Fourth Semi-Annual VRP Progress Report

Epic Savannah North Terminal
Savannah, Chatham County, Georgia
VRP #1440101197

Epic Midstream, LLC

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I certify that I am a qualified groundwater scientist who has received a baccalaureate or postgraduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by me or by a subordinate working under my direction.

John A. DiZinno, PE

Printed Name (Professional Engineer)

12/1/2017

Signature (Professional Engineer)

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1. Introduction

On behalf of Epic Midstream, LLC (Epic), GHD has prepared this semi-annual progress report pursuant to the approved Voluntary Remediation Program (VRP) application for the Epic Savannah North Terminal located at 7 Foundation Drive, Savannah, Georgia (Site). A vicinity map for the Site is included as Figure 1. An aerial photograph of the Site obtained in 2016 is included as Figure 2. A layout of the Site in its current configuration is shown on Figure 3.

1.1 Background

The Epic Savannah North Terminal has been utilized for petroleum refining and storage activities since the early 1900s. Mexican Petroleum first developed the property as a petroleum refinery in 1929. The property was later acquired by American Oil Company (and later Amoco), which continued petroleum operations. In 1993, the property was acquired by CITGO Asphalt Refining (CITGO), and began asphalt refining operations until acquisition by NuStar Asphalt Refining, LLC in 2008. Asphalt refining operations were temporarily halted in 2012. The property was acquired by Axeon Specialty Products (Axeon) in 2014, which utilized the Site for bulk storage and distribution of petroleum related products. The property was most recently obtained by Epic in December 2015 and is currently used as a bulk storage and distribution facility for petroleum products. The refinery portion of the Site was removed during the first quarter of 2016.

In 1989, light non-aqueous phase liquid (LNAPL) was discovered at the Site and a subsequent investigation by Amoco concluded that detected LNAPL was the result of the “gradual accumulation of residual oil over several decades.” Subsurface investigations and LNAPL recovery operations have been conducted in various capacities since the discovery of the LNAPL. Through subsurface investigations, the LNAPL present at the Site has been determined to be petroleum hydrocarbon-based material.

In 1996, Horizontal Subsurface Systems, Inc. installed a 20-foot (ft) deep and approximately 1,500 ft long polyethylene (HDPE) polywall at the Site along the Savannah River. The polywall was positioned at the downgradient edge of the Site to prevent the migration of LNAPL to the Savannah River. Portions of the polywall were exposed through excavation by Axeon in June and July of 2015. Upon inspection, the exposed sections of the polywall did not show any signs of delamination, degradation, or deterioration. The installation of the polywall has proved to be a success and an effective method of providing containment for the LNAPL plume.

On August 8, 2015, a VRP application or Voluntary Investigation and Remediation Plan (VIRP) was submitted by Axeon to the Georgia Environmental Protection Division (GAEPD) for the Site. Following submittal of the VIRP, Terracon, on behalf of Axeon, performed additional investigation at the Site and the results were summarized in a Site Investigation Summary Report (SISR) submitted to Georgia EPD on September 15, 2015. Additionally, Langan Engineering and Environmental Services (Langan) evaluated the LNAPL at the Site and identified potential LNAPL recovery approaches for implementation at the Site that were described in a Technical Memorandum to Axeon that was submitted to Georgia EPD on October 29, 2015. The SISR and Langan Technical Memorandum were submitted to supplement the August 2015 VIRP.

In correspondence dated November 24, 2015, the Georgia EPD stated that the Site had been approved for participation in the VRP with comments and was assigned VRP #1440101197. Epic purchased the Site from Axeon on December 22, 2015 and on January 14, 2016 Epic submitted a revised VRP application and checklist to reflect the ownership change.

The existing monitoring well network at the Site as identified by GHD consists of 61 wells installed during previous environmental investigations that are shown on Figure 3. Historically, as many as 27 of these monitor wells have contained LNAPL, with 23 wells containing measurable LNAPL during the reporting period.

1.2 Report Overview

This report summarizes the findings from the following activities that were performed at the Site during the reporting period of May 16, 2017 through November 2, 2017:

- Quarterly groundwater monitoring and LNAPL measuring performed in August and November 2017.
- Continuation of long-term LNAPL recovery and transmissivity evaluations for monitoring wells AW-9, AW-11, AW-49, AW-56, and AW-82.
- Initiation and completion of long-term LNAPL recovery and transmissivity evaluations for monitoring wells AW-6, AW-18, and AW-54.
- Initiation of long-term LNAPL recovery and transmissivity evaluations for monitoring wells AW-22 and AW-74.

2. Activities Completed During Reporting Period

2.1 Quarterly LNAPL Monitoring

2.1.1 August 2017 Gauging Event

Depth to water measurements were obtained on August 8, 2017 for 60 existing on-Site monitoring wells that were located and accessible during the event; well AW-73 was not located during the event. The measurements were obtained using a Solinst oil/water interface probe and are summarized in Table 1. Groundwater elevations were determined based on the depth to groundwater measurements compared to surveyed top of casing elevations and adjusted for the measured in-well LNAPL thickness, where required. A groundwater potentiometric elevation and contour map based on the August 8, 2017 groundwater elevation data is shown on Figure 4 and indicates that the groundwater flow direction is generally to the east towards the Savannah River; which is consistent with historical observations.

LNAPL was measured in 23 of 60 gauged wells during the August 2017 event as summarized in Table 1 with observed thicknesses varying between 0.05 and 10.14 feet. Figure 5 presents isopleths depicting the measured in-well LNAPL thicknesses for this event which are generally consistent with observations from recent events. No indication of the presence of LNAPL was observed on the river side of the polywall.

2.1.2 November 2017 Gauging Event

Depth to water measurements were obtained on November 1, 2017 for 61 existing on-Site monitoring wells that were located and accessible during the event. The measurements were obtained using a Solinst oil/water interface probe and are summarized in Table 1. Groundwater elevations were determined based on the depth to groundwater measurements compared to surveyed top of casing elevations and adjusted for the measured in-well LNAPL thickness, where required. A groundwater potentiometric elevation and contour map based on the November 1, 2017 groundwater elevation data is shown on Figure 6 and indicates that the groundwater flow direction is generally to the east towards the Savannah River; which is consistent with historical observations.

LNAPL was measured in 23 of 61 gauged wells during the November 2017 event as summarized in Table 1 with observed thicknesses varying between a sheen and 9.12 feet. Figure 7 presents isopleths depicting the measured in-well LNAPL thicknesses for this event which are generally consistent with observations from recent events. A sheen of LNAPL was observed on the river side of the polywall, in AW-62 and POD-1.

2.1.3 LNAPL Extent

Figure 8 depicts the inferred areal extent of LNAPL in the subsurface based on observations of in-well LNAPL accumulations; the historical maximum extent, the inferred extent in 2009, and the inferred extent based on the August and November 2017 measurements. Historically, LNAPL has been detected in monitoring wells across the majority of the Site with an inferred extent of over 35 acres. Measurements obtained in 2009 suggested an areal extent of 18 acres. The measurements from the fall of 2017 indicated an extent of less than 16 acres. Based on these observations, there has been over a 10% reduction in extent since 2009 and an overall reduction of LNAPL extent of over 56%.

Table 4 presents a summary of the reported historical maximum in-well LNAPL thickness and the maximum in-well LNAPL thickness observed in those wells since 2016. The average reduction is approximately 51% with 14 of the 30 wells exhibiting a reduction of greater than 50% and 10 of those wells exhibit a 95% reduction.

These observations suggest that the LNAPL plume is stable and in a declining condition that supports the conclusion that the LNAPL at the Site is immobile and not likely to migrate nor is it expected to be recoverable to a large extent.

2.2 LNAPL Skimming and Transmissivity Evaluation

As described in the *Third Semi-Annual VRP Progress Report*, GHD completed a series of short-duration LNAPL skimming evaluations at numerous on-Site monitoring wells to identify wells with potential LNAPL transmissivity (Tn) values indicative of the presence of recoverable/mobile LNAPL. Data from these short duration tests was provided in previous Progress Reports and was used to determine candidate wells for completion of long-term transmissivity evaluations. The wells identified for additional evaluation include AW-5, AW-6, AW-9, AW-10, AW-11, AW-12, AW-18, AW-22, AW-49, AW-54, AW-56, AW-68, AW-74, and AW-82. During the reporting period, GHD

continued implementation of long-duration skimming tests in candidate wells to further evaluate the potential for LNAPL to migrate or to be recovered feasibly.

2.2.1 Long-Duration LNAPL Skimming Studies

As described in the *Second Semi-Annual VRP Progress Report*, GHD determined that several wells at the Site that had been evaluated over a short duration required further evaluation to accurately estimate the LNAPL recoverability/mobility for those areas of the Site. During this reporting period, longer-durations tests at several wells were initiated, continued, and/or completed to evaluate the LNAPL recovery at these wells. Tests at several of these wells are currently on-going. The results of the completed tests and observations of the ongoing transmissivity tests are discussed in the following section. A summary of the LNAPL recovery for each well during the long-term tests is presented in Table 3.

The skimmer refill/discharge rates were set to maintain a minimal in-well LNAPL thickness in each well (Note: The skimmers are effective at reducing in-well LNAPL thicknesses to approximately 0.2 feet). Skimmer system operation and the volume of recovered LNAPL was monitored weekly throughout the duration of each test. Approximate LNAPL recovery from the longer-duration tests as of November 2, 2017 are as follows:

Well ID	Approximate Volume of LNAPL Recovered (gallons)	Test Duration (weeks)	Notes
AW-6	1	5	Completed
AW-9	1,105	59	Ongoing
AW-10	160	15	Completed
AW-11	800	41	Ongoing
AW-18	4	6	Completed
AW-22	15	6	Ongoing
AW-49	1,965	59	Ongoing
AW-54	120	9	Completed
AW-56	800	36	Ongoing
AW-74	7	9	Ongoing
AW-82	640	27	Ongoing

2.2.2 LNAPL Transmissivity Evaluation Approach

Because the elevation of Site groundwater is influenced by tidal fluctuations in the Savannah River, an equilibrium groundwater elevation and in-well LNAPL thickness was determined for each of the wells evaluated using depth to water and depth to LNAPL measurements obtained since 2015. These equilibrium values were used to determine the maximum theoretical unconfined LNAPL drawdown possible at each well and to determine the observed LNAPL drawdown for each measurement period which was then used to estimate the LNAPL Tn. The LNAPL Tn values were calculated using the methodology detailed in ASTM E2856-13: Standard Guide for Estimation of LNAPL Transmissivity.

Summary tables for each of the candidate wells evaluated as part of the long-duration transmissivity evaluation are included in Appendix A. The summary tables include observations from the weekly operation and maintenance visits. Data collected during these weekly visits includes the system up-time during the interval between measurement events, the volume of LNAPL recovered, and the in-well LNAPL thickness. This data is used to calculate values for LNAPL drawdown, average LNAPL recovery rate for the interval, and the estimated LNAPL Tn for the interval; values for which are included in the summary tables.

Where applicable based on observations, Appendix A also presents three graphical depictions of the observations and interpretations of the data for each well that are discussed below.

- The first chart for each well presents a depiction of the cumulative LNAPL recovery volume (gallons) and the weekly LNAPL recovery rate over time (gpd) during the long-term evaluation period. Typically, as the volume of LNAPL recovered from a well increases over time, the LNAPL recovery rate will decrease (i.e. LNAPL volumetric recovery decline). This is due to the removal of the recoverable portion of LNAPL from the subsurface in the vicinity of the well.
- The second chart for each well presents an analysis of the LNAPL volumetric recovery on a weekly basis and, when appropriate, includes a volumetric decline curve. Once stabilization of LNAPL recovery is reached (i.e., the in-well LNAPL has been drawn down and the skimmer is operating continuously during the observation interval), plotting the LNAPL recovery rate versus the cumulative LNAPL volume recovered can be used to determine a estimate of the total volume of recoverable LNAPL at the well. When a clear trend is identified based on the data collected, the value of the estimated recoverable volume is shown on the chart.
- The third chart for each well presents an analysis of the weekly LNAPL Tn values compared to total volumetric recovery and, where appropriate, a Tn decline curve. The plot presents the estimated LNAPL Tn values following stabilization of LNAPL recovery rates as compared to the ITRC de minimis criteria of 0.8 ft^2/day.

2.2.3 LNAPL Transmissivity Evaluation Findings

AW-6 Observations and Skimming Results

LNAPL skimming was conducted at monitoring well AW-6 between August 2, 2017 and September 6, 2017 to complete a long-term skimming test that would allow for the determination of the LNAPL Tn at this well. The following are based on the observations to date for AW-6:

- One gallon of LNAPL was removed from this well during the 5-week test duration with all LNAPL recovery measured during the initial removal of in-well LNAPL (first 2-3 hours). No further LNAPL was recovered through continuous operation of the skimmer system in this well. The in-well LNAPL thickness was maintained at 0.28 feet or less for the duration of the test.
- Following the conclusion of the LNAPL skimming test, LNAPL thickness in this well has recovered to approximately 1.5 feet similar to the in-well LNAPL thickness observed prior to the skimming test. This observation is consistent with ITRC guidance and science-based approaches for evaluating LNAPL recoverability that conclude that in-well LNAPL thicknesses are not indicative of LNAPL recoverability and often return to thicknesses consistent with observations prior to implementation of remedial efforts.

Based on the above, LNAPL skimming was effective at removing the limited quantity of in-well LNAPL, but the LNAPL Tn for this well appears to be very low and continued skimming or more aggressive methods of LNAPL recovery do not appear to be warranted at monitoring well AW-6. While continued skimming would likely provide additional LNAPL recovery, it would do so at de minimis rates that are not technically practicable.

AW-9 Observations and Skimming Results

LNAPL skimming has been underway at monitoring well AW-9 since September 2016. The following are based on the observations to date for AW-9:

- As of November 2, 2017, approximately 1,105 gallons of LNAPL have been removed from this well over the 59-week test duration.
- The estimated total volume of recoverable LNAPL from monitoring well AW-9 has consistently remained between 1,500 and 1,600 gallons. Since the initiation of the LNAPL skimming test at AW-9, approximately 1,105 gallons of LNAPL have been recovered or approximately 70% of the estimated total volume of recoverable LNAPL.
- LNAPL recovery rates have decreased over time as expected indicating that the volume of recoverable LNAPL at AW-9 has been reduced.
- LNAPL Tn values have decreased over time with the majority of the estimated LNAPL Tn values below or near the ITRC de minimis criteria of 0.8 ft^2/day. The LNAPL Tn value is currently equal to 0.5 ft^2/day and is expected to continue to decline in the future as the volume of recoverable LNAPL decreases.
- The measured in-well LNAPL thickness at the start of the long-term skimming test was nearly 4 feet but based on the observations to date, following the initial removal of LNAPL from in and near the well, the LNAPL recovery rate decreased significantly. Additionally, during the long-term testing, the skimming system was shut down due to equipment malfunctions or other site circumstances. Each time the in-well LNAPL thickness returned to approximately 3 to 4 feet; however, upon restart, the LNAPL recovery rates quickly diminished and returned to less than 0.25 feet. These observations are consistent with ITRC guidance and science-based approaches for evaluating LNAPL recoverability that conclude that in-well LNAPL thicknesses are not indicative of LNAPL recoverability and often return to thicknesses consistent with observations prior to implementation of remedial efforts.
- In the October 2015 Langan Technical Memorandum, the estimated LNAPL Tn for AW-9 was 0.86 ft^2/day; the long-term skimming evaluation has indicated the long-term LNAPL Tn for AW-9 is less than this value. Additionally, the memorandum proposed the use of an LNAPL skimmer as the remedial approach for AW-9 followed by relocation to other wells “based on diminishing recovery and reduction in transmissivity (Tn) trends over time.” (Drawing G4, Langan, 2015)

Based on the above, aggressive methods of LNAPL recovery do not appear warranted at monitoring well AW-9 given the low LNAPL Tn estimation. LNAPL skimming is effective at removing the recoverable volume of LNAPL and will be continued at this well in the near-term. The weekly observations will be monitored and if appropriate due to declining LNAPL recovery rates/Tn values, LNAPL skimming will be halted and the skimmer relocated to another well at the Site.

AW-10 Observations and Skimming Results

LNAPL skimming was conducted at monitoring well AW-10 between January 19, 2017 and April 27, 2017 to complete a long-term skimming test that would allow for the determination of the LNAPL Tn at this well. The following are based on the observations to date for AW-10:

- 161 gallons of LNAPL had been removed from this well over the 15-week test duration and the estimated total volume of recoverable LNAPL from monitoring well AW-10 is approximately 200 gallons of which approximately 161 gallons of LNAPL or approximately 80% of the total volume of recoverable LNAPL was recovered.
- The cumulative volume of LNAPL recovered over time plateaued as shown on the first chart in Appendix A and if skimming continued, recovery would be expected to approach the estimated total recoverable LNAPL volume of 205 gallons.
- LNAPL recovery rates were very low following the initial removal of the in-well LNAPL and decreased over time to less than 1 gpd indicating that the volume of recoverable LNAPL at AW-10 has been reduced.
- LNAPL Tn values were very low with the majority of the estimated LNAPL Tn values at or near the lower end of the ITRC de minimis criteria range (0.1 ft^2/day).
- In the October 2015 Langan Technical Memorandum, the estimated LNAPL Tn for AW-10 was 2.13 ft^2/day based on a 26-hour duration test. The long-term skimming test indicates a significantly lower LNAPL Tn for AW-10.
- Additionally, the Langan memorandum reported that 168 gallons of LNAPL were removed during the 26-hour duration test. GHD removed an additional 101 gallons of LNAPL during the 4-week short-duration skimming evaluation completed in 2016. Only an additional 161 gallons of LNAPL were recovered from AW-10 during the 15-week duration long-term test. This suggests that bulk of recoverable LNAPL at AW-10 has been removed and that the residual LNAPL near AW-10 is not mobile and will not be easily recovered.
- Following the conclusion of the LNAPL skimming test, LNAPL thickness in this well has recovered to approximately 4 feet similar to the in-well LNAPL thickness observed prior to the skimming test. This observation is consistent with ITRC guidance and science-based approaches for evaluating LNAPL recoverability that conclude that in-well LNAPL thicknesses are not indicative of LNAPL recoverability and often return to thicknesses consistent with observations prior to implementation of remedial efforts.

Based on the above observations, LNAPL skimming was halted at monitoring well AW-10 on April 27, 2017. The very low and diminishing LNAPL recovery rates/Tn values, as well as the plateauing cumulative volume of LNAPL recovery at approximately 80% of the total recoverable volume of LNAPL suggest that aggressive methods of LNAPL recovery do not appear warranted at monitoring well AW-10. LNAPL skimming has been effective at removing the in-well LNAPL and recoverable volume of LNAPL. Continued skimming would provide additional LNAPL recovery but at de minimis rates that are not technically practicable.

AW-11 Observations and Skimming Results

LNAPL skimming has been underway at monitoring well AW-11 since January 2017 to complete a long-term skimming test that would allow for the determination of the LNAPL Tn at this well. The following are based on the observations to date for AW-11:

- As of November 2, 2017, approximately 800 gallons of LNAPL have been removed from this well over the 41-week duration test.
- The estimated total volume of recoverable LNAPL from monitoring well AW-11 is 1,400 gallons. Since the initiation of the LNAPL skimming test at AW-11, approximately 800 gallons of LNAPL have been recovered or approximately 57% of the total volume of recoverable LNAPL.
- LNAPL recovery rates have generally decreased over time with isolated periods of increased LNAPL recovery.
- LNAPL Tn values have generally decreased over time with the majority of the estimated LNAPL Tn values below the ITRC de minimis criteria of 0.8 ft^2/day. The LNAPL Tn value is expected to decline in the future as the volume of recoverable LNAPL decreases.
- The measured in-well LNAPL thickness at the start of the long-term skimming test was approximately 3.5 feet but based on the observations to date, following the initial removal of LNAPL from in and near the well, the LNAPL recovery rate decreased significantly. Additionally, during the long-term testing, the skimming system was shut down once due inclement weather. The in-well LNAPL thickness returned to approximately 2.5 feet; however, upon restart, the LNAPL recovery rates quickly diminished and returned to less than 0.25 feet. This observation is consistent with ITRC guidance and science-based approaches for evaluating LNAPL recoverability that conclude that in-well LNAPL thicknesses are not indicative of LNAPL recoverability and often return to thicknesses consistent with observations prior to implementation of remedial efforts.
- In the October 2015 Langan Technical Memorandum, the estimated LNAPL Tn for AW-11 was 0.51 ft^2/day which has been confirmed by the long-term skimming evaluation. Additionally, the memorandum proposed the use of an LNAPL skimmer as the remedial approach for AW-11 followed by relocation to other wells “based on diminishing recovery and reduction in transmissivity (Tn) trends over time.” (Drawing G4, Langan, 2015)

Based on the above, aggressive methods of LNAPL recovery do not appear warranted at monitoring well AW-11 given the low LNAPL Tn estimation. LNAPL skimming is effective at removing the recoverable volume of LNAPL and will be continued at this well in the near-term. The weekly observations will be monitored and if appropriate due to declining LNAPL recovery rates/Tn values, LNAPL skimming will be halted and the skimmer relocated to another well at the Site.

AW-18 Observations and Skimming Results

LNAPL skimming was conducted at monitoring well AW-18 between June 19, 2017 and August 2, 2017 to complete a long-term skimming test that would allow for the determination of the LNAPL Tn at this well. The following are based on the observations to date for AW-18:

- Four gallons of LNAPL had been removed from this well during the 6-week test duration with all the LNAPL recovery measured during the initial removal of in-well LNAPL (first 2-3 hours of operation). No further LNAPL was recovered through continuous operation of the skimmer system in this well. The LNAPL thickness was maintained at 0.35 feet or less for the duration of the test.
- Following the conclusion of the LNAPL skimming test, LNAPL thickness in this well has recovered to approximately 1.5 feet, similar to the in-well LNAPL thickness observed prior to the skimming test. This observation is consistent with ITRC guidance and science-based approaches for evaluating LNAPL recoverability that conclude that in-well LNAPL thicknesses are not indicative of LNAPL recoverability and often return to thicknesses consistent with observations prior to implementation of remedial efforts.

Based on the above, LNAPL skimming was effective at removing the limited quantity of in-well LNAPL, but the LNAPL Tn for this well appears to be very low and continual skimming or more aggressive methods of LNAPL recovery do not appear to be warranted at monitoring well AW-18. While continued skimming would likely provide additional LNAPL recovery, it would do so at de minimis rates that are not technically practicable.

AW-22 Observations and Skimming Results

LNAPL skimming has been underway at monitoring well AW-22 since September 21, 2017 to complete a long-term skimming test that would allow for the determination of the LNAPL Tn at this well. The following are based on the observations to date for AW-22:

- As of November 2, 2017, approximately 15 gallons of LNAPL have been removed from this well over the 6-week duration test.
- The initial stabilized average LNAPL recovery rate for this well has ranged from approximately 0.1 to 0.5 gallons per day but due to the limited amount of data collected to date a long-term recovery trend cannot be confirmed.
- As observed in other wells, the LNAPL Tn value decreased substantially following the initial removal of in-well LNAPL; however, even the initial Tn value for this well was 0.6 ft^2/day, which is below the ITRC de minimis criteria of 0.8 ft^2/day. The calculated LNAPL Tn values, have since been 0.1 ft^2/day or less and is expected to decline in the future as the volume of recoverable LNAPL decreases.

Based on the initial low recovery rates aggressive methods of LNAPL recovery do not appear warranted at monitoring well AW-22. LNAPL skimming will continue at this location until a representative long-term LNAPL recovery trend can be established. The weekly observations will be monitored and if appropriate due to declining LNAPL recovery rates/Tn values, LNAPL skimming will be halted and the skimmer relocated to another well at the Site.

AW-49 Observations and Skimming Results

LNAPL skimming has been underway at monitoring well AW-49 since September 2016 to complete a long-term skimming test that would allow for the determination of the LNAPL Tn at this well. The following are based on the observations to date for AW-49:

- As of November 2, 2017, approximately 1,965 gallons of LNAPL have been removed from this well over the 59-week test duration.
- LNAPL recovery rates for AW-49 have fluctuated over the skimming period with recovery rates between 4 and 7 gpd observed over the past several months. Using the observations from the past several months, the estimated total volume of recoverable LNAPL from monitoring well AW-49 is approximately 3,800 to 3,900 gallons. Since the initiation of the LNAPL skimming test at AW-49, approximately 1,965 gallons of LNAPL have been recovered or approximately 51% of the total volume of recoverable LNAPL.
- LNAPL Tn values have fluctuated over time with the majority of the recent estimated LNAPL Tn values above the ITRC de minimis criteria of 0.8 ft^2/day.
- The measured in-well LNAPL thickness at the start of the long-term skimming test was approximately 3 feet but based on the observations to date, following the initial removal of LNAPL from in and near the well, the LNAPL recovery rate decreased significantly. Additionally, during the long-term testing, the skimming system was shut down once due inclement weather. The in-well LNAPL thickness returned to approximately 2.5 feet; however, upon restart, the LNAPL recovery rates quickly diminished and returned to less than 0.25 feet. This observation is consistent with ITRC guidance and science-based approaches for evaluating LNAPL recoverability that conclude that in-well LNAPL thicknesses are not indicative of LNAPL recoverability and often return to thicknesses consistent with observations prior to implementation of remedial efforts.
- In the October 2015 Langan Technical Memorandum, the proposed remedial approach for wells in the vicinity of AW-49 was the use of an LNAPL skimmer followed by relocation to other wells "based on diminishing recovery and reduction in transmissivity (Tn) trends over time." (Drawing G4, Langan, 2015)

Based on the above, aggressive methods of LNAPL recovery do not appear warranted at monitoring well AW-49 given the low LNAPL Tn estimation. LNAPL skimming is effective at removing the recoverable volume of LNAPL and will be continued at this well in the near-term. The weekly observations will be monitored and if appropriate due to declining LNAPL recovery rates/Tn values, LNAPL skimming will be halted and the skimmer relocated to another well at the Site.

AW-54 Observations and Skimming Results

LNAPL skimming was conducted at monitoring well AW-54 between June 20, 2017 and August 22, 2017 to complete a long-term skimming test that would allow for the determination of the LNAPL Tn at this well. At the conclusion of the evaluation, the following are based on the observations to date for AW-10:

- 120 gallons of LNAPL had been removed from this well during the 9-week test duration with 113 gallons removed during the first 3 weeks of skimming. The estimated total volume of recoverable LNAPL from monitoring well AW-54 was determined to be approximately 120 gallons, based on the long-term evaluation. During the LNAPL skimming test at AW-54, approximately 120 gallons of LNAPL have been recovered or 100% of the total volume of recoverable LNAPL.

- LNAPL recovery rates were very low following the initial removal of the in-well LNAPL and decreased over time to less than 1 gpd indicating that the volume of recoverable LNAPL at AW-54 has been reduced.
- LNAPL Tn values have been very low with the majority of the estimated LNAPL Tn values at or near the lower end of the ITRC de minimis criteria range (0.1 ft^2/day). The geometric mean of the stabilized LNAPL Tn values for the test was approximately 0.2 ft^2/day.
- Following the conclusion of the LNAPL skimming test, LNAPL thickness in this well recovered to approximately 2.5 feet by August 30, 2017 and to approximately 7.25 feet during the November 1, 2017 gauging event. The historical average LNAPL thickness in this well since 2015 is between 10 and 11 feet. This slow observed LNAPL thickness recovery supports the long-term test conclusions that LNAPL mobility and recoverability is very low at this well despite the high in-well LNAPL thickness. This observation is consistent with ITRC guidance and science-based approaches for evaluating LNAPL recoverability that conclude that in-well LNAPL thicknesses are not indicative of LNAPL recoverability and often return to thicknesses consistent with observations prior to implementation of remedial efforts.

Based on the above observations, LNAPL skimming was halted at monitoring well AW-54 on August 22, 2017. The very low and diminishing LNAPL recovery rates/Tn values, as well as the plateauing cumulative volume of LNAPL recovery suggest that aggressive methods of LNAPL recovery do not appear warranted at monitoring well AW-54. LNAPL skimming has been effective at removing the in-well LNAPL and recoverable volume of LNAPL. Continued skimming would provide additional LNAPL recovery but at de minimis rates that are not technically practicable.

AW-56 Observations and Skimming Results

LNAPL skimming has been underway at monitoring well AW-56 since February 2017 to complete a long-term skimming test that would allow for the determination of the LNAPL Tn at this well. The following are based on the observations to date for AW-56:

- As of November 2, 2017, approximately 800 gallons of LNAPL have been removed from this well over the 36-week test duration.
- The estimated total volume of recoverable LNAPL from monitoring well AW-56 is approximately 3,500 gallons. Since the initiation of the LNAPL skimming test at AW-56, approximately 800 gallons of LNAPL have been recovered or approximately 23% of the total volume of recoverable LNAPL.
- LNAPL recovery rates have remained relatively constant over time with periods of increased LNAPL recovery.
- LNAPL Tn values have also remained relatively constant with the majority of the estimated LNAPL Tn values below the ITRC de minimis criteria of 0.8 ft^2/day. The LNAPL Tn values, are currently between 0.3 and 0.9 ft^2/day and are expected to decline in the future as the volume of recoverable LNAPL decreases.
- The measured in-well LNAPL thickness at the start of the long-term skimming test was approximately 5.5 feet, but following the initial removal of LNAPL from in and near the well, the LNAPL recovery rate decreased significantly. Additionally, during the long-term testing, the

skimming system has been shut down or malfunctioned several times. The in-well LNAPL thickness returned to approximately 5 feet; however, upon restart, the LNAPL recovery rates quickly diminished and returned to prior levels. This observation is consistent with ITRC guidance and science-based approaches for evaluating LNAPL recoverability that conclude that in-well LNAPL thicknesses are not indicative of LNAPL recoverability and often return to thicknesses consistent with observations prior to implementation of remedial efforts.

- In the October 2015 Langan Technical Memorandum, the estimated LNAPL Tn for AW-56 was 1.68 ft^2/day based on a 23-hour duration extraction test and the proposed remedial approach for this area of the Site was the use of MPE. The long-term skimming test indicates a significantly lower LNAPL Tn for AW-56.

Based on the preliminary and limited observations to date, aggressive methods of LNAPL recovery do not appear warranted at monitoring well AW-56. LNAPL skimming is effective at removing the recoverable volume of LNAPL and will be continued at this well in the near-term. The weekly observations will be monitored and if appropriate due to declining LNAPL recovery rates/Tn values, LNAPL skimming will be halted and the skimmer relocated to another well at the Site.

AW-74 Observations and Skimming Results

LNAPL skimming has been underway at monitoring well AW-74 since August 30, 2017 to complete a long-term skimming test that would allow for the determination of the LNAPL Tn at this well. The following are based on the observations to date for AW-74:

- As of November 2, 2017, approximately 7 gallons of LNAPL have been removed from this well during the 9-week test duration. Following the initial removal of a limited volume of LNAPL from AW-74 over the first week of skimmer operation, no recovery of LNAPL was observed. The in-well LNAPL thickness was maintained below 0.21 feet for the duration of the test and through the November 2017 gauging event though no LNAPL has been recovered since the first week of skimmer operation.

Based on the above, LNAPL skimming was effective at removing the in-well LNAPL, but the LNAPL Tn for this well appears to be very low and continual skimming or more aggressive methods of LNAPL recovery do not appear to be warranted at monitoring well AW-74. Continued skimming would likely provide additional LNAPL recovery over time but at de minimis rates that are not technically practicable.

AW-82 Observations and Skimming Results

LNAPL skimming has been underway at monitoring well AW-82 since April 2017 to complete a long-term skimming test that would allow for the determination of the LNAPL Tn at this well. The following are based on the observations to date for AW-11:

- As of November 2, 2017, approximately 640 gallons of LNAPL have been removed from this well during the 27-week test duration.
- The estimated total volume of recoverable LNAPL from monitoring well AW-82 is between 700 and 800 gallons. Since the initiation of the LNAPL skimming test at AW-82, approximately

640 gallons of LNAPL have been recovered or approximately 85% of the total volume of recoverable LNAPL.

- LNAPL recovery rates have generally decreased over time with periods of increased LNAPL recovery.
- LNAPL Tn values have generally decreased over time with the majority of the estimated LNAPL Tn values below the ITRC de minimis criteria of 0.8 ft^2/day. The LNAPL Tn values are currently between 0.1 and 0.3 ft^2/day, and have displayed a slight decreasing trend since the beginning of the evaluation. This trend is expected to continue in the future as the volume of recoverable LNAPL decreases.
- The measured in-well LNAPL thickness at the start of the long-term skimming test was approximately 3 feet, but following the initial removal of LNAPL from in and near the well, the LNAPL recovery rate decreased significantly. Additionally, during the long-term testing, the skimming system was shut down once due to inclement weather. The in-well LNAPL thickness returned to approximately 2 feet; however, upon restart, the LNAPL recovery rates quickly diminished and returned to prior levels. This observation is consistent with ITRC guidance and science-based approaches for evaluating LNAPL recoverability that conclude that in-well LNAPL thicknesses are not indicative of LNAPL recoverability and often return to thicknesses consistent with observations prior to implementation of remedial efforts.
- In the October 2015 Langan Technical Memorandum, the proposed remedial approach for this area of the Site was the use of MPE. The long-term skimming test indicates a LNAPL Tn for AW-82 that would not warrant a MPE remedial approach.

Based on the above, aggressive methods of LNAPL recovery do not appear warranted at monitoring well AW-82 given the low LNAPL Tn estimation. LNAPL skimming is effective at removing the recoverable volume of LNAPL and will be continued at this well in the near-term. The weekly observations will be monitored and if appropriate due to declining LNAPL recovery rates/Tn values, LNAPL skimming will be halted and the skimmer relocated to another well at the Site.

Remedial Endpoints

Epic will continue to monitor all known, accessible monitoring wells for the presence of LNAPL; however, it is proposed that the commonly accepted, science-based ITRC de minimis criteria of 0.1 to 0.8 ft^2/day be utilized as the endpoint for LNAPL recovery as this range of LNAPL Tn values indicates that the potential for LNAPL migration is minimal. ITRC has published and presented significant information that arbitrary remedial endpoints such as 0.1 feet of LNAPL in a well are based on an outdated understanding of LNAPL behavior as in-well LNAPL thickness measurements are not representative of the recoverability/mobility of LNAPL. The decline in LNAPL recovery over several evaluations completed between 2015 and 2017 despite the presence of greater than several feet of LNAPL in select wells supports this determination. Therefore, Epic proposes to utilize the ITRC de minimis criteria of 0.1 – 0.8 ft^2/day as the remedial endpoint for LNAPL recovery as wells exhibiting LNAPL Tn values within this range will result in de minimis LNAPL recovery rates.

Similarly, for wells that are evaluated over a longer duration and that indicate LNAPL Tn values within the range of the ITRC de minimis criteria of 0.1 – 0.8 ft^2/day and that are demonstrating

decreasing LNAPL recovery rates/Tn values, LNAPL recovery will be discontinued as the potential for LNAPL migration is minimal.

Wells will be continuously evaluated on an individual basis to determine the most efficient means of LNAPL recovery, as required.

2.3 Conclusions and Path Forward

As described above, additional LNAPL recovery from several monitoring wells is not warranted or practicable using a science-based approach to determine LNAPL mobility and recoverability. Wells AW-9, AW-11, AW-49, and to a limited extent AW-56 and AW-82 continue to exhibit sustainable, but decreasing LNAPL recovery rates and LNAPL Tn values suggesting that limited additional skimming is warranted. As the additional skimming progresses, it is anticipated that LNAPL recovery and Tn values will diminish further such that additional LNAPL recovery efforts are not warranted.

Following the completion of the LNAPL skimming evaluations for several wells (AW-6, AW-10, AW-18, and AW-54), measured in-well LNAPL thicknesses returned to pre-skimming levels. Similarly, during the extended tests at several wells (AW-9, AW-11, AW-49, AW-56, AW-82), there have been instances where the skimmer systems were not operational due to inclement weather, equipment malfunctions, or other site-specific reasons where the in-well LNAPL thicknesses also returned to pre-skimming levels during the shutdown periods; however, upon restart, the in-wells LNAPL was quickly recovered and LNAPL recovery rates quickly diminished and returned to prior levels.

These observations are consistent with ITRC guidance and science-based approaches for evaluating LNAPL recoverability that conclude that in-well LNAPL thicknesses are not indicative of LNAPL recoverability and often return to thicknesses consistent with observations prior to implementation of remedial efforts. Residual LNAPL in the subsurface will re-accumulate in wells over time due to natural processes such as through the tidal process that will continuously expose and submerge the LNAPL smear zone.

