	6.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		25-Jun-19	N-156_20190625		3	0.3 J	0.4 J	3 J	ND (0.2)	-	12	0.9	8	6	ND (2)	ND (0.0095)	0.3 J	32	42	3	7	0.3 J	0.1 J	0.2 J	ND (0.1)	ND (1.1)
	N-157	2-Jul-18	N-157_20180702		262	64.0	28.2	79.6	2.68	-	15.6	35.0	1.17 B	29.7	ND (1.00)	ND (0.0100)	ND (0.0500)	0.258	0.110	ND (0.0500)	0.0732	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		2-Jul-18	N-157_HS_20180702	Hydra Sleeve	383	86.4	37.0	106	4.69	-	19.3	63.3	1.55 B	39.0	1.04	ND (0.0100)	ND (0.0500)	0.358	0.137	ND (0.0500)	0.0711	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		24-Jun-19	N-157_20190624		570	110	63	110	1	-	22	110	0.7 J	23	ND (2)	ND (0.0095)	ND (0.09)	0.3 J	0.2 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	PGW-MW-6	25-Jun-19	PGW-MW-6_20190625		11	0.3 J	0.3 J	1 J	0.3 J	-	26	1	0.5 J	0.5 J	ND (2)	ND (0.0095)	0.5 J	26	4	3	4	0.4 J	0.4 J	0.4 J	0.3 J	ND (1.1)
	PGW-MW-9	21-Oct-16	PGW-MW-9-20161021-WG		21.9 SL	ND (5.00) SL	74.3 SL	32.7 SL	ND (1.00) SL	-	69.1 SL	ND (3.75) SL	28.8 SL	14.1 SL	ND (1.00) SL	ND (0.0100) SL *	ND (0.750) SL	62.7 SL	47.8 SL	21.1 SL	17.7 SL	ND (0.750) SL	1.25 SL	ND (0.750) SL	ND (0.750) SL	ND (2.00) SL
		12-Jul-19	PGW-MW-9_20190712		20	1	82	26	ND (0.2)	-	120	20	39	20	ND (2)	ND (0.0094)	15	71	67	42	23	13	11	9	5	ND (1.1)
	PGW-MW-21	21-Oct-16	PGW-MW-21-20161021-WG		9.10	ND (5.00)	6.15	4.94	ND (1.00)	-	16.7	ND (7.50)	2.11	1.74	ND (1.00)	ND (0.0100) *	137	238	309	322	159	168	170	208	95.1	ND (2.00)
		5-Jul-18	PGW-MW-21_HS_20180705	Hydra Sleeve	106	14.8	200	160	ND (1.00)	-	39.7	604	65.5	22.4	ND (1.00)	ND (0.0100)	0.752	106	85.7	6.80	16.6	1.03	0.854	0.906	0.522	ND (2.00)
		5-Jul-18	PGW-MW-21-20180705		77.5	8.66	11.2	103	ND (1.00)	-	2.05	ND (5.00)	49.0	19.3	ND (1.00)	ND (0.0100)	4.00	95.9	15.0	13.7	19.5	4.63	4.66	5.01	2.89	ND (2.00)
		25-Jun-19	PGW-MW-21_20190625		130	17	150	130	ND (0.2)	-	47	640	65	24	ND (2)	ND (0.0094)	2	110	86	9	18	2	2	2	1	ND (1.1)
	RW-502	26-Aug-16	RW-502-20160826-WG		28.2 SL	ND (5.00) SL	ND (1.00) SL	10.7 SL	ND (1.00) SL	-	40.2 SL	9.83 SL	2.53 SL	1.85 SL	ND (1.00) SL	ND (0.0100) SL *	1.24 SL	5.17 SL	17.5 SL	4.85 SL	2.92 SL	1.31 SL	0.945 SL	0.677 SL	0.557 SL	ND (2.00) SL
		17-Oct-16	RW-502-20161017-WG		48.1 SL	5.71 SL	ND (1.00) SL	12.7 SL	ND (1.00) SL	-	45.6 SL	15.3 SL	2.12 SL	2.32 SL	ND (1.00) SL	ND (0.0100) SL *	0.749 SL	7.10 SL	13.1 SL	3.02 SL	ND (0.0500) SL	0.674 SL	0.427 SL	0.319 SL	0.291 SL	ND (2.00) SL
		6-Jul-18	RW-502_20180706		ND (1.00) SL	ND (1.00) SL	ND (1.00) SL	ND (3.00) SL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2-Jul-19	RW-502-SL_20190702		46 SL	6 J SL	ND (2) SL	14 J SL	ND (2) SL	-	45 J SL	32 SL	ND (3) SL	ND (3) SL	ND (20) SL	ND (0.0094) SL	9 SL	32 SL	61 SL	18 SL	16 SL	6 SL	4 SL	3 SL	2 SL	ND (1.1) SL

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
AOI 8	V-MW-2	26-May-11	MW-2_05-26-2011		1,300	210	270	500	ND (40)	-	55	910	ND (40)	150	ND (20)	ND (0.05)	-	-	-	-	-	-	-	-	-	ND (0.48)
		21-Sep-11	MW-2_09-21-2011		940	170	190	440	32	-	56	660	16	140	ND (2.0)	ND (0.05)	-	-	-	-	-	-	-	-	-	ND (0.48)
		13-Feb-13	MW-2_02-13-2013		1,000	200	280	610	19	-	110	930	23	230	ND (10)	ND (0.029)	10	-	-	40	-	10	5 J	5 J	4 J	31
		4-Apr-13	MW-2_04-04-2013		970	180	310	600	18	-	120	800	20	200	ND (5.0)	ND (0.029)	1 J	-	-	4 J	-	1 J	ND (5.0)	ND (5.0)	ND (5.0)	ND (1.0)
		14-May-13	MW-2_05-14-2013		990	210	310	620	19	-	140	790	22	240	ND (10)	ND (0.029)	19	-	-	120	-	23	7	11	2 J	ND (1.0)
		28-Jun-13	MW-2_06-28-2013		960	180	220	440	15	-	79	590	11	110	ND (3.0)	ND (0.01)	3 J	-	-	9	-	2 J	1 J	1 J	ND (1.0)	ND (0.085)
		7-Aug-13	MW-2_08-07-2013		920	160	230	450	15 J	-	97	680	11 J	130	ND (10)	ND (0.0094)	9 J	-	-	37	-	9 J	6 J	6 J	4 J	ND (0.085)
		18-Sep-13	MW-2_09-18-2013		980	180	300	610	20	-	170	960	18 J	210	ND (5)	ND (0.0098)	9	-	-	28	-	7	3 J	4 J	2 J	ND (0.085)
		5-Nov-13	MW-2_11-05-2013		970	160	210	410	21	-	92	540	10 J	120	ND (5)	ND (0.0094)	8	-	-	23	-	6	4 J	3 J	2 J	0.20 J
		20-Dec-13	MW-2_12-20-2013		980	180	320	640	27	-	180	1,000	20 J	210	ND (10)	ND (0.0098)	17	-	-	55	-	13	7	7	3 J	0.089 J
		17-Apr-14	MW-2_04-17-2014		990	190	290	590	27	-	150	900	18 J	200	ND (5)	ND (0.0096)	15	-	-	48	-	13	7	7	4 J	0.089 J
		24-Jun-14	MW-2_06-24-2014		860	160	160	380	32	-	73	620	10 J	110	ND	ND	ND	-	-	2 J	-	ND	ND	ND	ND	ND
		15-Sep-14	MW-2_09-15-2014		630	140	240	450	23	-	180	590	15 J	170	ND	ND	7	-	-	24.0	-	6	3	3	2	ND
		4-Dec-14	MW-2_12-04-2014		960	190	170	420	16	-	67	570	9 J	97	ND	ND	0.9	-	-	3	-	1	0.4 J	0.4 J	0.2 J	ND
		17-Mar-16	V-MW-2-20160317		72.6	97.8	55.4	118	3.57	-	14.6	106 *	1.46	19.5	ND (1)	ND (0.01)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (2)
		9-Jul-19	V-MW-2_20190709		210	94	76	220	3	-	44	71	3 J	33	ND (2)	ND (0.0094)	2	1	2	2	0.4 J	0.7	1	2	2	ND (1.1)
AOI 9	MW-1SRTF	9-Nov-15	AOI9_MW-1SRTF_110915		0.74 SL	1.1 SL	ND (1.0) SL	1.4 SL	70.4 SL	-	12.9 SL	293 SL	ND (2.0) SL	ND (2.0) SL	ND (1.0) SL	ND (0.020) SL	0.291 SL	1.49 SL	1.69 SL	0.641 SL	0.293 SL	0.241 SL	0.193 SL	0.252 SL	0.184 SL	24.9 SL
		8-Nov-16	MW-1SRTF-20161108-WG		4,980 SL	333 SL	1,320 SL	6,830 SL	269 SL	-	166 SL	297 SL	2,110 SL	349 SL	ND (1.0) SL	0.28 SL	0.12 SL	0.60 SL	1.2 SL	0.33 SL	0.13 SL	0.084 J SL	0.042 J SL	0.051 J SL	0.036 J SL	14.0 SL
		27-Jun-19	MW-1SRTF-SL_20190627		6,200 SL	730 SL	2,100 SL	9,200 SL	210 SL	850 SL	350 SL	410 SL	1,500 SL	410 SL	ND (40) SL	0.026 J SL	ND (0.1) SL	0.6 SL	0.7 SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (0.1) SL	ND (1.1) SL
	S-74D2SRTF	8-Apr-11	S-74D2SRTF_04082011		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.6 J	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
		8-Apr-11	S-74D2SRTF_04082011 FILT		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		30-Jun-11	S-74D2SRTF_06302011		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.6 J	-	ND (0.5)	ND (0.9)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.9)	ND (0.9)	ND (0.9)	ND (0.9)	-	-	-	-	-	-
		30-Jun-11	S-74D2SRTF_06302011 FILT.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		29-May-12	S-74D2_52912		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (0.09)	ND (0.09)	0.1 J	ND (0.09)	-	-	-	-	-	ND (1.0)
		20-Aug-12	S-74D2_082012		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.7 J	-	ND (0.5)	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.0)
		31-Oct-12	S-74D2_103112		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.63 J	-	ND (5.0)	ND (0.10)	ND (5.0)	ND (5.0)	ND (1.0)	ND (0.015) *	ND (0.10)	ND (0.10)	0.066	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.10)	ND (5.0)
		28-Mar-13	S-74D2_032813		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	0.66 J	-	ND (2.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	4.2
		12-Mar-15	S-74D2SRTF_031215		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.48 J	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020) ED	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		14-Aug-15	S-74D2SRTF-20150814		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	0.37 J	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.019)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)
		3-Dec-15	AOI9_S-74D2SRTF_120315		ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	0.40 J	-	ND (1.0)	-	ND (1.0)	ND (1.0)	ND (1.0)	-	-	-	-	-	-	-	-	-	-	-
		19-May-17	S-74D2SRTF-20170519		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
	S-110DSRTF	12-Aug-15	S-110DSRTF-20150812		0.35 J	ND (1.0)	ND (1.0)	ND (1.0)	31.7	-	ND (1.0)	ND (0.10)	0.34 J	ND (2.0)	5.4	ND (0.021)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)
		11-Nov-15	AOI9_S-110DSRTF_111115		0.30 J	ND (1.0)	ND (1.0)	ND (1.0)	43.9	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	5.7	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)
		9-Nov-16	S-110DSRTF-20161109-WG		ND (1.0)	ND (1.0)	ND (1.0)	ND (3.0)	47.7	-	ND (1.0)	ND (0.030)	ND (1.0)	ND (1.0)	5.1	ND (0.040) J	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.026 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)
		23-May-17	S-110DSRTF-20170523		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	27	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	4	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		3-Jul-18	S-110DSRTF_20180703		4.23	1.73	ND (1.00)	ND (3.00)	33.5	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	3.94	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		3-Jul-18	S-110DSRTF_HS_20180703	Hydra Sleeve	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	31.6	30.1	ND (1.00)	-	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100) HT	-	-	-	-	-	-	-	-	-	-
		26-Jun-19	S-110DSRTF_20190626		0.3 J	ND (0.2)	ND (0.2)	ND (0.5)	35	31	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	3 J	0.031	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-110SRTF	11-Aug-09	S-110 SRTF		3	2	300	880	ND (1)	-	120	300	970	300	ND (1)	ND (0.03)	ND (50)	ND (50)	ND (50)	ND (50)	-	-	-	-	-	4.5
		10-Mar-15	S-110SRTF_031015		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.11)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020) ED	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (3.0)
		14-Aug-15	S-110SRTF-20150814		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	1.0	0.445	ND (2.0)	0.64 J	ND (1.0)	ND (0.019)	0.394	0.453	0.684	0.632	0.383	0.371	0.342	0.381	1.18	ND (3.0)
		5-Nov-15	AOI9_S-110SRTF_110515		ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)
		6-Dec-17	S-110DSRTF-20171206		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	27	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	5	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.11)
		26-Jun-19	S110SRTF_20190626		0.4 J	0.5 J	ND (0.2)	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

				BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved	
Area of Interest	Sample Location	Sample Date	Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
AOI 9	S-116SRTF	11-Aug-09	S-116 SRTF	31	3	14	9	4	-	10	7	3	12	ND (1)	ND (0.03)	ND (5)	ND (5)	ND (5)	ND (5)	-	-	-	-	-	ND (1)	
		11-Mar-15	S-116SRTF_031115	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (0.11)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020) ED	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (3.0)	
		14-Aug-15	S-116SRTF-20150814	27.4	12.0	4.7	8.6	44.3	-	70.2	0.591	0.32 J	1.8 J	ND (1.0)	ND (0.019)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)
		9-Nov-15	AOI9_S-116SRTF_110915	ND (0.50)	0.37 J	ND (1.0)	0.61 J	0.37 J	-	0.86 J	ND (0.11)	0.26 J	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.056)	ND (0.056)	ND (0.11)	ND (0.11)	ND (3.0)
		11-Nov-16	S-116SRTF-20161111-WG	21.6	3.0	8.1	2.5 J	16.4	-	36.1	2.4	1.4	19.2	ND (1.0)	ND (0.040)	ND (0.10)	0.051 J	0.062 J	0.023 J	0.015 J	0.016 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
		18-May-17	S-116SRTF-20170518	ND (0.5)	0.5 J	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.2 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.29 J
		8-Dec-17	S-116SRTF-20171208	34	5	21	6	12	-	46	6	ND (0.5)	40	ND (0.5)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.11)	
		28-Jun-18	S-116SRTF_20180628	48.3	ND (10.0)	ND (10.0)	ND (30.0)	16.1	-	53.6	0.729	ND (10.0)	ND (10.0)	ND (10.0)	ND (10.0)	ND (0.0100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (2.00)
	S-118DSRTF	12-Aug-15	S-118DSRTF-20150812	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	3.9	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)
		11-Nov-15	AOI9_S-118DSRTF_111115	0.65	0.27 J	ND (1.0)	ND (1.0)	189	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)
		9-Nov-16	S-118DSRTF-20161109-WG	0.80 J	0.25 J	ND (1.0)	ND (3.0)	210	-	0.49 J	ND (0.048)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040) J	ND (0.10)	0.025 J	0.026 J	ND (0.10)	0.089 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
		7-Dec-17	S-118DSRTF-20171207	0.8 J	ND (0.5)	ND (0.5)	ND (0.5)	190	-	ND (0.5)	0.3 J	ND (0.5)	ND (0.5)	0.6 J	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.11)
		5-Jul-18	S-118DSRTF_20180705	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	134	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		5-Jul-18	S-118DSRTF_HS_20180705	Hydra Sleeve	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		26-Jun-19	S-118DSRTF_20190626	0.6 J	ND (0.2)	ND (0.2)	ND (0.5)	110	42	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-120DSRTF	8-Apr-11	S-120DSRTF_04082011	0.7 J	2	ND (0.5)	1	37	-	6	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-
		8-Apr-11	S-120DSRTF_04082011 FILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		30-Jun-11	S-120DSRTF_06302011	0.6 J	0.7 J	ND (0.5)	0.6 J	30	-	4	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	-	-
		30-Jun-11	S-120DSRTF_06302011 FILT.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1.0)
		29-May-12	S-120D_52912	ND (0.5)	0.5 J	ND (0.5)	0.7 J	36	-	6	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.09)	0.1 J	0.3 J	ND (0.09)	-	-	-	-	-	-	ND (1.0)
		20-Aug-12	S-120D_082012	ND (0.5)	0.7 J	ND (0.5)	1	39	-	6	ND (0.09)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.09)	ND (0.09)	0.3 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.0)
		1-Nov-12	S-120D_11112	0.57	0.73 J	ND (1.0)	ND (1.0)	42.9	-	11.1	0.11	ND (5.0)	ND (5.0)	ND (1.0)	ND (0.015) *	ND (0.10)	ND (0.10)	0.15	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.10)	ND (5.0)	
		28-Mar-13	S-120D_32813	0.87 J	1.1	0.36 J	1.9	47.1	-	24.6	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	0.314	0.280	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.8 J
		13-Mar-15	S-120DSRTF_031315	0.65	0.94 J	ND (1.0)	0.88 J	76.1	-	12.4	ND (0.10)	ND (2.0)	0.24 J	ND (1.0)	ND (0.020) ED	ND (0.10)	0.343	0.200	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		13-Aug-15	S-120DSRTF-20150813	0.57	0.80 J	ND (1.0)	0.69 J	64.3	-	8.8	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.019)	ND (0.10)	0.169	0.132	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)	
		10-Nov-15	AOI9_S-120DSRTF_111015	ND (0.50)	ND (1.0)	ND (1.0)	0.43 J	ND (1.0)	-	ND (1.0)	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.021)	ND (0.10)	0.237	0.170	ND (0.10)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)	ND (0.10)	ND (3.0)	
		9-Nov-16	S-120DSRTF-20161109-WG	0.42 J	0.84 J	ND (1.0)	0.78 J	60.1	-	10.6	0.62	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040) J	ND (0.10)	0.15	0.20	0.019 J	0.047 J	0.016 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
		18-May-17	S-120DSRTF-20170518	ND (0.5)	0.7 J	ND (0.5)	0.5 J	45	-	8	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0099)	ND (0.1)	ND (0.1)	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		5-Jul-18	S-120DSRTF_20180705	1.31	ND (1.00)	ND (1.00)	ND (3.00)	44.4	-	6.82	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	0.0579	0.220	ND (0.0500)	0.110	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	S-122SRTF	13-Aug-09	S-122 SRTF	1,800	51	56	49	140	-	240	310	19	290	ND (5)	ND (0.029)	ND (5)	21	47	14	-	-	-	-	-	-	8.5
		10-Mar-15	S-122SRTF_031015	120	39.0	27.2	30.8	39.5	-	171	27.2	5.0	119	ND (1.0)	ND (0.020) ED	0.442	6.07	7.47	1.36	1.06	0.395	0.204	0.237	0.110	12.8	
		18-Aug-15	S-122SRTF-20150818	64.9	31.9	11.7	18.4	41.8	-																	