Given the results of the LNAPL Tn evaluations completed to date, there does not appear to be a technical, science-based need for widespread LNAPL recovery at the Site. Furthermore, the results suggest that aggressive recovery techniques such as MPE or periodic vacuum events are not required and will not be an effective approach to remove recoverable LNAPL from the subsurface. The exception to this would be in the vicinity of monitoring wells AW-62 and POD-1 which are located downgradient of the polywall barrier system and contain residual LNAPL that is currently being effectively managed with absorbent socks.

2.4 Conceptual Site Model

A preliminary CSM was submitted as a part of the VIRP. The CSM will be updated as additional data are collected during the progress of activities implemented over time. The CSM will be updated using the results and observations from the LNAPL Transmissivity Evaluations and will be included in the Final Remediation Plan to be submitted in May 2018.

3. Proposed Remediation Activities

Continued LNAPL Skimming and Refinement of LNAPL Transmissivity Evaluation

As described previously, several wells require additional longer-term evaluation to determine more accurate LNAPL Tn values through the maximization of LNAPL recovery rates. LNAPL skimming at AW-9, AW-10, AW-49, AW-56, and AW-82 will continue to more accurately define the trend in LNAPL Tn values for those wells and to gauge the decreasing LNAPL recovery rate and the effects on the transmissivity of the LNAPL.

GHD will continue to utilize LNAPL skimmer systems to perform longer-duration evaluations of several wells including: AW-12, AW-68, and AW-52. The duration of the evaluation for each well will be determined based on field observations of the LNAPL recovery rate, reductions in the measured in-well LNAPL thickness, and estimates of the LNAPL Tn. If a well is determined to exhibit an LNAPL Tn of less than the de minimis criteria, then skimming will be halted as general industry guidance suggests that LNAPL with a Tn value less than 0.8 ft^2/day is not mobile and/or recoverable.

Based on the LNAPL Tn values calculated thus far, a focused LNAPL skimming approach appears to be an appropriate remedial approach for implementation at the Site. Epic will continue to implement LNAPL skimming at the Site in select wells with a calculated LNAPL Tn value that exceeds the generally accepted, science-based endpoint of 0.8 ft^2/day. Selective skimming will also be performed at wells that exhibit high in-well LNAPL thicknesses but low LNAPL transmissivities and minimal long-term LNAPL production to provide additional LNAPL recovery, although not warranted based on the ITRC science-based evaluation approach.

Quarterly LNAPL Gauging

GHD will continue to visit the Site on a quarterly basis to complete measurements of groundwater elevations and in-well LNAPL thickness. The measured LNAPL thicknesses will be reviewed and any wells requiring addition or removal from the LNAPL skimming and transmissivity program will be identified. The quarterly LNAPL gauging information will be utilized to update the CSM to reflect the current extent and in-well thickness trends at the Site.

AW-62 and POD-1 LNAPL Gauging

GHD will continue to monitor AW-62 and POD-1 which are on the river side of the polywall for the presence of LNAPL. A sheen of LNAPL has been measured in AW-62 intermittently during this reporting period. Absorbent socks have been placed within AW-62 (and POD-1 as a precautionary measure) to recover the residual LNAPL, and have been replaced as needed.

Epic will continue to monitor the LNAPL sheen in AW-62, given the proximity of this well to the Savannah River. Should LNAPL continue to be observed or should the in-well LNAPL thickness in AW-62 increase, additional delineation or remedial strategies will be evaluated.

On-Site Horizontal/Vertical Delineation

Epic and GHD will continue to evaluate the need for additional soil and/or groundwater sampling in the interior of the Site. Any sampling performed will be restricted to ensuring there is no on-going

source of LNAPL contamination at the Site. As described in previous reports, Epic has completed several actions since their acquisition of the Site to address the potential for continuing sources of LNAPL releases.

The results of the LNAPL transmissivity evaluations completed to date suggest that the observed LNAPL has a very low potential to migrate. Quarterly monitoring of LNAPL in all on-Site wells has shown that LNAPL in limited to the Site and movement of the LNAPL has been limited. Additionally, the inferred extent of LNAPL at the Site has decreased approximately 56 % and in-well thicknesses have decreased an average of 50% as compared to observed historical maximums.

4. Commitment to Future Requirements

Epic affirms its commitment to the following future requirements:

- Progress Reports – June 1st and December 1st through 2020
- May 14, 2018 – update the CSM and prepare final remediation plan
- March 31, 2021 – submit CSR upon completion of remedial activities proposed herein

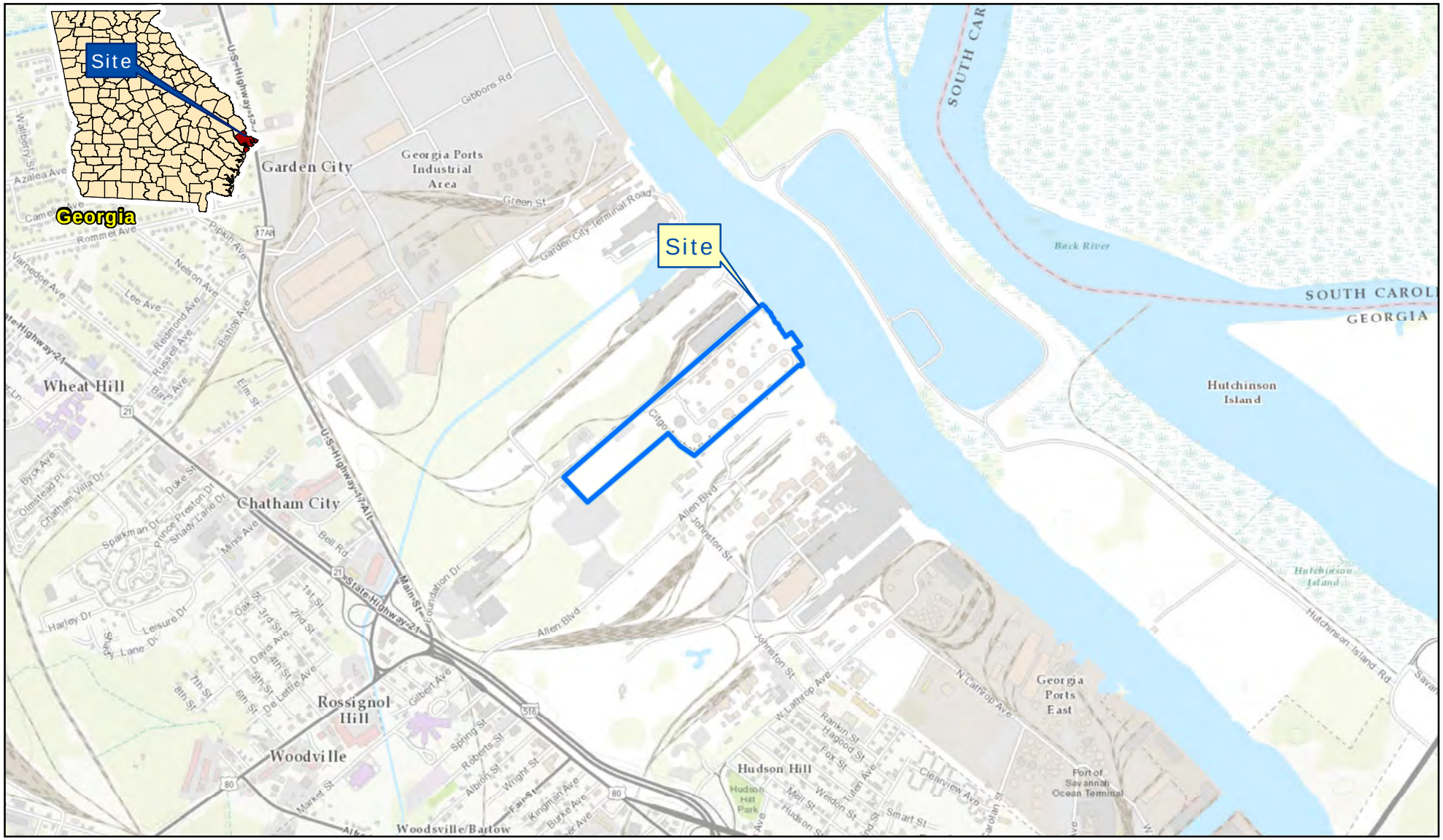
5. Project Schedule

The anticipated milestone schedule for the December 1, 2017 to June 1, 2018 reporting period is provided in Table 3.

6. Engineering Fees

Appendix B includes the summary of engineering fees incurred by this project from May 1, 2017 to November 11, 2017.

Figures



Source: ESRI World Topographic Map.

0 1,000 2,000
Feet

Coordinate System:
NAD 1983 UTM Zone 17N

N

GHD

EPIC MIDSTREAM, LLC
EPIC SAVANNAH NORTH TERMINAL, 7 FOUNDATION DRIVE, SAVANNAH, GEORGIA

May 15, 2017

VICINITY MAP

FIGURE 1

GIS File: I:\GIS\GIS\Client Project Data Library\Epic Midstream, LLC\Savannah North Terminal, Georgia\Vicinity Map\Epic Savannah North Terminal - Vicinity Map.mxd

Source: Aerial Photograph provided by Epic Midstream, LLC on March 17, 2016.

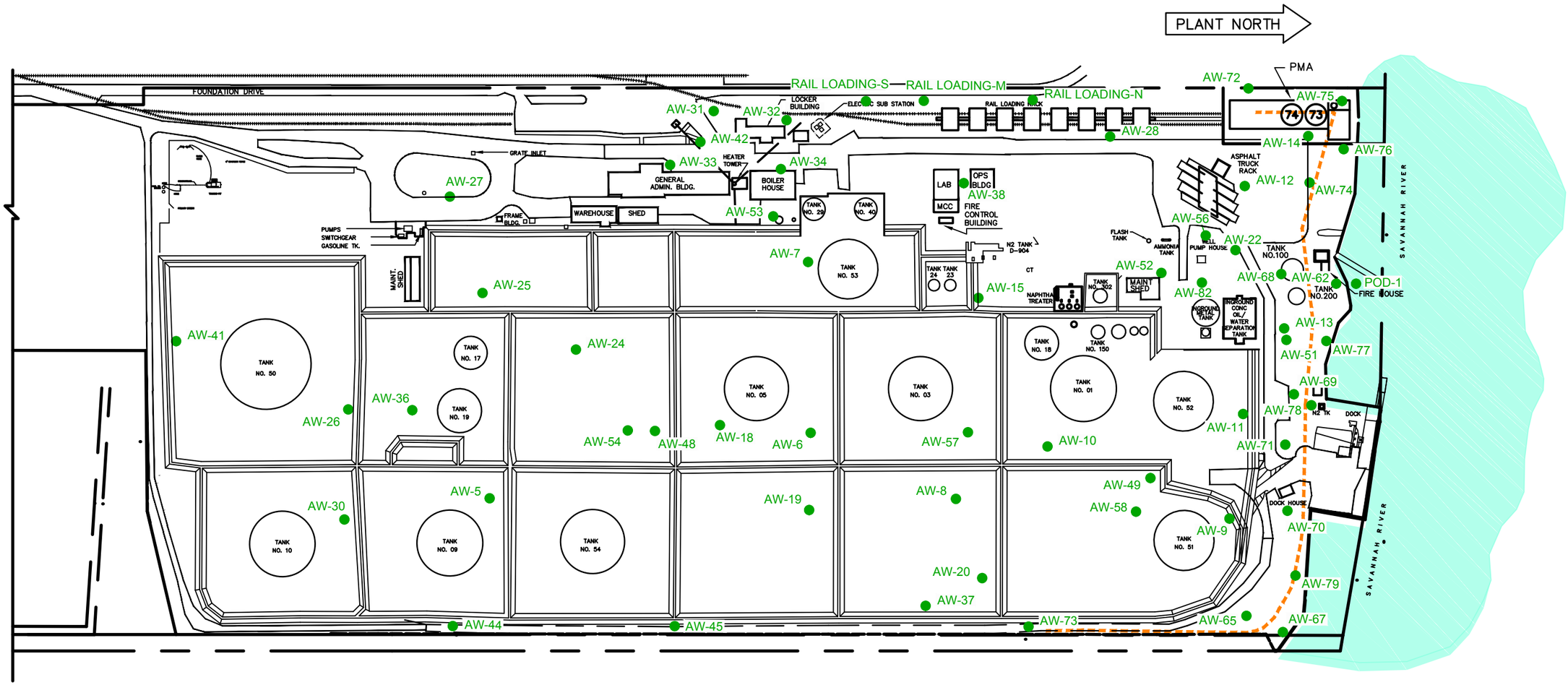
EPIC MIDSTREAM, LLC
EPIC SAVANNAH NORTH TERMINAL, 7 FOUNDATION DRIVE, SAVANNAH, GEORGIA

089400-00
May 16, 2017

2016 AERIAL PHOTOGRAPH

FIGURE 2

GIS File: I:\GIS\GIS\Projects\89000s\89400\89400-00(004)PR\89400-00(004)PR-BR001 2016 Aerial Photograph.mxd



0 100 200ft

LEGEND

POLYWALL BARRIER

AW-52 WELL LOCATION

GHD

EPIC MIDSTREAM, LLC
EPIC SAVANNAH NORTH TERMINAL, 7 FOUNDATION DRIVE, SAVANNAH, GEORGIA

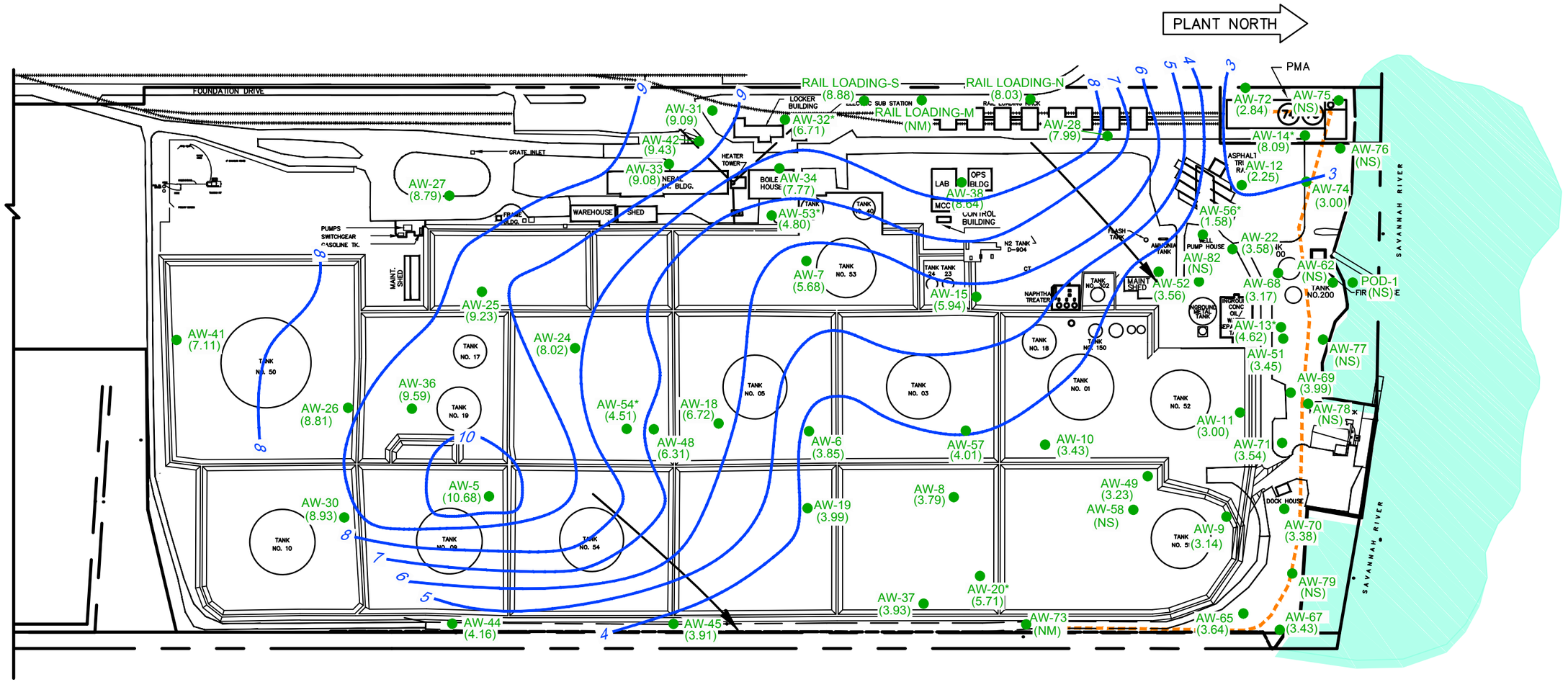
89400-02

Nov 6, 2017

SITE PLAN

FIGURE 3

CAD File: P:\drawings\89000s\89400\89400-REPORT\89400-02(005)\89400-02(005)GN\89400-02(005)GN-WA001.dwg



LEGEND

- POLYWALL BARRIER
- AW-52 ● WELL LOCATION
- (8.01) GROUNDWATER ELEVATION (FT AMSL)
- 8 GROUNDWATER ELEVATION CONTOUR (FT AMSL)
- GROUNDWATER FLOW DIRECTION
- NS NOT SURVEYED
- NM NOT MEASURED
- * MEASURED ELEVATION NOT USED TO DEVELOP CONTOURS

0 100 200ft

GHD

EPIC MIDSTREAM, LLC
EPIC SAVANNAH NORTH TERMINAL, 7 FOUNDATION DRIVE, SAVANNAH, GEORGIA

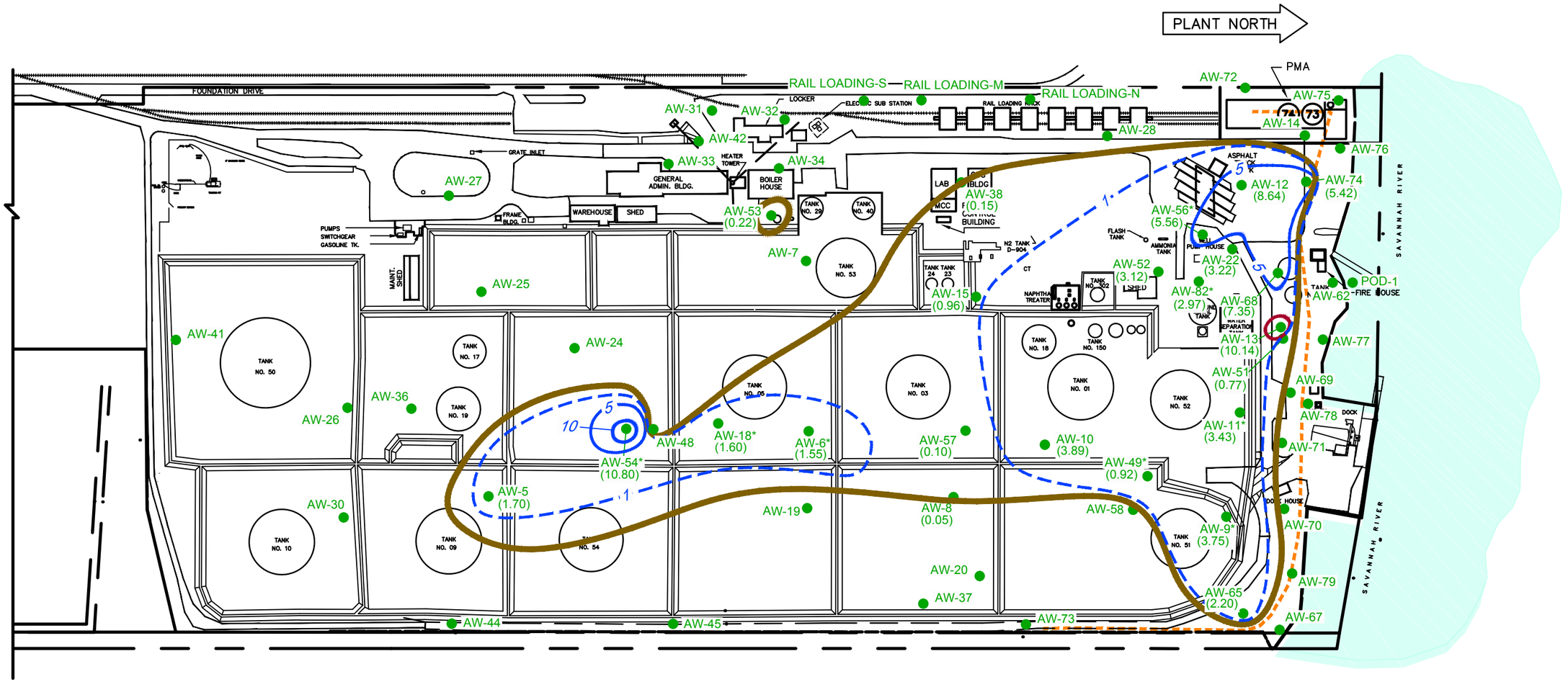
89400-02

Nov 6, 2017

AUGUST 2017 GROUNDWATER ELEVATION CONTOUR MAP

FIGURE 4

CAD File: P:\drawings\89000s\89400\89400-REPORT\89400-02(005)\89400-02(005)GN\89400-02(005)GN-WA002.dwg



LEGEND

- POLYWALL BARRIER
- AW-52 ● WELL LOCATION
- (2.55) LNAPL THICKNESS (FEET)
- 1 LNAPL THICKNESS ISOPLETH (FEET)
- HEAVIER LNAPL
- * WELL UNDERGOING SKIMMING OPERATION
- NOVEMBER 2017 INFERRED EXTENT OF LNAPL

0 100 200ft

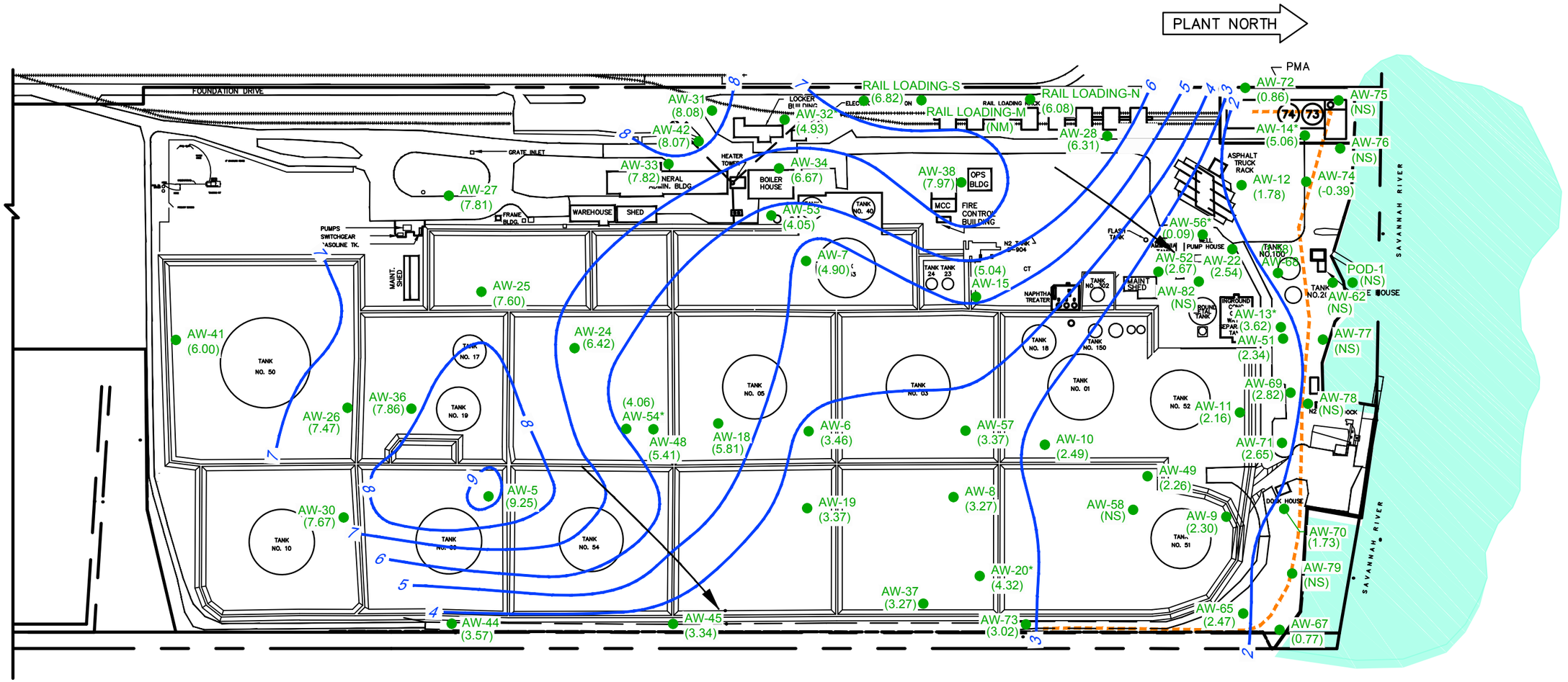
EPIC MIDSTREAM, LLC
EPIC SAVANNAH NORTH TERMINAL, 7 FOUNDATION DRIVE, SAVANNAH, GEORGIA

89400-02
Nov 20, 2017

AUGUST 2017 LNAPL ISOCONTOUR MAP

FIGURE 5

CAD File: P:\drawings\89000s\89400\89400-REPORT\89400-02(005)\89400-02(005)GN\89400-02(005)GN-WA003.dwg



LEGEND

- POLYWALL BARRIER
- AW-52 — WELL LOCATION
- (8.01) (3.05) (2.40) — GROUNDWATER ELEVATION (FT AMSL)
- 8 — GROUNDWATER ELEVATION CONTOUR (FT AMSL)
- GROUNDWATER FLOW DIRECTION
- NS — NOT SURVEYED
- NM — NOT MEASURED
- * — MEASURED ELEVATION NOT USED TO DEVELOP CONTOURS

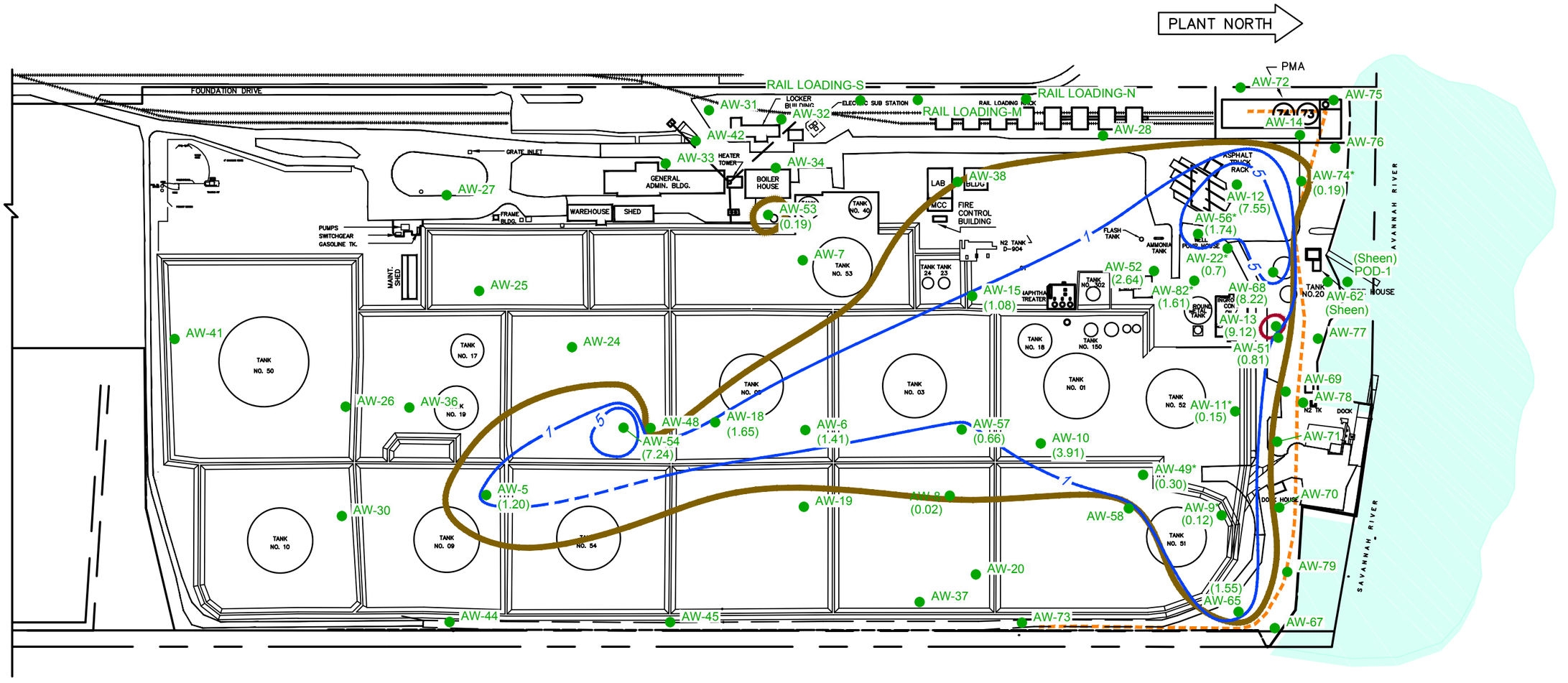
0 100 200ft

EPIC MIDSTREAM, LLC
EPIC SAVANNAH NORTH TERMINAL, 7 FOUNDATION DRIVE, SAVANNAH, GEORGIA

89400-02
Nov 8, 2017

NOVEMBER 2017 GROUNDWATER ELEVATION CONTOUR MAP FIGURE 6

CAD File: P:\drawings\89000s\89400\89400-REPORT\89400-02(005)\89400-02(005)GN\89400-02(005)GN-WA004.dwg



LEGEND

- POLYWALL BARRIER
- AW-52 ● WELL LOCATION
- (2.55) LNAPL THICKNESS (FEET)
- 1 LNAPL THICKNESS ISOPLETH (FEET)
- HEAVIER LNAPL
- * WELL UNDERGOING SKIMMING OPERATION
- NOVEMBER 2017 INFERRED EXTENT OF LNAPL

0 100 200ft

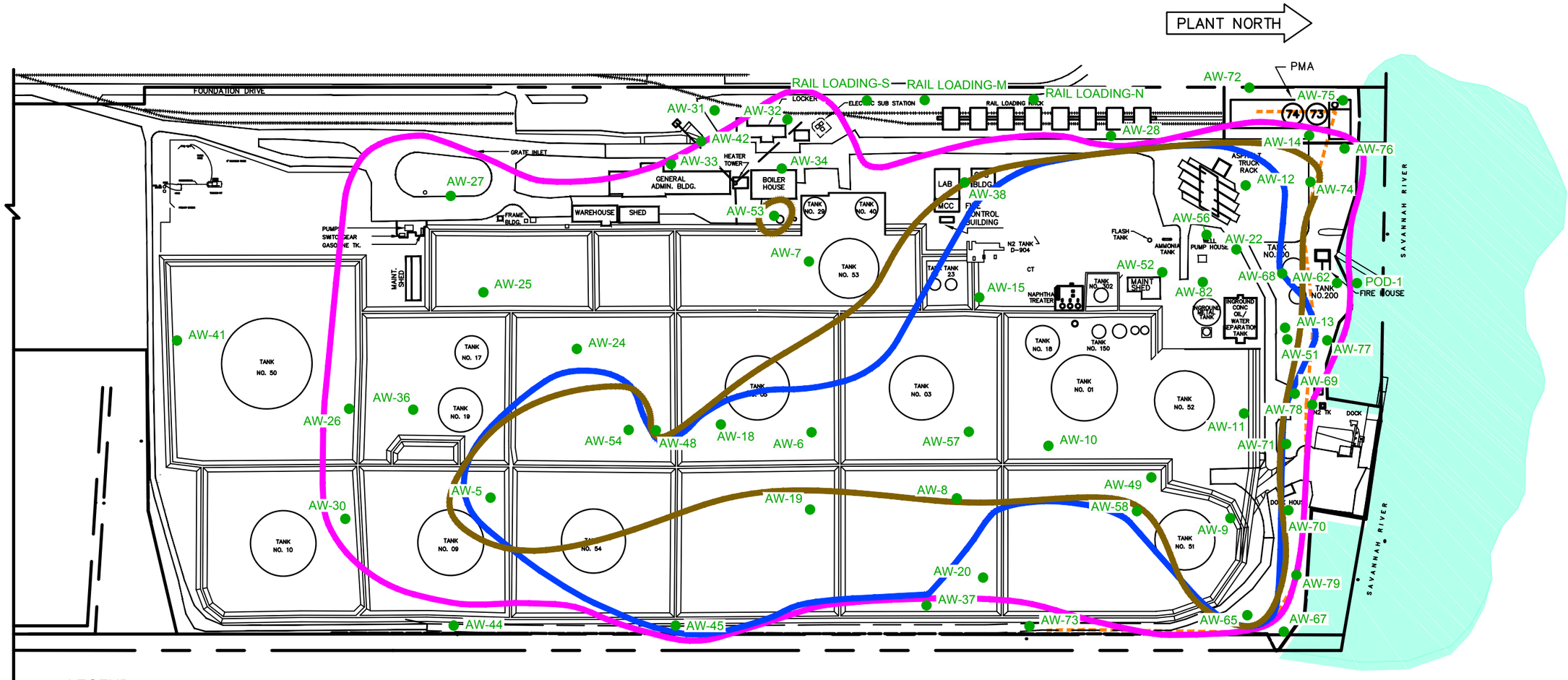
EPIC MIDSTREAM, LLC
EPIC SAVANNAH NORTH TERMINAL, 7 FOUNDATION DRIVE, SAVANNAH, GEORGIA

89400-02
Nov 20, 2017

NOVEMBER 2017 LNAPL ISOCONTOUR MAP

FIGURE 7

CAD File: P:\drawings\89000s\89400\89400-REPORT\89400-02(005)\89400-02(005)GN\89400-02(005)GN-WA005.dwg



LEGEND

- POLYWALL BARRIER
- AW-52 ● WELL LOCATION
- MAXIMUM INFERRED EXTENT OF LNAPL
- MARCH 2009 INFERRED EXTENT OF LNAPL
- NOVEMBER 2017 INFERRED EXTENT OF LNAPL

AREAS	
MAXIMUM INFERRED EXTENT OF LNAPL	1,554,313 SQ. FT.
MARCH 2009 INFERRED EXTENT OF LNAPL	781,492 SQ. FT.
NOVEMBER 2017 INFERRED EXTENT OF LNAPL	695,976 SQ. FT.

0 100 200ft

EPIC MIDSTREAM, LLC
EPIC SAVANNAH NORTH TERMINAL, 7 FOUNDATION DRIVE, SAVANNAH, GEORGIA

89400-02

Nov 20, 2017

INFERRED EXTENT OF LNAPL

FIGURE 8

CAD File: P:\drawings\89000s\89400\89400-REPORT\89400-02(005)\89400-02(005)GN\89400-02(005)GN-WA006.dwg

Tables

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
AW-5	3/1/2016	6.56	7.75	9.31	1.19
	5/1/2016	6.42	7.61	9.45	1.19
	9/21/2016	5.50	8.05	10.17	2.55
	11/15/2016	6.72	8.32	9.09	1.60
	2/14/2017	5.35	6.42	10.53	1.07
	5/2/2017	7.23	7.62	8.75	0.39
	8/8/2017	5.11	6.81	10.68	1.70
	11/1/2017	6.61	7.81	9.25	1.20
AW-6	3/1/2016	8.20	9.43	3.19	1.23
	5/1/2016	8.06	9.58	3.29	1.52
	9/22/2016	7.46	9.37	3.83	1.91
	11/15/2016	7.25	9.54	3.99	2.29
	2/14/2017	7.91	9.53	3.42	1.62
	5/2/2017	8.36	9.64	3.02	1.28
	8/8/2017	7.70	7.81	3.85	0.11
	11/1/2017	7.90	9.31	3.46	1.41
AW-7	3/1/2016	--	7.93	4.61	--
	5/1/2016	--	7.78	4.76	--
	9/22/2016	--	7.22	5.32	--
	11/15/2016	--	6.38	6.16	--
	2/14/2017	Not Measured			
	5/2/2017	--	8.11	4.43	--
	8/8/2017	--	6.86	5.68	--
	11/1/2017	--	7.64	4.90	--
AW-8	3/1/2016	--	12.70	2.98	--
	5/1/2016	12.54	12.70	3.12	0.16
	9/22/2016	12.20	12.25	3.47	0.05
	11/15/2016	11.80	11.82	3.88	0.02
	2/14/2017	12.36	12.40	3.31	0.04
	5/2/2017	12.99	13.01	2.69	0.02
	8/8/2017	11.88	11.93	3.79	0.05
	11/1/2017	12.41	12.43	3.27	0.02
AW-9	3/1/2016	10.89	14.82	2.04	3.93
	5/1/2016	10.77	14.62	2.17	3.85
	9/22/2016	11.15	11.40	2.31	0.25
	11/15/2016	10.31	13.20	2.77	2.89
	2/14/2017	10.92	11.24	2.53	0.32
	5/2/2017	11.74	11.85	1.74	0.11
	8/8/2017	10.35	10.45	3.14	0.10
	11/1/2017	11.18	11.30	2.30	0.12
AW-10	3/1/2016	11.10	14.72	2.27	3.62
	5/1/2016	10.73	14.82	2.57	4.09
	9/22/2016	10.44	15.33	2.75	4.89
	11/15/2016	9.40	14.12	3.82	4.73
	2/14/2017	11.31	11.56	2.55	0.25
	5/2/2017	11.73	13.08	1.97	1.35
	8/8/2017	9.90	13.79	3.43	3.89
	11/1/2017	10.84	14.75	2.49	3.91

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
AW-11	3/1/2016	11.20	14.79	1.92	3.59
	5/1/2016	10.86	14.92	2.19	4.06
	9/22/2016	10.77	14.17	2.37	3.40
	11/15/2016	10.18	12.68	3.10	2.50
	2/14/2017	11.26	11.49	2.35	0.23
	5/2/2017	12.25	13.39	1.22	1.14
	8/8/2017	10.61	10.81	3.00	0.20
	11/1/2017	11.46	11.61	2.16	0.15
AW-12	3/1/2016	9.25	12.65	2.30	3.40
	5/1/2016	8.96	15.77	2.01	6.81
	9/21/2016	5.47	16.20	4.82	10.73
	11/15/2016	8.70	10.99	3.04	2.29
	2/14/2017	9.46	14.09	1.88	4.63
	5/2/2017	9.50	15.15	1.67	5.65
	8/8/2017	8.40	17.04	2.25	8.64
	11/1/2017	9.06	16.61	1.78	7.55
AW-13	3/1/2016	10.40	17.70	2.99	7.30
	5/1/2016	9.95	18.64	3.56	8.69
	9/22/2016	10.20	16.45	3.11	6.25
	11/15/2016	9.11	14.15	4.10	5.04
	2/14/2017	9.66	17.22	3.75	7.56
	5/2/2017	10.67	18.28	2.75	7.61
	8/8/2017	9.01	19.15	4.62	10.14
	11/1/2017	9.92	19.04	3.62	9.12
AW-14	3/1/2016	--	8.52	4.99	--
	5/1/2016	Not Measured			
	9/22/2016	--	8.05	5.46	--
	11/15/2016	--	7.46	6.05	--
	2/14/2017	--	8.66	4.85	--
	5/2/2017	--	8.19	5.32	--
	8/8/2017	--	8.09	5.42	--
	11/1/2017	--	8.45	5.06	--
AW-15	3/1/2016	10.65	10.75	4.72	0.10
	5/1/2016	9.40	9.66	5.94	0.26
	9/22/2016	9.25	10.31	5.98	1.06
	11/15/2016	9.48	10.46	5.76	0.98
	2/14/2017	9.91	11.12	5.29	1.21
	5/2/2017	10.75	11.94	4.46	1.19
	8/8/2017	9.30	10.26	5.94	0.96
	11/1/2017	10.18	11.26	5.04	1.08
AW-18	3/1/2016	7.06	8.60	5.64	1.54
	5/1/2016	7.00	8.75	5.66	1.75
	9/22/2016	6.70	9.45	5.82	2.75
	11/15/2016	6.29	7.74	6.42	1.45
	2/14/2017	6.09	7.31	6.65	1.22
	5/2/2017	6.95	7.80	5.85	0.85
	8/8/2017	6.16	6.40	6.72	0.24
	11/1/2017	6.87	8.52	5.81	1.65

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
AW-19	3/1/2016	12.40	12.45	3.09	0.05
	5/1/2016	--	12.26	3.24	--
	9/22/2016	11.97	11.99	3.53	0.02
	11/15/2016	--	11.60	3.90	--
	2/14/2017	--	12.11	3.39	--
	5/2/2017	--	12.50	3.00	--
	8/8/2017	--	11.51	3.99	--
	11/1/2017	--	12.13	3.37	--
AW-20	3/1/2016	--	12.20	3.47	--
	5/1/2016	--	12.06	3.61	--
	9/22/2016	--	11.16	4.51	--
	11/15/2016	--	11.04	4.63	--
	2/14/2017	--	11.80	3.87	--
	5/2/2017	--	12.58	3.09	--
	8/8/2017	--	9.96	5.71	--
	11/1/2017	--	11.35	4.32	--
AW-22	3/1/2016	12.65	17.72	1.74	5.07
	5/1/2016	12.75	16.42	1.84	3.67
	9/21/2016	11.20	15.75	3.27	4.55
	11/15/2016	11.93	11.95	3.20	0.02
	2/14/2017	11.62	14.00	3.16	2.38
	5/2/2017	12.18	14.55	2.60	2.37
	8/8/2017	11.08	14.30	3.58	3.22
	11/1/2017	12.58	12.65	2.54	0.07
AW-24	3/1/2016	--	5.10	6.26	--
	5/1/2016	--	5.04	6.32	--
	9/22/2016	--	4.67	6.69	--
	11/15/2016	--	5.16	6.20	--
	2/14/2017	--	4.56	6.80	--
	5/2/2017	--	5.34	6.02	--
	8/8/2017	--	3.34	8.02	--
	11/1/2017	--	4.94	6.42	--
AW-25	3/1/2016	--	5.92	7.58	--
	5/1/2016	--	5.78	7.72	--
	9/22/2016	--	5.29	8.21	--
	11/15/2016	--	5.74	7.76	--
	2/14/2017	--	5.41	8.09	--
	5/2/2017	--	6.24	7.26	--
	8/8/2017	--	4.27	9.23	--
	11/1/2017	--	5.90	7.60	--

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
AW-26	3/1/2016	--	4.52	7.95	--
	5/1/2016	--	4.54	7.93	--
	9/22/2016	--	4.64	7.83	--
	11/15/2016	--	4.91	7.56	--
	2/14/2017	--	4.46	8.01	--
	5/2/2017	--	5.23	7.24	--
	8/8/2017	--	3.66	8.81	--
	11/1/2017	--	5.00	7.47	--
AW-27	3/1/2016	--	6.28	7.24	--
	5/1/2016	--	6.13	7.39	--
	9/22/2016	--	5.57	7.95	--
	11/15/2016	--	6.04	7.48	--
	2/14/2017	--	5.82	7.70	--
	5/2/2017	--	6.43	7.09	--
	8/8/2017	--	4.73	8.79	--
	11/1/2017	--	5.71	7.81	--
AW-28	3/1/2016	--	5.15	6.03	--
	5/1/2016	--	5.19	5.99	--
	9/22/2016	--	4.60	6.58	--
	11/15/2016	--	5.13	6.05	--
	2/14/2017	--	5.40	5.78	--
	5/2/2017	--	5.80	5.38	--
	8/8/2017	--	3.19	7.99	--
	11/1/2017	--	4.87	6.31	--
AW-30	3/1/2016	--	5.35	8.05	--
	5/1/2016	--	5.31	8.09	--
	9/22/2016	--	5.39	8.01	--
	11/15/2016	--	5.59	7.81	--
	2/14/2017	--	5.29	8.11	--
	5/2/2017	--	5.95	7.45	--
	8/8/2017	--	4.47	8.93	--
	11/1/2017	--	5.73	7.67	--
AW-31	3/1/2016	--	2.72	7.58	--
	5/1/2016	--	2.60	7.70	--
	9/22/2016	--	2.10	8.20	--
	11/15/2016	--	1.80	8.50	--
	2/14/2017	--	2.40	7.90	--
	5/2/2017	--	2.76	7.54	--
	8/8/2017	--	1.21	9.09	--
	11/1/2017	--	2.22	8.08	--
AW-32	3/1/2016	--	10.40	3.99	--
	5/1/2016	--	9.60	4.79	--
	9/22/2016	--	9.37	5.02	--
	11/15/2016	--	9.70	4.69	--
	2/14/2017	9.49	9.49	4.90	Sheen
	5/2/2017	9.91	10.04	4.46	0.13
	8/8/2017	--	7.68	6.71	--
	11/1/2017	--	9.46	4.93	--

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
AW-33	3/1/2016	--	5.43	7.65	--
	5/1/2016	--	5.35	7.73	--
	9/22/2016	--	4.92	8.16	--
	11/15/2016	--	5.39	7.69	--
	2/14/2017	--	5.32	7.76	--
	5/2/2017	--	6.79	6.29	--
	8/8/2017	--	4.00	9.08	--
	11/1/2017	--	5.26	7.82	--
AW-34	3/1/2016	--	7.57	5.70	--
	5/1/2016	--	7.36	5.91	--
	9/22/2016	--	6.40	6.87	--
	11/15/2016	--	7.11	6.16	--
	2/14/2017	--	7.36	5.91	--
	5/2/2017	--	8.04	5.23	--
	8/8/2017	--	5.50	7.77	--
	11/1/2017	--	6.60	6.67	--
AW-36	3/1/2016	--	5.47	8.18	--
	5/1/2016	--	5.42	8.23	--
	9/22/2016	--	5.23	8.42	--
	11/15/2016	--	5.82	7.83	--
	2/14/2017	--	5.17	8.48	--
	5/2/2017	--	6.22	7.43	--
	8/8/2017	--	4.06	9.59	--
	11/1/2017	--	5.79	7.86	--
AW-37	3/1/2016	--	11.37	2.96	--
	5/1/2016	--	11.24	3.09	--
	9/22/2016	--	10.95	3.38	--
	11/15/2016	--	10.49	3.84	--
	2/14/2017	--	10.98	3.35	--
	5/2/2017	--	11.53	2.80	--
	8/8/2017	--	10.40	3.93	--
	11/1/2017	--	11.06	3.27	--
AW-38	3/1/2016	--	4.45	7.58	--
	5/1/2016	Not Measured			
	9/22/2016	3.80	3.82	8.23	0.02
	11/15/2016	4.17	4.18	7.86	0.01
	2/14/2017	4.48	4.49	7.55	0.01
	5/2/2017	5.11	5.12	6.92	0.01
	8/8/2017	3.37	3.52	8.64	0.15
	11/1/2017	--	4.06	7.97	--

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
AW-41	3/1/2016	--	9.15	6.00	--
	5/1/2016	--	9.71	5.44	--
	9/22/2016	--	9.15	6.00	--
	11/15/2016	--	9.47	5.68	--
	2/14/2017	--	8.97	6.18	--
	5/2/2017	--	9.50	5.65	--
	8/8/2017	--	8.04	7.11	--
	11/1/2017	--	9.15	6.00	--
AW-42	3/1/2016	Not Measured			
	5/1/2016	1.69	1.70	7.74	0.01
	9/22/2016	--	1.23	8.20	--
	11/15/2016	--	1.93	7.50	--
	2/14/2017	--	1.50	7.93	--
	5/2/2017	--	2.11	7.32	--
	8/8/2017	--	0.00	9.43	--
	11/1/2017	--	1.36	8.07	--
AW-44	3/1/2016	--	10.03	3.38	--
	5/1/2016	--	10.00	3.41	--
	9/22/2016	--	9.65	3.76	--
	11/15/2016	--	9.39	4.02	--
	2/14/2017	--	9.55	3.86	--
	5/2/2017	--	10.11	3.30	--
	8/8/2017	--	9.25	4.16	--
	11/1/2017	--	9.84	3.57	--
AW-45	3/1/2016	--	12.14	2.99	--
	5/1/2016	--	12.12	3.01	--
	9/22/2016	--	11.78	3.35	--
	11/15/2016	--	11.51	3.62	--
	2/14/2017	--	11.88	3.25	--
	5/2/2017	--	12.22	2.91	--
	8/8/2017	--	11.22	3.91	--
	11/1/2017	--	11.79	3.34	--
AW-48	3/1/2016	--	6.82	4.31	--
	5/1/2016	--	6.10	5.03	--
	9/22/2016	--	5.58	5.55	--
	11/15/2016	--	5.49	5.64	--
	2/14/2017	--	5.72	5.41	--
	5/2/2017	--	6.39	4.74	--
	8/8/2017	--	4.82	6.31	--
	11/1/2017	--	5.72	5.41	--

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
AW-49	3/1/2016	13.10	15.94	1.99	2.84
	5/1/2016	12.73	16.76	2.18	4.03
	9/22/2016	13.22	13.47	2.24	0.25
	11/15/2016	13.00	13.19	2.47	0.19
	2/14/2017	12.99	13.21	2.48	0.22
	5/2/2017	13.69	13.96	1.77	0.27
	8/8/2017	12.24	12.45	3.23	0.21
	11/1/2017	13.20	13.50	2.26	0.30
AW-51	3/1/2016	10.48	11.41	2.16	0.93
	5/1/2016	9.90	10.62	2.76	0.72
	9/22/2016	10.35	11.67	2.24	1.32
	11/15/2016	9.41	9.62	3.31	0.21
	2/14/2017	9.84	10.17	2.87	0.33
	5/2/2017	10.85	11.34	1.84	0.49
	8/8/2017	9.21	9.98	3.45	0.77
	11/1/2017	10.31	11.12	2.34	0.81
AW-52	3/1/2016	12.80	15.69	2.52	2.89
	5/1/2016	12.47	15.56	2.82	3.09
	9/22/2016	12.40	15.52	2.88	3.12
	11/15/2016	11.68	15.00	3.58	3.32
	2/14/2017	Not Measured			
	5/2/2017	13.39	16.42	1.91	3.03
	8/8/2017	11.72	14.84	3.56	3.12
	11/1/2017	12.68	15.32	2.67	2.64
AW-53	3/1/2016	6.62	6.92	3.67	0.30
	5/1/2016	6.51	6.76	3.78	0.25
	9/22/2016	6.06	6.28	4.24	0.22
	11/15/2016	5.88	6.36	4.38	0.48
	2/14/2017	6.39	6.60	3.91	0.21
	5/2/2017	6.77	7.34	3.48	0.57
	8/8/2017	5.50	5.72	4.80	0.22
	11/1/2017	6.25	6.44	4.05	0.19
AW-54	3/1/2016	5.95	14.88	3.41	8.93
	5/1/2016	5.83	15.81	3.37	9.98
	9/22/2016	5.51	9.60	4.55	4.09
	11/15/2016	5.08	15.84	4.01	10.76
	2/14/2017	5.05	15.62	4.07	10.57
	5/2/2017	5.48	19.23	3.17	13.75
	8/8/2017	6.12	6.32	4.51	0.20
	11/1/2017	5.54	12.78	4.06	7.24

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
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Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
AW-56	3/1/2016	9.32	14.05	2.64	4.73
	5/1/2016	8.48	14.55	3.28	6.07
	9/22/2016	9.39	15.09	2.43	5.70
	11/15/2016	7.88	13.39	3.97	5.51
	2/14/2017	8.63	13.85	3.26	5.22
	5/2/2017	11.15	11.45	1.46	0.30
	8/8/2017	11.04	11.25	1.58	0.21
	11/1/2017	12.31	14.05	0.09	1.74
AW-57	3/1/2016	Not Measured			
	5/1/2016	8.64	10.23	3.27	1.59
	9/22/2016	8.45	9.27	3.57	0.82
	11/15/2016	7.96	9.77	3.92	1.81
	2/14/2017	8.89	9.09	3.22	0.20
	5/2/2017	9.33	9.74	2.75	0.41
	8/8/2017	8.12	8.22	4.01	0.10
	11/1/2017	8.68	9.34	3.37	0.66
AW-58	3/1/2016	--	8.61	NS	--
	5/1/2016	--	8.51	NS	--
	9/22/2016	--	8.15	NS	--
	11/15/2016	--	7.44	NS	--
	2/14/2017	--	6.04	NS	--
	5/2/2017	--	8.91	NS	--
	8/8/2017	--	7.45	NS	--
	11/1/2017	--	8.39	NS	--
AW-62	3/1/2016	--	9.24	NS	--
	5/1/2016	--	10.60	NS	--
	9/22/2016	9.60	9.60	NS	Sheen
	11/15/2016	9.42	9.42	NS	Sheen
	2/14/2017	4.92	4.92	NS	Sheen
	5/2/2017	10.92	10.92	NS	Sheen
	8/8/2017	--	5.40	NS	--
	11/1/2017	--	9.24	NS	Sheen
AW-65	3/1/2016	11.45	13.20	1.56	1.75
	5/1/2016	11.53	13.51	1.45	1.98
	9/22/2016	10.75	12.41	2.27	1.66
	11/15/2016	10.41	12.62	2.53	2.21
	2/14/2017	11.01	12.13	2.09	1.12
	5/2/2017	11.78	13.82	1.19	2.04
	8/8/2017	9.30	11.50	3.64	2.20
	11/1/2017	10.57	12.12	2.47	1.55

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
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Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
AW-67	3/1/2016	--	12.33	-1.01	--
	5/1/2016	--	13.37	-2.05	--
	9/22/2016	--	8.85	2.47	--
	11/15/2016	--	12.33	-1.01	--
	2/14/2017	--	6.10	5.22	--
	5/2/2017	--	11.09	0.23	--
	8/8/2017	--	7.89	3.43	--
	11/1/2017	--	10.55	0.77	--
AW-68	3/1/2016	11.75	15.11	1.56	3.36
	5/1/2016	10.48	13.90	2.82	3.42
	9/22/2016	11.66	16.90	1.37	5.24
	11/15/2016	10.88	18.10	1.87	7.22
	2/14/2017	9.89	17.90	2.74	8.01
	5/2/2017	11.19	18.46	1.55	7.27
	8/8/2017	9.56	16.91	3.17	7.35
	11/1/2017	11.02	19.24	1.58	8.22
AW-69	3/1/2016	Not Measured			
	5/1/2016	--	6.90	2.54	--
	9/22/2016	--	4.50	4.94	--
	11/15/2016	--	7.36	2.08	--
	2/14/2017	--	6.39	3.05	--
	5/2/2017	--	7.40	2.04	--
	8/8/2017	--	5.45	3.99	--
	11/1/2017	--	6.62	2.82	--
AW-70	3/1/2016	--	11.18	1.07	--
	5/1/2016	--	11.11	1.14	--
	9/22/2016	--	9.57	2.68	--
	11/15/2016	--	10.44	1.81	--
	2/14/2017	--	10.06	2.19	--
	5/2/2017	--	10.85	1.40	--
	8/8/2017	--	8.87	3.38	--
	11/1/2017	--	10.52	1.73	--
AW-71	3/1/2016	--	11.05	2.24	--
	5/1/2016	--	10.79	2.50	--
	9/22/2016	--	10.53	2.76	--
	11/15/2016	--	10.22	3.07	--
	2/14/2017	--	10.91	2.38	--
	5/2/2017	--	11.46	1.83	--
	8/8/2017	--	9.75	3.54	--
	11/1/2017	--	10.64	2.65	--

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
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Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
AW-72	3/1/2016	--	8.78	1.34	--
	5/1/2016	--	7.25	2.87	--
	9/22/2016	--	8.85	1.27	--
	11/15/2016	--	6.57	3.55	--
	2/14/2017	--	7.67	2.45	--
	5/2/2017	--	9.76	0.36	--
	8/8/2017	--	7.28	2.84	--
	11/1/2017	--	9.26	0.86	--
AW-73	3/1/2016	Not Measured			
	5/1/2016	Not Measured			
	9/22/2016	Not Measured			
	11/15/2016	--	8.67	3.37	--
	2/14/2017	--	9.26	2.78	--
	5/2/2017	--	9.68	2.36	--
	8/8/2017	Not Measured			
	11/1/2017	--	9.02	3.02	--
AW-74	3/1/2016	9.27	10.99	0.44	1.72
	5/1/2016	6.78	7.96	3.01	1.18
	9/22/2016	9.53	13.71	-0.18	4.18
	11/15/2016	6.46	7.05	3.41	0.59
	2/14/2017	7.11	10.21	2.40	3.10
	5/2/2017	10.11	13.90	-0.70	3.79
	8/8/2017	6.52	9.55	3.00	3.03
	11/1/2017	10.32	10.51	-0.39	0.19
AW-75	3/1/2016	--	11.04	NS	--
	5/1/2016	--	6.57	NS	--
	9/22/2016	--	11.74	NS	--
	11/15/2016	--	6.40	NS	--
	2/14/2017	--	7.35	NS	--
	5/2/2017	--	12.36	NS	--
	8/8/2017	--	7.56	NS	--
	11/1/2017	--	11.59	NS	--
AW-76	3/1/2016	--	13.61	NS	--
	5/1/2016	--	14.07	NS	--
	9/22/2016	--	12.41	NS	--
	11/15/2016	--	13.86	NS	--
	2/14/2017	--	7.34	NS	--
	5/2/2017	--	13.00	NS	--
	8/8/2017	--	7.49	NS	--
	11/1/2017	--	12.81	NS	--

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
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Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
AW-77	3/1/2016	--	7.91	NS	--
	5/1/2016	--	9.59	NS	--
	9/22/2016	--	9.59	NS	--
	11/15/2016	--	9.18	NS	--
	2/14/2017	--	4.43	NS	--
	5/2/2017	--	9.71	NS	--
	8/8/2017	--	5.25	NS	--
	11/1/2017	--	9.22	NS	--
AW-78	3/1/2016	--	6.91	NS	--
	5/1/2016	--	6.77	NS	--
	9/22/2016	--	6.36	NS	--
	11/15/2016	--	6.42	NS	--
	2/14/2017	--	6.13	NS	--
	5/2/2017	--	7.42	NS	--
	8/8/2017	--	5.25	NS	--
	11/1/2017	--	6.37	NS	--
AW-79	3/1/2016	--	10.95	NS	--
	5/1/2016	--	11.03	NS	--
	9/22/2016	--	5.07	NS	--
	11/15/2016	--	10.73	NS	--
	2/14/2017	--	5.55	NS	--
	5/2/2017	--	7.29	NS	--
	8/8/2017	--	4.82	NS	--
	11/1/2017	--	9.55	NS	--
AW-82	3/1/2016	9.95	12.84	NS	2.89
	5/1/2016	9.65	12.63	NS	2.98
	9/22/2016	9.54	12.62	NS	3.08
	11/15/2016	8.97	11.84	NS	2.87
	2/14/2017	9.77	12.35	NS	2.58
	5/2/2017	11.10	11.41	NS	0.31
	8/8/2017	9.60	9.72	NS	0.12
	11/1/2017	10.11	11.72	NS	1.61
RAIL LOADING - N	3/1/2016	--	7.31	5.30	--
	5/1/2016	--	7.25	5.36	--
	9/22/2016	--	6.42	6.19	--
	11/15/2016	--	7.29	5.32	--
	2/14/2017	--	7.22	5.39	--
	5/2/2017	--	8.02	4.59	--
	8/8/2017	--	4.58	8.03	--
	11/1/2017	--	6.53	6.08	--

Table 1

Groundwater Elevation and LNAPL Thickness Data - March 2016 to Current
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Location ID	Measurement Date	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	Groundwater Elevation (ft AMSL)	LNAPL Thickness (ft)
RAIL LOADING - S	3/1/2016	--	6.22	6.08	--
	5/1/2016	--	6.10	6.20	--
	9/22/2016	--	5.28	7.02	--
	11/15/2016	--	6.10	6.20	--
	2/14/2017	--	5.91	6.39	--
	5/2/2017	--	6.63	5.67	--
	8/8/2017	--	3.42	8.88	--
	11/1/2017	--	5.48	6.82	--
RAIL LOADING - M	3/1/2016	Damaged Casing			
	5/1/2016	Damaged Casing			
	9/22/2016	Damaged Casing			
	11/15/2016	Damaged Casing			
	2/14/2017	Damaged Casing			
	5/2/2017	Damaged Casing			
	8/8/2017	Damaged Casing			
	11/1/2017	Damaged Casing			
POD - 1	3/1/2016	--	11.60	NS	--
	5/1/2016	--	12.04	NS	--
	9/22/2016	--	10.35	NS	--
	11/15/2016	--	11.43	NS	--
	2/14/2017	--	4.65	NS	--
	5/2/2017	--	10.77	NS	--
	8/8/2017	--	4.45	NS	--
	11/1/2017	--	9.31	NS	Sheen

Notes:
Dash (--) indicates not applicable
NS = Not Surveyed
ft btoc = feet below top of casing
ft AMSL = feet above mean sea level

Table 2

LNAPL Removal Summary - Long-Term Skimming
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Well ID	Measurement Date	Measured In-Well LNAPL Thickness (feet)	LNAPL Removed Between Measurements (gallons)	Cumulative Total LNAPL Removal (gallons)	Comments
AW-9	9/14/2016	3.93	--	--	Installed LNAPL Skimmer
	9/21/2016	0.35	31.7	31.7	
	9/28/2016	0.26	20.3	52.0	
	10/5/2016	0.23	19.0	71.0	LNAPL skimmer shutdown due to Hurricane Matthew
	10/13/2016	4.06	0.0	71.0	LNAPL skimmer restarted
	10/20/2016	0.11	97.0	168.0	LNAPL skimmer shutdown due to nearly full tank
	10/28/2016	3.40	0.0	168.0	LNAPL skimmer restarted
	11/4/2016	3.45	2.0	170.0	
	11/15/2016	2.89	0.0	170.0	Batteries dead, system restarted
	11/22/2016	0.27	4.5	174.5	
	11/29/2016	0.34	26.5	201.0	
	12/5/2016	2.83	2.0	203.0	Batteries dead, system restarted
	12/7/2016	0.20	46.6	249.6	
	12/14/2016	0.95	14.0	263.6	Batteries dead, system restarted
	12/21/2016	0.33	21.7	285.3	
	12/27/2016	0.28	16.7	302.0	
	1/4/2017	0.08	53.4	355.3	
	1/9/2017	0.24	24.8	380.1	
	1/19/2017	0.12	39.0	419.1	
	1/26/2017	0.28	30.0	449.1	Estimated
	1/31/2017	0.18	24.6	473.7	
	2/7/2017	0.23	25.4	499.1	
	2/13/2017	0.30	22.0	521.1	
	2/14/2017	0.32	4.2	525.3	
	2/23/2017	0.27	34.1	559.4	
	3/3/2017	2.20	2.5	561.9	
	3/7/2017	2.37	16.7	578.5	
	3/10/2017	0.51	20.8	599.4	
	3/16/2017	2.55	8.8	608.2	Batteries dead, system restarted
	3/23/2017	1.07	55.0	663.2	Batteries dead, system restarted
	3/31/2017	0.22	15.0	678.2	Estimated
	4/3/2017	0.24	11.2	689.4	
	4/13/2017	0.18	30.4	719.8	
	4/18/2017	0.16	13.9	733.7	
	4/27/2017	0.11	25.1	758.8	
	5/2/2017	0.11	9.5	768.3	
	5/10/2017	0.11	27.0	795.3	
	5/17/2017	0.10	15.0	810.3	
	5/26/2017	0.08	28.5	838.8	
	6/1/2017	0.25	14.5	853.3	
	6/8/2017	0.20	10.5	863.8	
	6/15/2017	0.16	10.1	873.9	
	6/20/2017	0.17	7.4	881.3	
	6/22/2017	0.18	7.0	888.3	
	6/26/2017	0.15	6.0	894.3	
	6/30/2017	0.21	4.2	898.5	

Table 2

LNAPL Removal Summary - Long-Term Skimming
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Well ID	Measurement Date	Measured In-Well LNAPL Thickness (feet)	LNAPL Removed Between Measurements (gallons)	Cumulative Total LNAPL Removal (gallons)	Comments
AW-9 (continued)	7/7/2017	0.13	12.0	910.5	
	7/12/2017	0.16	11.8	922.3	
	7/19/2017	0.19	9.2	931.5	
	7/26/2017	0.04	22.2	953.7	
	8/2/217	0.23	6.8	960.5	
	8/9/2017	0.07	13.2	973.7	
	8/17/2017	0.22	18.0	991.7	
	8/22/2017	0.18	11.8	1003.5	
	8/30/2017	0.08	51.7	1055.2	
	9/6/2017	0.10	5.5	1060.7	Shutdown due to Hurricane Irma
	9/21/2017	3.43	0.0	1060.7	LNAPL skimmer restarted
	9/22/2017	0.20	5.0	1065.7	
	9/29/2017	0.24	7.6	1073.3	
	10/6/2017	0.21	3.9	1077.2	
	10/12/2017	0.61	5.0	1082.2	Estimated
	10/19/2017	0.23	6.0	1088.2	
	11/2/2017	0.23	16.0	**1104.2**	
	LNAPL Skimming Underway				
AW-49	9/14/2016	3.65	--	--	Installed LNAPL Skimmer
	9/21/2016	0.29	134.4	134.4	
	9/28/2016	0.23	70.8	205.2	
	10/5/2016	0.13	55.5	260.7	LNAPL skimmer shutdown due to Hurricane Matthew
	10/13/2016	4.73	0.0	260.7	LNAPL skimmer restarted
	10/20/2016	3.16	267.0	527.7	LNAPL skimmer shutdown due to full tank
	10/28/2016	3.25	0.0	527.7	LNAPL skimmer restarted
	11/4/2016	0.32	134.0	661.7	
	11/15/2016	0.19	222.0	883.7	LNAPL skimmer shutdown due to full tank
	11/22/2016	1.30	65.0	948.7	LNAPL skimmer restarted
	11/29/2016	1.38	50.0	998.7	LNAPL skimmer shutdown due to full tank
	12/7/2016	0.53	0.0	998.7	LNAPL skimmer shutdown due to full tank
	12/14/2016	0.65	0.0	998.7	LNAPL skimmer shutdown due to full tank
	12/21/2016	1.37	0.0	998.7	LNAPL skimmer restarted
	12/27/2016	0.37	29.7	1028.4	
	1/4/2017	0.21	38.8	1067.2	
	1/9/2017	0.27	15.9	1083.1	
	1/19/2017	2.03	15.7	1098.8	
	1/20/2017	1.38	5.4	1104.2	System off upon arrival
	1/23/2017	1.01	0.0	1104.2	System off upon arrival
	1/26/2017	0.30	20.0	1124.2	Estimated
	1/31/2017	0.25	21.7	1145.9	
	2/7/2017	0.13	21.5	1167.4	
	2/13/2017	0.31	27.0	1194.4	
	2/14/2017	0.22	1.7	1196.1	
	2/23/2017	0.21	28.4	1224.5	
	3/3/2017	1.88	11.6	1236.1	
	3/7/2017	0.26	21.7	1257.8	

Table 2

LNAPL Removal Summary - Long-Term Skimming
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Well ID	Measurement Date	Measured In-Well LNAPL Thickness (feet)	LNAPL Removed Between Measurements (gallons)	Cumulative Total LNAPL Removal (gallons)	Comments
AW-49 (continued)	3/10/2017	0.31	9.4	1267.2	
	3/16/2017	1.14	16.0	1283.2	Batteries unseated, system restarted
	3/23/2017	0.76	2.2	1285.4	
	3/31/2017	0.31	13.0	1298.4	Estimated
	4/3/2017	0.28	6.0	1304.4	
	4/13/2017	0.26	22.5	1326.9	
	4/18/2017	0.40	11.7	1338.6	
	4/27/2017	0.35	16.3	1354.9	
	5/2/2017	0.27	9.5	1364.4	
	5/10/2017	0.28	19.7	1384.1	
	5/17/2017	0.23	20.3	1404.4	
	5/26/2017	0.17	22.0	1426.4	
	6/1/2017	0.24	12.0	1438.4	
	6/8/2017	0.13	5.3	1443.7	
	6/15/2017	0.28	9.3	1453.0	
	6/20/2017	0.22	9.4	1462.4	
	6/22/2017	0.28	4.0	1466.4	
	6/26/2017	0.26	5.0	1471.4	
	6/30/2017	0.28	1.8	1473.2	
	7/7/2017	0.25	7.3	1480.4	
	7/12/2017	0.26	12.0	1492.4	
	7/19/2017	0.23	11.0	1503.4	
	7/26/2017	0.18	14.0	1517.4	
	8/2/217	0.23	41.0	1558.4	
	8/9/2017	0.24	38.0	1596.4	
	8/17/2017	0.24	33.9	1630.3	
	8/22/2017	0.20	35.5	1665.8	
	8/30/2017	0.22	48.9	1714.7	
	9/6/2017	0.25	34.6	1749.3	Shutdown due to Hurricane Irma
	9/21/2017	2.33	0.0	1749.3	LNAPL skimmer restarted
	9/22/2017	0.25	22.0	1771.3	
	9/29/2017	0.28	83.3	1854.6	
	10/6/2017	1.60	1.1	1855.7	System off upon arrival
	10/12/2017	0.31	20.0	1875.7	Estimated
	10/19/2017	0.20	46.4	1922.1	
	11/2/2017	0.28	45.3	**1967.4**	
	LNAPL Skimming Underway				

Table 2

LNAPL Removal Summary - Long-Term Skimming
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Well ID	Measurement Date	Measured In-Well LNAPL Thickness (feet)	LNAPL Removed Between Measurements (gallons)	Cumulative Total LNAPL Removal (gallons)	Comments
AW-10	1/19/2017	4.12	--	--	Installed LNAPL Skimmer
	1/20/2017	0.01	60.8	60.8	
	1/23/2017	0.68	0.0	60.8	LNAPL skimmer shutdown due to full tank
	1/26/2017	0.18	5.0	65.8	Estimated
	1/31/2017	0.21	36.5	102.3	
	2/7/2017	0.21	10.1	112.4	
	2/13/2017	0.40	2.9	115.2	
	2/14/2017	0.25	0.0	115.2	
	2/23/2017	0.25	7.4	122.6	
	3/3/2017	0.31	2.5	125.1	
	3/7/2017	0.29	5.0	130.1	
	3/10/2017	0.43	2.6	132.7	
	3/16/2017	0.26	6.1	138.8	
	3/23/2017	0.32	0.0	138.8	
	3/31/2017	0.34	6.0	144.8	Estimated
	4/3/2017	0.20	1.8	146.6	
	4/13/2017	0.15	7.2	153.8	
	4/18/2017	0.18	2.7	156.5	
	4/27/2017	0.16	4.3	**160.8**	LNAPL Skimmer removed for relocation
	LNAPL Skimming Concluded				
AW-11	1/19/2017	3.89	--	--	Installed LNAPL Skimmer
	1/20/2017	0.32	11.3	11.3	
	1/26/2017	0.32	20.0	31.3	Estimated
	1/31/2017	0.29	16.3	47.6	
	2/7/2017	0.29	95.9	143.5	
	2/13/2017	0.46	15.6	159.1	
	2/14/2017	0.23	2.5	161.6	
	2/23/2017	0.35	12.5	174.1	
	3/3/2017	0.13	10.5	184.6	
	3/7/2017	0.30	4.3	188.9	
	3/10/2017	0.32	10.6	199.4	
	3/16/2017	0.23	6.2	205.6	
	3/23/2017	0.23	72.0	277.6	
	3/31/2017	1.32	10.2	287.8	Estimated
	4/3/2017	0.04	157.5	445.3	
	4/13/2017	0.25	13.3	458.6	
	4/18/2017	0.26	9.1	467.7	
	4/27/2017	0.34	10.9	478.6	
	5/2/2017	1.14	8.3	486.9	
	5/10/2017	0.29	13.7	500.6	
	5/17/2017	0.23	12.0	512.6	
	5/26/2017	0.19	14.7	527.3	
	6/1/2017	0.30	5.3	532.6	
	6/8/2017	0.17	8.1	540.7	
	6/15/2017	0.13	9.3	550.0	
	6/20/2017	0.25	4.6	554.6	