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

					BENZENE	TOUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHRENE	BENZO(G,H)PERYLENE	LEAD, Dissolved	
Area of Interest	Sample Location	Sample Date		Sample Type	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
AOI 9	S-143SRTF	8-Nov-16	S-143SRTF-20161108-WG		ND (1.0)	0.13 J	ND (1.0)	ND (3.0)	249	-	ND (1.0)	ND (0.071)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.040) J	ND (0.10)	0.020 J	0.038 J	0.021 J	0.026 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
		7-Dec-17	S-143SRTF-20171207		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	100	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.11)	
		21-Jun-18	S-143SRTF_20180621		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	172	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)	
		21-Jun-18	S-143SRTF_HS_20180621	Hydra Sleeve	ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	149	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)	
		25-Jun-19	S-143SRTF_20190625		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	0.3 J	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-144SRTF	9-Nov-16	S-144SRTF-20161109-WG		ND (1.0)	ND (1.0)	ND (1.0)	0.61 J	106	-	ND (1.0)	ND (0.073)	2.2	0.56 J	0.36 J	ND (0.040) J	ND (0.10)	0.11	0.26	0.12	0.029 J	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
		18-May-17	S-144SRTF-20170518		ND (0.5)	ND (0.5)	ND (0.5)	0.6 J	69	-	ND (0.5)	ND (0.1)	0.6 J	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)	
		7-Dec-17	S-144SRTF-20171207		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	34	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.11)	
		26-Jun-19	S-144SRTF_20190626		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	68	45	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-145SRTF	9-Nov-16	S-145SRTF-20161109-WG		300	38.4	291	1,150	32.5	-	59.4	41.4	568	201	ND (1.0)	ND (0.040)	ND (0.10)	0.74	0.83	0.045 J	0.14	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (5.0)	
		18-May-17	S-145SRTF-20170518		80	4	22	52	45	-	9	4	68	23	ND (0.5)	ND (0.0097)	ND (0.1)	0.4 J	0.2 J	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.21 J	
		8-Dec-17	S-145SRTF-20171208		4	ND (0.5)	0.8 J	2	4	-	ND (0.5)	ND (0.1)	1 J	11	ND (0.5)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	2.1	
	S-146SRTF	19-Nov-18	S-146-SRTF-20181119-WG		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	5.33	ND (5.00)	ND (1.00)	ND (5.00)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	ND (2.00)
		5-Feb-19	S-146-SRTF-20190205-WG		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	6.61	6.32	ND (1.00)	ND (5.00)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	
		25-Jun-19	S-146SRTF_20190625		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	6	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-147SRTF	19-Nov-18	S-147-SRTF-20181119-WG		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	5.25	ND (5.00)	ND (1.00)	ND (5.00)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	ND (2.00)
		5-Feb-19	S-147-SRTF-20190205-WG		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	5.14	ND (5.00)	ND (1.00)	ND (5.00)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	
		25-Jun-19	S-147SRTF_20190625		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	4	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0096)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-148SRTF	19-Nov-18	S-148-SRTF-20181119-WG		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	5.42	ND (5.00)	ND (1.00)	ND (5.00)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	ND (2.00)
		5-Feb-19	S-148-SRTF-20190205-WG		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	6.77	ND (5.00)	ND (1.00)	ND (5.00)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	
		27-Jun-19	S-148SRTF_20190627		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	6	ND (10)	ND (0.3)	ND (0.09)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)	
	S-149SRTF	19-Nov-18	S-149-SRTF-20181119-WG		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	7.08	ND (5.00)	ND (1.00)	ND (5.00)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	ND (2.00)
		5-Feb-19	S-149-SRTF-20190205-WG		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	5.94	6.77	ND (1.00)	ND (5.00)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	
		25-Jun-19	S-149SRTF_20190625		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	5	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	S-150SRTF	19-Nov-18	S-150-SRTF-20181119-WG		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	89.4	ND (5.00)	ND (1.00)	ND (5.00)	ND (1.00)	ND (1.00)	1.00	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	ND (2.00)
		5-Feb-19	S-150-SRTF-20190205-WG		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	13.6	ND (5.00)	ND (1.00)	ND (5.00)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	-	-	-	-	-	-	-	-	-	-	
		25-Jun-19	S-150SRTF_20190625		0.3 J	ND (0.2)	ND (0.2)	ND (0.5)	93	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
		25-Jun-19	DUP-3_20190625	Field Duplicate	0.4 J	ND (0.2)	ND (0.2)	ND (0.5)	92	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
AOI 10	W-1	8-Sep-10	W-1_090810		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	50	29	36	93	-	-	-	-	-	ND (0.052)	
		27-Apr-11	W-1_04272011		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	20	13	13	37	-	-	-	-	-	ND (0.052)	
		1-Jul-19	W-1_20190701		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	0.5 J	-	0.4 J	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	3	2	0.9	0.8	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)	
	W-12	26-Oct-04	W-12		40	6.9	34	93	ND (5.0)	-	15	24	-	-	ND (5.0)	ND (0.020)	1.2 J	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0	

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
AOI 10	W-33	27-Apr-11	W-33_04272011		250	60	13	70	ND (5)	-	ND (5)	330	36	11 J	ND (5)	ND (0.0094)	6	36	66	16	-	-	-	-	-	0.068 J
		1-Jul-19	W-33_20190701		36	1	3	15	ND (0.2)	-	3 J	25	12	3 J	ND (2)	ND (0.0095)	ND (0.1)	10	11	2	3	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
BELMONT	MW-30	15-Oct-04	MW-30		490	3.0	24	18	ND (1.8)	-	6.0	64	-	-	7.3	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	ND (10)	ND (10)	ND (10)	-	ND (5.0)
		27-Apr-05	MW30-042705		960	37	430	870	ND (5)	-	61	3,000	-	-	ND (5)	ND (0.029)	ND (96)	ND (96)	ND (96)	ND (96)	-	-	-	-	-	-
		18-Nov-09	MW-30		300	5 J	24	15	ND (3)	-	9 J	180	8 J	3 J	ND (3)	ND (0.010)	48	-	93	110	-	-	-	-	-	0.17 J
		10-Nov-10	MW-30		22	ND (3)	3 J	ND (3)	ND (3)	-	ND (3)	110	ND (3)	ND (3)	ND (3)	ND (0.0096)	70	13 J	52	90	-	-	-	-	-	0.30 J
		14-Apr-11	MW-30		100	ND (0.7)	4 J	5	ND (0.5)	-	3 J	-	-	-	ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-
		6-Jun-11	MW-30		210	4 J	11	21	ND (0.5)	-	6	70	11	4 J	ND (1)	ND (1)	ND (200)	15	35	23	-	-	-	-	-	ND (0.08)
		29-Nov-11	MW-30		110	0.9 J	3	5	ND (0.5)	-	3	89	2	0.7 J	ND (0.5)	ND (0.0098)	ND (70)	11	43	66	-	-	-	-	-	0.61 J
		12-Jul-12	MW30_071212		41	1	2	5	ND (0.5)	-	3	55	2	0.6 J	ND (0.5)	ND (0.0096)	10	19	29	21	7	6	6	10	5	0.32 J
		3-Apr-13	MW-30		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		3-Apr-13	MW-30_040313		36.3	1.3	0.40 J	2.9	ND (1.0)	-	3.2	21.9	1.8 J	ND (2.0)	ND (1.0)	ND (0.020)	5.41	3.48	8.55	8.61	ND (1.0)	2.36	3.76	7.02	4.11	-
		28-May-14	MW-30		21.5	3.6	ND (1.0)	3.0	ND (1.0)	-	2.7	6.32	1.5 J	0.41 J	ND (1.0)	ND (0.020)	12.2	1.15	10.4	20.7	0.794	5.38	8.87	16.2	8.02	ND (3.0)
		10-Dec-14	MW-30-20141210		16.9	3.0	ND (1.0)	3.0	ND (1.0)	-	2.4	6.55	1.5 J	0.46 J	ND (1.0)	ND (0.020)	13.7	2.34	13.5	24.0	1.29	6.12	9.84	14.3	9.63	2.3 J
		19-May-15	MW-30_20150519		27	2	ND (1)	5	ND (1)	-	3 J	11	2 J	ND (1)	ND (1)	ND (0.0096)	30	2	17	32	0.9	10	17	31	16	0.095 J
		16-May-16	MW-30-20160516		61	2	ND (0.5)	2	ND (0.5)	-	1 J	14	1 J	ND (0.5)	ND (0.5)	0.022 J	48	6	34	57	2	21	30	56	28	ND (0.13)
		16-May-17	MW-30-20170516		12	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)	4	ND (5)	ND (5)	ND (5)	ND (0.0096)	10	0.8	7	13	0.5	4	7	12	7	ND (0.090)
		31-Jul-18	MW-30-20180731		50.7	2.80	2.38	5.96	ND (1.00)	1,440	4.35	15.9	4.74	1.69	ND (1.00)	ND (0.0100)	19.3	6.71	23.8	25.1	4.11	7.50	12.9	30.1	16.1	ND (2.00)
	MW-32	26-Apr-05	MW32-042605		420	4,600	1,100	6,200	ND (250)	-	ND (250)	120	-	-	ND (250)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		10-Nov-05	MW-32_11_10_2005		801	2,430 D	3,160 D	13,100 D	285	-	-	436	-	-	ND (10)	ND (0.02)	9.4	2.1	17	20.7	-	14.2	7.9	21.5	5.1	-
		14-Apr-11	MW-32		7 J	ND (4)	240	890	5 J	-	26	-	-	-	ND (5)	ND (5)	-	-	-	-	-	-	-	-	-	-
		8-Jun-11	MW-32		23	13	670	2,500	19	-	53	180	1,400	510	ND (2)	ND (2)	4.2	3.3 J	6.0	6.1 J	-	-	-	-	-	2.4
		18-Jul-12	MW32_071812		13	3 J	190	560	18	-	19	81	570	210	ND (3)	ND (0.0099)	15	6	14	18	3	6	10	24	16	0.68 J
		28-May-14	MW-32		7.6	0.79 J	34.2	89.1	7.5	-	6.4	12.6	91.0	36.6	ND (1.0)	ND (0.020)	2.89	0.984	3.00	3.84	0.373	1.22	1.71	4.00	1.93	ND (3.0)
		10-Dec-14	MW-32-20141210		7.5	0.64 J	52.6	138	5.8	-	11.3	27.8	178	72.7	ND (1.0)	ND (0.020)	7.18	4.31	8.68	10.3	1.77	5.01	5.49	8.72	7.71	2.6 J
	MW-33	30-Jul-18	MW-32_20180730		19.2	3.37	196	351	114	4,000	20.9	29.0	372	133	ND (1.00)	ND (0.0100)	2.66	0.367	1.71	3.34	0.306	1.10	1.98	4.29	2.40	ND (2.00)
		6-Nov-08	MW-33_110608		19	ND (0.5)	ND (0.5)	0.8 J	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	63	-	49	79	-	-	-	-	-	0.097 J
		14-Apr-11	MW-33		2 J	ND (0.7)	ND (0.8)	ND (0.8)	ND (0.5)	-	ND (1)	-	-	-	ND (1)	ND (1)	-	-	-	-	-	-	-	-	-	-
		6-Jun-11	MW-33		94	6	4 J	26	0.5 J	-	1 J	3,400	13	9	ND (1)	ND (1)	ND (24,000)	790	3,600	ND (5,100)	-	-	-	-	-	0.59 J
		12-Jul-12	MW33_071212		1,800	9	22	4 J	ND (3)	-	ND (3)	ND (1)	ND (3)	ND (3)	ND (3)	ND (0.0096)	6	2 J	5	12	2 J	3 J	5	9	5 J	1.1
		30-May-14	MW-33		24.5	0.32 J	ND (1.0)	0.35 J	ND (1.0)	-	0.33 J	1.70	0.49 J	ND (2.0)	ND (1.0)	ND (0.020)	0.400	0.684	0.262	0.521	ND (0.10)	0.148	0.321	0.583	0.373	3.2
		10-Dec-14	MW-33-20141210		3.9	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	0.111	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	5.28	0.243	3.03	6.33	0.424	2.47	4.41	5.58	4.51	ND (3.0)
		31-Jul-18	MW-33-20180731		97.2	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	62.3	ND (1.00)	ND (5.00)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0101)	41.9	ND (1.00)	12.5	45.1	2.21	23.8	34.8	58.4	36.7	ND (2.00)
	MW-36	25-Apr-05	MW36-042505		150,000	ND (5,000)	ND (5,000)	ND (5,000)	ND (5,000)	-	ND (5,000)	5,800	-	-	ND (5,000)	ND (0.029)	ND (10)	23	25	ND (10)	-	-	-	-	-	-
		17-Jul-12	MW36_071712		170,000	2,500	1,000	4,100	ND (250)	-	ND (250)	6,100	510 J	ND (250)	1,100	ND (0.0097)	4 J	38	49	10	11	3 J	2 J	2 J	ND (1)	0.64 J
		30-May-14	MW-36		309,000	4,420	888	3,090	114	-	70.4	3,230	538	159	ND (10)	ND (0.020)	0.447	20.8	18.1	1.51	2.32	0.396	0.252	0.297	0.132	2.9 J
		17-Dec-14	MW-36-20141217		233,000	4,030	1,160	4,190	138 J	-	67.6 J	1,920	515	156 J	ND (200)	ND (0.020)	0.182	5.50	6.29	0.862	1.26	0.184	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		3-Aug-18	MW-36_20180803		313,000	6,650	ND (5,000)	3,250	ND (1,000)	ND (5,000)	ND (1,000)	3,230	ND (5,000)	ND (1,000)	ND (1,000)	ND (0.0100)	ND (0.250)	16.8	12.6	1.11	2.23	ND (0.250)	ND (0.250)	ND (0.250)	ND (0.250)	2.25 B
		16-Jul-19	MW-36_20190716		60,000	1,600	440	1,600	ND (20)	ND (1,000)	39 J	1,500	210 J	74 J	ND (200)	ND (0.0095)	0.5 J	11	11	1	2	0.3 J	0.2 J	0.3 J	0.1 J	ND (1.1)