Table 2

LNAPL Removal Summary - Long-Term Skimming
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Well ID	Measurement Date	Measured In-Well LNAPL Thickness (feet)	LNAPL Removed Between Measurements (gallons)	Cumulative Total LNAPL Removal (gallons)	Comments
AW-11 (continued)	6/22/2017	0.16	27.2	581.8	
	6/26/2017	0.03	13.9	595.7	
	6/30/2017	0.22	10.0	605.7	
	7/7/2017	0.21	13.0	618.7	
	7/12/2017	0.21	10.0	628.7	
	7/19/2017	0.27	12.0	640.7	
	7/26/2017	0.18	9.7	650.4	
	8/2/217	0.27	7.3	657.7	
	8/9/2017	0.14	15.0	672.7	
	8/17/2017	0.23	13.0	685.7	
	8/22/2017	0.27	13.5	699.2	
	8/30/2017	0.10	19.5	718.7	
	9/6/2017	0.26	15.0	733.7	Shutdown due to Hurricane Irma
	9/21/2017	2.24	0.0	733.7	LNAPL skimmer restarted
	9/22/2017	0.21	3.0	736.7	
	9/29/2017	0.17	16.2	752.9	
	10/6/2017	0.97	0.0	752.9	System off upon arrival
	10/12/2017	0.16	12.0	764.9	Estimated
	10/19/2017	1.22	6.8	771.7	System off upon arrival
	11/2/2017	0.24	26.9	**798.6**	
	LNAPL Skimming Underway				
AW-56	2/23/2017	5.05	--	--	Installed LNAPL Skimmer
	2/23/2017	0.35	38.1	38.1	Tank initially contained ~30 gallons of diesel
	3/3/2017	0.28	36.3	74.4	
	3/7/2017	4.75	15.0	89.4	Estimated
	3/10/2017	3.56	11.5	100.9	
	3/16/2017	5.04	6.2	107.1	
	3/23/2017	1.84	33.5	140.6	Drum full, switched to 275-gal tank
	3/31/2017	0.25	8.2	148.8	Estimated
	4/3/2017	0.18	13.0	161.8	
	4/13/2017	0.15	33.8	195.6	
	4/18/2017	3.00	13.7	209.3	
	4/27/2017	3.25	11.0	220.3	
	5/2/2017	0.22	24.3	244.6	
	5/10/2017	0.46	24.0	268.6	
	5/17/2017	0.45	29.0	297.6	
	5/26/2017	0.03	36.0	333.6	
	6/1/2017	0.28	19.0	352.6	
	6/8/2017	1.73	8.5	361.1	
	6/15/2017	0.21	33.5	394.6	
	6/20/2017	0.24	15.0	409.6	
	6/22/2017	0.14	7.0	416.6	
	6/26/2017	0.05	14.0	430.6	
	6/30/2017	0.09	19.0	449.6	
	7/7/2017	0.19	23.0	472.6	
	7/12/2017	0.09	24.6	497.2	

Table 2

LNAPL Removal Summary - Long-Term Skimming
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Well ID	Measurement Date	Measured In-Well LNAPL Thickness (feet)	LNAPL Removed Between Measurements (gallons)	Cumulative Total LNAPL Removal (gallons)	Comments
AW-56 (continued)	7/19/2017	0.17	41.4	538.6	
	7/26/2017	0.13	17.3	555.9	
	8/2/217	6.20	3.0	558.9	Pump off on arrival, solenoid not cycling
	8/9/2017	0.11	32.0	590.9	
	8/17/2017	0.12	30.0	620.9	
	8/22/2017	0.18	20.5	641.4	
	8/30/2017	0.17	24.5	665.9	
	9/6/2017	5.27	11.0	676.9	Shutdown due to Hurricane Irma
	9/21/2017	5.70	0.0	676.9	LNAPL skimmer restarted
	9/22/2017	0.24	7.0	683.9	
	9/29/2017	0.19	27.5	711.4	
	10/6/2017	0.20	17.1	728.5	
	10/12/2017	5.55	10.0	738.5	System off upon arrival
	10/19/2017	4.90	6.5	745.0	System off upon arrival
	11/2/2017	0.06	53.5	**798.5**	System off upon arrival
	LNAPL Skimming Underway				
AW-82	4/27/2017	3.05	--	--	Installed LNAPL Skimmer
	5/2/2017	0.15	119.0	119.0	
	5/10/2017	1.41	75.0	194.0	
	5/17/2017	0.16	52.0	246.0	
	5/26/2017	0.19	60.0	306.0	
	6/1/2017	0.19	21.0	327.0	
	6/8/2017	0.14	25.0	352.0	
	6/15/2017	0.17	15.9	367.9	
	6/22/2017	0.15	25.0	392.9	
	6/26/2017	0.15	13.1	406.0	
	6/30/2017	0.89	53.5	459.5	
	7/7/2017	0.90	9.5	469.0	
	7/12/2017	0.08	17.8	486.8	
	7/19/2017	0.09	10.2	497.0	
	7/26/2017	0.02	43.9	540.9	
	8/2/217	0.21	8.1	549.0	
	8/9/2017	0.15	3.0	552.0	
	8/17/2017	0.03	2.0	554.0	
	8/22/2017	0.10	9.0	563.0	
	8/30/2017	0.14	5.7	568.7	
	9/6/2017	0.14	5.3	574.0	Shutdown due to Hurricane Irma
	9/21/2017	2.02	0.0	574.0	LNAPL skimmer restarted
	9/22/2017	0.06	12.3	586.3	
	9/29/2017	0.16	10.4	596.7	
	10/6/2017	1.31	23.7	620.4	System off upon arrival
	10/12/2017	0.17	10.0	630.4	Estimated
	10/19/2017	0.12	2.1	632.5	
	11/2/2017	0.24	9.2	**641.7**	System off upon arrival
	LNAPL Skimming Underway				

Table 2

LNAPL Removal Summary - Long-Term Skimming
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Well ID	Measurement Date	Measured In-Well LNAPL Thickness (feet)	LNAPL Removed Between Measurements (gallons)	Cumulative Total LNAPL Removal (gallons)	Comments
AW-18	6/19/2017	1.71	--	--	Installed LNAPL Skimmer
	6/20/2017	0.30	4.0	4.0	
	6/22/2017	0.31	0.0	4.0	
	6/26/2017	0.35	0.0	4.0	
	6/30/2017	0.18	0.0	4.0	
	7/7/2017	0.14	0.0	4.0	
	7/12/2017	0.17	0.0	4.0	
	7/19/2017	0.22	0.0	4.0	
	7/26/2017	0.22	0.0	4.0	
	8/2/217	0.13	0.0	**4.0**	
	LNAPL Skimming Concluded				
AW-54	6/20/2017	10.42	--	--	Installed LNAPL Skimmer
	6/20/2017	7.40	6.0	6.0	
	6/22/2017	8.52	12.0	18.0	
	6/26/2017	10.60	0.0	18.0	Skimmer inlet clogged on arrival
	6/30/2017	5.75	60.5	78.5	
	7/7/2017	--	0.0	78.5	Well area flooded
	7/12/2017	0.25	34.0	112.5	
	7/19/2017	0.23	0.0	112.5	
	7/26/2017	0.42	2.5	115.0	
	8/2/217	0.31	1.5	116.5	
	8/9/2017	0.20	2.0	118.5	
	8/17/2017	0.27	1.0	119.5	
	8/22/2017	0.17	0.0	**119.5**	
	LNAPL Skimming Concluded				
AW-6	8/2/217	2.17	--	--	Installed LNAPL Skimmer
	8/9/2017	0.11	1.0	1.0	
	8/17/2017	0.10	0.0	1.0	
	8/22/2017	0.16	0.0	1.0	
	8/30/2017	0.09	0.0	1.0	
	9/6/2017	0.21	0.0	**1.0**	Shutdown due to Hurricane Irma
	LNAPL Skimming Concluded				
AW-74	8/30/2017	1.83	--	--	Installed LNAPL Skimmer
	8/30/2017	0.26	2.3	2.3	
	9/6/2017	0.21	2.7	5.0	Shutdown due to Hurricane Irma
	9/21/2017	0.05	0.0	5.0	LNAPL skimmer restarted
	9/22/2017	0.07	0.0	5.0	
	9/29/2017	0.04	0.0	5.0	Tank full (water), system off
	10/6/2017	0.01	0.0	5.0	Tank full (water), system off
	10/12/2017	0.07	0.0	5.0	
	10/19/2017	0.03	0.0	5.0	
	11/2/2017	0.16	2.0	7.0	Tank full (water), system off
	LNAPL Skimming Underway				

Table 2

LNAPL Removal Summary - Long-Term Skimming
Epic Midstream, LLC
Savannah, Georgia
VRP #1440101197

Well ID	Measurement Date	Measured In-Well LNAPL Thickness (feet)	LNAPL Removed Between Measurements (gallons)	Cumulative Total LNAPL Removal (gallons)	Comments
AW-22	9/21/2017	3.76	--	--	Installed LNAPL Skimmer
	9/22/2017	0.06	2.3	2.3	
	9/29/2017	0.03	3.5	5.8	
	10/6/2017	0.09	1.5	7.3	
	10/12/2017	0.18	2.0	9.3	Estimated
	10/19/2017	0.12	0.5	9.8	
	11/2/2017	0.10	4.5	**14.3**	
	LNAPL Skimming Underway				

Notes:

1. Long-term skimming was initiated in AW-9 and AW-49 on September 14, 2016.
2. Long-term skimming was initiated in AW-11 on January 19, 2017.
3. Long-term skimming was initiated in AW-10 on January 19, 2017 and halted on April 27, 2017.
4. Long-term skimming was initiated in AW-56 on February 23, 2017.
5. Long-term skimming was initiated in AW-82 on April 27, 2017.
6. Long-term skimming was initiated in AW-18 on June 19, 2017 and halted on August 2, 2017.
7. Long-term skimming was initiated in AW-54 on June 20, 2017 and halted on August 22, 2017.
8. Long-term skimming was initiated in AW-6 on August 2, 2017 and halted on September 6, 2017.
9. Long-term skimming was initiated in AW-74 on August 30, 2017.
10. Long-term skimming was initiated in AW-22 on September 21, 2017.
11. Includes observations through November 2, 2017.

Table 3

Milestone Schedule
December 1, 2017 to June 1, 2018
Epic Midstream LLC
Savannah, Georgia
VRP #1440101197

Milestone	Timeline
Submittal of Semi-Annual Progress Report	December 1, 2017
Continued Longer-Duration LNAPL Skimming Program	Ongoing
Refine LNAPL Transmissivity Evaluation	Ongoing
Update Conceptual Site Model (CSM) & Submit Final Remediation P	May 14, 2018
Determine Additional LNAPL Delineation Needs	June 1, 2018
Submittal of Semi-Annual Progress Report	June 1, 2018

Table 4

Summary of Observed Reduction in In-Well LNAPL Thicknesses
Epic Midstream LLC
Savannah, Georgia
VRP #1440101197

Well ID	Historical Maximum In-Well LNAPL Thickness	Maximum In-Well LNAPL Thickness Since 2016	% Reduction
AW-5	3.32	2.55	23%
AW-6	4.25	2.29	46%
AW-8	3.84	0.16	96%
AW-9	7.69	3.93	49%
AW-10	7.86	4.89	38%
AW-11	5.52	4.06	26%
AW-12	10.73	10.73	0%
AW-13	12.50	10.14	19%
AW-15	3.84	1.21	68%
AW-18	5.16	2.75	47%
AW-19	1.24	0.05	96%
AW-22	13.05	5.07	61%
AW-30	0.59	--	100%
AW-32	10.61	0.13	100%
AW-34	1.28	--	100%
AW-38	11.68	0.15	99%
AW-40	2.63	--	100%
AW-45	2.40	--	100%
AW-49	4.28	4.03	6%
AW-51	10.21	1.32	87%
AW-52	4.99	3.32	33%
AW-53	0.62	0.57	8%
AW-54	14.02	13.75	2%
AW-55	3.68	--	100%
AW-56	6.30	6.07	4%
AW-62	8.04	sheen	100%
AW-65	4.85	2.21	54%
AW-68	8.01	8.22	-3%
AW-74	4.42	4.18	5%
AW-82	3.08	3.08	0%

Appendices

Appendix A
LNAPL Transmissivity Evaluation Summary Tables and Charts

Appendix A-1

AW-6 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

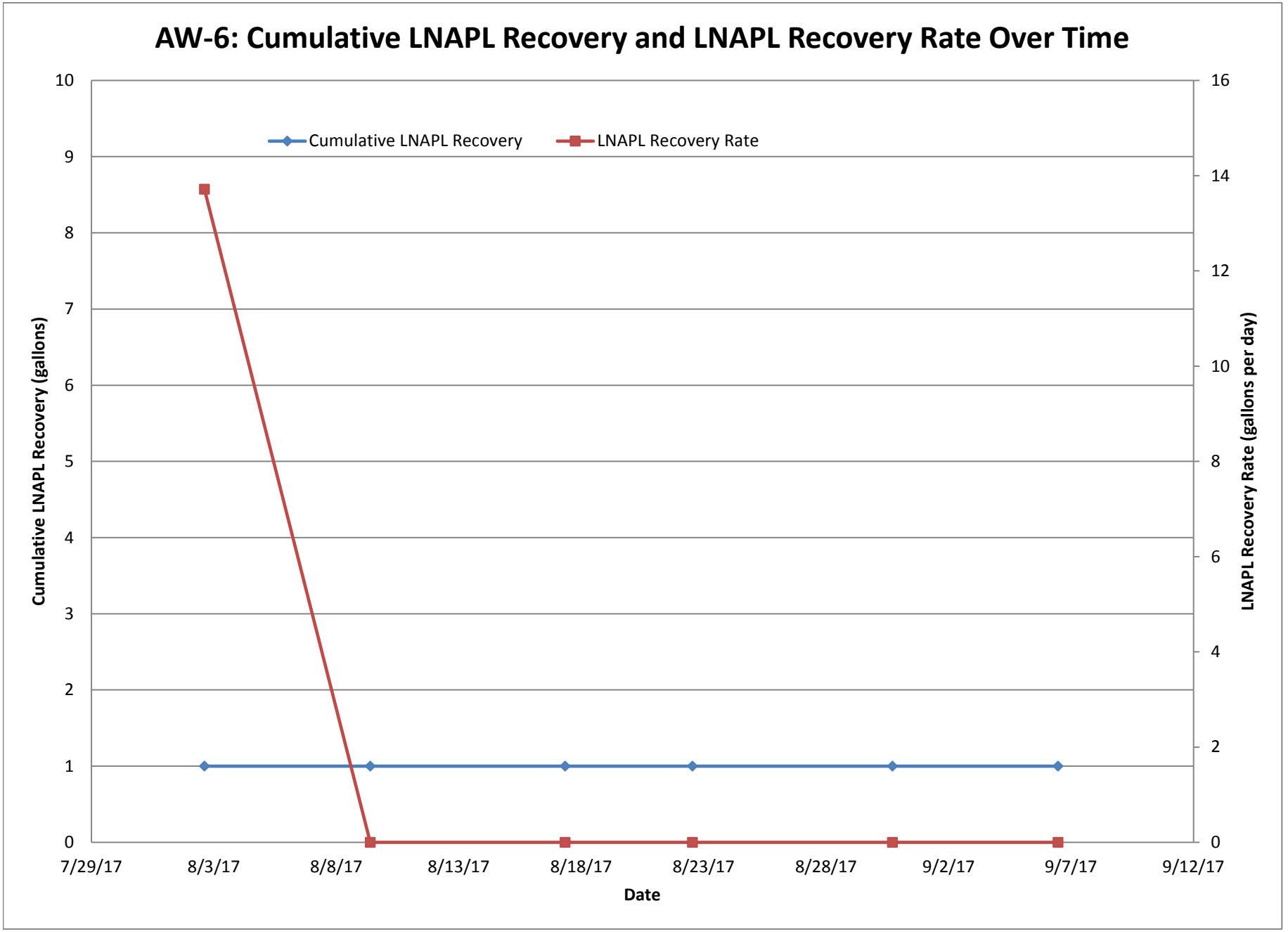
Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-6	**Equilibrium**							7.87	9.52	1.65	--	0.24		--	--	--	
	8/2/2017 13:00	--	--	0.00	--	--	--	7.33	9.50	2.17	--			--	--	--	
	8/2/2017 14:45	0.07	0.07	0.07	1.00	1.0	1.0	7.73	8.01	0.28	-0.14		0.24	13.7	1.83	5.6	
	8/9/2017 9:17	6.77	6.77	6.85	1.00	0.0	1.0	7.70	7.81	0.11	-0.17		0.24	0.0	0.00	0.0	
	8/17/2017 8:12	7.95	7.95	14.80	1.00	0.0	1.0	7.44	7.54	0.10	-0.43		0.24	0.0	0.00	0.0	
	8/22/2017 12:55	5.20	5.20	20.00	1.00	0.0	1.0	7.46	7.62	0.16	-0.41		0.24	0.0	0.00	0.0	
	8/30/2017 17:00	8.17	8.17	28.17	1.00	0.0	1.0	7.71	7.80	0.09	-0.16		0.24	0.0	0.00	0.0	
	9/6/2017 11:12	6.76	6.76	34.93	1.00	0.0	1.0	7.52	7.73	0.21	-0.35		0.24	0.0	0.00	0.0	
	END OF TEST																

Assumed LNAPL specific gravity = 0.854

All calculations performed pursuant to the methodology detailed in ASTM E2856-13

[a]The maximum theoretical drawdown is used for each interval calculation where the measured drawdown is negative or where it exceeds the theoretical maximum.

[b]Represents the geometric mean of the stabilized recovery rates/LNAPL transmissivity estimates (i.e., excludes initial elevated values that would not represent potential long-term recovery rates).


AW-6: Cumulative LNAPL Recovery and LNAPL Recovery Rate Over Time
Cumulative LNAPL Recovery
LNAPL Recovery Rate
Cumulative LNAPL Recovery (gallons)
LNAPL Recovery Rate (gallons per day)
Date
0
1
2
3
4
5
6
7
8
9
10
0
2
4
6
8
10
12
14
16
7/29/17
8/3/17
8/8/17
8/13/17
8/18/17
8/23/17
8/28/17
9/2/17
9/7/17
9/12/17

Appendix A-2

AW-9 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-9	**Equilibrium**	--	--		--	--		10.43	14.18	3.75	--	0.55		--	--	--	
	9/14/2016 13:10	--	--		--	--		10.05	13.98	3.93	--			--	--	--	
	9/14/2016 16:50	0.15	0.15	0.15	9.00	9.0	9.0	10.65	12.35	1.70	0.22		0.22	58.9	7.87	26.2	
	9/15/2016 8:05	0.64	0.64	0.64	14.70	5.7	14.7	10.35	10.51	0.16	-0.08		0.55	9.0	1.20	1.6	
	9/15/2016 8:55	0.03	0.03	0.67	14.85	0.2	14.9	10.31	10.51	0.20	-0.12		0.55	4.3	0.58	0.8	
	9/15/2016 11:50	0.12	0.12	0.79	15.20	0.4	15.2	10.26	10.50	0.24	-0.17		0.55	2.9	0.38	0.5	
	9/21/2016 11:52	6.00	6.00	6.79	31.70	16.5	31.7	10.75	11.10	0.35	0.32		0.32	2.7	0.37	0.8	
	9/22/2016 9:45	0.91	0.80	7.60	33.00	1.3	33.0	11.15	11.40	0.25	0.72		0.72	1.6	0.22	0.2	
	9/28/2016 8:15	5.94	5.94	13.53	52.00	19.0	52.0	10.46	10.72	0.26	0.03		0.03	3.2	0.43	10.4	
	10/5/2016 14:15	7.25	7.25	20.78	71.00	19.0	71.0	10.19	10.42	0.23	-0.24		0.55	2.6	0.35	0.5	
	END OF TEST INTERVAL - SHUTDOWN DUE TO HURRICANE																
	10/13/2016 13:50	7.98	0.00	20.78	0.00	0.0	71.0	8.83	12.89	4.06	--			--	--	--	
	10/20/2016 12:35	6.95	6.95	27.73	97.00	97.0	168.0	9.53	9.64	0.11	-0.90		0.55	6.5	0.87	1.2	
	END OF TEST INTERVAL - SHUTDOWN DUE TO FULL TANK																
	10/28/2016 11:24	--	--	--	--	--	168.0	9.33	12.73	3.40	--			--	--	--	
	11/4/2016 11:45	7.01	0.70	0.70	1.80	2.0	170.0	9.85	13.30	3.45	-0.58		0.55	2.9	0.38	0.5	
	END OF TEST INTERVAL - DUE TO EQUIPMENT MALFUNCTION																
	11/15/2016 16:42	--	--	--	--	--	170.0	10.31	13.20	2.89	--			--	--	--	
	11/22/2016 12:07	6.81	1.70	1.70	4.50	4.5	174.5	11.27	11.54	0.27	0.84		0.55	2.6	0.35	0.5	
	11/29/2016 15:10	7.13	7.13	8.83	29.50	26.5	201.0	11.10	11.44	0.34	0.67		0.55	3.7	0.50	0.7	
	END OF TEST INTERVAL - DUE TO EQUIPMENT MALFUNCTION																
	12/5/2016 12:30	5.89	--	--	--	2.0	203.0	10.38	13.21	2.83	--			--	--	--	
	12/7/2016 13:10	2.03	2.01	2.01	46.60	46.6	249.6	10.74	10.94	0.20	0.31		0.31	14.0	1.87	4.4	
	12/14/2016 9:38	6.85	6.42	6.42	14.00	14.0	263.6	10.65	11.60	0.95	0.22		0.22	2.2	0.29	1.0	
	12/21/2016 9:10	6.98	6.98	6.98	21.68	21.7	285.3	11.02	11.35	0.33	0.59		0.55	3.1	0.42	0.6	
	12/27/2016 12:25	6.14	6.14	13.12	38.35	16.7	302.0	10.86	11.14	0.28	0.43		0.43	2.7	0.36	0.6	
	1/4/2017 12:50	8.02	8.02	21.13	91.70	53.4	355.3	11.21	11.29	0.08	0.78		0.55	6.7	0.89	1.2	
	1/9/2017 11:28	4.94	4.94	26.08	116.50	24.8	380.1	11.26	11.50	0.24	0.83		0.55	5.0	0.67	0.9	
	1/19/2017 13:58	10.10	10.10	36.18	155.50	39.0	419.1	11.24	11.36	0.12	0.81		0.55	3.9	0.52	0.7	
	1/26/2017 13:09	6.97	6.97	43.15	185.50	30.0	449.1	10.84	11.12	0.28	0.41		0.41	4.3	0.58	1.0	
	1/31/2017 12:45	4.98	4.98	48.13	210.10	24.6	473.7	10.82	11.00	0.18	0.39		0.39	4.9	0.66	1.2	
	2/7/2017 12:49	7.00	7.00	55.13	235.50	25.4	499.1	11.27	11.50	0.23	0.84		0.55	3.6	0.48	0.6	
	2/13/2017 14:36	6.07	6.07	61.21	257.47	22.0	521.1	11.20	11.50	0.30	0.77		0.55	3.6	0.48	0.6	
	2/14/2017 14:19	0.99	0.99	62.19	261.67	4.2	525.3	10.92	11.24	0.32	0.49		0.49	4.3	0.57	0.8	
	2/23/2017 11:15	8.87	8.69	70.89	295.79	34.1	559.4	10.99	11.26	0.27	0.56		0.55	3.9	0.52	0.7	
	3/3/2017 10:20	7.96	2.55	73.44	298.25	2.5	561.9	11.43	13.63	2.20	1.00		0.55	1.0	0.13	0.2	
	3/7/2017 13:36	4.14	0.58	74.02	314.93	16.7	578.5	11.26	13.63	2.37	0.83		0.55	4.0	0.54	0.7	
	3/10/2017 10:25	2.87	2.70	76.71	335.77	20.8	599.4	11.11	11.62	0.51	0.68		0.55	7.7	1.03	1.4	
	3/16/2017 11:15	6.03	0.60	77.31	344.57	8.8	608.2	11.35	13.90	2.55	0.92		0.55	1.5	0.19	0.3	
	3/23/2017 10:41	6.98	6.42	83.73	399.57	55.0	663.2	11.18	12.25	1.07	0.75		0.55	8.6	1.15	1.5	
	3/31/2017 8:32	7.91	7.91	91.64	414.57	15.0	678.2	11.57	11.79	0.22	1.14		0.55	1.9	0.25	0.3	
	4/3/2017 10:00	3.06	3.06	94.70	425.77	11.2	689.4	11.55	11.79	0.24	1.12		0.55	3.7	0.49	0.7	

Appendix A-2

AW-9 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

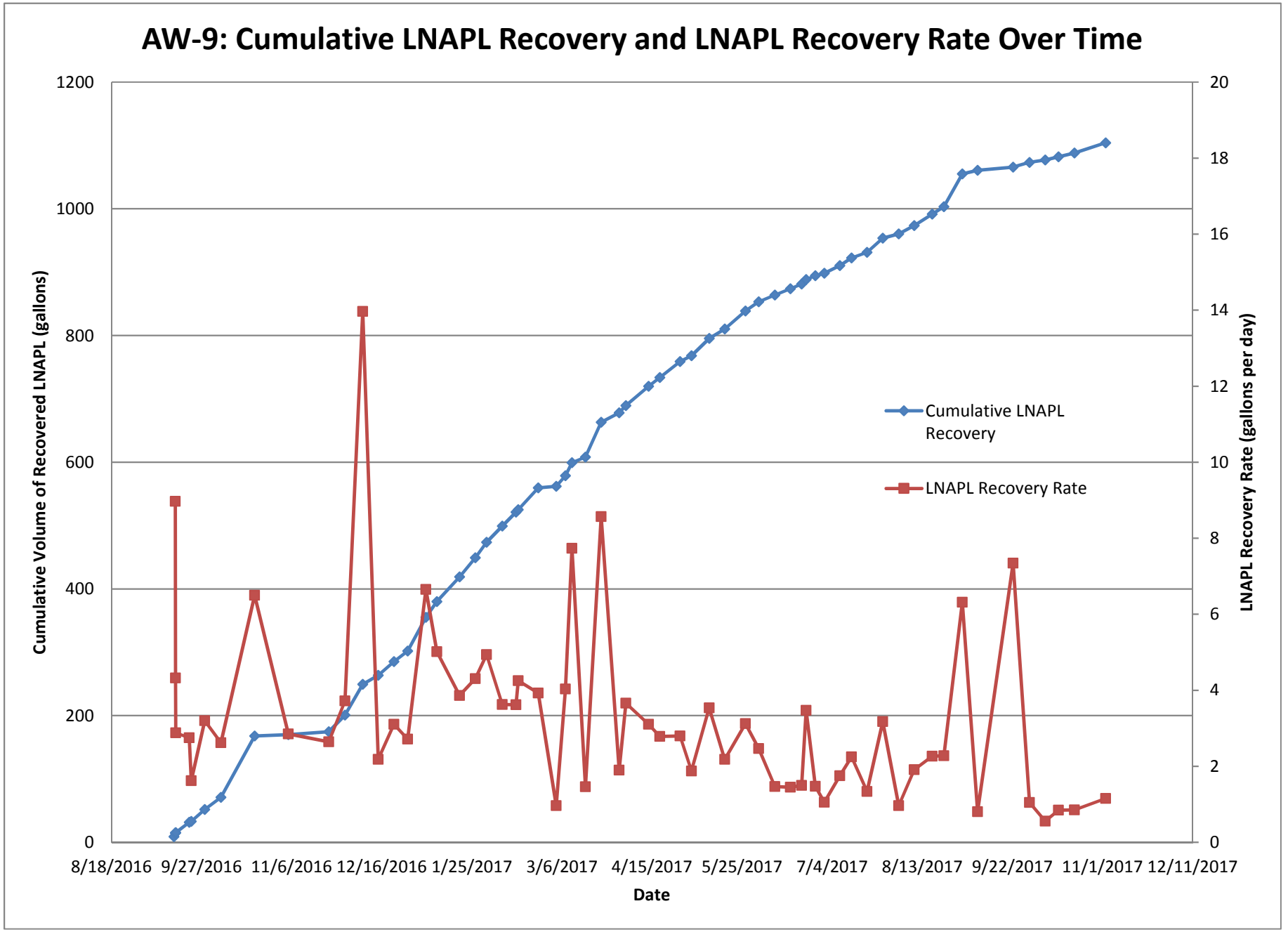
Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-9	4/13/2017 11:46	10.07	9.80	104.50	456.17	30.4	719.8	11.14	11.32	0.18	0.71		0.55	3.1	0.41	0.6	
	4/18/2017 11:41	5.00	4.99	109.49	470.07	13.9	733.7	11.65	11.81	0.16	1.22		0.55	2.8	0.37	0.5	
	4/27/2017 10:55	8.97	8.97	118.46	495.17	25.1	758.8	11.09	11.20	0.11	0.66		0.55	2.8	0.37	0.5	
	5/2/2017 12:39	5.07	5.07	123.53	504.67	9.5	768.3	11.74	11.85	0.11	1.31		0.55	1.9	0.25	0.3	
	5/10/2017 10:40	7.92	7.64	131.16	531.67	27.0	795.3	11.49	11.60	0.11	1.06		0.55	3.5	0.47	0.6	
	5/17/2017 7:39	6.87	6.87	138.04	546.67	15.0	810.3	11.80	11.90	0.10	1.37		0.55	2.2	0.29	0.4	
	5/26/2017 10:49	9.13	9.13	147.17	575.17	28.5	838.8	11.42	11.50	0.08	0.99		0.55	3.1	0.42	0.6	
	6/1/2017 7:55	5.88	5.88	153.05	589.67	14.5	853.3	11.33	11.58	0.25	0.90		0.55	2.5	0.33	0.4	
	6/8/2017 11:50	7.16	7.16	160.21	600.17	10.5	863.8	10.86	11.06	0.20	0.43		0.43	1.5	0.20	0.3	
	6/15/2017 11:03	6.97	6.97	167.18	610.27	10.1	873.9	11.60	11.76	0.16	1.17		0.55	1.4	0.19	0.3	
	6/20/2017 9:48	4.95	4.95	172.13	617.67	7.4	881.3	11.34	11.51	0.17	0.91		0.55	1.5	0.20	0.3	
	6/22/2017 10:10	2.02	2.02	174.14	624.67	7.0	888.3	11.09	11.27	0.18	0.66		0.55	3.5	0.46	0.6	
	6/26/2017 11:51	4.07	4.07	178.21	630.67	6.0	894.3	--	--	0.15	--		0.55	1.5	0.20	0.3	
	6/30/2017 11:38	3.99	3.99	182.20	634.87	4.2	898.5	11.34	11.55	0.21	0.91		0.55	1.1	0.14	0.2	
	7/7/2017 8:09	6.85	6.85	189.06	646.87	12.0	910.5	11.03	11.16	0.13	0.60		0.55	1.8	0.23	0.3	
	7/12/2017 14:15	5.25	5.25	194.31	658.67	11.8	922.3	10.85	11.01	0.16	0.42		0.42	2.2	0.30	0.5	
	7/19/2017 11:14	6.87	6.87	201.19	667.87	9.2	931.5	11.10	11.29	0.19	0.67		0.55	1.3	0.18	0.2	
	7/26/2017 10:55	6.99	6.99	208.17	690.07	22.2	953.7	10.90	10.94	0.04	0.47		0.47	3.2	0.42	0.7	
	8/2/2017 11:48	7.04	7.04	215.21	696.87	6.8	960.5	10.57	10.80	0.23	0.14		0.14	1.0	0.13	0.7	
	8/9/2017 9:51	6.92	6.92	222.13	710.07	13.2	973.7	10.65	10.72	0.07	0.22		0.22	1.9	0.26	0.8	
	8/17/2017 8:33	7.95	7.95	230.07	728.07	18.0	991.7	10.26	10.48	0.22	-0.17		0.55	2.3	0.30	0.4	
	8/22/2017 12:50	5.18	5.18	235.25	739.87	11.8	1003.5	10.20	10.38	0.18	-0.23		0.55	2.3	0.30	0.4	
	8/30/2017 17:13	8.18	8.18	243.44	791.57	51.7	1055.2	10.27	10.35	0.08	-0.16		0.55	6.3	0.84	1.1	
	9/6/2017 13:35	6.85	6.83	250.27	797.07	5.5	1060.7	10.36	10.46	0.10	-0.07		0.55	0.8	0.11	0.1	0.5
	END OF TEST INTERVAL - SHUTDOWN DUE TO HURRICANE																
	9/21/2017 15:37	--	--	--	--	--	1060.7	9.16	12.59	3.43	--			--	--	--	
	9/22/2017 7:57	0.68	0.68	250.95	802.07	5.0	1065.7	10.27	10.47	0.20	-0.16		0.55	7.3	0.98	1.3	
	9/29/2017 13:52	7.25	7.25	258.20	809.67	7.6	1073.3	10.31	10.55	0.24	-0.12		0.55	1.0	0.14	0.2	
	10/6/2017 13:49	7.00	7.00	265.19	813.57	3.9	1077.2	9.95	10.16	0.21	-0.48		0.55	0.6	0.07	0.1	
	10/12/2017 11:24	5.90	5.90	271.09	818.57	5.0	1082.2	10.36	10.97	0.61	-0.07		0.55	0.8	0.11	0.2	
	10/19/2017 12:10	7.03	7.03	278.12	824.57	6.0	1088.2	9.81	10.04	0.23	-0.62		0.55	0.9	0.11	0.2	
	11/2/2017 8:59	13.87	13.87	291.99	840.57	16.0	1104.2	10.81	11.04	0.23	0.38		0.38	1.2	0.15	0.3	0.5

Assumed LNAPL specific gravity = 0.854

All calculations performed pursuant to the methodology detailed in ASTM E2856-13

[a]The maximum theoretical drawdown is used for each interval calculation where the measured drawdown is negative or where it exceeds the theoretical maximum.

[b]Represents the geometric mean of the stabilized recovery rates/LNAPL transmissivity estimates (i.e., excludes initial elevated values that would not represent potential long-term recovery rates).


AW-9: Cumulative LNAPL Recovery and LNAPL Recovery Rate Over Time
Cumulative Volume of Recovered LNAPL (gallons)
LNAPL Recovery Rate (gallons per day)
Date
Cumulative LNAPL Recovery
LNAPL Recovery Rate
0
200
400
600
800
1000
1200
0
2
4
6
8
10
12
14
16
18
20
8/18/2016
9/27/2016
11/6/2016
12/16/2016
1/25/2017
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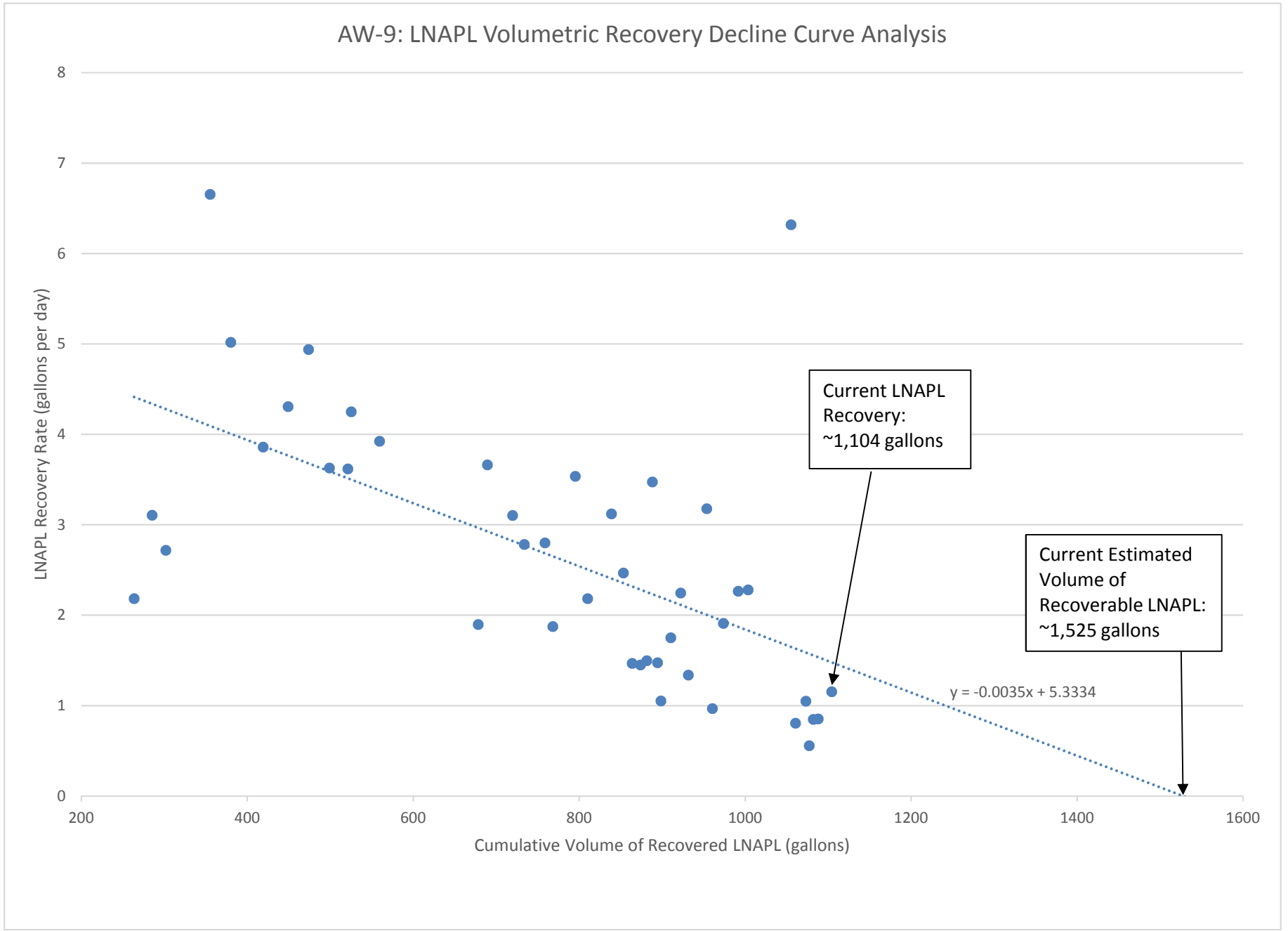
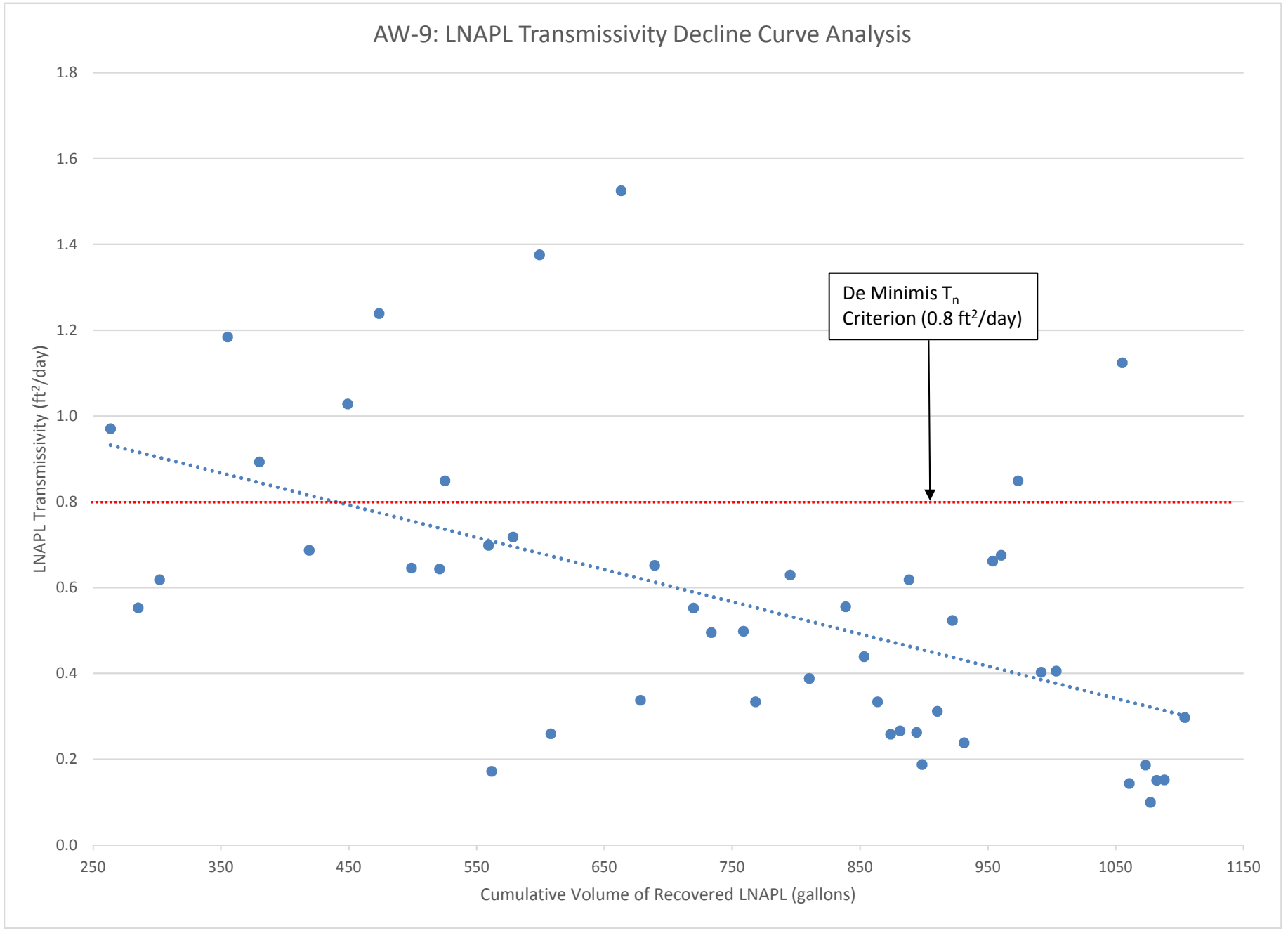
8/13/2017
9/22/2017
11/1/2017
12/11/2017


AW-9: LNAPL Volumetric Recovery Decline Curve Analysis
LNAPL Recovery Rate (gallons per day)
Cumulative Volume of Recovered LNAPL (gallons)
0
1
2
3
4
5
6
7
8
200
400
600
800
1000
1200
1400
1600
Current LNAPL Recovery: ~1,104 gallons
Current Estimated Volume of Recoverable LNAPL: ~1,525 gallons
y = -0.0035x + 5.3334


AW-9: LNAPL Transmissivity Decline Curve Analysis
LNAPL Transmissivity (ft²/day)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
250
350
450
550
650
750
850
950
1050
1150
Cumulative Volume of Recovered LNAPL (gallons)
De Minimis T_n Criterion (0.8 ft²/day)

Appendix A-3

AW-10 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

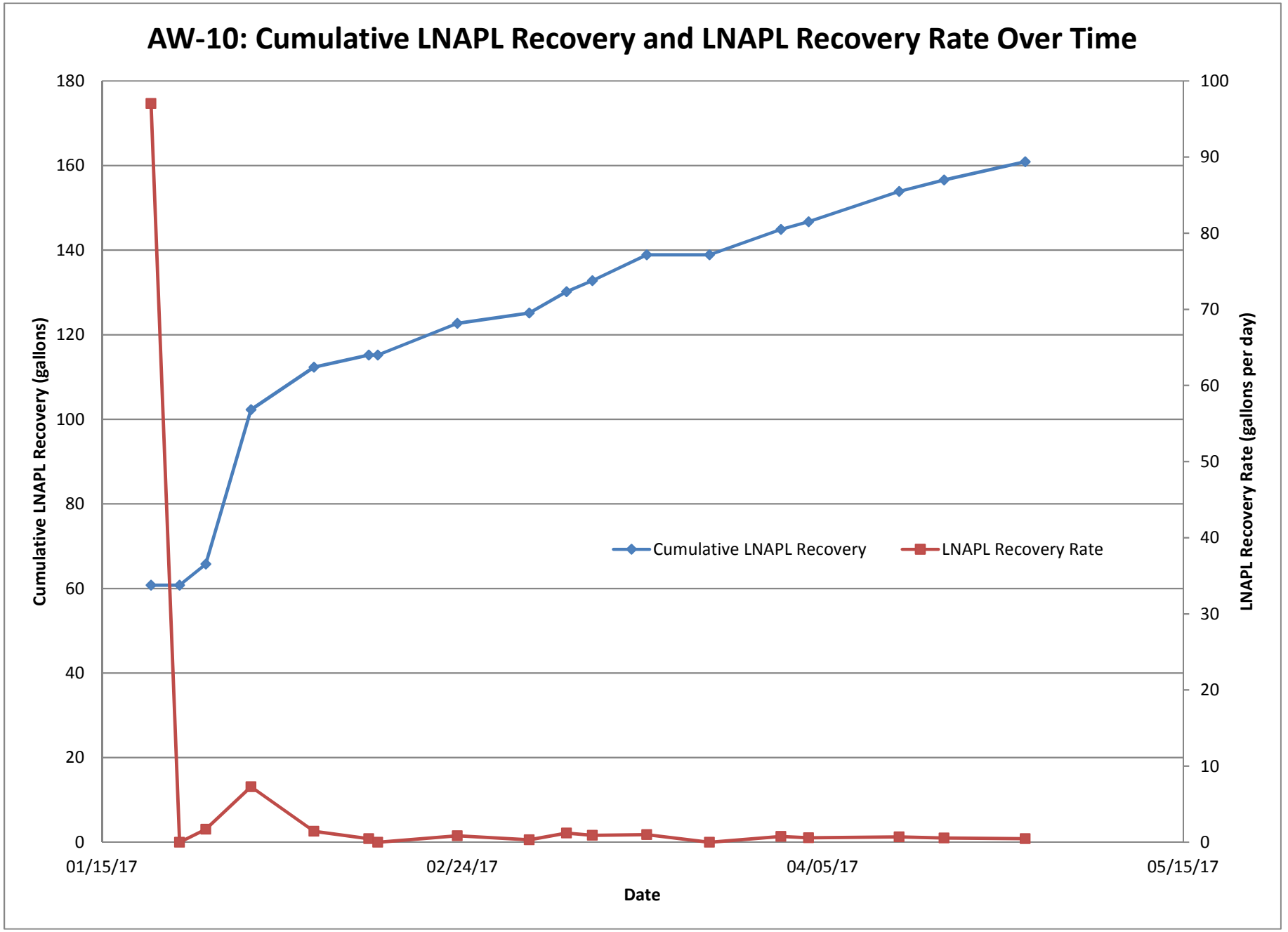
Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-10	**Equilibrium**						10.22	14.70	4.48	--	0.65		--	--	--	
	1/19/2017 14:23	--	--		--	0.0	11.07	15.19	4.12	--			--	--	--	
	1/20/2017 10:25	0.83	0.63	0.63	60.8	60.8	11.94	11.95	0.01	1.72		0.65	97.0	12.97	14.6	
	1/23/2017 14:52	3.19	3.19	3.81	0.0	60.8	11.26	11.94	0.68	1.04		0.65	0.0	0.00	0.0	
	1/26/2017 12:40	2.91	2.91	6.72	5.0	65.8	10.87	11.05	0.18	0.65		0.65	1.7	0.23	0.3	
	1/31/2017 12:40	5.00	5.00	11.72	36.5	102.3	11.02	11.23	0.21	0.80		0.65	7.3	0.98	1.1	
	2/7/2017 12:28	6.99	6.99	18.71	10.1	112.4	11.19	11.27	0.08	0.97		0.65	1.4	0.19	0.2	
	2/13/2017 14:50	6.10	6.10	24.81	2.9	115.2	11.51	11.91	0.40	1.29		0.65	0.5	0.06	0.1	
	2/14/2017 14:30	0.99	0.99	25.80	0.0	115.2	11.31	11.56	0.25	1.09		0.65	0.0	0.00	0.0	
	2/23/2017 10:43	8.84	8.84	34.64	7.5	122.7	11.30	11.55	0.25	1.08		0.65	0.8	0.11	0.1	
	3/3/2017 9:50	7.96	7.96	42.60	2.5	125.2	12.09	12.40	0.31	1.87		0.65	0.3	0.04	0.0	
	3/7/2017 13:10	4.14	4.14	46.74	5.0	130.2	11.90	12.19	0.29	1.68		0.65	1.2	0.16	0.2	
	3/10/2017 10:02	2.87	2.87	49.61	2.6	132.8	11.35	11.78	0.43	1.13		0.65	0.9	0.12	0.1	
	3/16/2017 10:56	6.04	6.04	55.65	6.1	138.9	12.24	12.50	0.26	2.02		0.65	1.0	0.14	0.2	
	3/23/2017 10:23	6.98	6.98	62.63	0.0	138.9	11.91	12.23	0.32	1.69		0.65	0.0	0.00	0.0	
	3/31/2017 8:41	7.93	7.93	70.55	6.0	144.9	11.85	12.19	0.34	1.63		0.65	0.8	0.10	0.1	
	4/3/2017 10:10	3.06	3.06	73.62	1.8	146.7	11.88	12.08	0.20	1.66		0.65	0.6	0.08	0.1	
	4/13/2017 11:28	10.05	10.05	83.67	7.2	153.9	11.80	11.95	0.15	1.58		0.65	0.7	0.10	0.1	
	4/18/2017 11:04	4.98	4.98	88.65	2.7	156.6	12.11	12.29	0.18	1.89		0.65	0.5	0.07	0.1	
	4/27/2017 11:20	9.01	9.01	97.66	4.3	160.9	10.98	11.14	0.16	0.76		0.65	0.5	0.06	0.1	0.1
		END OF TEST														

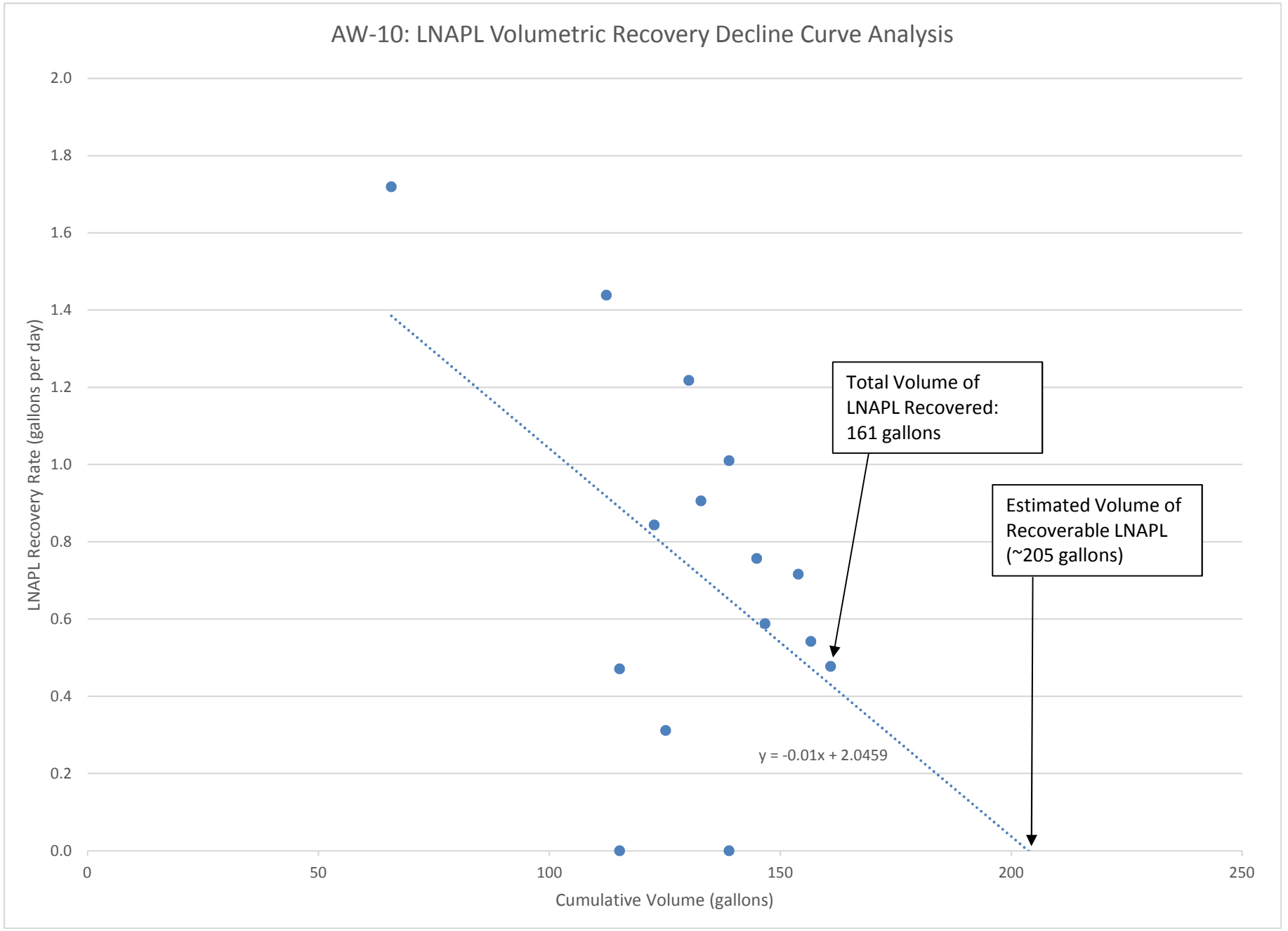
Assumed LNAPL specific gravity = 0.854

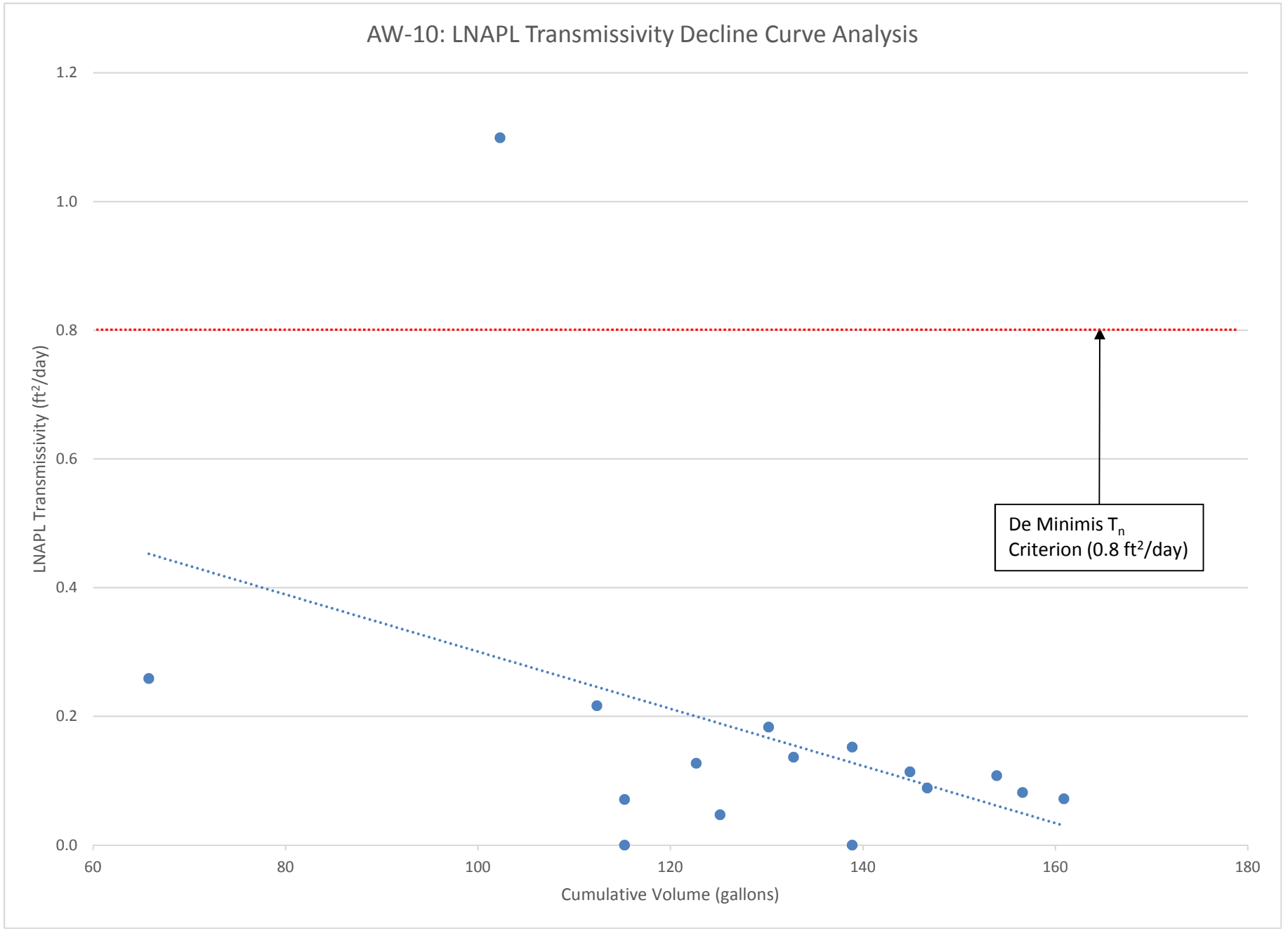
All calculations performed pursuant to the methodology detailed in ASTM E2856-13

[a]The maximum theoretical drawdown is used for each interval calculation where the measured drawdown is negative or where it exceeds the theoretical maximum.

[b]Represents the geometric mean of the stabilized recovery rates/LNAPL transmissivity estimates (i.e., excludes initial elevated values that would not represent potential long-term recovery rates).


AW-10: Cumulative LNAPL Recovery and LNAPL Recovery Rate Over Time
Cumulative LNAPL Recovery (gallons)
LNAPL Recovery Rate (gallons per day)
Date
Cumulative LNAPL Recovery
LNAPL Recovery Rate
180
160
140
120
100
80
60
40
20
0
100
90
80
70
60
50
40
30
20
10
0
01/15/17
02/24/17
04/05/17
05/15/17


AW-10: LNAPL Volumetric Recovery Decline Curve Analysis
LNAPL Recovery Rate (gallons per day)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
50
100
150
200
250
Cumulative Volume (gallons)
Total Volume of LNAPL Recovered: 161 gallons
Estimated Volume of Recoverable LNAPL (~205 gallons)
y = -0.01x + 2.0459


AW-10: LNAPL Transmissivity Decline Curve Analysis
1.2
1.0
0.8
0.6
0.4
0.2
0.0
LNAPL Transmissivity (ft²/day)
60
80
100
120
140
160
180
Cumulative Volume (gallons)
De Minimis Tn
Criterion (0.8 ft²/day)

Appendix A-4

AW-11 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-11	**Equilibrium**							10.71	14.14	3.43	--	0.50		--	--	--	
	1/19/2017 14:16	--	--		--	--	0.0	11.06	14.95	3.89	--			--	--	--	
	1/20/2017 11:15	0.87	0.62	0.62	11.33	11.3	11.3	11.82	12.14	0.32	1.11		0.50	18.4	2.46	3.6	
	1/26/2017 12:52	6.07	6.07	6.68	31.33	20.0	31.3	11.19	11.51	0.32	0.48		0.48	3.3	0.44	0.7	
	1/31/2017 12:36	4.99	4.99	11.67	47.58	16.3	47.6	11.41	11.70	0.29	0.70		0.50	3.3	0.44	0.6	
	2/7/2017 12:39	7.00	7.00	18.67	143.48	95.9	143.5	11.72	11.90	0.18	1.01		0.50	13.7	1.83	2.7	
	2/13/2017 14:02	6.06	6.06	24.73	159.08	15.6	159.1	11.44	11.90	0.46	0.73		0.50	2.6	0.34	0.5	
	2/14/2017 14:41	1.03	1.03	25.76	161.60	2.5	161.6	11.26	11.49	0.23	0.55		0.50	2.5	0.33	0.5	
	2/23/2017 10:58	8.85	8.85	34.60	174.10	12.5	174.1	11.25	11.60	0.35	0.54		0.50	1.4	0.19	0.3	
	3/3/2017 10:00	7.96	7.86	42.46	184.60	10.5	184.6	12.12	12.25	0.13	1.41		0.50	1.3	0.18	0.3	
	3/7/2017 13:18	4.14	4.14	46.60	188.86	4.3	188.9	11.85	12.15	0.30	1.14		0.50	1.0	0.14	0.2	
	3/10/2017 10:13	2.87	2.87	49.47	199.41	10.6	199.4	11.70	12.02	0.32	0.99		0.50	3.7	0.49	0.7	
	3/16/2017 11:08	6.04	6.00	55.47	205.61	6.2	205.6	12.26	12.49	0.23	1.55		0.50	1.0	0.14	0.2	
	3/23/2017 10:30	6.97	6.97	62.44	277.61	72.0	277.6	12.22	12.45	0.23	1.51		0.50	10.3	1.38	2.0	
	3/31/2017 8:10	7.90	0.33	62.77	287.81	10.2	287.8	11.78	13.10	1.32	1.07		0.50	30.9	4.13	6.0	
	4/3/2017 9:51	3.07	3.07	65.84	445.31	157.5	445.3	12.71	12.75	0.04	2.00		0.50	51.3	6.86	10.0	
	4/13/2017 11:35	10.07	10.07	75.91	458.61	13.3	458.6	11.84	12.09	0.25	1.13		0.50	1.3	0.18	0.3	
	4/18/2017 11:13	4.98	4.98	80.90	467.71	9.1	467.7	11.90	12.16	0.26	1.19		0.50	1.8	0.24	0.4	
	4/27/2017 11:11	9.00	9.00	89.90	478.61	10.9	478.6	11.74	12.08	0.34	1.03		0.50	1.2	0.16	0.2	
	5/2/2017 12:51	5.07	5.07	94.97	486.91	8.3	486.9	12.25	13.39	1.14	1.54		0.50	1.6	0.22	0.3	
	5/10/2017 10:54	7.92	7.92	102.89	500.61	13.7	500.6	12.09	12.38	0.29	1.38		0.50	1.7	0.23	0.3	
	5/17/2017 7:54	6.88	6.88	109.76	512.61	12.0	512.6	12.11	12.34	0.23	1.40		0.50	1.7	0.23	0.3	
	5/26/2017 11:06	9.13	9.13	118.89	527.31	14.7	527.3	12.02	12.21	0.19	1.31		0.50	1.6	0.22	0.3	
	6/1/2017 8:10	5.88	5.88	124.77	532.61	5.3	532.6	11.89	12.19	0.30	1.18		0.50	0.9	0.12	0.2	
	6/8/2017 11:30	7.14	7.14	131.91	540.71	8.1	540.7	11.31	11.48	0.17	0.60		0.50	1.1	0.15	0.2	
	6/15/2017 10:45	6.97	6.97	138.88	550.01	9.3	550.0	11.85	11.98	0.13	1.14		0.50	1.3	0.18	0.3	
	6/20/2017 10:04	4.97	4.97	143.85	554.61	4.6	554.6	11.99	12.24	0.25	1.28		0.50	0.9	0.12	0.2	
	6/22/2017 10:50	2.03	2.03	145.88	581.81	27.2	581.8	11.86	12.02	0.16	1.15		0.50	13.4	1.79	2.6	
	6/26/2017 11:23	4.02	4.02	149.91	595.71	13.9	595.7	12.09	12.12	0.03	1.38		0.50	3.5	0.46	0.7	
	6/30/2017 11:52	4.02	4.02	153.93	605.71	10.0	605.7	11.66	11.88	0.22	0.95		0.50	2.5	0.33	0.5	
	7/7/2017 8:24	6.86	6.86	160.78	618.71	13.0	618.7	11.28	11.49	0.21	0.57		0.50	1.9	0.25	0.4	
	7/12/2017 14:29	5.25	5.25	166.03	628.71	10.0	628.7	11.19	11.40	0.21	0.48		0.48	1.9	0.25	0.4	
	7/19/2017 11:28	6.87	6.87	172.91	640.71	12.0	640.7	11.28	11.55	0.27	0.57		0.48	1.7	0.23	0.4	
	7/26/2017 11:08	6.99	6.99	179.89	650.41	9.7	650.4	11.16	11.34	0.18	0.45		0.45	1.4	0.19	0.3	
	8/2/2017 12:00	7.04	7.04	186.93	657.71	7.3	657.7	10.82	11.09	0.27	0.11		0.11	1.0	0.14	0.9	
	8/9/2017 9:42	6.90	6.90	193.84	672.71	15.0	672.7	10.90	11.04	0.14	0.19		0.19	2.2	0.29	1.1	
	8/17/2017 8:46	7.96	7.96	201.80	685.71	13.0	685.7	10.55	10.78	0.23	-0.16		0.50	1.6	0.22	0.3	
	8/22/2017 12:35	5.16	5.16	206.96	699.21	13.5	699.2	10.55	10.82	0.27	-0.16		0.50	2.6	0.35	0.5	
	8/30/2017 17:30	8.20	8.20	215.16	718.71	19.5	718.7	10.83	10.93	0.10	0.12		0.12	2.4	0.32	1.9	
	9/6/2017 13:55	6.85	6.85	222.01	733.71	15.0	733.7	10.75	11.01	0.26	0.04		0.04	2.2	0.29	5.4	

Appendix A-4

AW-11 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

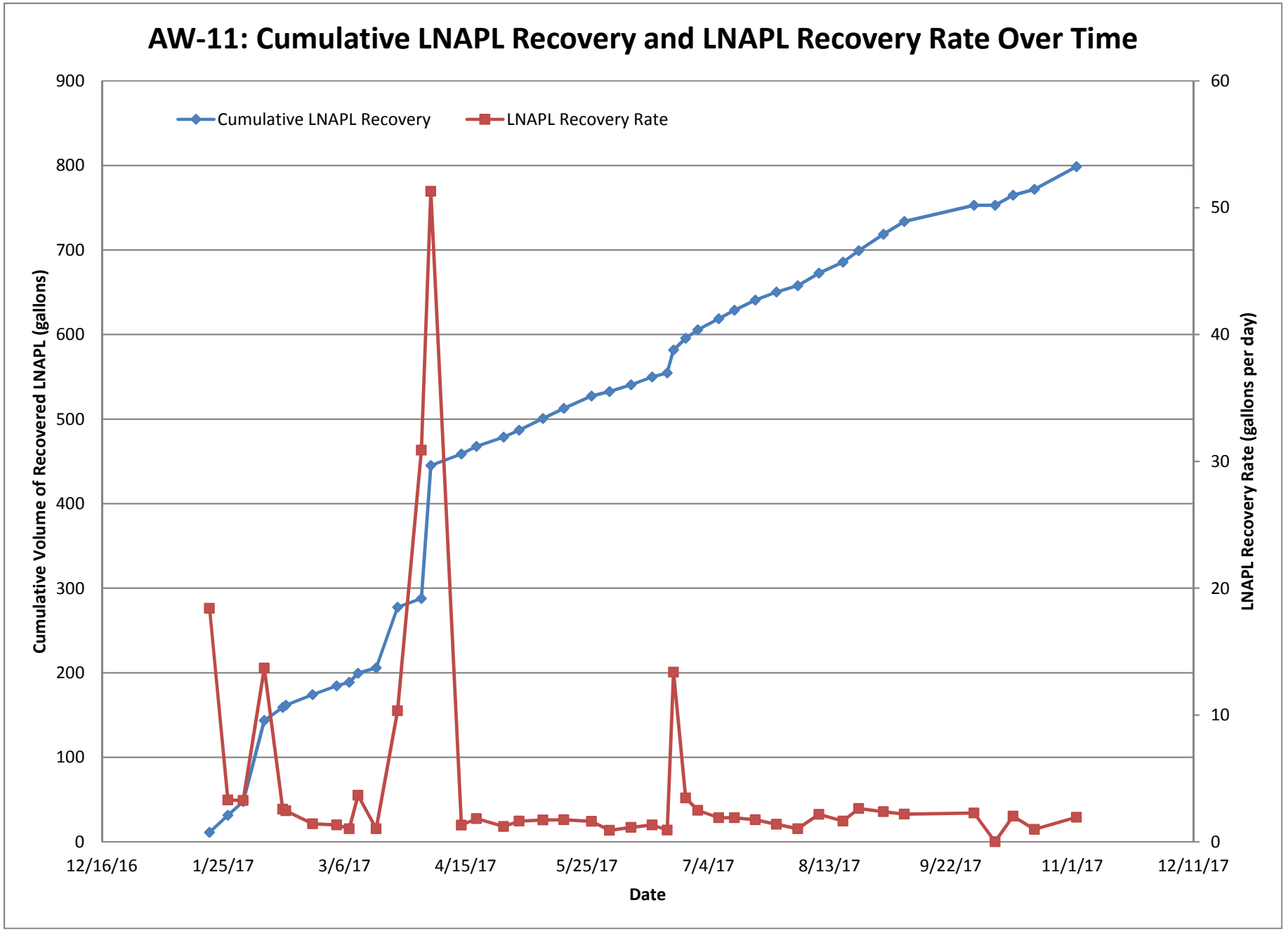
Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-11	*END OF TEST INTERVAL - SHUTDOWN DUE TO HURRICANE*																
	9/22/2017 8:39	--	--	--	--	--	733.7	10.08	12.32	2.24	--			--	--	--	
	9/22/2017 9:56	0.05	0.05	222.06	736.71	3.0	736.7	10.77	10.98	0.21	0.06		0.06	56.1	7.50	91.5	
	9/29/2017 13:35	7.15	7.15	229.22	752.91	16.2	752.9	10.61	10.78	0.17	-0.10		0.50	2.3	0.30	0.4	
	10/6/2017 13:55	7.01	7.01	236.23	752.91	0.0	752.9	9.98	10.95	0.97	-0.73		0.50	0.0	0.00	0.0	
	10/12/2017 11:42	5.91	5.91	242.14	764.91	12.0	764.9	10.83	10.99	0.16	0.12		0.12	2.0	0.27	1.7	
	10/19/2017 11:50	7.01	7.01	249.14	771.71	6.8	771.7	10.22	11.44	1.22	-0.49		0.50	1.0	0.13	0.2	
	11/2/2017 9:15	13.89	13.89	263.04	798.61	26.9	798.6	11.21	11.45	0.24	0.50		0.50	1.9	0.26	0.4	

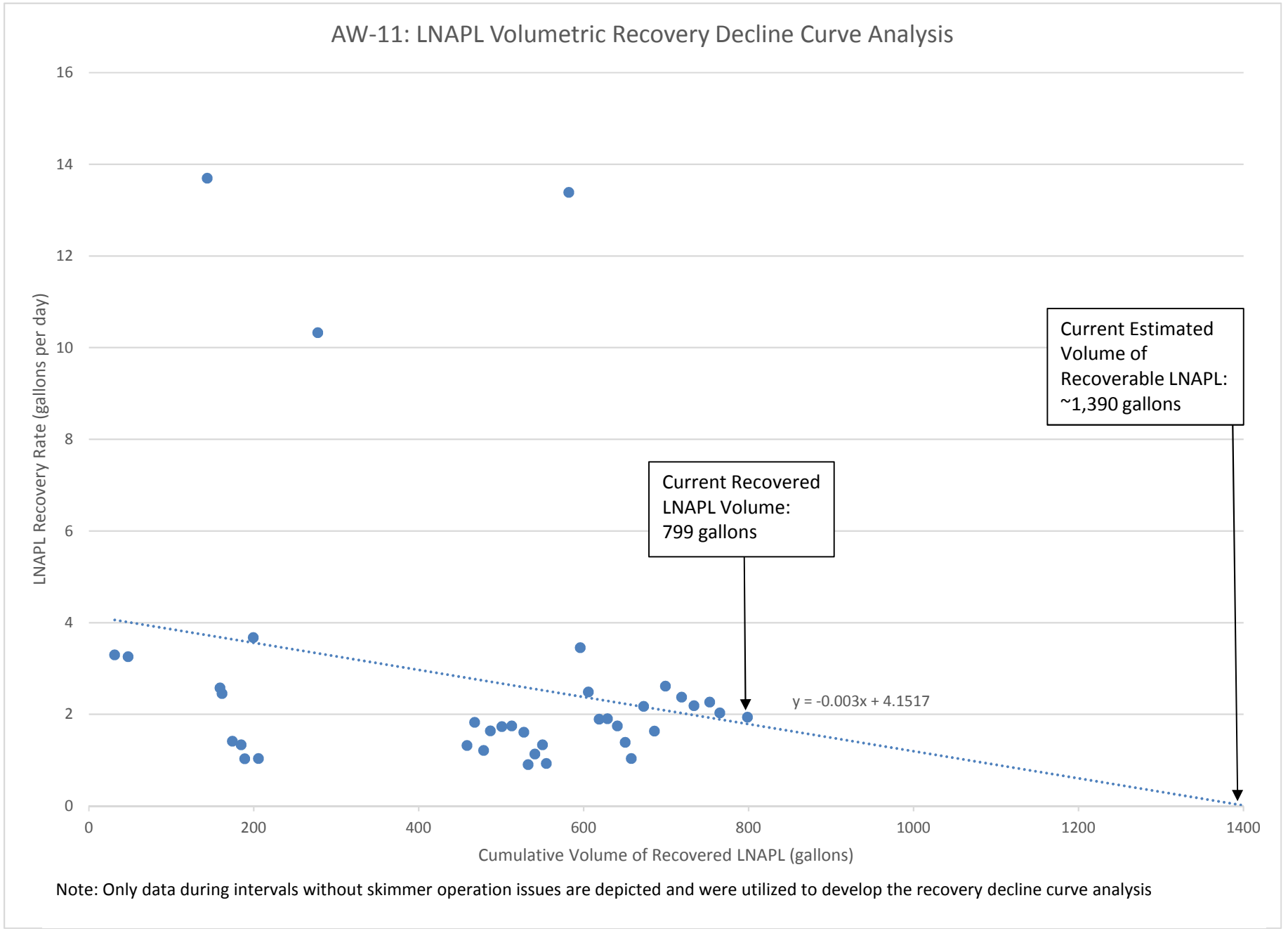
Assumed LNAPL specific gravity = 0.854

All calculations performed pursuant to the methodology detailed in ASTM E2856-13

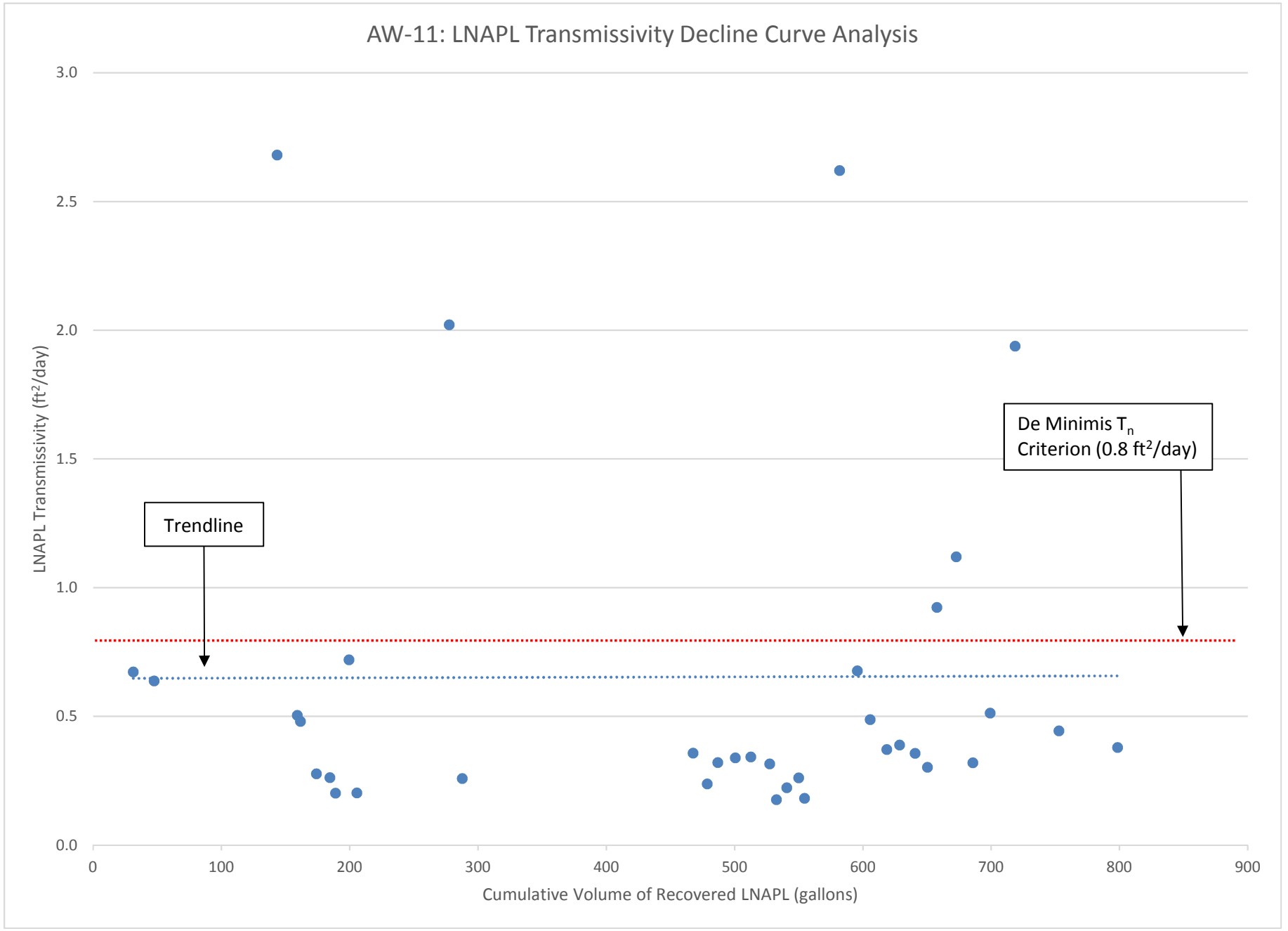
[a]The maximum theoretical drawdown is used for each interval calculation where the measured drawdown is negative or where it exceeds the theoretical maximum.