See notes on
last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PYRENE	LEAD, Dissolved
BELMONT	MW-37	26-Apr-05	MW37-042605		370,000	31,000	12,000	41,000	ND (10,000)	-	ND (10,000)	25	-	-	ND (10,000)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		18-Dec-07	MW-37		15,000	300	37	130	-	-	97	63 J	-	-	ND (10)	ND (0.0094)	ND (1.0)	2.0 J	3.0 J	2.0 J	-	-	-	-	-	0.051 J
		7-Nov-08	MW-37_110708		130,000	640	ND (250)	ND (250)	ND (250)	-	ND (250)	ND (500)	ND (250)	ND (250)	ND (250)	ND (0.0098)	ND (1)	-	2 J	1 J	-	-	-	-	-	ND (0.050)
		18-Nov-09	MW-37		79,000	800	44 J	150	ND (25)	-	120	ND (50)	ND (25)	ND (25)	ND (25)	ND (0.0098)	ND (0.25)	-	1.6	0.60 J	-	-	-	-	-	0.052 J
		10-Nov-10	MW-37		29,000	390	ND (25)	31 J	ND (25)	-	67 J	3 J	ND (25)	ND (25)	ND (25)	ND (0.0095)	ND (1)	1 J	ND (1)	1 J	-	-	-	-	-	ND (0.052)
		29-Nov-11	MW-37		130,000	1,400	32 J	120	ND (25)	-	62 J	11	ND (25)	ND (25)	ND (25)	ND (0.0099)	ND (0.079)	ND (0.50)	0.55	ND (0.098)	-	-	-	-	-	ND (0.080)
		17-Jul-12	MW37_071712		200,000	1,200	ND (250)	ND (250)	ND (250)	-	ND (250)	10	ND (250)	ND (250)	ND (250)	ND (0.0099)	4	0.7	8	7	0.7	3	3	4	2	0.067 J
		3-Apr-13	MW-37		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		3-Apr-13	MW-37_040313		96,600	1,250	ND (250)	70.7 J	ND (250)	-	ND (500)	2.91	ND (500)	ND (500)	ND (250)	ND (0.020)	ND (0.10)	0.409	0.248	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	-
		30-May-14	MW-37		236,000	3,040	ND (100)	197	ND (100)	-	58.9 J	4.52	ND (200)	ND (200)	ND (100)	ND (0.020)	0.173	0.615	0.767	0.485	0.244	0.126	0.140	0.227	0.138	17.5
		17-Dec-14	MW-37-20141217		197,000	2,220	ND (1,000)	ND (1,000)	ND (1,000)	-	ND (1,000)	3.60	ND (2,000)	ND (2,000)	ND (1,000)	ND (0.020)	ND (0.10)	0.342	0.351	0.171	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.3 J
		19-May-15	MW-37_20150519		90,000	1,400	ND (50)	91 J	ND (50)	-	ND (50)	6	ND (50)	ND (50)	ND (50)	ND (0.0096)	0.3 J	0.4 J	0.6	0.6	0.1 J	0.2 J	0.2 J	0.3 J	0.2 J	ND (0.082)
		16-May-16	MW-37-20160516		130,000	1,100	ND (100)	ND (100)	ND (100)	-	ND (100)	10	ND (100)	ND (100)	ND (100)	0.024 J	ND (0.1)	0.7	0.8	0.2 J	0.2 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		16-May-17	MW-37-20170516		160,000	1,200	ND (250)	ND (250)	ND (250)	-	ND (250)	5	ND (250)	ND (250)	ND (250)	ND (0.0095)	0.1 J	0.4 J	0.7	0.3 J	0.1 J	ND (0.1)	0.1 J	ND (0.1)	ND (0.1)	ND (0.090)
		1-Aug-18	MW-37_20180801		262,000	ND (10,000)	ND (10,000)	ND (30,000)	ND (10,000)	ND (50,000)	ND (10,000)	4.76	ND (10,000)	ND (10,000)	ND (10,000)	ND (0.0100)	ND (0.0500)	0.613	0.609	0.178	0.144	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		2-Jul-19	MW-37_20190702		290,000	560	ND (40)	140 J	ND (40)	ND (2,000)	ND (60)	5	ND (60)	ND (60)	ND (400)	ND (0.0095)	ND (0.09)	0.4 J	0.7	0.3 J	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (0.09)	ND (1.1)
	MW-38	26-Apr-05	MW38-042605		110	ND (5)	ND (5)	ND (5)	11	-	ND (5)	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	24	ND (10)	ND (10)	-	-	-	-	-	-
		12-Jul-12	MS38_071212		41	ND (0.5)	ND (0.5)	ND (0.5)	33	-	ND (0.5)	0.2 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0096)	0.1 J	0.5	0.4 J	2	0.9	0.1 J	ND (0.09)	0.1 J	ND (0.09)	0.11 J
		28-May-14	MW-38		57.4	2.3	2.1	2.4	185	-	1.7	ND (0.10)	0.96 J	0.42 J	ND (1.0)	ND (0.020)	ND (0.10)	0.947	0.544	1.27	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.9 J
		11-Dec-14	MW-38-20141211		4.2	ND (1.0)	ND (1.0)	ND (1.0)	37.8	-	0.51 J	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	0.734	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		26-Jul-18	MW-38-20180726		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	1.18	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	0.316	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		2-Jul-19	MW-38_20190702		3	ND (0.2)	ND (0.2)	ND (0.5)	2	50	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	0.4 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	MW-43	2-May-05	MW43-050205		5,400	ND (130)	1,000	490	ND (130)	-	ND (130)	7,400	-	-	ND (130)	0.041	ND (99)	ND (99)	170	ND (99)	-	-	-	-	-	-
		5-Dec-06	MW-43		2,300	63	1,300	740	13 J	-	140	7,500	-	-	ND (5.0)	ND (0.0097)	88.0	170	320	190	-	-	-	-	-	0.16 J
		19-Dec-07	MW-43		2,600	88	2,400	1,300	-	-	150	9,700	-	-	ND (25)	ND (0.0096)	8.0	65	79	24	-	-	-	-	-	ND (0.047)
		14-Apr-11	MW-43		800	34 J	560	320	7 J	-	120	-	-	-	21 J	ND (10)	-	-	-	-	-	-	-	-	-	-
		7-Jun-11	MW-43		2,500	210	3,100	2,100	29 J	-	150	7,100	750	250	ND (20)	ND (20)	1.1 J	52	47	4.3	-	-	-	-	-	ND (0.08)
		19-Jul-12	MW43_071912		970	47	1,500	900	6	-	130	5,100	390	100	ND (3)	ND (0.0097)	0.8	51	54	4	10	0.6	0.4 J	0.6	0.3 J	ND (0.034)
		30-May-14	MW-43		1,110	75.9	3,200	1,710	5.3 J	-	185	7,070	802	200	ND (20)	ND (0.020)	0.895	50.1	56.0	3.51	10.2	0.622	0.597	0.992	0.660	ND (3.0)
		18-Dec-14	MW-43-20141218		681	22.5	63.2	73.7	5.2	-	100	124	14.4	6.7	ND (1.0)	ND (0.020)	0.964	15.9	15.9	1.91	2.20	0.701	0.555	0.960	0.482	ND (3.0)
		27-Jul-18	MW-43_20180727		165	10.8	191	122	1.36	78.7	46.2	847	51.6	14.6	ND (1.00)	ND (0.0100)	0.941	11.4	12.9	2.03	2.28	0.471	0.640	1.22	0.607	ND (2.00)
	MW-44	22-Sep-05	MW-44_092205		1,400	ND (50)	ND (50)	ND (50)	82	-	ND (50)	ND (50)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		6-Jun-11	MW-44		21,000	6,000	2,900	15,000	720	-	100	2,900	2,600	810	ND (20)	ND (20)	39	110	250	ND (270)	-	-	-	-	-	27.4
		29-May-14	MW-44		13,000	2,690	1,600	8,950	623	-	66.7	346	2,130	624	ND (50)	ND (0.020)	1.10	9.15	14.8	3.14	2.54	1.08	0.634	1.11	0.429	38.6
		17-Dec-14	MW-44-20141217		6,660	848	1,300	6,750	ND (50)	-	46.6 J	646	1,330	403	ND (50)	ND (0.020)	16.8	18.6	40.9	23.4	4.94	6.30	11.4	17.3	12.9	7.8
		1-Aug-18	MW-44_20180801		8,870	1,330	1,740	10,500	345	3,500	ND (100)	594	1,700	496	ND (100)	ND (0.0100)	0.748	7.07	8.22	1.85	1.15	ND (0.500)	ND (0.500)	0.846	ND (0.500)	16.0
		1-Jul-19	MW-44_20190701		8,700	220	990	5,300	120	740	43 J	270	1,200	360	ND (40)	ND (0.0095)	2	4	6	3	0.7	0.7	1	2	0.9	4.5
	OW-19	26-Jul-12	OW-19_072612		12,000	8,600	2,700	18,000	420,000	-	150	9,500	4,000	1,400	32 J	ND (0.0098)	130	450	890	440	200	140	110	140	62	1.2
		28-May-14	OW-19		20,900	39,300	4,000	26,400	184,000	-	156	765	4,060	1,200	ND (50)	ND (0.020)	0.866	4.29	7.62	3.02	2.22	0.946	0.506	0.705	0.265	3.1
		18-Dec-14	OW-19-20141218		20,600	33,500	4,750	31,600	418,000	-	329	562	7,890	2,590	ND (200)	ND (0.020)	1.87	11.2	20.4	4.60	2.87	1.80	1.19	1.53	0.802	7.7
		15-Aug-18	OW-19_20180815		18,000	43,500	13,100	87,600	172,000	-	ND (5,000)	3,120	33,600	11,200	ND (5,000)	ND (0.0100)	27.4	106	215	86.2	60.4	27.5	18.1	23.1	10.7	ND (18.0)
		1-Jul-19	OW-19_20190701		8,600	11,000	1,400	9,800	63,000	40,000	68 J	600	1,900	630	ND (40)	ND (0.0094)	18	33	85	54	26	18	17	14	7	ND (1.1)
	RW-26	7-Jun-11	RW-26		5,400	150	200	1,500	24,000	-	13 J	49	350	160	ND (10)	ND (10)	1.1	15	8.8	2.7	-	-	-	-	-	1.5
		11-Jul-12	RW26_071112		10,000	ND (100)	1,100	1,800	210,000	-	ND (100)	9,500	520	150 J	ND (100)	ND (0.0097)	ND (1)	58	48	4 J	9	ND (1)	ND (1)	ND (1)	ND (1)	0.19 J
		29-May-14	RW-26		6,020	31.7 J	902	1,220	1,580	-	83.5	6,680	491	104	ND (50)	ND (0.020)	0.113	16.5	12.4	0.789	2.26	0.111	ND (0.10)	0.112	ND (0.10)	1.3 J
		17-Dec-14	RW-26-20141217		7,500	172	992	1,620	5,320	-	69.5	6,000	384	89.1	ND (25)	ND (0.020)	0.967	22.8	25.4	3.45	4.98	1.02	0.506	0.627	0.214	ND (3.0)
		1-Aug-18	RW-26_20180801		3,570	ND (250)	589	ND (750)	1,840	52,700	ND (250)	3,680	327	ND (250)	ND (250)	ND (0.0100)	0.342	37.3	33.8	2.96	6.05	0.347	0.134	0.172	0.0524	ND (2.00)
		3-Jul-19	RW-26_20190703		1,000	16	230	380	1,000	8,700	49	930	400	24 J	ND (10)	ND (0.0094)	0.9	12	20	4	3	0.7	0.6	0.8	0.6	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

Area of Interest	Sample Location	Sample Date		Sample Type	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
BELMONT	S-74	15-Oct-04	S-74		ND (1.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	-	ND (5.0)	ND (5.0)	-	-	ND (5.0)	ND (0.020)	ND (0.14)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	ND (5.0)
		26-Apr-05	S74-042605		ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)	ND (10)	-	-	ND (5)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		18-Dec-07	S-74		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	-	ND (0.5)	ND (1.0)	-	-	ND (0.5)	ND (0.0094)	ND (1.0)	ND (1.0)	ND (1.0)	3.0 J	-	-	-	-	-	0.064 J
		7-Nov-08	S-74_110708		0.8 J	ND (0.5)	3	0.6 J	0.7 J	-	1 J	48	9	0.9 J	ND (0.5)	ND (0.0097)	ND (1)	-	1 J	2 J	-	-	-	-	-	ND (0.050)
		18-Nov-09	S-74		94	2	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (0.057)	-	0.066 J	0.46	-	-	-	-	-	ND (0.050)
		10-Nov-10	S-74		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.5 J	-	ND (0.5)	ND (1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	ND (1)	ND (1)	ND (1)	ND (1)	-	-	-	-	-	ND (0.052)
		29-Nov-11	S-74		0.6 J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.99)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0098)	0.75	ND (0.099)	0.64	1.3	-	-	-	-	-	ND (0.080)
		12-Jul-12	S-74_071212		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.6 J	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	0.1 J	ND (0.1)	0.2 J	1	ND (0.1)	0.2 J	0.2 J	0.3 J	0.1 J	0.13 J
		3-Apr-13	S-74		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		3-Apr-13	S-74_040313		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (2.0)	1.20	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	-
		27-May-14	S-74		3.0	1.2	ND (1.0)	2.4	0.69 J	-	ND (1.0)	0.580	0.67 J	ND (2.0)	ND (1.0)	ND (0.020)	0.191	0.183	0.614	0.462	0.110	0.130	ND (0.10)	0.165	ND (0.10)	ND (3.0)
		8-Dec-14	S-74-20141208		ND (0.50)	ND (1.0)	ND (1.0)	0.72 J	0.37 J	-	ND (1.0)	0.138	0.54 J	0.34 J	ND (1.0)	ND (0.020)	0.244	ND (0.10)	0.250	0.412	ND (0.10)	0.141	0.167	0.317	0.164	1.8 J
		19-May-15	S-74_20150519		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	2	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	0.5	ND (0.1)	0.3 J	1	ND (0.1)	0.2 J	0.8	0.8	0.5	ND (0.082)
		16-May-16	S-74-20160516		ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	ND (0.1)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0097)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.13)
		16-May-17	S-74-20170516		3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	-	ND (0.5)	0.8	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.0095)	ND (0.1)	0.1 J	0.3 J	0.5	0.1 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.090)
		26-Jul-18	S-74_20180726		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	-	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	0.162	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
	S-75	12-Jul-12	S-75_071212		5	2	6	3	4	-	61	23	3 J	10	ND (1)	ND (0.0096)	1 J	64	110	10	11	1 J	ND (0.9)	1 J	1 J	26.1
		28-May-14	S-75		8.9	3.7	12.5	5.2	14.0	-	62.3	ND (0.10)	5.8	15.3	ND (1.0)	ND (0.020)	0.529	19.8	32.7	3.38	ND (0.10)	0.515	0.297	0.436	0.440	6.7
		11-Dec-14	S-75-20141211		9.9	4.0	4.5	5.9	13.5	-	56.9	ND (0.10)	4.1	9.5	ND (1.0)	ND (0.020)	0.506	20.9	40.0	3.96	ND (0.10)	0.526	0.311	0.407	0.376	8.6
		2-Aug-18	S-75-20180802		2.32 SL	1.43 SL	ND (1.00) SL	ND (3.00) SL	29.3 SL	169 SL	60.2 SL	6.12 SL	ND (1.00) SL	7.15 SL	ND (1.00) SL	ND (0.0100) SL	0.740 SL	8.33 SL	6.31 SL	3.97 SL	ND (0.250) SL	0.698 SL	0.336 SL	0.372 SL	0.295 SL	3.92 B SL
		2-Jul-19	S-75_20190702		6	2	2	1 J	24	410	31	1	0.6 J	7	ND (2)	ND (0.0094)	ND (0.1)	3	3	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	2.3 J
		2-Jul-19	DUP-5_20190702	Field Duplicate	6	2	2	1 J	22	480	29	3	0.5 J	6	ND (2)	ND (0.0094)	ND (0.1)	2	2	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	2.5 J
	S-394	21-May-14	S-394		8,700	ND (25)	ND (25)	ND (25)	ND (25)	-	ND (25)	0.350	ND (50)	ND (50)	ND (25) J	ND (0.020)	ND (0.10)	ND (0.10)	0.107	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		5-Dec-14	S-394-20141205		22,200	ND (100)	ND (100)	ND (100)	ND (100)	-	ND (100)	0.363	ND (200)	ND (200)	ND (100)	ND (0.020)	ND (0.10)	ND (0.10)	0.166	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	1.4 J
		1-Aug-18	S-394_20180801		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	ND (5.00)	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	0.129	ND (0.0500)	0.0941	0.226	ND (0.0500)	0.0711	0.106	0.184	0.109	ND (2.00)
		9-Jul-19	S-394_20190709		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	0.5 J	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0094)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	S-395	27-May-14	S-395		312	2.1	0.58 J	1.3	ND (1.0)	-	1.5	0.212	0.30 J	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (3.0)
		15-Dec-14	S-395-20141215		11.3	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	0.87 J	ND (0.10)	ND (2.0)	ND (2.0)	ND (1.0)	ND (0.020)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10) J	ND (0.10)	ND (0.10)	ND (0.10)	1.3 J
		1-Aug-18	S-395_20180801		ND (1.00)	ND (1.00)	ND (1.00)	ND (3.00)	ND (1.00)	ND (5.00)	ND (1.00)	ND (0.250)	ND (1.00)	ND (1.00)	ND (1.00)	ND (0.0100)	ND (0.0500)	ND (0.0500)	ND (0.0500)	0.0659	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (0.0500)	ND (2.00)
		8-Jul-19	S-395_20190708		ND (0.2)	ND (0.2)	ND (0.2)	ND (0.5)	ND (0.2)	ND (10)	ND (0.3)	ND (0.1)	ND (0.3)	ND (0.3)	ND (2)	ND (0.0095)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)
	TW-5	14-Oct-04	TW-5		700,000	12,000	540	2,100	ND (200)	-	ND (200)	ND (1,000)	-	-	ND (200)	ND (0.020)	3.0	ND (14)	ND (14)	ND (14)	-	-	-	-	-	ND (5.0)
		25-Apr-05	TW5-042505		450,000	8,500	ND (5,000)	ND (5,000)	ND (5,000)	-	ND (5,000)	17	-	-	ND (5,000)	ND (0.029)	ND (10)	ND (10)	ND (10)	ND (10)	-	-	-	-	-	-
		13-Jul-12	TW-5_071312		680,000	10,000	670 J	1,900	ND (500)	-	ND (500)	130	ND (500)	ND (500)	ND (500)	ND (0.0096)	11	28	130	48	25	7	5 J	8	4 J	0.077 J
		30-May-14	TW-5		572,000	7,340	ND (5,000)	ND (5,000)	ND (5,000)	-	ND (5,000)	14.3	ND (10,000)	ND (10,000)	ND (5,000)	ND (0.020)	0.799	1.88	5.70	2.36	1.48	0.637	0.537	0.844	0.413	2.4 J
		18-Dec-14	TW-5-20141218		665,000	9,320	517	2,450	22.9 J	-	144	28.6	26.0 J	13.7 J	ND (50)	ND (0.020)	0.590	1.77	4.17	1.74	1.06	0.510	0.355	0.575	0.289	ND (3.0)
		14-Aug-18	TW_5_20180814		489,000	ND (10,000)	541	ND (30,000)	ND (500)	-	ND (500)	27.3	ND (10,000)	ND (500)	ND (500)	ND (0.0100)	1.27	5.44	21.6	9.67	4.18	1.33	0.669	1.15	0.528	ND (2.00)
		3-Jul-19	TW-5_20190703		850,000	8,700	410 J	1,900 J	ND (100)	ND (5,000)	ND (150)	15	ND (150)	ND (150)	ND (1,000)	ND (0.0094)	0.3 J	ND (0.1)	1	0.5	0.4 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (1.1)

See notes on last page.