[b]Represents the geometric mean of the stabilized recovery rates/LNAPL transmissivity estimates (i.e., excludes initial elevated values that would not represent potential long-term recovery rates).


AW-11: Cumulative LNAPL Recovery and LNAPL Recovery Rate Over Time
Cumulative LNAPL Recovery
LNAPL Recovery Rate
Cumulative Volume of Recovered LNAPL (gallons)
LNAPL Recovery Rate (gallons per day)
Date
900
800
700
600
500
400
300
200
100
0
60
50
40
30
20
10
0
12/16/16
1/25/17
3/6/17
4/15/17
5/25/17
7/4/17
8/13/17
9/22/17
11/1/17
12/11/17



Note: Only data during intervals without skimmer operation issues are depicted and were utilized to develop the recovery decline curve analysis


AW-11: LNAPL Transmissivity Decline Curve Analysis
LNAPL Transmissivity (ft²/day)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
100
200
300
400
500
600
700
800
900
Cumulative Volume of Recovered LNAPL (gallons)
Trendline
De Minimis Tn Criterion (0.8 ft²/day)

Appendix A-5

AW-18 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

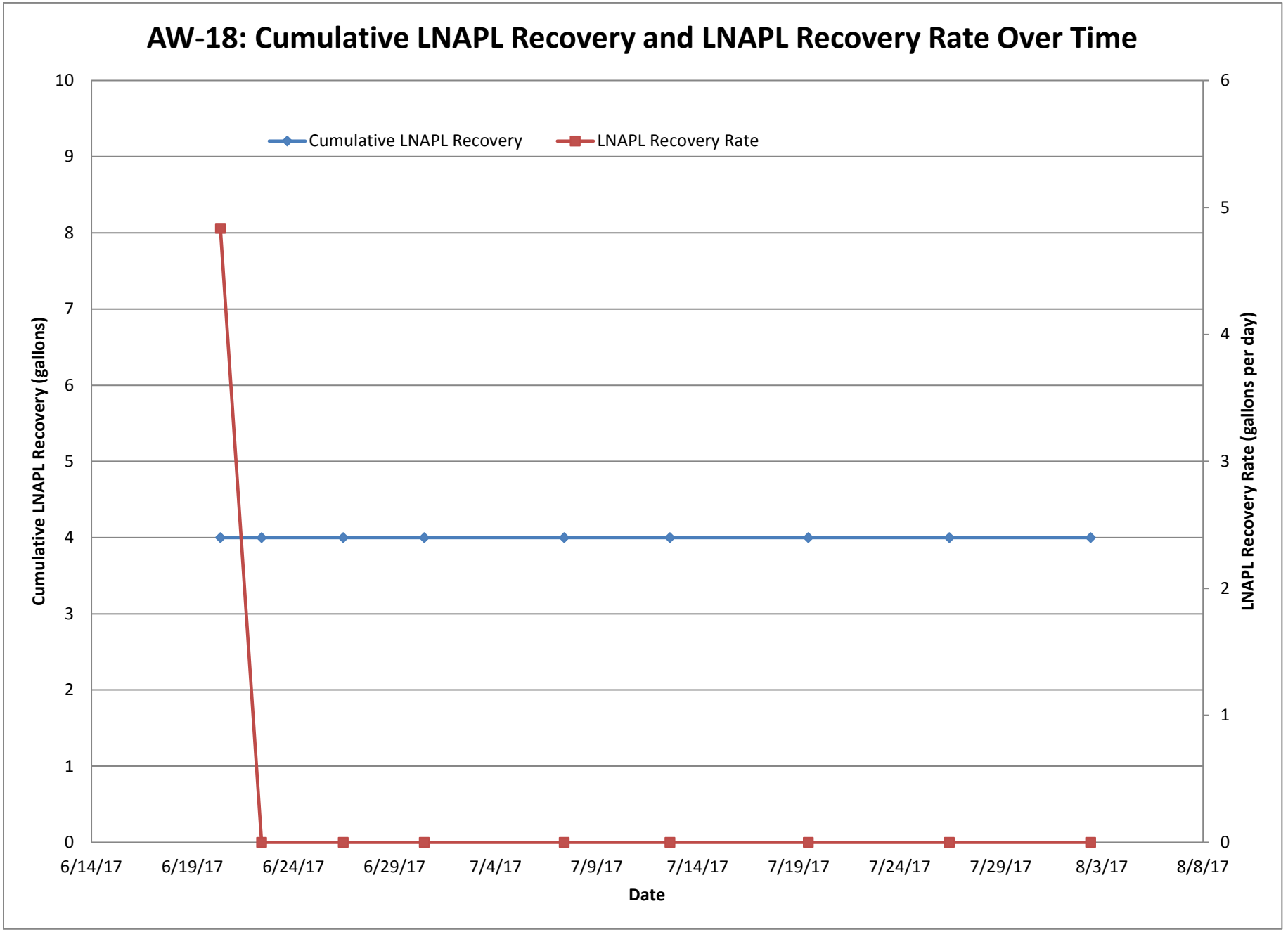
Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-18	Equilibrium							6.68	8.28	1.60	--	0.23		--	--	--	
	6/19/2017 13:15	--	--	0.00	--	--	--	6.48	8.19	1.71	--			--	--	--	
	6/20/2017 9:06	0.83	0.83	0.83	4.00	4.0	4.0	6.75	7.05	0.30	0.07		0.07	4.8	0.65	6.8	
	6/22/2017 10:09	2.04	2.04	2.87	4.00	0.0	4.0	7.05	7.36	0.31	0.37		0.23	0.0	0.00	0.0	
	6/26/2017 11:02	4.04	4.04	6.91	4.00	0.0	4.0	6.80	7.15	0.35	0.12		0.12	0.0	0.00	0.0	
	6/30/2017 11:13	4.01	4.01	10.92	4.00	0.0	4.0	6.90	7.08	0.18	0.22		0.22	0.0	0.00	0.0	
	7/7/2017 9:18	6.92	6.92	17.84	4.00	0.0	4.0	6.44	6.58	0.14	-0.24		0.23	0.0	0.00	0.0	
	7/12/2017 14:59	5.24	5.24	23.07	4.00	0.0	4.0	6.26	6.43	0.17	-0.42		0.23	0.0	0.00	0.0	
	7/19/2017 11:06	6.84	6.84	29.91	4.00	0.0	4.0	6.79	7.01	0.22	0.11		0.11	0.0	0.00	0.0	
	7/26/2017 10:43	6.98	6.98	36.89	4.00	0.0	4.0	6.47	6.69	0.22	-0.21		0.23	0.0	0.00	0.0	
	8/2/2017 10:30	6.99	6.99	43.89	4.00	0.0	4.0	6.59	6.72	0.13	-0.09		0.23	0.0	0.00	0.0	
	End of Test																
	8/22/2017 13:00	20.10	--	--	--	--	--	6.45	7.70	1.25	--	--	--	--	--	--	--

Assumed LNAPL specific gravity = 0.854

All calculations performed pursuant to the methodology detailed in ASTM E2856-13

[a]The maximum theoretical drawdown is used for each interval calculation where the measured drawdown is negative or where it exceeds the theoretical maximum.

[b]Represents the geometric mean of the stabilized recovery rates/LNAPL transmissivity estimates (i.e., excludes initial elevated values that would not represent potential long-term recovery rates).


AW-18: Cumulative LNAPL Recovery and LNAPL Recovery Rate Over Time
Cumulative LNAPL Recovery
LNAPL Recovery Rate
Cumulative LNAPL Recovery (gallons)
LNAPL Recovery Rate (gallons per day)
Date
0
1
2
3
4
5
6
7
8
9
10
6/14/17
6/19/17
6/24/17
6/29/17
7/4/17
7/9/17
7/14/17
7/19/17
7/24/17
7/29/17
8/3/17
8/8/17

Appendix A-6

AW-22 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

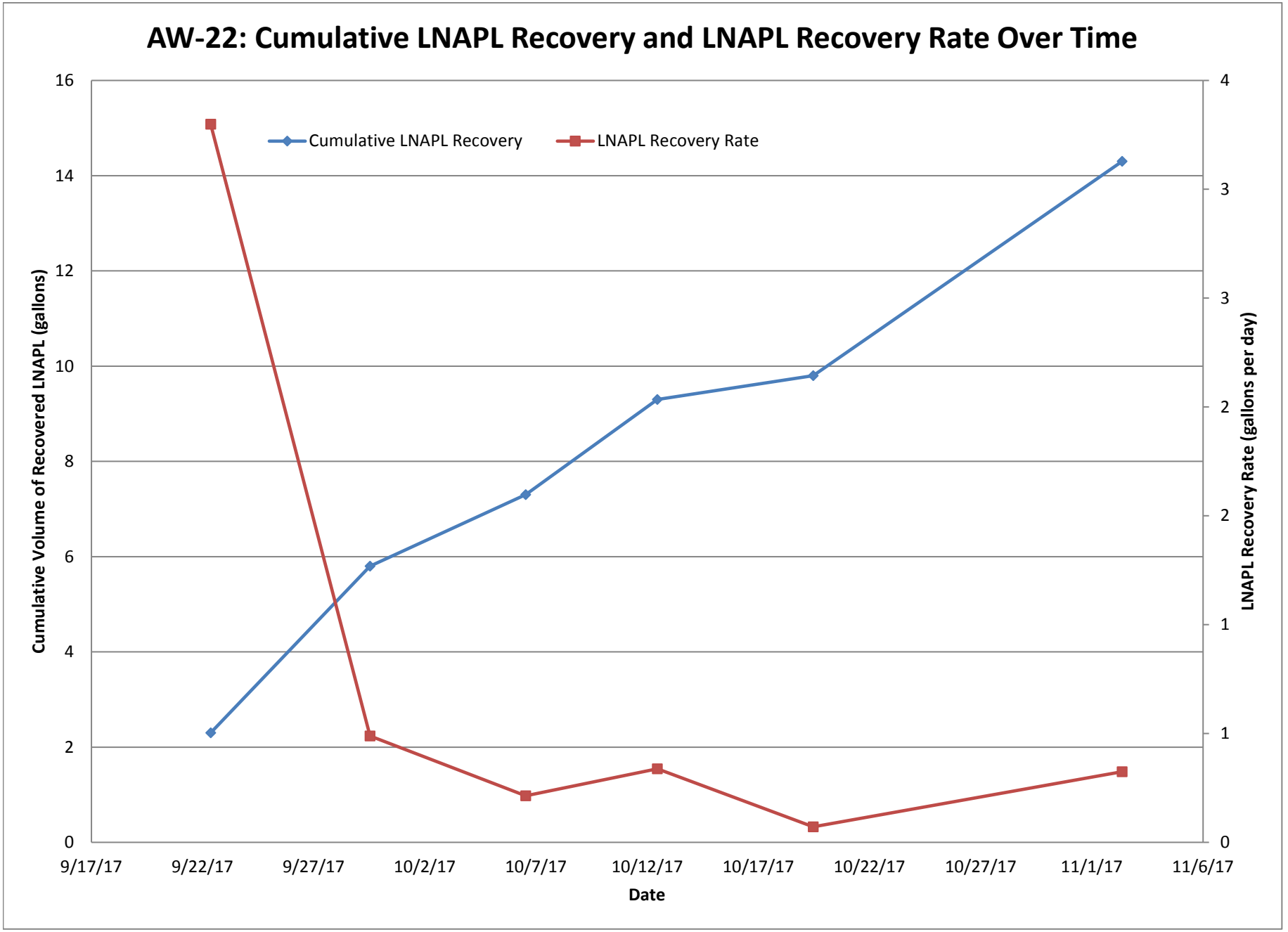
Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-22	Equilibrium							11.91	15.46	3.55	--	0.52		--	--	--	
	9/21/2017 16:00	--	--	0.00	--	--	--	10.44	14.20	3.76	--			--	--	--	
	9/22/2017 8:44	0.70	0.70	0.70	2.30	2.3	2.3	11.59	11.65	0.06	-0.32		0.52	3.3	0.44	0.6	
	9/29/2017 12:43	7.17	7.17	7.86	5.80	3.5	5.8	11.65	11.68	0.03	-0.26		0.52	0.5	0.07	0.1	
	10/6/2017 12:42	7.00	7.00	14.86	7.30	1.5	7.3	11.41	11.50	0.09	-0.50		0.52	0.2	0.03	0.0	
	10/12/2017 10:55	5.93	5.93	20.79	9.30	2.0	9.3	12.22	12.40	0.18	0.31		0.31	0.3	0.05	0.1	
	10/19/2017 11:05	7.01	7.01	27.80	9.80	0.5	9.8	11.60	11.72	0.12	-0.31		0.52	0.1	0.01	0.0	
	11/2/2017 8:32	13.89	13.89	41.69	14.30	4.5	14.3	12.76	12.86	0.10	0.85		0.52	0.3	0.04	0.1	0.1

Assumed LNAPL specific gravity = 0.854

All calculations performed pursuant to the methodology detailed in ASTM E2856-13

[a]The maximum theoretical drawdown is used for each interval calculation where the measured drawdown is negative or where it exceeds the theoretical maximum.

[b]Represents the geometric mean of the stabilized recovery rates/LNAPL transmissivity estimates (i.e., excludes initial elevated values that would not represent potential long-term recovery rates).


AW-22: Cumulative LNAPL Recovery and LNAPL Recovery Rate Over Time
Cumulative LNAPL Recovery
LNAPL Recovery Rate
Cumulative Volume of Recovered LNAPL (gallons)
LNAPL Recovery Rate (gallons per day)
Date
0
2
4
6
8
10
12
14
16
0
1
1
2
2
3
3
4
9/17/17
9/22/17
9/27/17
10/2/17
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10/12/17
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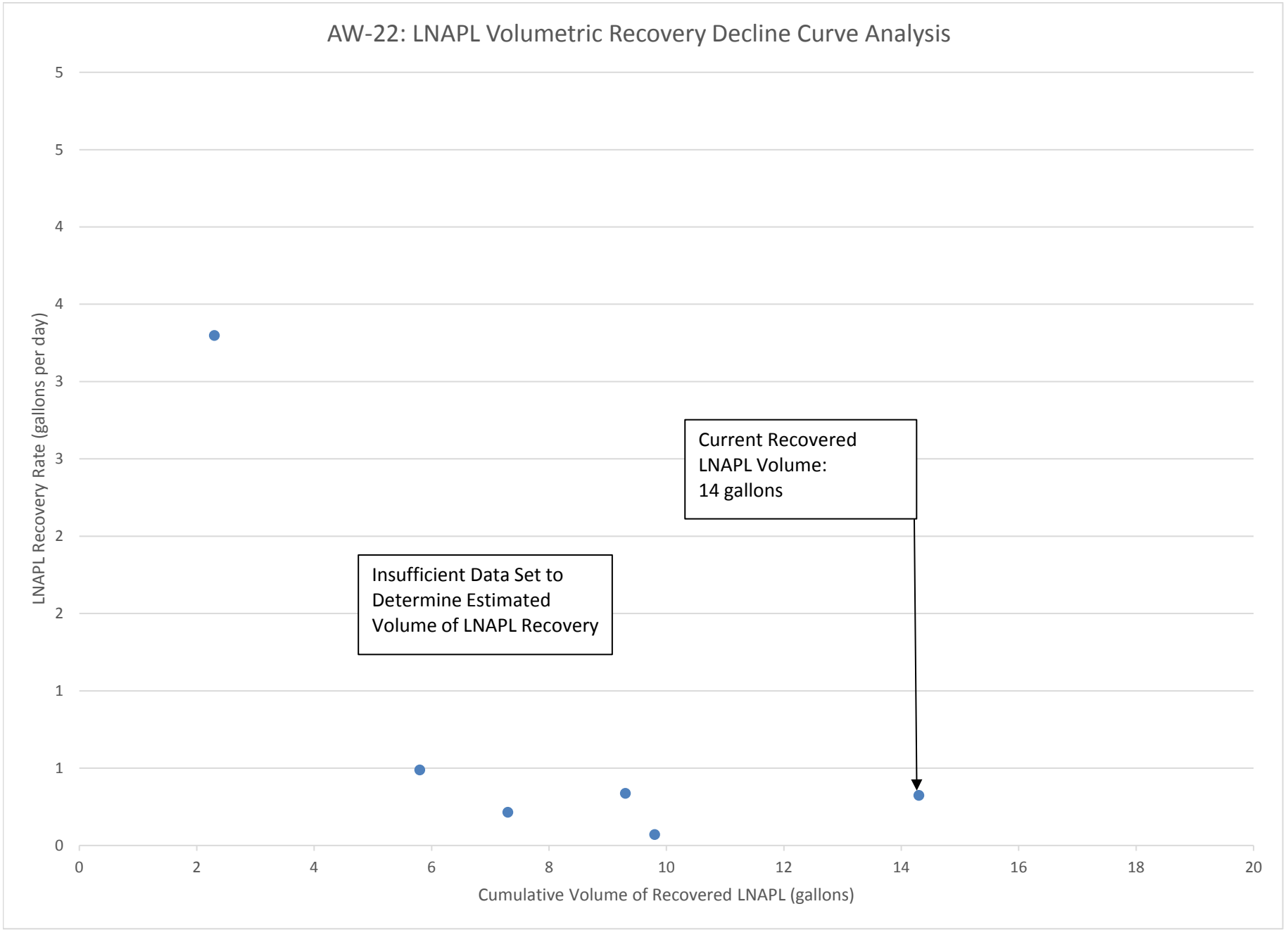
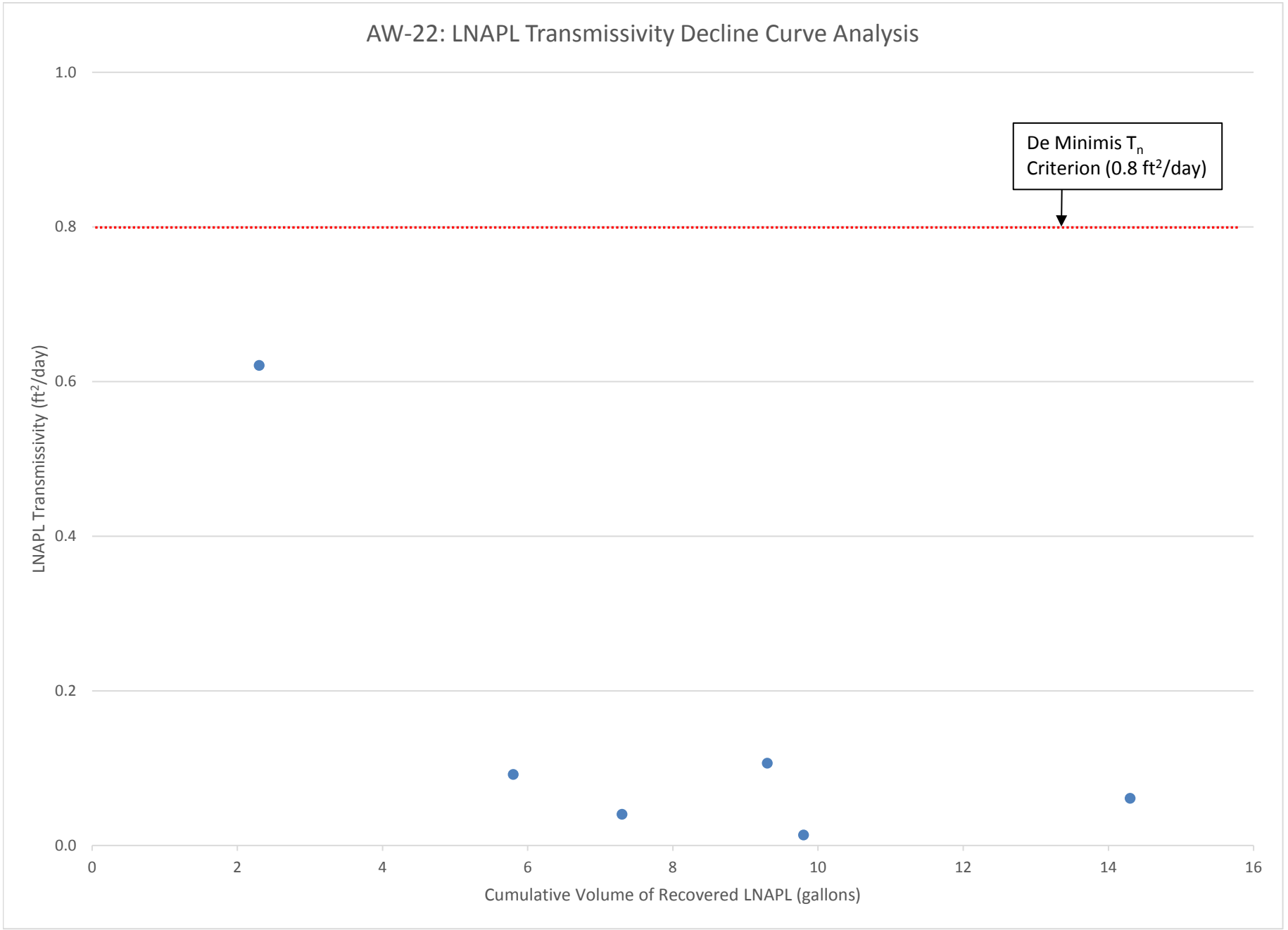
10/22/17
10/27/17
11/1/17
11/6/17


AW-22: LNAPL Volumetric Recovery Decline Curve Analysis
LNAPL Recovery Rate (gallons per day)
Cumulative Volume of Recovered LNAPL (gallons)
Current Recovered LNAPL Volume: 14 gallons
Insufficient Data Set to Determine Estimated Volume of LNAPL Recovery
0
1
1
2
2
3
3
4
4
5
5
0
2
4
6
8
10
12
14
16
18
20


AW-22: LNAPL Transmissivity Decline Curve Analysis
1.0
0.8
0.6
0.4
0.2
0.0
LNAPL Transmissivity (ft²/day)
De Minimis Tn
Criterion (0.8 ft²/day)
0
2
4
6
8
10
12
14
16
Cumulative Volume of Recovered LNAPL (gallons)

Appendix A-7

AW-49 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-49	**Equilibrium**	--	--		--	--		12.71	15.63	2.92	--	0.43		--	--	--	
	9/14/2016 16:35	--	--		--	--		12.15	15.80	3.65	--			--	--	--	
	9/14/2016 17:20	0.03	0.03	0.03	2.30	2.3	2.3	12.25	14.55	2.30	-0.46		0.43	73.6	9.84	16.8	
	9/15/2016 8:15	0.62	0.62	0.65	21.10	18.8	21.1	12.25	12.41	0.16	-0.46		0.43	30.2	4.04	6.9	
	9/15/2016 8:45	0.02	0.02	0.67	21.60	0.5	21.6	12.21	12.41	0.20	-0.50		0.43	24.0	3.21	5.5	
	9/15/2016 11:45	0.13	0.13	0.80	23.40	1.8	23.4	12.33	12.50	0.17	-0.38		0.43	14.4	1.92	3.3	
	9/21/2016 12:07	6.02	6.02	6.81	134.40	111.0	134.4	12.57	12.86	0.29	-0.14		0.43	18.5	2.47	4.2	
	9/22/2016 9:50	0.90	0.90	7.72	146.90	12.5	146.9	13.22	13.47	0.25	0.51		0.43	13.8	1.85	3.2	
	9/28/2016 8:35	5.95	5.95	13.67	205.20	58.3	205.2	12.37	12.60	0.23	-0.34		0.43	9.8	1.31	2.2	
	10/5/2016 14:32	7.25	6.23	19.90	260.70	55.5	260.7	12.16	12.29	0.13	-0.55		0.43	8.9	1.19	2.0	
	END OF TEST INTERVAL - SHUTDOWN DUE TO HURRICANE																
	10/13/2016 13:00	7.94	0.00	19.90	0.00	--	260.7	10.60	15.33	4.73	-2.11			--	--	--	
	10/20/2016 12:20	6.97	3.63	23.53	267.00	267.0	527.7	10.88	14.04	3.16	-1.83		0.43	23.1	3.09	5.3	
	END OF TEST INTERVAL - SHUTDOWN DUE TO FULL TANK - PUMPED 11/21/2016																
	10/28/2016 11:23	--	--	--	--	--	527.7	11.55	13.80	2.25	--			--	--	--	
	11/4/2016 12:30	7.05	6.13	6.13	133.00	134.0	661.7	12.35	12.67	0.32	-0.36		0.43	21.9	2.92	5.0	
	11/15/2016 17:02	11.19	11.19	17.32	223.44	222.0	883.7	13.00	13.19	0.19	0.29		0.29	19.8	2.65	6.7	
	END OF TEST INTERVAL - SHUTDOWN DUE TO FULL TANK																
	11/22/2016 12:34	--	6.81	--	--	65.0	948.7	13.00	14.30	1.30	0.29		0.29	9.5	1.28	3.2	
	11/29/2016 15:35	--	7.13	--	--	50.0	998.7	13.06	14.44	1.38	0.35		0.35	7.0	0.94	2.0	
	12/7/2016 13:20	--	--	--	--	--	998.7	12.87	13.40	0.53	--			--	--	--	
	12/14/2016 9:50	--	--	--	--	--	998.7	12.35	13.00	0.65	--			--	--	--	
	SHUTDOWN DUE TO FULL TANK																
	12/21/2016 9:20	--	--	--	0.00	--	998.7	12.93	14.30	1.37	--			--	--	--	
	12/27/2016 12:40	6.14	6.14	6.14	29.73	29.7	1028.4	13.03	13.40	0.37	0.32		0.32	4.8	0.65	1.5	
	1/4/2017 13:03	8.02	8.02	14.15	68.54	38.8	1067.2	13.05	13.26	0.21	0.34		0.34	4.8	0.65	1.4	
	1/9/2017 11:36	4.94	4.94	19.09	84.40	15.9	1083.1	13.41	13.68	0.27	0.70		0.43	3.2	0.43	0.7	
	1/19/2017 14:12	10.11	5.56	24.65	100.05	15.7	1098.8	12.45	14.48	2.03	-0.26		0.43	2.8	0.38	0.6	
	1/20/2017 10:49	0.86	0.12	24.77	105.49	0.0	1098.8	13.36	14.74	1.38	0.65		0.43	0.0	0.00	0.0	
	1/23/2017 15:17	3.19	1.59	26.37	105.49	5.4	1104.2	12.82	13.83	1.01	0.11		0.11	3.4	0.46	3.0	
	1/26/2017 13:01	2.91	2.91	29.27	125.49	20.0	1124.2	12.92	13.22	0.30	0.21		0.21	6.9	0.92	3.2	
	1/31/2017 12:55	5.00	5.00	34.27	147.19	21.7	1145.9	12.65	12.90	0.25	-0.06		0.43	4.3	0.58	1.0	
	2/7/2017 12:56	7.00	7.00	41.27	168.71	21.5	1167.4	13.17	13.30	0.13	0.46		0.43	3.1	0.41	0.7	
	2/13/2017 14:28	6.06	6.06	47.33	195.73	27.0	1194.4	13.30	13.61	0.31	0.59		0.43	4.5	0.60	1.0	
	2/14/2017 14:24	1.00	1.00	48.33	197.41	1.7	1196.1	12.99	13.21	0.22	0.28		0.28	1.7	0.23	0.6	
	2/23/2017 11:08	8.86	8.60	56.93	225.77	28.4	1224.5	12.99	13.20	0.21	0.28		0.28	3.3	0.44	1.2	
	3/3/2017 10:10	7.96	5.81	62.74	237.37	11.6	1236.1	13.44	15.32	1.88	0.73		0.43	2.0	0.27	0.5	
	3/7/2017 13:27	4.14	4.14	66.88	259.07	21.7	1257.8	13.66	13.92	0.26	0.95		0.43	5.2	0.70	1.2	
	3/10/2017 10:34	2.88	2.88	69.76	268.51	9.4	1267.2	13.29	13.60	0.31	0.58		0.43	3.3	0.44	0.7	
	3/16/2017 11:30	6.04	3.26	73.02	284.51	16.0	1283.2	13.26	14.40	1.14	0.55		0.43	4.9	0.66	1.1	
	3/23/2017 10:53	6.97	0.77	73.78	286.71	2.2	1285.4	13.30	14.06	0.76	0.59		0.43	2.9	0.38	0.7	

Appendix A-7

AW-49 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

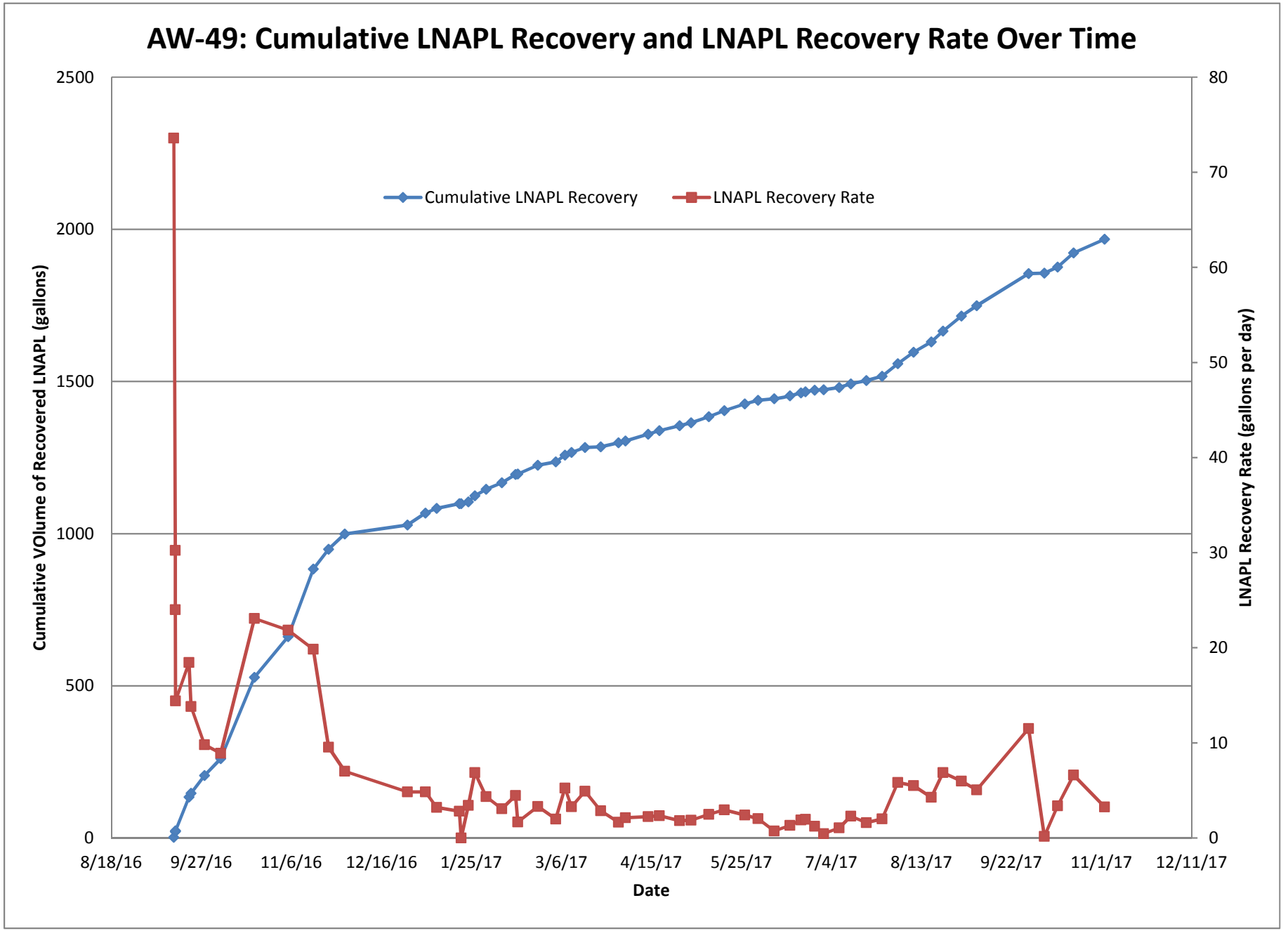
Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-49	3/31/2017 8:41	7.91	7.91	81.69	299.71	13.0	1298.4	13.62	13.93	0.31	0.91		0.43	1.6	0.22	0.4	
	4/3/2017 10:10	3.06	2.82	84.51	305.71	6.0	1304.4	13.74	14.02	0.28	1.03		0.43	2.1	0.28	0.5	
	4/13/2017 11:53	10.07	10.07	94.58	328.21	22.5	1326.9	13.12	13.38	0.26	0.41		0.41	2.2	0.30	0.5	
	4/18/2017 11:33	4.99	4.99	99.57	339.91	11.7	1338.6	13.70	14.10	0.40	0.99		0.43	2.3	0.31	0.5	
	4/27/2017 11:03	8.98	8.98	108.55	356.21	16.3	1354.9	13.00	13.35	0.35	0.29		0.29	1.8	0.24	0.6	
	5/2/2017 12:47	5.07	5.07	113.62	365.71	9.5	1364.4	13.69	13.96	0.27	0.98		0.43	1.9	0.25	0.4	
	5/10/2017 10:47	7.92	7.92	121.53	385.41	19.7	1384.1	13.40	13.68	0.28	0.69		0.43	2.5	0.33	0.6	
	5/17/2017 7:46	6.87	6.87	128.41	405.71	20.3	1404.4	13.85	14.08	0.23	1.14		0.43	3.0	0.39	0.7	
	5/26/2017 10:51	9.13	9.13	137.54	427.71	22.0	1426.4	13.35	13.58	0.23	0.64		0.43	2.4	0.32	0.5	
	6/1/2017 8:02	5.88	5.88	143.42	439.71	12.0	1438.4	13.55	13.79	0.24	0.84		0.43	2.0	0.27	0.5	
	6/8/2017 11:40	7.15	7.15	150.57	445.01	5.3	1443.7	12.87	13.00	0.13	0.16		0.16	0.7	0.10	0.5	
	6/15/2017 11:16	6.98	6.98	157.55	454.31	9.3	1453.0	13.51	13.79	0.28	0.80		0.43	1.3	0.18	0.3	
	6/20/2017 9:56	4.94	4.94	162.50	463.71	9.4	1462.4	13.52	13.74	0.22	0.81		0.43	1.9	0.25	0.4	
	6/22/2017 10:46	2.03	2.03	164.53	467.71	4.0	1466.4	13.13	13.41	0.28	0.42		0.42	2.0	0.26	0.5	
	6/26/2017 11:42	4.04	4.04	168.57	472.71	5.0	1471.4	13.07	13.33	0.26	0.36		0.36	1.2	0.17	0.3	
	6/30/2017 11:45	4.00	4.00	172.58	474.46	1.8	1473.2	13.36	13.64	0.28	0.65		0.43	0.4	0.06	0.1	
	7/7/2017 8:17	6.86	6.86	179.43	481.71	7.3	1480.4	12.92	13.17	0.25	0.21		0.21	1.1	0.14	0.5	
	7/12/2017 14:23	5.25	5.25	184.68	493.71	12.0	1492.4	12.86	13.12	0.26	0.15		0.15	2.3	0.31	1.5	
	7/19/2017 11:22	6.87	6.87	191.56	504.71	11.0	1503.4	13.29	13.52	0.23	0.58		0.43	1.6	0.21	0.4	
	7/26/2017 11:02	6.99	6.99	198.55	518.71	14.0	1517.4	12.72	12.90	0.18	0.01		0.43	2.0	0.27	0.5	
	8/2/2017 11:54	7.04	7.04	205.58	559.71	41.0	1558.4	12.79	13.02	0.23	0.08		0.43	5.8	0.78	1.3	
	8/9/2017 9:46	6.91	6.91	212.49	597.71	38.0	1596.4	12.46	12.70	0.24	-0.25		0.43	5.5	0.73	1.3	
	8/17/2017 8:40	7.95	7.95	220.45	631.64	33.9	1630.3	12.34	12.58	0.24	-0.37		0.43	4.3	0.57	1.0	
	8/22/2017 12:45	5.17	5.17	225.62	667.14	35.5	1665.8	12.18	12.38	0.20	-0.53		0.43	6.9	0.92	1.6	
	8/30/2017 17:22	8.19	8.19	233.81	716.04	48.9	1714.7	12.19	12.41	0.22	-0.52		0.43	6.0	0.80	1.4	
	9/6/2017 13:15	6.83	6.83	240.64	750.64	34.6	1749.3	12.43	12.68	0.25	-0.28		0.25	5.1	0.68	2.0	
	END OF TEST INTERVAL - SHUTDOWN DUE TO HURRICANE																
	9/21/2017 15:22	--	--	--	--	--	1749.3	11.28	13.61	2.33	--			--	--	--	
	9/22/2017 8:05	0.70	0.70	241.33	772.64	22.0	1771.3	12.30	12.55	0.25	-0.41		0.43	31.6	4.22	7.2	
	9/29/2017 13:45	7.24	7.24	248.57	855.94	83.3	1854.6	12.37	12.65	0.28	-0.34		0.43	11.5	1.54	2.6	
	10/6/2017 13:21	6.98	6.98	255.55	857.04	1.1	1855.7	11.75	13.35	1.60	-0.96		0.43	0.2	0.02	0.0	
	10/12/2017 11:32	5.92	5.92	261.48	877.04	20.0	1875.7	12.77	13.08	0.31	0.06		0.43	3.4	0.45	0.8	
	10/19/2017 12:00	7.02	7.02	268.50	923.44	46.4	1922.1	11.82	12.02	0.20	-0.89		0.43	6.6	0.88	1.5	
	11/2/2017 9:05	13.88	13.88	282.38	968.74	45.3	1967.4	12.72	13.00	0.28	0.01		0.43	3.3	0.44	0.7	1.1

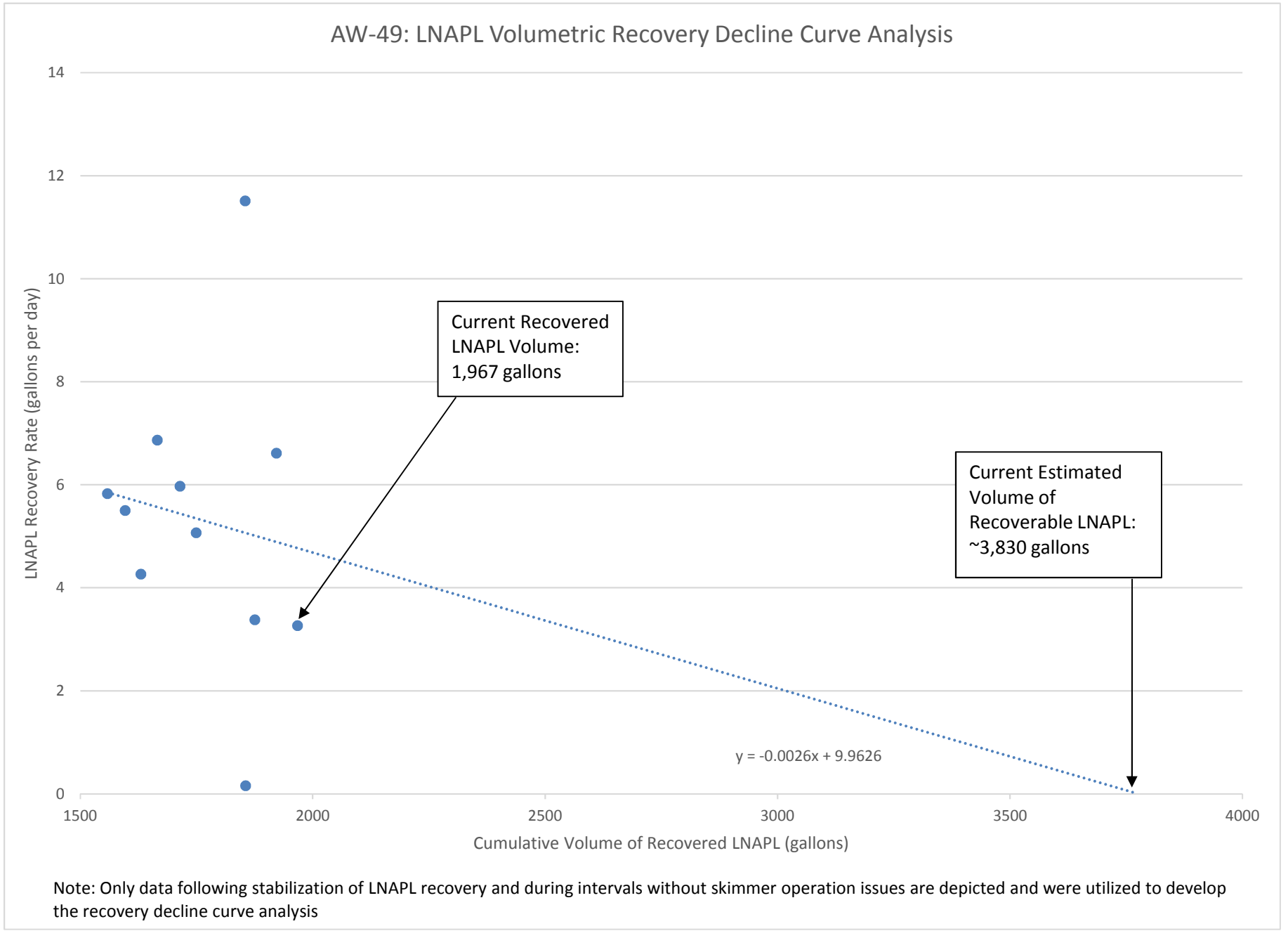
Assumed LNAPL specific gravity = 0.854

All calculations performed pursuant to the methodology detailed in ASTM E2856-13

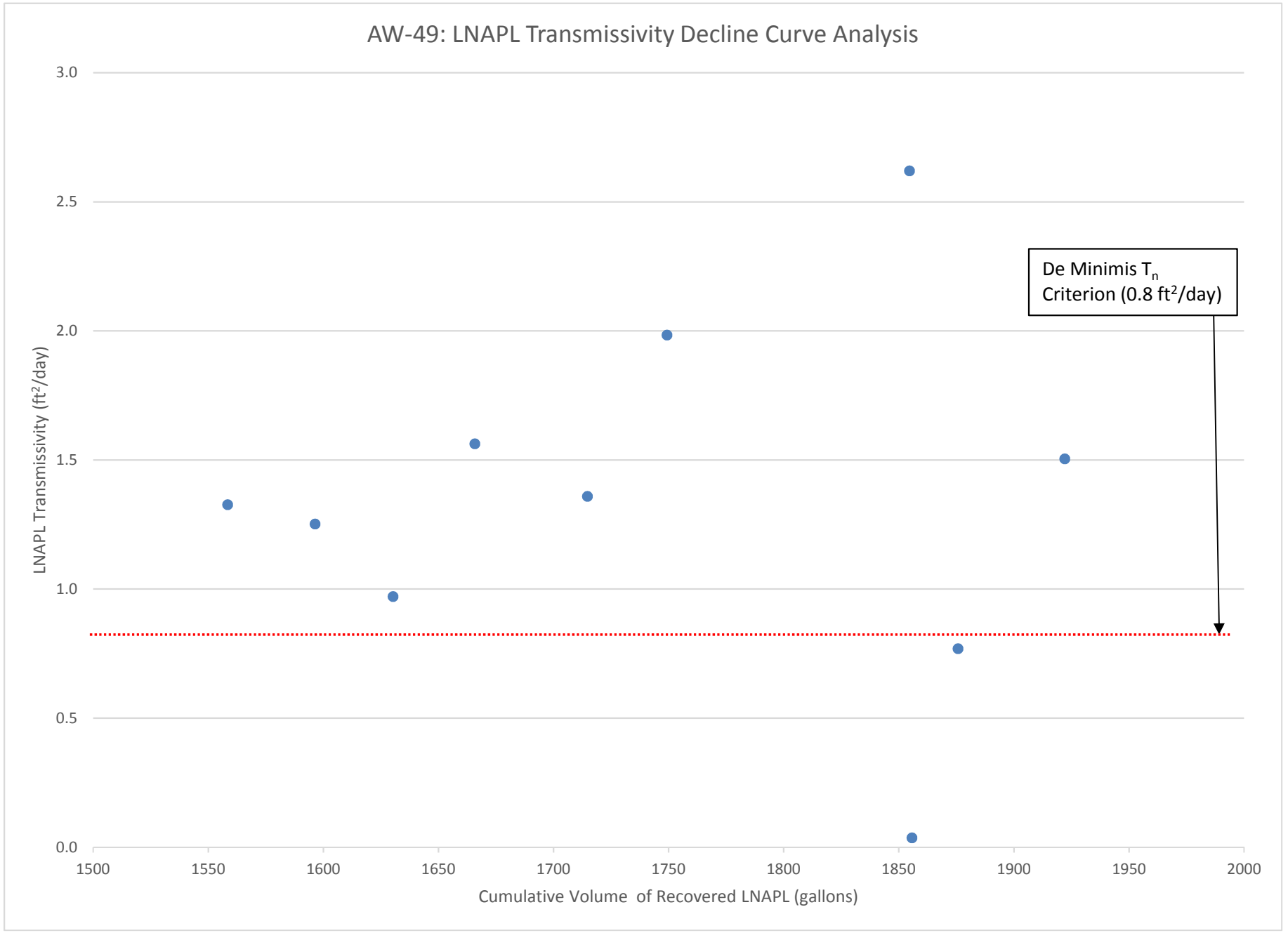
[a]The maximum theoretical drawdown is used for each interval calculation where the measured drawdown is negative or where it exceeds the theoretical maximum.

[b]Represents the geometric mean of the stabilized recovery rates/LNAPL transmissivity estimates (i.e., excludes initial elevated values that would not represent potential long-term recovery rates).


AW-49: Cumulative LNAPL Recovery and LNAPL Recovery Rate Over Time
Cumulative LNAPL Recovery
LNAPL Recovery Rate
Cumulative VOlume of Recovered LNAPL (gallons)
LNAPL Recovery Rate (gallons per day)
Date
2500
2000
1500
1000
500
0
80
70
60
50
40
30
20
10
0
8/18/16
9/27/16
11/6/16
12/16/16
1/25/17
3/6/17
4/15/17
5/25/17
7/4/17
8/13/17
9/22/17
11/1/17
12/11/17



Note: Only data following stabilization of LNAPL recovery and during intervals without skimmer operation issues are depicted and were utilized to develop the recovery decline curve analysis

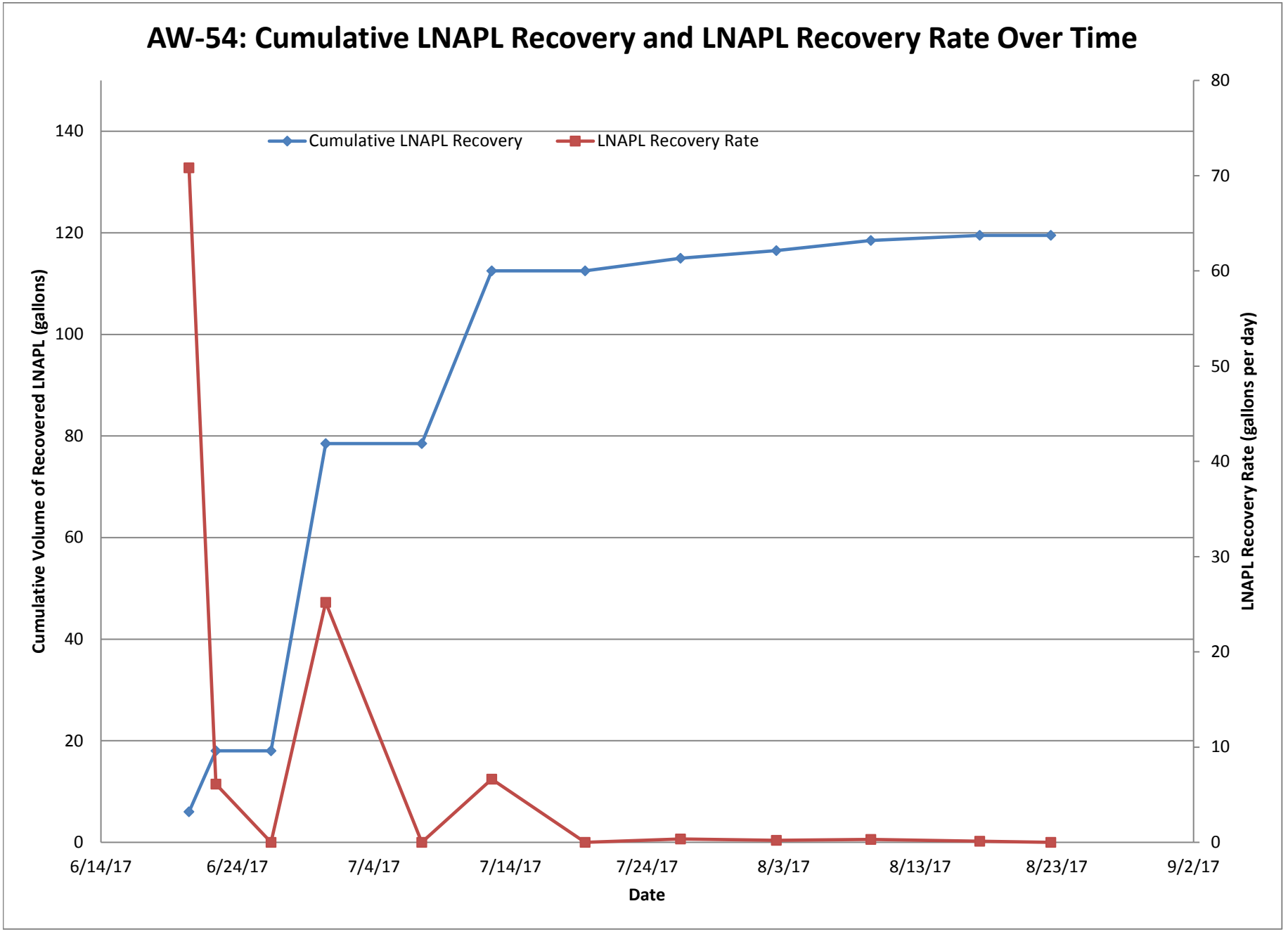

AW-49: LNAPL Transmissivity Decline Curve Analysis
3.0
2.5
2.0
1.5
1.0
0.5
0.0
LNAPL Transmissivity (ft²/day)
De Minimis Tn
Criterion (0.8 ft²/day)
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
Cumulative Volume of Recovered LNAPL (gallons)

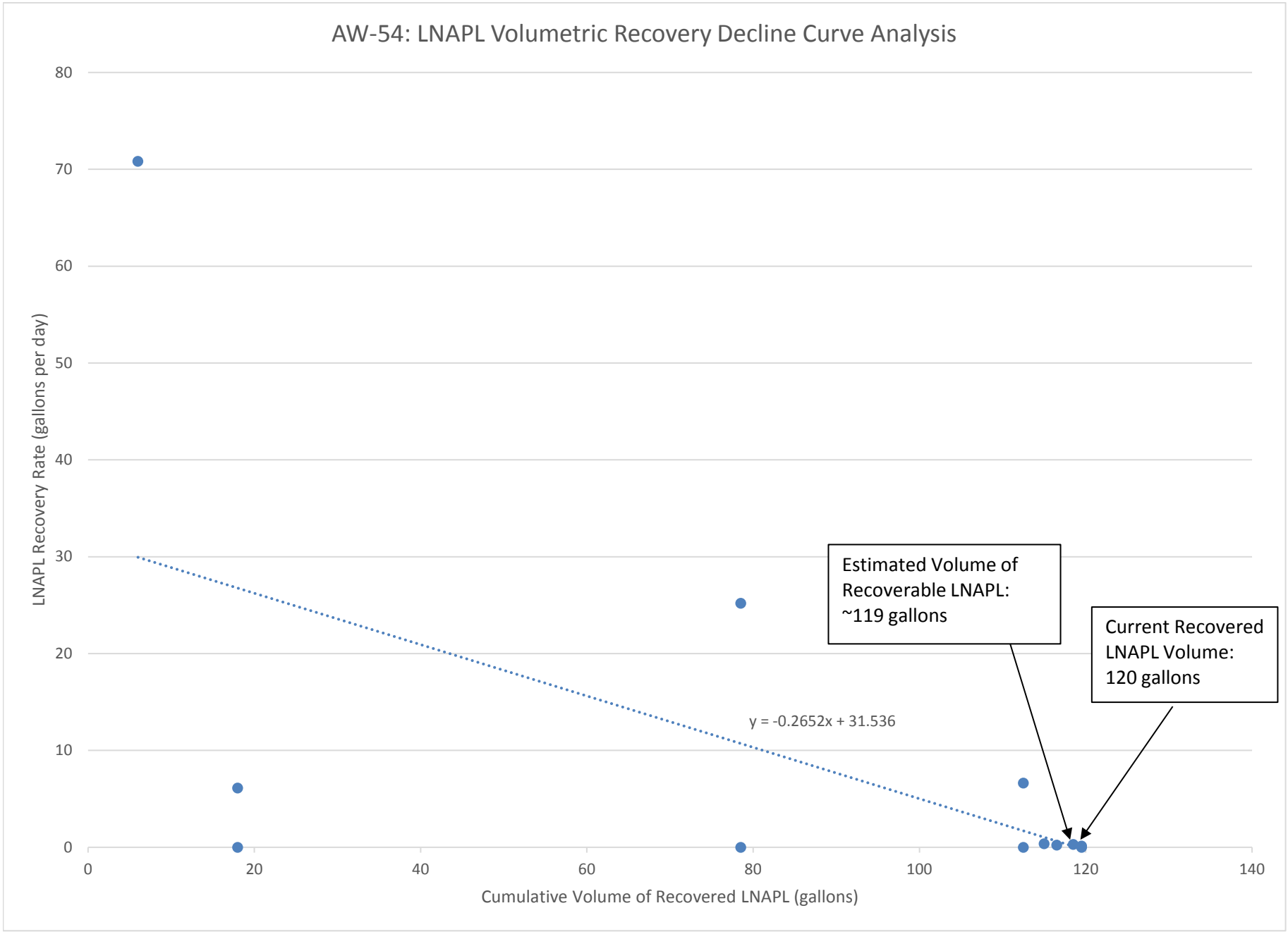
Appendix A-8

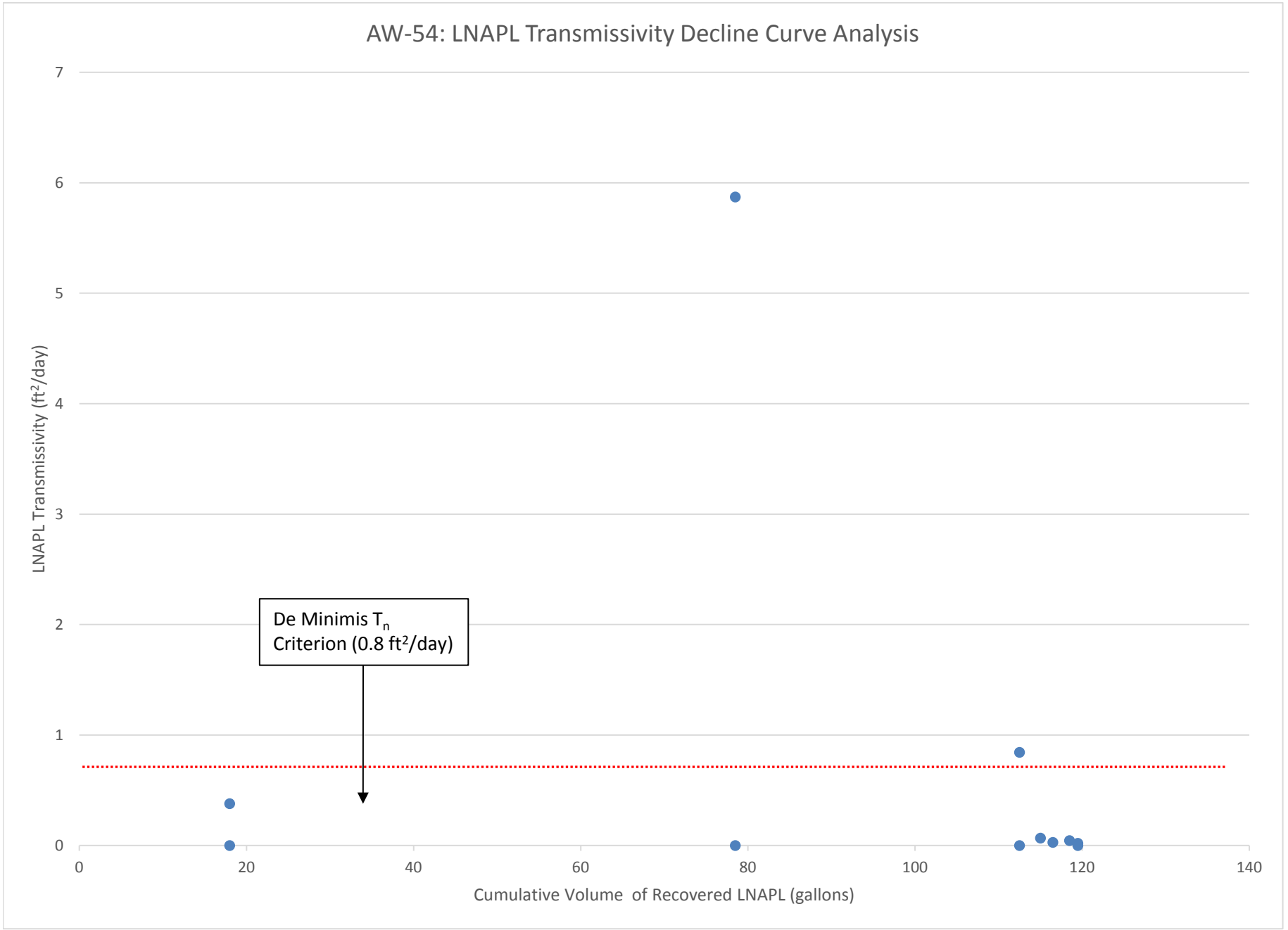
AW-54 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-54	**Equilibrium**							5.48	16.28	10.80	--	1.58		--	--	--	
	6/20/2017 8:45	--	--	0.00	--	--	--	5.40	15.82	10.42	--			--	--	--	
	6/20/2017 10:47	0.08	0.08	0.08	6.00	6.0	6.0	5.90	13.30	7.40	0.42		0.42	70.8	9.47	16.5	
	6/22/2017 9:54	1.96	1.96	2.05	18.00	12.0	18.0	5.30	13.82	8.52	-0.18		1.58	6.1	0.82	0.4	
	6/26/2017 10:48	6.00	4.02	4.11	18.00	0.0	18.0	5.55	16.15	10.60	0.07		0.07	0.0	0.00	0.0	
	6/30/2017 10:50	4.00	2.40	6.51	78.50	60.5	78.5	5.90	11.65	5.75	0.42		0.42	25.2	3.37	5.9	
	7/7/2017 11:58	7.05	0.00	6.51	78.50	0.0	78.5	--	--	--	--		--	--	--	--	
	7/12/2017 14:52	5.12	5.12	11.63	112.50	34.0	112.5	6.25	6.50	0.25	0.77		0.77	6.6	0.89	0.8	
	7/19/2017 10:50	6.83	6.70	18.32	112.50	0.0	112.5	5.62	5.85	0.23	0.14		0.14	0.0	0.00	0.0	
	7/26/2017 10:35	6.99	6.99	25.31	115.00	2.5	115.0	6.00	6.42	0.42	0.52		0.52	0.4	0.05	0.1	
	8/2/2017 10:48	7.01	7.01	32.32	116.50	1.5	116.5	6.26	6.57	0.31	0.78		0.78	0.2	0.03	0.0	
	8/9/2017 9:04	6.93	6.79	39.11	118.50	2.0	118.5	6.12	6.32	0.20	0.64		0.64	0.3	0.04	0.0	
	8/17/2017 8:05	7.96	7.96	47.07	119.50	1.0	119.5	6.08	6.35	0.27	0.60		0.60	0.1	0.02	0.0	
	8/22/2017 13:05	5.21	5.21	52.28	119.50	0.0	119.5	6.95	7.12	0.17	1.47		1.47	0.0	0.00	0.0	
	End of Test																
	8/30/2017 16:00	8.12	--	--	--	--	--	6.00	8.56	2.56	--	--	--	--	--	--	--

Assumed LNAPL specific gravity = 0.854
All calculations performed pursuant to the methodology detailed in ASTM E2856-13
[a]The maximum theoretical drawdown is used for each interval calculation where the measured drawdown is negative or where it exceeds the theoretical maximum.
[b]Represents the geometric mean of the stabilized recovery rates/LNAPL transmissivity estimates (i.e., excludes initial elevated values that would not represent potential long-term recovery rates).


AW-54: Cumulative LNAPL Recovery and LNAPL Recovery Rate Over Time
Cumulative LNAPL Recovery
LNAPL Recovery Rate
Cumulative Volume of Recovered LNAPL (gallons)
LNAPL Recovery Rate (gallons per day)
Date
0
20
40
60
80
100
120
140
0
10
20
30
40
50
60
70
80
6/14/17
6/24/17
7/4/17
7/14/17
7/24/17
8/3/17
8/13/17
8/23/17
9/2/17


AW-54: LNAPL Volumetric Recovery Decline Curve Analysis
LNAPL Recovery Rate (gallons per day)
Cumulative Volume of Recovered LNAPL (gallons)
y = -0.2652x + 31.536
Estimated Volume of Recoverable LNAPL: ~119 gallons
Current Recovered LNAPL Volume: 120 gallons
0
10
20
30
40
50
60
70
80
0
20
40
60
80
100
120
140


AW-54: LNAPL Transmissivity Decline Curve Analysis
LNAPL Transmissivity (ft²/day)
7
6
5
4
3
2
1
0
0
20
40
60
80
100
120
140
Cumulative Volume of Recovered LNAPL (gallons)
De Minimis Tn
Criterion (0.8 ft²/day)

Appendix A-9

AW-56 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-56	**Equilibrium**							10.84	16.40	5.56	--	0.81		--	--	--	
	2/23/2017 9:45	--	--	--	--	--		10.80	15.85	5.05	--			--	--	--	
	2/23/2017 11:42	0.08	0.05	0.05	38.10	38.1	38.1	12.05	13.33	1.28	1.21		0.81	744.3	99.50	89.7	
	2/23/2017 13:08	0.06	0.06	0.11	40.50	2.4	40.5	12.30	12.65	0.35	1.46		0.81	40.2	5.37	4.8	
	3/3/2017 9:40	7.86	7.86	7.97	74.44	33.9	74.4	12.72	13.00	0.28	1.88		0.81	4.3	0.58	0.5	
	SHUTDOWN DUE TO TANK FAILURE																
	3/7/2017 14:00	--	--		--	--	89.4	12.20	16.95	4.75	--			--	--	--	
	3/10/2017 9:40	2.82	2.82	2.82	11.49	11.5	100.9	11.34	14.90	3.56	0.50		0.50	4.1	0.54	0.8	
	3/16/2017 10:35	6.04	6.04	8.86	17.66	6.2	107.1	11.86	16.90	5.04	1.02		0.81	1.0	0.14	0.1	
	3/23/2017 9:58	6.97	6.07	14.93	51.20	33.5	140.6	11.77	13.61	1.84	0.93		0.81	5.5	0.74	0.7	
	3/31/2017 7:50	7.91	7.91	22.84	59.40	8.2	148.8	12.75	13.00	0.25	1.91		0.81	1.0	0.14	0.1	
	4/3/2017 9:38	3.07	3.07	25.92	72.40	13.0	161.8	12.72	12.90	0.18	1.88		0.81	4.2	0.57	0.5	
	4/13/2017 11:20	10.07	10.07	35.99	106.20	33.8	195.6	11.76	11.91	0.15	0.92		0.81	3.4	0.45	0.4	
	4/18/2017 10:47	4.98	4.98	40.97	119.90	13.7	209.3	12.25	15.25	3.00	1.41		0.81	2.8	0.37	0.3	
	4/27/2017 10:41	9.00	9.00	49.96	130.90	11.0	220.3	11.10	14.35	3.25	0.26		0.26	1.2	0.16	0.5	
	5/2/2017 12:58	5.10	5.10	55.06	155.2	24.3	244.6	12.44	12.66	0.22	1.60		0.81	4.8	0.64	0.6	
	5/10/2017 10:30	7.90	7.90	62.95	179.2	24.0	268.6	12.00	12.46	0.46	1.16		0.81	3.0	0.41	0.4	
	5/17/2017 7:32	6.88	6.88	69.83	208.2	29.0	297.6	12.83	13.28	0.45	1.99		0.81	4.2	0.56	0.5	
	5/26/2017 10:42	9.13	9.13	78.96	244.2	36.0	333.6	11.95	11.98	0.03	1.11		0.81	3.9	0.53	0.5	
	6/1/2017 7:45	5.88	5.88	84.84	263.2	19.0	352.6	12.31	12.59	0.28	1.47		0.81	3.2	0.43	0.4	
	6/8/2017 11:15	7.15	7.15	91.98	271.7	8.5	361.1	11.13	12.86	1.73	0.29		0.29	1.2	0.16	0.4	
	6/15/2017 10:29	6.97	6.97	98.95	305.2	33.5	394.6	12.51	12.72	0.21	1.67		0.81	4.8	0.64	0.6	
	6/20/2017 9:36	4.96	4.96	103.92	320.2	15.0	409.6	12.27	12.51	0.24	1.43		0.81	3.0	0.40	0.4	
	6/22/2017 10:57	2.06	2.06	105.97	327.2	7.0	416.6	11.86	12.00	0.14	1.02		0.81	3.4	0.46	0.4	
	6/26/2017 12:30	4.06	4.06	110.04	341.2	14.0	430.6	11.55	11.60	0.05	0.71		0.71	3.4	0.46	0.5	
	6/30/2017 12:28	4.00	4.00	114.04	360.2	19.0	449.6	12.02	12.11	0.09	1.18		0.81	4.8	0.64	0.6	
	7/7/2017 8:03	6.82	6.82	120.85	383.2	23.0	472.6	11.65	11.84	0.19	0.81		0.81	3.4	0.45	0.4	
	7/12/2017 14:36	5.27	5.27	126.12	407.8	24.6	497.2	11.65	11.74	0.09	0.81		0.81	4.7	0.62	0.6	
	7/19/2017 11:45	6.88	6.88	133.01	449.2	41.4	538.6	12.51	12.68	0.17	1.67		0.81	6.0	0.80	0.7	
	7/26/2017 11:24	6.99	6.99	139.99	466.5	17.3	555.9	11.30	11.43	0.13	0.46		0.46	2.5	0.33	0.5	
	8/2/2017 12:06	7.03	1.00	140.99	469.5	3.0	558.9	10.91	17.11	6.20	0.07		0.07	3.0	0.40	4.2	
	8/9/2017 10:00	6.91	6.91	147.90	501.5	32.0	590.9	11.11	11.22	0.11	0.27		0.27	4.6	0.62	1.7	
	8/17/2017 8:26	7.93	7.93	155.84	531.5	30.0	620.9	11.13	11.25	0.12	0.29		0.29	3.8	0.51	1.3	
	8/22/2017 12:25	5.17	5.17	161.00	552.0	20.5	641.4	10.80	10.98	0.18	-0.04		0.81	4.0	0.53	0.5	
	8/30/2017 17:38	8.22	8.22	169.22	576.5	24.5	665.9	10.74	10.91	0.17	-0.10		0.81	3.0	0.40	0.4	
	9/6/2017 12:47	6.80	3.44	172.66	587.5	11.0	676.9	10.24	15.51	5.27	-0.60		0.81	3.2	0.43	0.4	0.5
	END OF TEST INTERVAL - SHUTDOWN DUE TO HURRICANE																
	9/21/2017 12:03	--	--	--	--	--	676.9	9.42	15.12	5.70	--			--	--	--	
	9/22/2017 11:50	0.99	0.99	173.65	594.50	7.0	683.9	10.82	11.06	0.24	-0.02		0.81	7.1	0.94	0.9	
	9/29/2017 13:24	7.07	7.07	180.72	622.00	27.5	711.4	11.26	11.45	0.19	0.42		0.42	3.9	0.52	0.9	
	10/6/2017 12:35	6.97	6.97	187.68	639.10	17.1	728.5	10.52	10.72	0.20	-0.32		0.81	2.5	0.33	0.3	