Table 4
Historical Perimeter Groundwater Sampling Analytical Results
Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC

				BENZENE	TOUENE	ETHYLBENZENE	XYLENES, TOTAL (DIMETHYLBENZENE)	METHYL TERTIARY BUTYL ETHER	TERT-BUTYL ALCOHOL	ISOPROPYLBENZENE (CUMENE)	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,2-DICHLOROETHANE (EDC)	1,2-DIBROMOETHANE (EDB)	CHRYSENE	FLUORENE	PHENANTHRENE	PYRENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H)PERYLENE	LEAD, Dissolved
Area of Interest	Sample Location	Sample Date		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
BELMONT	TW-8	15-Oct-04	TW-8	1,500	ND (80)	2,100	1,800	290	-	210	14,000	-	-	ND (74)	ND (0.020)	270	800	1,800	740	-	-	-	-	-	ND (5.0)
		25-Apr-05	TW8-042505	480	ND (250)	2,100	2,800	ND (250)	-	280	22,000	-	-	ND (250)	ND (0.029)	200	620	ND (2,500)	500	-	-	-	-	-	-
		5-Dec-06	TW-8	150	5.0	2,100	1,700	17	-	290	13,000	-	-	ND (1.0)	ND (0.0099)	580	2,100	4,300	1,700	-	-	-	-	-	0.15 J
		18-Dec-07	TW-8	660	12 J	1,400	870	-	-	190	12,000	-	-	ND (10)	ND (0.0094)	240	700	1,500	570	-	-	-	-	-	0.15 J
		7-Nov-08	TW-8_110708	240	ND (5)	1,600	790	31	-	170	13,000	1,100	140	ND (5)	ND (0.0097)	12	-	96	24	-	-	-	-	-	ND (0.050)
		18-Nov-09	TW-8	240	ND (10)	1,000	510	ND (10)	-	230	9,100	1,200	130	ND (10)	ND (0.0097)	16	-	180	63	-	-	-	-	-	ND (0.050)
		10-Nov-10	TW-8	84	2	1,300	430	8	-	180	9,200	1,200	91	ND (1)	ND (0.0097)	14 J	75	120	35 J	-	-	-	-	-	0.20 J
		29-Nov-11	TW-8	37	ND (3)	1,100	280	8	-	200	11,000	960	78	ND (3)	ND (0.0097)	ND (29)	120	180	68	-	-	-	-	-	0.84 J
		18-Jul-12	TW-8_071812	80	ND (5)	1,900	330	6 J	-	270	16,000	1,800	120	ND (5)	ND (0.0098)	26	110	180	59	44	25	18	22	8	0.74 J
		3-Apr-13	TW-8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)
		3-Apr-13	TW-8_040313	224	ND (20)	874	192	ND (20)	-	216	2,400	902	52.8	ND (20)	ND (0.020)	1.92	37.8	43.2	8.63	8.65	2.08	1.39	1.52	0.592	-
		27-May-14	TW-8	39.3	0.60 J	1,100	136	5.3	-	346	5,970	1,620	68.4	ND (1.0)	ND (0.020)	0.946	21.3	16.9	3.01	4.80	0.849	0.552	0.641	0.256	ND (3.0)
		11-Dec-14	TW-8_20141211	8.4	ND (10)	184	18.8	ND (10)	-	61.8	3,150	269	15.4 J	ND (10)	ND (0.020)	4.43	40.9	62.1	17.0	13.7	6.39	3.62	5.02	1.55	ND (3.0)
		19-May-15	TW-8_20150519	63	ND (3)	670	68	4 J	-	180	7,300	880	48	5	ND (0.0096)	5	56	57	11	12	4	3	3	1	0.089 J
		16-May-16	TW-8-20160516	500	0.9 J	560	89	4	-	150	6,000	530	52	2	ND (0.0097)	9	56	67	18	15	7	5	6	3	ND (0.13)
		16-May-17	TW-8-20170516	330	3 J	560	69	ND (3)	-	180	4,400	670	63	ND (3)	ND (0.0095)	18	83	140	41	32	17	12	14	7	ND (0.090)
		3-Aug-18	TW-8_20180803	307	25.9	526	82.0	2.54	8.15	129	6,530	466	43.8	ND (1.00)	ND (0.0100)	1.91	44.4	36.6	6.69	7.90	1.79	1.29	1.46	0.853	ND (2.00)

Notes:

15.2 Concentration was detected.

ND (0.5) Analyte was not detected at a concentration greater than the laboratory reporting limit.

B Indicates the analyte is detected in the associated blank as well as in the sample.

D Indicates an identified compound in an analysis that has been diluted. This flag alerts the data user to any differences between the concentrations reported in the two analyses.

DR Dry

E Indicates compounds whose concentrations exceed the calibration range of the instrument.

ED EDB was analyzed under SW8011. Laboratory work order and laboratory sample ID may be different for this result.

DM Date missing from original field records. Date of completion estimated. If only month and year are available, the default will be the first day of the month.

HT Sample(s) received past/too close to holding time expiration

J Indicates an estimated value above the method detection limit but below the laboratory reporting limit or limit of quantitation.

J- Indicates an estimated value that is biased low.

J+ Indicates an estimated value that is biased high.

MI Matrix Interference

ND Not Detected

OE The associated batch QC was outside the established quality control range for precision/accuracy.

R The data are failed the usability assessment (data validation) and are unusable. The analyte may or may not be present in the sample.

SH The sample concentration is too high to evaluate accurate spike recoveries.

SL Sample was collected below LNAPL

WI Well Inaccessible

µg/L Micrograms per liter

- Not analyzed

* Indicates that the analyte was reported by two different methods. For 1,2-Dibromoethane (EDB), the SW8011 method result is shown. For Naphthalene, the SW8270 result is shown.

APPENDIX 1

Remediation System Recovery Data

Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC
Groundwater and LNAPL Recovery Systems Operational Data
Belmont Terminal
Loading Rack Remediation System
First Half 2019

Date	Total Flow (gallons)	Period Total Flow (gallons)	Average Flow Rate (gpm)	LNAPL Recovered in Period (gallons)	Total LNAPL Recovered (gallons)
4-Jan-19	100,881,549	137,226	10.59	0.0	255,139
10-Jan-19	101,018,775	137,226	15.88	8.8	255,148
18-Jan-19	101,185,815	167,040	14.50	0.0	255,148
22-Jan-19	101,269,335	83,520	14.50	0.0	255,148
31-Jan-19	101,457,255	187,920	14.50	0.0	255,148
8-Feb-19	101,624,295	167,040	14.50	11.1	255,159
14-Feb-19	101,749,575	125,280	14.50	0.0	255,159
22-Feb-19	101,916,615	167,040	14.50	4.6	255,164
1-Mar-19	101,976,389	59,774	5.93	4.5	255,168
7-Mar-19	102,005,074	28,685	3.32	0.0	255,168
15-Mar-19	102,043,320	38,246	3.32	0.0	255,168
22-Mar-19	102,116,199	72,878	7.23	0.0	255,168
28-Mar-19	102,178,666	62,467	7.23	9.3	255,178
2-Apr-19	102,178,666	0	0.00	0.0	255,178
9-Apr-19	102,178,666	0	0.00	0.0	255,178
16-Apr-19	102,178,666	0	0.00	0.0	255,178
23-Apr-19	102,178,666	0	0.00	0.0	255,178
30-Apr-19	102,178,666	0	0.00	0.0	255,178
7-May-19	102,178,666	0	0.00	0.0	255,178
14-May-19	102,178,666	0	0.00	0.0	255,178
21-May-19	102,178,666	0	0.00	0.0	255,178
28-May-19	102,178,666	0	0.00	0.0	255,178
4-Jun-19	102,178,666	0	0.00	0.0	255,178
11-Jun-19	102,178,666	0	0.00	0.0	255,178
18-Jun-19	102,178,666	0	0.00	0.0	255,178
25-Jun-19	102,178,666	0	0.00	0.0	255,178

Notes:

gpm: gallons per minute

LNAPL: Light Non-Aqueous Phase Liquid

The Belmont Terminal Remediation System consist of the Loading Rack System (RW-4 and RW-21 through RW-25) and the Frontage Road system (RW-15 and RW-26 through RW-32). Both systems have a dedicated totalizer.

On August 30, 2012, the Frontage Road system was turned off and remained off for the reporting period. The system will remain offline unless there is a significant increase of LNAPL in the recovery wells. The recovery wells are routinely gauged and no product was detected during the reporting period.

The Loading Rack system was operational during the reporting period with the following exceptions:

On April 2, the system was turned off for site wide LNAPL transmissivity testing. The groundwater recovery portion of the system was returned to service on June 25. The LNAPL pumps remained off to observe LNAPL recovery potential.

Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC
AOI 1: Shunk Street Sewer Ventilation System and Biofilter
Organic Vapor Concentrations
First Half 2019

Date	Flow Rate (CFM)	Sewer Air PID (ppm)	Total Flow PID (ppm)	Treatment Cell Effluent PID (ppm)			Treatment Cell Media Temperature (°F)		
				Cell #1	Cell #2	Cell #3	Cell #1	Cell #2	Cell #3
1/4/2019	3700	2.00	2.00	0.00	0.00	0.00	60	60	60
1/10/2019	3700	3.00	3.00	0.00	0.00	0.00	60	60	60
1/18/2019	3700	3.00	3.00	0.00	0.00	0.00	60	60	60
1/22/2019	3700	2.00	2.00	0.00	0.00	0.00	60	60	60
1/31/2019	3700	3.00	3.00	0.00	0.00	0.00	48	48	48
2/8/2019	3200	3.00	3.00	0.00	0.00	0.00	56	56	56
2/14/2019	3400	3.00	3.00	0.00	0.00	0.00	58	58	58
2/22/2019	3200	2.00	2.00	0.00	0.00	0.00	56	56	56
3/1/2019	3200	2.00	2.00	0.00	0.00	0.00	50	50	50
3/7/2019	3000	3.00	3.00	0.00	0.00	0.00	53	53	53
3/15/2019	3000	1.00	1.00	0.00	0.00	0.00	65	65	65
3/22/2019	3700	3.00	3.00	0.00	0.00	0.00	52	52	52
3/28/2019	3700	2.00	2.00	0.00	0.00	0.00	68	68	68
4/2/2019	3700	1.00	1.00	0.00	0.00	0.00	64	64	64
4/9/2019	3700	3.00	3.00	0.00	0.00	0.00	74	74	74
4/16/2019	NM	NM	NM	NM	NM	NM	NM	NM	NM
4/23/2019	NM	NM	NM	NM	NM	NM	NM	NM	NM
4/30/2019	NM	NM	NM	NM	NM	NM	NM	NM	NM
5/7/2019	NM	NM	NM	NM	NM	NM	NM	NM	NM
5/14/2019	NM	NM	NM	NM	NM	NM	NM	NM	NM
5/21/2019	NM	NM	NM	NM	NM	NM	NM	NM	NM
5/28/2019	NM	NM	NM	NM	NM	NM	NM	NM	NM
6/4/2019	NM	NM	NM	NM	NM	NM	NM	NM	NM
6/11/2019	NM	NM	NM	NM	NM	NM	NM	NM	NM
6/18/2019	NM	NM	NM	NM	NM	NM	NM	NM	NM
6/25/2019	NM	NM	NM	NM	NM	NM	NM	NM	NM

Notes:

CFM = cubic feet per minute

NM = not measured

ppm = parts per million

°F = Degrees Fahrenheit

Vapor concentrations are collected using a MultiRAE Lite Photoionization Detector (PID).

The Sewer Air reading is collected from the Shunk Street sewer air stream only.

The air stripper was taken offline on June 17, 2004; therefore, the Total Flow is equal to the Sewer Air reading.

The system was operational for the reporting period with the following exceptions:

On April 9, the blower was removed for repairs and the biofilter system remained off through the end of the reporting period.

Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC
AOI 1: Shunk Street Sewer Ventilation System and Biofilter
pH Data

First Half 2019

Date	Leachate pH	Biofilter Treatment Cell - Soil pH		
		Cell 1	Cell 2	Cell 3
22-Jan-19	7.03	NM	NM	NM
22-Feb-19	6.89	6.96	7.00	6.78
22-Mar-19	6.88	NM	NM	NM
23-Apr-19	7.07	NM	NM	NM
28-May-19	6.88	NM	NM	NM
4-Jun-19	NM*	NM*	NM*	NM*

NOTES:

Leachate pH readings are collected on a monthly basis.

Media pH readings are collected on a quarterly basis.

NM = Not Measured

NM* = Not Measured due to the system not operating

The system was operational for the reporting period with the following exceptions:

On April 9, the blower was removed for repairs and the system remained off through the end of the reporting period.

Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC
Total Fluids Recovery System Operational Data
AOI 1: 26th Street North Remediation System

First Half 2019

Date	Total Flow (gallons)	Period Total Flow (gallons)	Calculated System Flow Rate (gpm)	LNAPL Recovered in Period (gallons)*	Total LNAPL Recovered (gallons)*
2-Jan-19	101,381,335	416,002	41.27	NA	9,148.60
10-Jan-19	101,976,458	595,123	51.66	NA	9,148.60
17-Jan-19	102,497,191	520,733	51.66	NA	9,148.60
24-Jan-19	102,982,241	485,050	48.12	NA	9,148.60
29-Jan-19	103,356,785	374,544	52.02	NA	9,148.60
7-Feb-19	104,134,385	777,600	60.00	NA	9,148.60
13-Feb-19	104,470,135	335,750	38.86	NA	9,148.60
22-Feb-19	104,972,465	502,330	38.76	NA	9,148.60
27-Feb-19	105,226,985	254,520	35.35	NA	9,148.60
8-Mar-19	105,685,121	458,136	35.35	NA	9,148.60
15-Mar-19	105,968,873	283,752	28.15	NA	9,148.60
18-Mar-19	106,084,951	116,078	26.87	NA	9,148.60
29-Mar-19	106,643,153	558,202	35.24	NA	9,148.60
2-Apr-19	106,643,153	0	0.00	NA	9,148.60
9-Apr-19	106,643,153	0	0.00	NA	9,148.60
16-Apr-19	106,643,153	0	0.00	NA	9,148.60
23-Apr-19	106,643,153	0	0.00	NA	9,148.60
30-Apr-19	106,643,153	0	0.00	NA	9,148.60
9-May-19	106,643,153	0	0.00	NA	9,148.60
16-May-19	106,643,153	0	0.00	NA	9,148.60
23-May-19	107,141,710	498,557	49.46	NA	9,148.60
29-May-19	107,381,470	239,760	27.75	NA	9,148.60
5-Jun-19	107,665,625	284,155	28.19	NA	9,148.60
12-Jun-19	107,949,780	284,155	28.19	NA	9,148.60
19-Jun-19	108,233,935	284,155	28.19	NA	9,148.60
26-Jun-19	108,730,274	496,339	49.24	NA	9,148.60

Notes:

gpm: gallons per minute

LNAPL: Light Non-Aqueous Phase Liquid

gpm: gallons per minute

*The system discharges directly to a process sewer; therefore, the volume of recoverable LNAPL cannot be quantified.

The Total Flow and Total LNAPL Recovered includes historical totals from former recovery wells RW-400 through RW-406.

The 26th Street North Remediation system consists of 20 total fluids recovery wells [15 active wells onsite along 26th Street (S-180, S-181, S-182, S-183, S-184, S-185, S-186, S-187, S-188, S-189, S-190, S-191, S-192, RW-400, and RW-402) and five inactive wells offsite on CSX property (S-193, S-194, S-265, S-267, & S-268)]. The offsite wells on the CSX property have not been activated.

The system was operational for the first half of 2019 with the following exceptions:

On February 13, S-182, S-185, S-189, S-191 and S-192 were not operational. The pumps were removed for maintenance.

On April 2, the system was turned off during LNAPL transmissivity testing. On May 23, the system was returned to service.

On April 16, S-182, S-185, S-189, and S-191 pumps were reinstalled.

On March 9, S-192 was reinstalled.

On June 26, RW-400, S-182 and S-186 were not operational. The pumps were removed for maintenance and repairs.

Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC
AOI 1: 26th Street & Packer Avenue Sewers Biofilter Remediation System
pH Data
First Half 2019

Date	Leachate pH	Biofilter Bed - Soil pH			
		Cell 1	Cell 2	Cell 3	Cell 4
23-Jan-19	7.16	NM	NM	NM	NM
21-Feb-19	7.01	6.65	7.03	NM	NM
19-Mar-19	7.01	NM	NM	NM	NM
23-Apr-19	7.15	NM	NM	NM	NM
20-May-19	6.89	6.76	6.98	NM	NM
24-Jun-19	7.13	NM	NM	NM	NM

Notes:

Media pH readings are collected on a quarterly basis.

NM: not measured

Cells 3 and 4 were shut off on June 18, 2010 and remained off for the reporting period as they are not currently needed for vapor treatment.

The system was operational during the reporting period.

Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC
AOI 1: 26th Street & Packer Avenue Sewers Biofilter Remediation System
Organic Vapor Concentrations
First Half 2019

Date	Biofilter Influent			Biofilter Effluent							
	Packer Ave. (ppm)	26 th Street (ppm)	ST-1 (Combined Influent) (ppm)	Cell-1N	Cell-1S	Cell-2N	Cell-2S	Cell-3N	Cell-3S	Cell-4N	Cell-4S
1/2/2019	0.0	1.0	0	0.0	0.0	0.0	0.0	NA	NA	NA	NA
1/10/2019	77.0	59.0	29	0.0	0.0	0.0	0.0	NA	NA	NA	NA
1/17/2019	49.0	33.0	18	0.0	0.0	0.0	0.0	NA	NA	NA	NA
1/23/2019	85.0	63.0	62.6	0.0	0.0	0.0	0.0	NA	NA	NA	NA
1/30/2019	12.0	21.0	10	0.0	0.0	0.0	0.0	NA	NA	NA	NA
2/6/2019	0.0	5.0	1	0.0	0.0	0.0	0.0	NA	NA	NA	NA
2/12/2019	41.0	12.0	7	0.0	0.0	0.0	0.0	NA	NA	NA	NA
2/21/2019	17.0	13.0	11	0.0	0.0	0.0	0.0	NA	NA	NA	NA
2/26/2019	18.0	9.0	14	0.0	0.0	0.0	0.0	NA	NA	NA	NA
3/6/2019	28.0	21.0	17	0.0	0.0	0.0	0.0	NA	NA	NA	NA
3/13/2019	1.0	2.0	2	0.0	0.0	0.0	0.0	NA	NA	NA	NA
3/19/2019	3.0	9.0	8	0.0	0.0	0.0	0.0	NA	NA	NA	NA
3/27/2019	32.0	36.0	21	0.0	0.0	0.0	0.0	NA	NA	NA	NA
4/3/2019	48.0	37.0	35	0.0	0.0	0.0	0.0	NA	NA	NA	NA
4/9/2019	2.0	2.0	5	0.0	0.0	0.0	0.0	NA	NA	NA	NA
4/17/2019	2.0	4.0	3	0.0	0.0	0.0	0.0	NA	NA	NA	NA
4/23/2019	2.0	4.0	3	0.0	0.0	0.0	0.0	NA	NA	NA	NA
4/30/2019	3.0	7.0	9	0.0	0.0	0.0	0.0	NA	NA	NA	NA
5/6/2019	20.0	25.0	7	0.0	0.0	0.0	0.0	NA	NA	NA	NA
5/16/2019	5.0	6.0	15	0.0	0.0	0.0	0.0	NA	NA	NA	NA
5/20/2019	9.0	7.0	14	0.0	0.0	0.0	0.0	NA	NA	NA	NA
5/28/2019	2.0	2.0	2	0.0	0.0	0.0	0.0	NA	NA	NA	NA
6/13/2019	9.0	2.0	8	0.0	0.0	0.0	0.0	NA	NA	NA	NA
6/18/2019	30.0	16.0	23	0.0	0.0	0.0	0.0	NA	NA	NA	NA
6/24/2019	9.0	11.0	9	0.0	0.0	0.0	0.0	NA	NA	NA	NA

Notes:

ppm: parts per million

NA: Not applicable

Vapor concentrations are collected using a MultiRAE Lite Photoionization Detector (PID).

The system was operational for the reporting period.

Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC
Total Fluids Recovery System Operational Data
AOI 2: Pollock Street Horizontal Wells

First Half 2019

Actual Dates in Period	Reporting Period (Internal)	Days in Period	HW-1 Days of Operation Within Period	HW-1 Water Recovered During Period (gallons)	HW-2 Days of Operation Within Period	HW-2 Water Recovered During Period (gallons)	HW-3 Days of Operation Within Period	HW-3 Water Recovered During Period (gallons)	Total Fluids Extracted During Period (gallons)	Total Fluids Extracted (gallons)	LNAPL Recovered During Period (gallons)*
12/25/2018 - 1/22/2019	Jan 2019	29	Totalizer	413,000	Totalizer	0	29	642,269	1,055,268.8	114,597,433	NA
1/23/2019 - 2/19/2019	Feb 2019	28	Totalizer	422,700	Totalizer	17,821	28	620,122	1,060,642.6	115,658,075	NA
2/20/2019 - 3/25/2019	Mar 2019	34	Totalizer	507,700	Totalizer	29,869	34	753,005	1,290,573.8	116,948,649	NA
3/26/2019 - 3/31/2019	end Q1 2019	5	Totalizer	73,714	Totalizer	4,622	5	110,736	189,072.4	117,137,722	NA
3/26/2019 - 4/23/2019	Apr 2019	29	Totalizer	119,000	Totalizer	8,060	8	177,178	304,237.6	117,252,887	NA
4/24/2019 - 5/23/2019	May 2019	30	Totalizer	400	Totalizer	0	1	22,147	22,547.2	117,275,434	NA
5/24/2019 - 6/24/2019	Jun 2019	31	Totalizer	498,200	Totalizer	0	31	686,563	1,184,763.2	118,460,197	NA
6/25/2019 - 6/30/2019	end Q2 2019	5	Totalizer	107,438	Totalizer	0	5	110,736	218,173.5	118,678,371	NA

Notes:

LNAPL: Light Non-Aqueous Phase Liquid

NA: Not Applicable

gpm: gallons per minute

*The system discharges directly to a process sewer; therefore, the volume of recoverable LNAPL cannot be quantified.

The estimated flow rate for HW-3 as determined by pump testing is 15.38 gpm

The system was operational during the reporting period with the following exceptions:

On December 17, 2018, HW-2 was turned off pending line jetting. HW-2 was returned to service on January 28, 2019.

On April 2, the HW-1, HW-2, and HW-3 pumps were turned off during LNAPL transmissivity testing. The pumps were restarted and the system was returned to service on May 23.

From May 29 through the end of the reporting period, the flow meter for HW-2 was not functional.

**Philadelphia Refinery Operations, a series of Evergreen
Resources Group, LLC
LNAPL Recovery System Operational Data
AOI 4: S-30 Remediation System**

First Half 2019

Date	LNAPL Recovered in Period (gallons)	Total LNAPL Recovered (gallons)
7-Jan-19	0.0	40,009
17-Jan-19	0.0	40,009
23-Jan-19	0.0	40,009
30-Jan-19	0.0	40,009
6-Feb-19	0.0	40,009
12-Feb-19	0.0	40,009
21-Feb-19	0.0	40,009
26-Feb-19	0.0	40,009
6-Mar-19	0.0	40,009
13-Mar-19	0.0	40,009
19-Mar-19	9.3	40,018
26-Mar-19	9.3	40,028
2-Apr-19	0.0	40,028
9-Apr-19	0.0	40,028
16-Apr-19	0.0	40,028
23-Apr-19	0.0	40,028
30-Apr-19	0.0	40,028
7-May-19	0.0	40,028
14-May-19	0.0	40,028
21-May-19	0.0	40,028
28-May-19	0.0	40,028
4-Jun-19	0.0	40,028
11-Jun-19	0.0	40,028
18-Jun-19	0.0	40,028
25-Jun-19	0.0	40,028

NOTES:

LNAPL: Light Non-Aqueous Phase Liquid

The reported volume recovered for total fluids accounts for the historical recovery for the S-30 Remediation System.

There is no groundwater recovery at S-30; it is a product skimming system.

During the reporting period, the S-30 Remediation System was operational with the following exceptions:

From February 6 through March 13, the S-30 pump was removed for repairs.

From April 2 through May 20, the system was not operational during LNAPL transmissivity testing.

Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC
Groundwater and LNAPL Recovery System Operational Data
AOI 4: Penrose Avenue Remediation System
First Half 2019

Date	Period Total Flow (gallons)	Total Flow (gallons)	Average Daily Flow (gpd)	LNAPL Recovered in Period (gallons)	Total LNAPL Recovered (gallons)
07-Jan-19	23,650	20,050,320	3,379	0.0	5777.7
17-Jan-19	73,810	20,124,130	7,381	0.0	5777.7
23-Jan-19	91,050	20,215,180	15,175	3.1	5780.8
30-Jan-19	91,010	20,306,190	13,001	1.0	5781.8
05-Feb-19	70,990	20,377,180	11,832	0.0	5781.8
12-Feb-19	80,450	20,457,630	11,493	0.0	5781.8
21-Feb-19	58,880	20,516,510	6,542	0.0	5781.8
26-Feb-19	55,120	20,571,630	11,024	0.0	5781.8
06-Mar-19	126,650	20,698,280	15,831	0.0	5781.8
13-Mar-19	89,800	20,788,080	12,829	0.0	5781.8
19-Mar-19	49,400	20,837,480	8,233	0.0	5781.8
27-Mar-19	300	20,837,780	38	0.0	5781.8
02-Apr-19	71,100	20,908,880	11,850	0.6	5782.4
09-Apr-19	0	20,908,880	0	0.0	5782.4
16-Apr-19	0	20,908,880	0	0.0	5782.4
23-Apr-19	0	20,908,880	0	0.0	5782.4
02-May-19	400	20,909,280	44	13.3	5795.7
06-May-19	39,200	20,948,480	9,800	45.5	5841.2
15-May-19	60,600	21,009,080	6,733	0.0	5841.2
20-May-19	63,900	21,072,980	12,780	17.8	5859.0
28-May-19	90,500	21,163,480	11,313	0.0	5859.0
04-Jun-19	137,600	21,301,080	19,657	0.0	5859.0
13-Jun-19	137,500	21,438,580	15,278	86.0	5945.0
18-Jun-19	500	21,439,080	100	42.5	5987.5
27-Jun-19	800	21,439,880	89	0.0	5987.5

Note:

gpd: gallons per day

LNAPL: Light Non-Aqueous Phase Liquid

The Penrose Avenue Remediation System consisting of 18 recovery wells (RW-700 through RW-717) was started on March 20, 2013. On February 21, 2018, pumps were installed in S-221, S-236, and S-237 to address LNAPL in those wells. Groundwater and LNAPL are extracted using pneumatic pumps, and total fluids pass through an oil/water separator (OWS). The groundwater is discharged to the Philadelphia Water Department (PWD) sanitary sewer system along Penrose Avenue, and LNAPL is recovered in a 550-gallon storage tank.

The system was operational during the reporting period with the following exceptions:

On January 7, the system was turned off during OWS cleaning activities.

On January 30, RW-700 was not operational due to cold weather. The pump was adjusted and returned to service.

On February 26, RW-700 and S-237 were not operational. RW-700 was adjusted and returned to service.

From April 2 through May 2, the system was not operational during LNAPL transmissivity testing.

On May 2, S-221 was not operational.

On May 15, RW-700 and RW-703 were not operational. The pumps were adjusted and returned to service.

On May 20, S-237 was returned to service.

On May 28, S-221 was returned to service.

On June 13, the system was turned off for OWS repair.

On June 18, the separator was cleaned and the system was returned to service.

Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC
Recovery System Operational Data
AOI 7: 3 Separator Remediation System
First Half 2019

Date	Total Flow (gallons)	Period Total Flow (gallons)	Calculated System Flow Rate (gpm)	LNAPL Recovered in Period (gallons)	Total LNAPL Recovered (gallons)
8-Jan-19	23,126,678	127,500	6.81	7.7	113,547.1
15-Jan-19	23,179,578	52,900	5.25	2.0	113,549.1
24-Jan-19	23,248,278	68,700	5.30	10.0	113,559.0
28-Jan-19	23,287,278	39,000	6.77	2.0	113,561.1
5-Feb-19	23,365,723	78,445	6.81	8.2	113,569.3
13-Feb-19	23,420,978	55,255	4.80	2.1	113,571.4
19-Feb-19	23,424,778	3,800	0.44	0.0	113,571.4
26-Feb-19	23,533,778	109,000	10.81	10.6	113,582.0
4-Mar-19	23,596,278	62,500	7.23	4.3	113,586.3
11-Mar-19	23,634,078	37,800	3.75	6.5	113,592.8
18-Mar-19	23,667,878	33,800	3.35	17.8	113,610.6
25-Mar-19	23,706,578	38,700	3.84	27.8	113,638.5
4-Apr-19	23,810,278	103,700	7.20	21.6	113,660.1
8-Apr-19	23,838,878	28,600	4.97	4.9	113,665.0
17-Apr-19	23,892,278	53,400	4.12	24.9	113,689.9
25-Apr-19	23,943,478	51,200	4.44	23.0	113,712.9
30-Apr-19	23,976,778	33,300	4.63	7.8	113,720.6
7-May-19	24,023,578	46,800	4.64	0.0	113,720.6
17-May-19	24,098,578	75,000	5.21	28.9	113,749.6
24-May-19	24,140,878	42,300	4.20	10.7	113,760.3
29-May-19	24,169,778	28,900	4.01	5.4	113,765.6
13-Jun-19	24,242,278	72,500	3.36	8.1	113,773.7
17-Jun-19	24,262,578	20,300	3.52	5.4	113,779.1
25-Jun-19	24,399,078	136,500	11.85	23.9	113,803.0

Notes:

gpm: gallons per minute

LNAPL: Light Non-Aqueous Phase Liquid

The 3 Separator Remediation System is a hydraulic control system constructed of ten recovery wells (RW-801 through RW-810) which was started on August 23, 2012. Groundwater and LNAPL are extracted using pneumatic submersible pumps and total fluids pass through an oil/water separator (OWS). Water is discharged to an onsite process sewer. LNAPL is recovered in a tank and recycled by the PES Complex.

The system was operational for the reporting period with the following exceptions:

On February 19, the system shut down due to a high OWS alarm. The system was reset and restarted. RW-800 was not operational after the system was restarted.

On April 4, RW-801 and RW-807 were removed for maintenance.

On March 24, the RW-807 line was fouled. RW-807 was not returned to service during the reporting period.

On June 17, RW-801 was returned to service.

On June 25, the system shut down due to a holding tank alarm.

On June 27, the holding tank was cleaned out and the system was returned to service.

Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC
AOI 8: Jackson Street Water Curtain
First Half 2019

Date	PID readings (ppm)			Comments
	Blower	Water Curtain	Interceptor Chamber	
03-Jan-19	NA	0.0	0.0	
11-Jan-19	NA	0.0	0.0	
24-Jan-19	NA	0.0	0.0	
31-Jan-19	NA	0.0	0.0	
08-Feb-19	NA	0.0	0.0	
14-Feb-19	NA	0.0	0.0	
22-Feb-19	NA	0.0	0.0	
01-Mar-19	NA	0.0	0.0	
08-Mar-19	NA	0.0	0.0	
14-Mar-19	NA	0.0	0.0	
22-Mar-19	NA	0.0	0.0	
29-Mar-19	NA	0.0	0.0	
05-Apr-19	NA	0.0	0.0	
10-Apr-19	NA	0.0	0.0	
17-Apr-19	NA	0.0	0.0	
25-Apr-19	NA	0.0	0.0	
03-May-19	NA	0.0	0.0	
10-May-19	NA	0.0	0.0	
17-May-19	NA	0.0	0.0	
23-May-19	NA	0.0	0.0	
29-May-19	NA	0.0	0.0	
13-Jun-19	NA	0.0	0.0	
18-Jun-19	NA	0.0	0.0	
25-Jun-19	NA	0.0	0.0	

NOTES:

PID: Photoionization detector

ppm: parts per million

NA: Not Available (PID readings are not collected at the blower.)

Vapor concentrations are collected using a MultiRAE Lite PID.

The totalizer was removed on December 11, 2009.

The system was operational during the reporting period.

APPENDIX 2

Laboratory Analytical Data Reports

(electronic copy only; provided on CD included with report)