Appendix A-9

AW-56 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

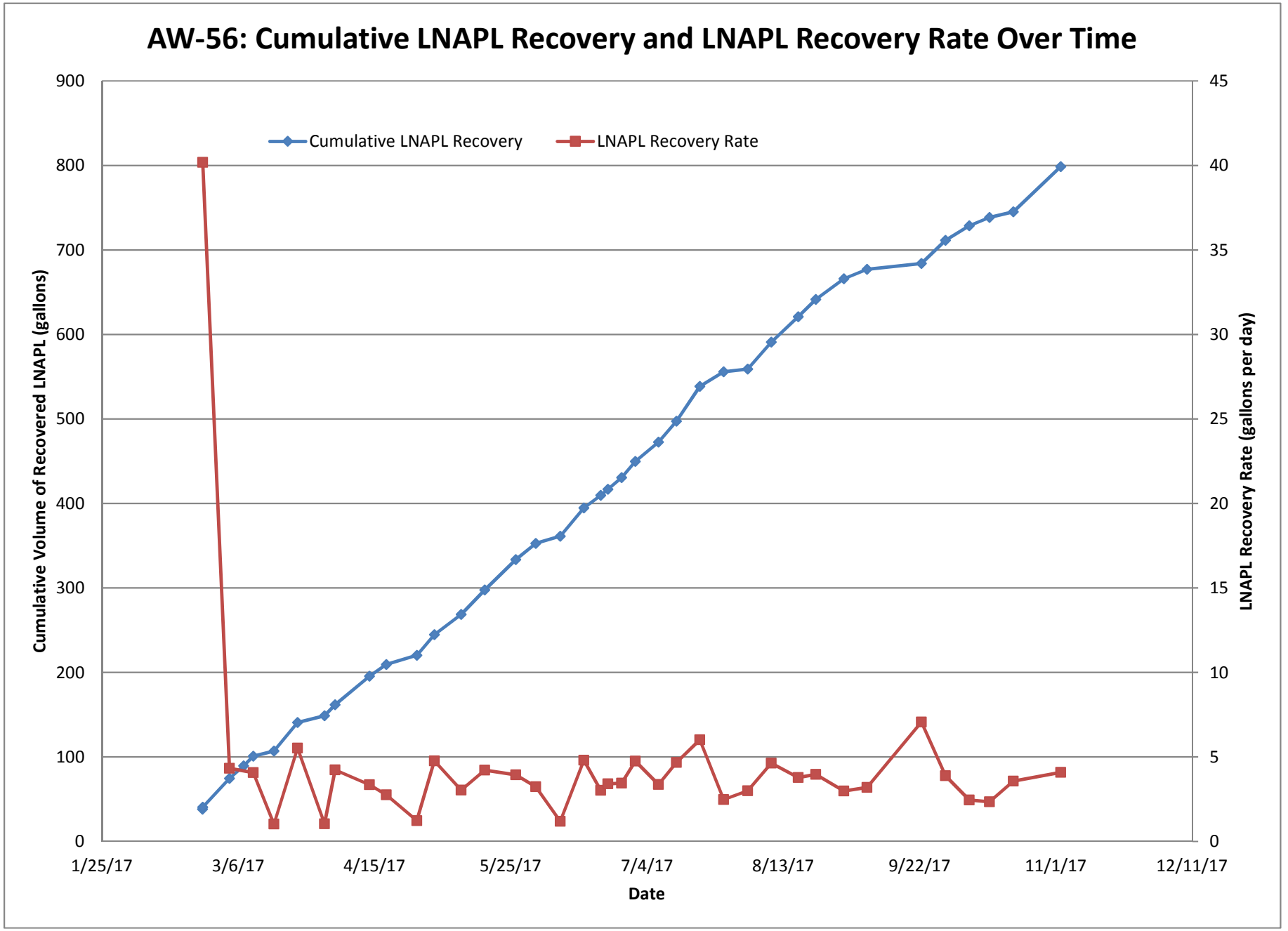
Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-56	10/12/2017 11:03	5.94	4.26	191.94	649.10	10.0	738.5	11.05	16.60	5.55	0.21		0.21	2.3	0.31	1.1	
	10/19/2017 11:15	7.01	1.82	193.77	655.60	6.5	745.0	9.65	14.55	4.90	-1.19		0.81	3.6	0.48	0.4	
	11/2/2017 8:41	13.89	13.08	206.85	709.10	53.5	798.5	11.30	11.36	0.06	0.46		0.46	4.1	0.55	0.9	

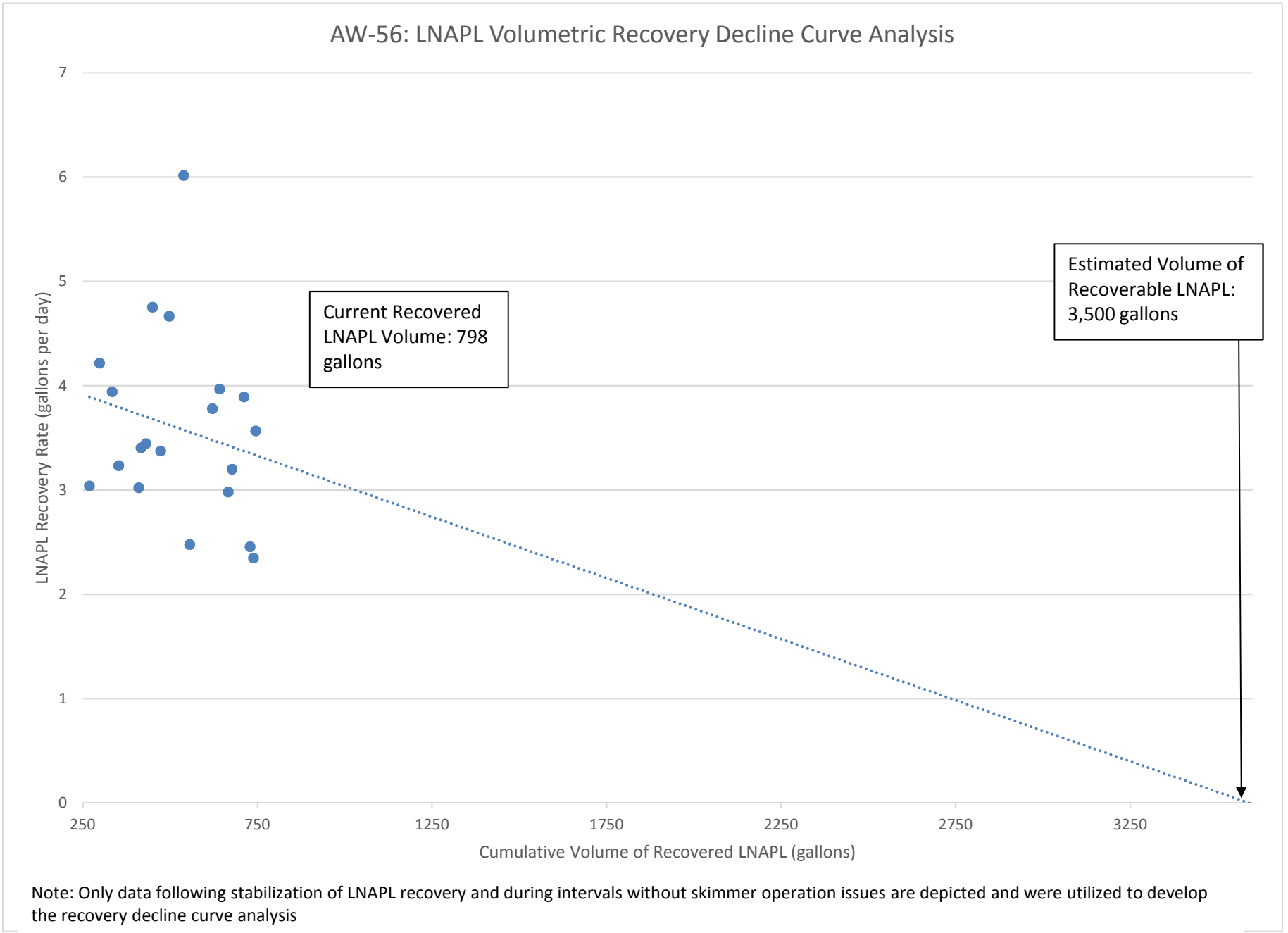
Assumed LNAPL specific gravity = 0.854

All calculations performed pursuant to the methodology detailed in ASTM E2856-13

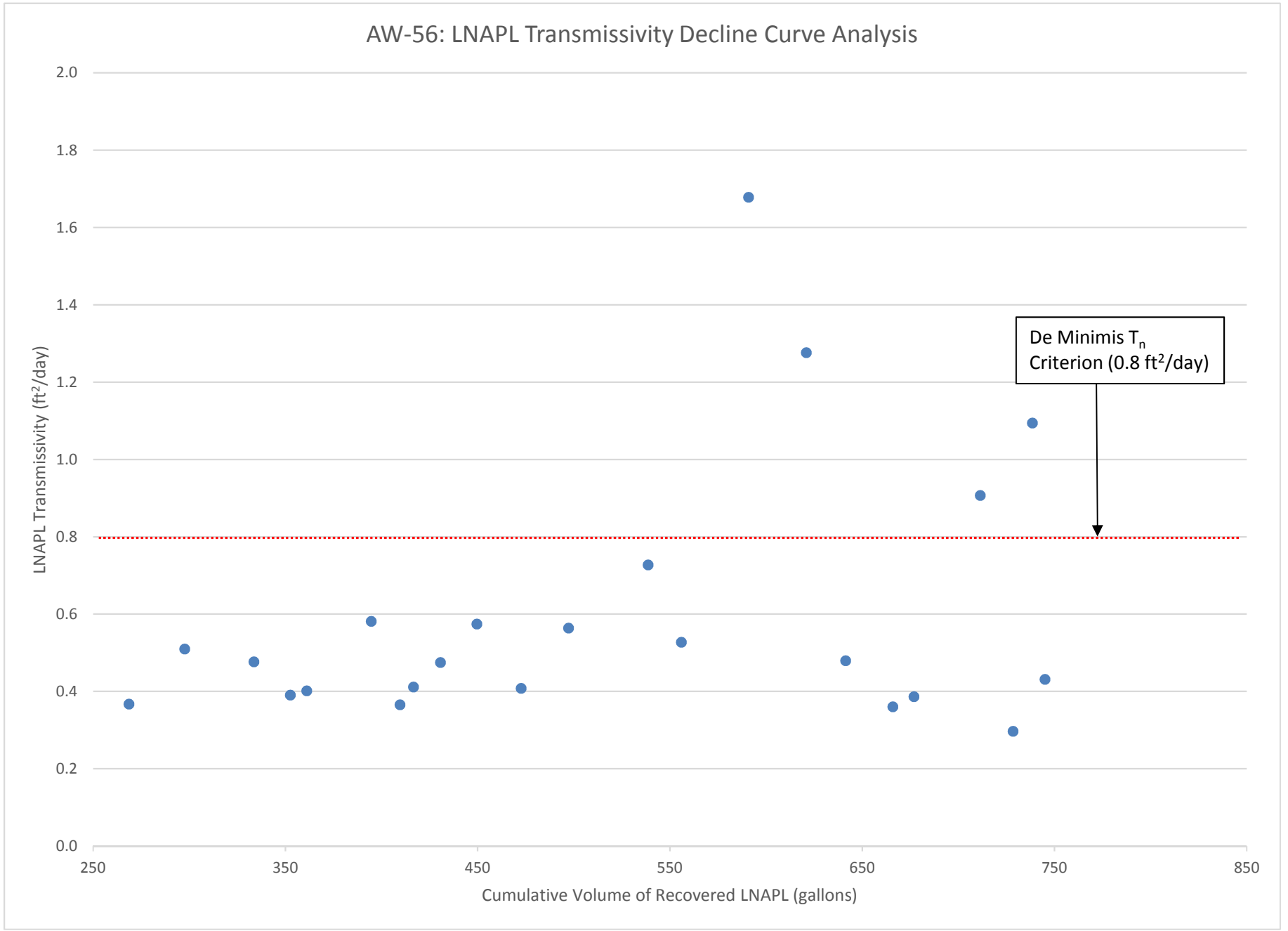
[a]The maximum theoretical drawdown is used for each interval calculation where the measured drawdown is negative or where it exceeds the theoretical maximum.

[b]Represents the geometric mean of the stabilized recovery rates/LNAPL transmissivity estimates (i.e., excludes initial elevated values that would not represent potential long-term recovery rates).


AW-56: Cumulative LNAPL Recovery and LNAPL Recovery Rate Over Time
Cumulative LNAPL Recovery
LNAPL Recovery Rate
Cumulative Volume of Recovered LNAPL (gallons)
LNAPL Recovery Rate (gallons per day)
Date
0
100
200
300
400
500
600
700
800
900
0
5
10
15
20
25
30
35
40
45
1/25/17
3/6/17
4/15/17
5/25/17
7/4/17
8/13/17
9/22/17
11/1/17
12/11/17



Note: Only data following stabilization of LNAPL recovery and during intervals without skimmer operation issues are depicted and were utilized to develop the recovery decline curve analysis


AW-56: LNAPL Transmissivity Decline Curve Analysis
LNAPL Transmissivity (ft²/day)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
250
350
450
550
650
750
850
Cumulative Volume of Recovered LNAPL (gallons)
De Minimis T_n Criterion (0.8 ft²/day)

Appendix A-10

AW-74 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

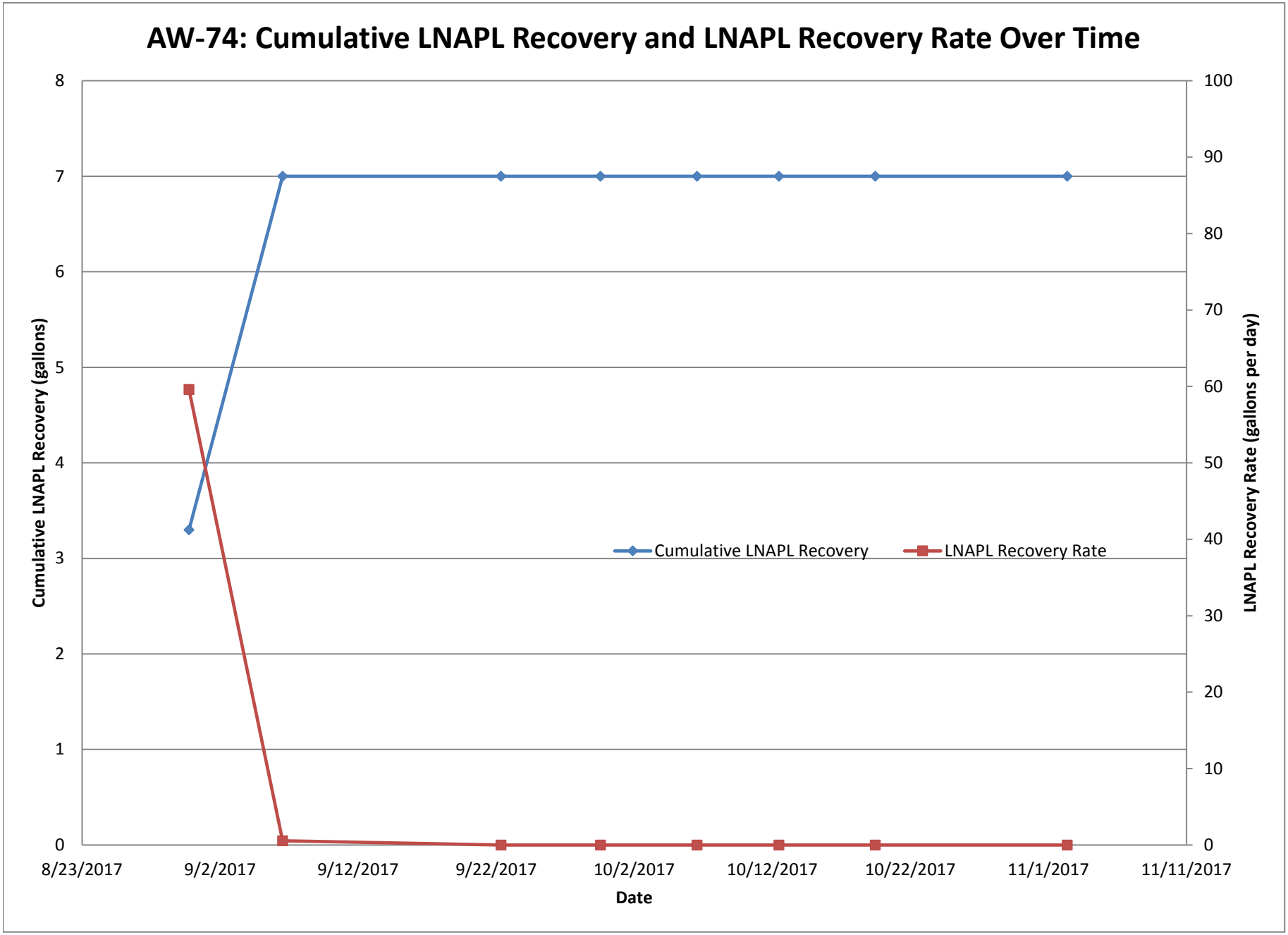
Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-74	Equilibrium							7.97	10.48	2.51	--	0.37		--	--	--	
	8/30/2017 16:00	--	--		--	--	0.0	6.25	8.08	1.83	--			--	--	--	
	8/30/2017 17:48	0.08	0.06	0.06	3.30	3.3	3.3	6.52	6.78	0.26	-1.45		0.37	59.6	7.97	15.8	
	9/6/2017 12:19	6.77	6.77	6.83	7.00	3.7	7.0	7.49	7.70	0.21	-0.48		0.37	0.5	0.07	0.1	
	END OF TEST INTERVAL - SHUTDOWN DUE TO HURRICANE																
	9/21/2017 12:00	--	--		--		--	6.15	6.20	0.05	--			--	--	--	
	9/22/2017 8:12	0.84	0.84	0.84	7.00	0.0	7.0	7.58	7.65	0.07	-0.39		0.37	0.0	0.00	0.0	
	9/29/2017 12:55	7.20	7.20	8.04	7.00	0.0	7.0	7.95	7.99	0.04	-0.02		0.37	0.0	0.00	0.0	
	10/6/2017 12:55	7.00	7.00	15.04	7.00	0.0	7.0	6.74	6.75	0.01	-1.23		0.37	0.0	0.00	0.0	
	10/12/2017 11:12	5.93	5.93	20.97	7.00	0.0	7.0	8.88	8.95	0.07	0.91		0.37	0.0	0.00	0.0	
	10/19/2017 10:50	6.98	6.98	27.95	7.00	0.0	7.0	5.94	5.97	0.03	-2.03		0.37	0.0	0.00	0.0	
	11/2/2017 8:43	13.91	13.91	41.86	7.00	0.0	7.0	6.77	6.93	0.16	-1.20		0.37	0.0	0.00	0.0	

Assumed LNAPL specific gravity = 0.854

All calculations performed pursuant to the methodology detailed in ASTM E2856-13

[a]The maximum theoretical drawdown is used for each interval calculation where the measured drawdown is negative or where it exceeds the theoretical maximum.

[b]Represents the geometric mean of the stabilized recovery rates/LNAPL transmissivity estimates (i.e., excludes initial elevated values that would not represent potential long-term recovery rates).


AW-74: Cumulative LNAPL Recovery and LNAPL Recovery Rate Over Time
Cumulative LNAPL Recovery (gallons)
LNAPL Recovery Rate (gallons per day)
Date
Cumulative LNAPL Recovery
LNAPL Recovery Rate
0
1
2
3
4
5
6
7
8
0
10
20
30
40
50
60
70
80
90
100
8/23/2017
9/2/2017
9/12/2017
9/22/2017
10/2/2017
10/12/2017
10/22/2017
11/1/2017
11/11/2017

Appendix A-11

AW-82 LNAPL Skimming Test Results - Long-Duration Skimming
Epic Midstream Savannah North Terminal
Savannah, Georgia

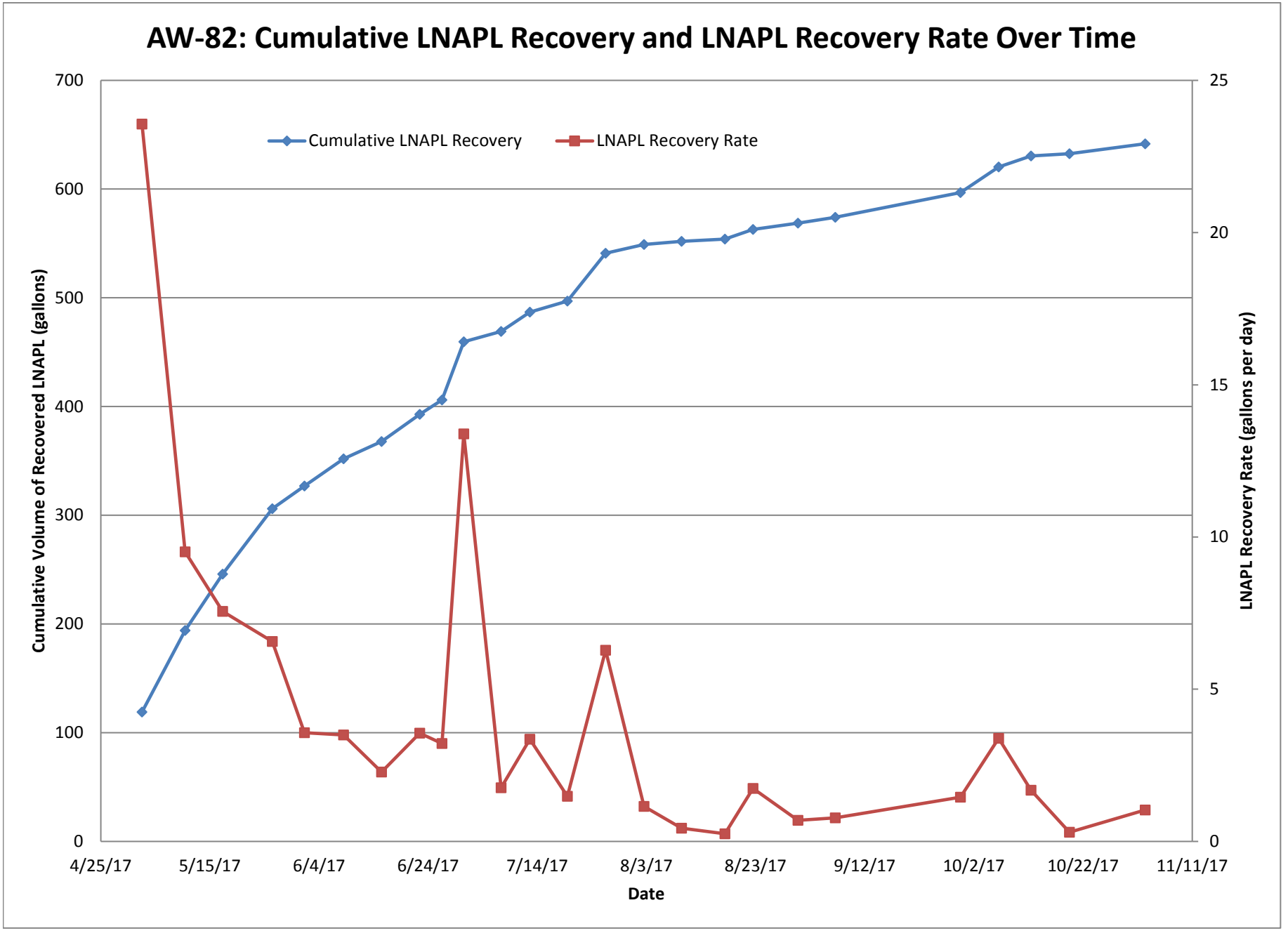
Well ID	Measurement Date & Time	Time Between Measurement Events (days)	Actual Skimmer Run-Time Between Measurement Events (days)	Cumulative Run Time (days)	Total Volume of LNAPL Recovered (gallons)	Volume of LNAPL Recovered During Measurement Interval (gallons)	RUNNING Total Volume of LNAPL Recovered (gallons)	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	In-Well LNAPL Thickness (feet)	LNAPL Drawdown (feet)	Maximum Theoretical Unconfined LNAPL Drawdown (feet)	LNAPL Drawdown Used in Transmissivity Estimate[a] (feet)	Average LNAPL Recovery Rate for Interval (gal/day)	Average LNAPL Recovery Rate for Interval (ft^3/day)	Estimated LNAPL Transmissivity for Interval (ft^2/day)	Overall Average LNAPL Transmissivity[b] (ft^2/day)
AW-82	**Equilibrium**							9.50	12.47	2.97	--	0.43		--	--	--	
	4/27/2017 11:50	--	--	0.00	--	--	--	9.97	13.02	3.05	--			--	--	--	
	5/2/2017 13:01	5.05	5.05	5.05	119.00	119.0	119.0	11.23	11.38	0.15	1.73		0.43	23.6	3.15	5.4	
	5/10/2017 10:17	7.89	7.89	12.94	194.00	75.0	194.0	10.85	12.26	1.41	1.35		0.43	9.5	1.27	2.2	
	5/17/2017 7:24	6.88	6.88	19.82	246.00	52.0	246.0	10.93	11.09	0.16	1.43		0.43	7.6	1.01	1.7	
	5/26/2017 10:34	9.13	9.13	28.95	306.00	60.0	306.0	10.96	11.15	0.19	1.46		0.43	6.6	0.88	1.5	
	6/1/2017 7:34	5.88	5.88	34.82	327.00	21.0	327.0	10.61	10.80	0.19	1.11		0.43	3.6	0.48	0.8	
	6/8/2017 11:05	7.15	7.15	41.97	352.00	25.0	352.0	10.31	10.45	0.14	0.81		0.43	3.5	0.47	0.8	
	6/15/2017 10:20	6.97	6.97	48.94	367.90	15.9	367.9	10.81	10.98	0.17	1.31		0.43	2.3	0.30	0.5	
	6/22/2017 11:00	7.03	7.03	55.97	392.90	25.0	392.9	10.48	10.63	0.15	0.98		0.43	3.6	0.48	0.8	
	6/26/2017 12:38	4.07	4.07	60.03	406.00	13.1	406.0	10.51	10.66	0.15	1.01		0.43	3.2	0.43	0.7	
	6/30/2017 12:34	4.00	4.00	64.03	459.50	53.5	459.5	10.56	11.45	0.89	1.06		0.43	13.4	1.79	3.0	
	7/7/2017 7:55	6.81	5.38	69.41	469.00	9.5	469.0	10.00	10.90	0.90	0.50		0.43	1.8	0.24	0.4	
	7/12/2017 15:11	5.30	5.30	74.71	486.80	17.8	486.8	10.08	10.16	0.08	0.58		0.43	3.4	0.45	0.8	
	7/19/2017 11:52	6.86	6.86	81.57	497.00	10.2	497.0	10.15	10.24	0.09	0.65		0.43	1.5	0.20	0.3	
	7/26/2017 11:35	6.99	6.99	88.56	540.90	43.9	540.9	10.04	10.06	0.02	0.54		0.43	6.3	0.84	1.4	
	8/2/2017 12:26	7.04	7.04	95.60	549.00	8.1	549.0	9.70	9.91	0.21	0.20		0.20	1.2	0.15	0.6	
	8/9/2017 10:03	6.90	6.90	102.50	552.00	3.0	552.0	9.75	9.90	0.15	0.25		0.25	0.4	0.06	0.2	
	8/17/2017 8:21	7.93	7.93	110.43	554.00	2.0	554.0	9.42	9.45	0.03	-0.08		0.43	0.3	0.03	0.1	
	8/22/2017 12:15	5.16	5.16	115.59	563.00	9.0	563.0	9.48	9.58	0.10	-0.02		0.43	1.7	0.23	0.4	
	8/30/2017 17:42	8.23	8.23	123.82	568.70	5.7	568.7	9.52	9.66	0.14	0.02		0.22	0.7	0.09	0.3	
	9/6/2017 14:20	6.86	6.86	130.67	574.00	5.3	574.0	--	--	--	--		0.43	0.8	0.10	0.2	
	END OF TEST INTERVAL - SHUTDOWN DUE TO HURRICANE																
	9/21/2017 11:28	--	--	--	--	--	574.0	8.59	10.61	2.02	--			--	--	--	
	9/22/2017 8:51	0.89	0.89	131.57	12.30	12.3	586.3	9.35	9.41	0.06	-0.15		0.43	13.8	1.85	3.1	
	9/29/2017 12:35	7.16	7.16	138.72	22.70	10.4	596.7	9.54	9.70	0.16	0.04		0.40	1.5	0.19	0.4	
	10/6/2017 12:23	6.99	6.99	145.71	46.40	23.7	620.4	9.05	10.36	1.31	-0.45		0.43	3.4	0.45	0.8	
	10/12/2017 10:45	5.93	5.93	151.64	56.40	10.0	630.4	9.75	9.92	0.17	0.25		0.25	1.7	0.23	0.7	
	10/19/2017 11:30	7.03	7.03	158.68	58.50	2.1	632.5	9.27	9.39	0.12	-0.23		0.43	0.3	0.04	0.1	
	11/2/2017 8:34	13.88	8.91	167.58	67.70	9.2	641.7	10.20	10.44	0.24	0.70		0.43	1.0	0.14	0.2	0.6

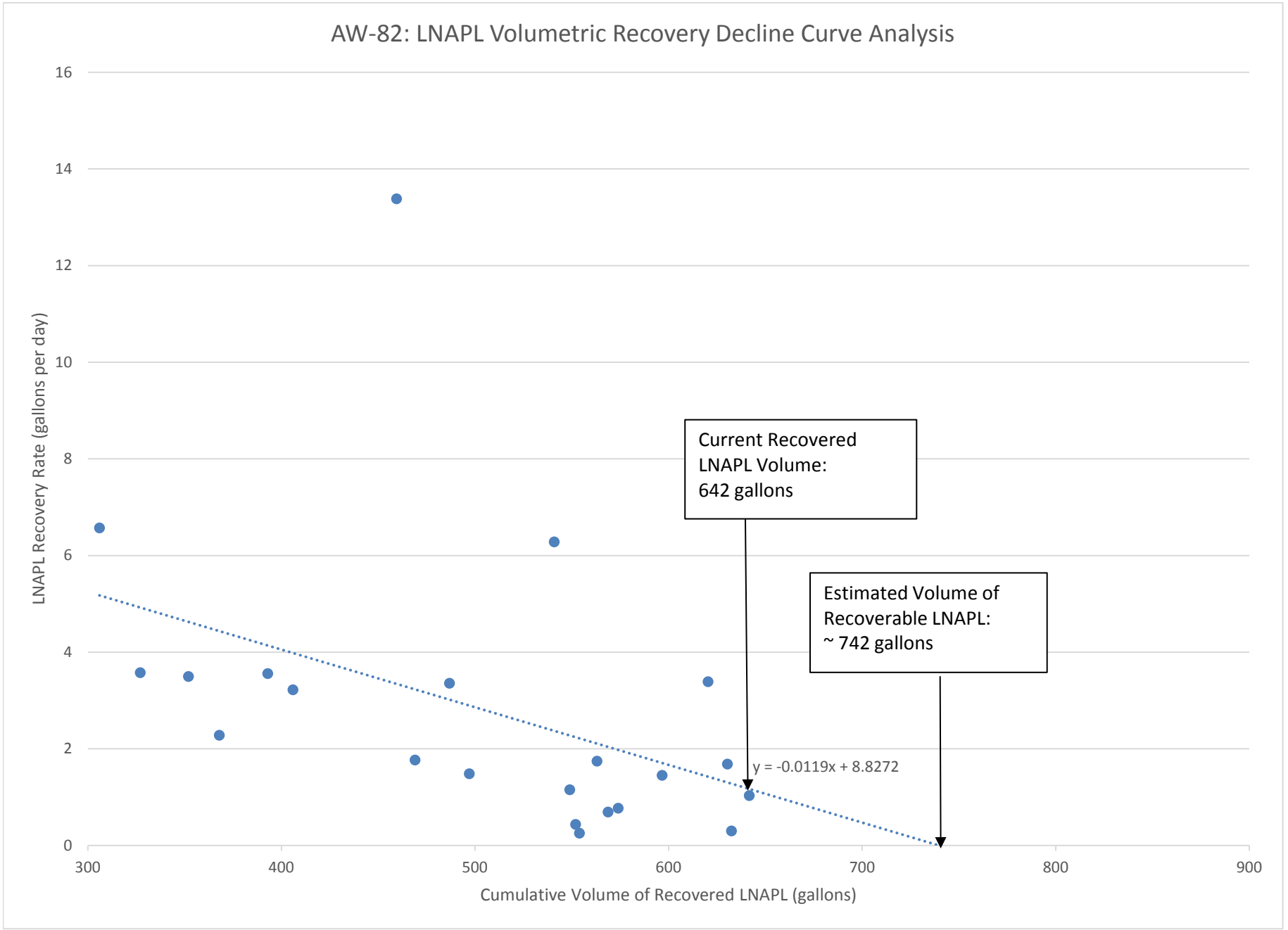
Assumed LNAPL specific gravity = 0.854

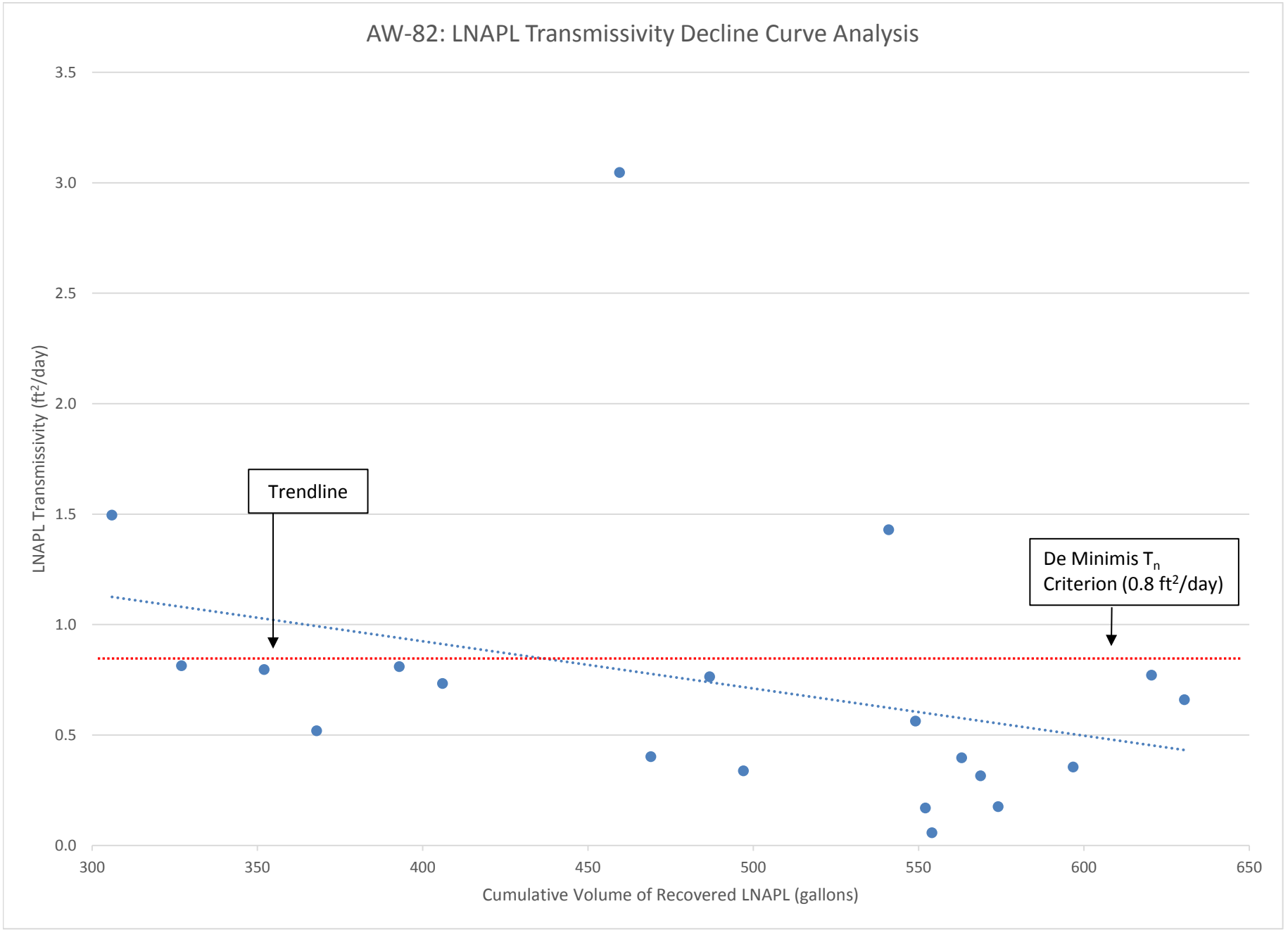
All calculations performed pursuant to the methodology detailed in ASTM E2856-13

[a]The maximum theoretical drawdown is used for each interval calculation where the measured drawdown is negative or where it exceeds the theoretical maximum.

[b]Represents the geometric mean of the stabilized recovery rates/LNAPL transmissivity estimates (i.e., excludes initial elevated values that would not represent potential long-term recovery rates).


AW-82: Cumulative LNAPL Recovery and LNAPL Recovery Rate Over Time
Cumulative LNAPL Recovery
LNAPL Recovery Rate
Cumulative Volume of Recovered LNAPL (gallons)
LNAPL Recovery Rate (gallons per day)
Date
0
100
200
300
400
500
600
700
0
5
10
15
20
25
4/25/17
5/15/17
6/4/17
6/24/17
7/14/17
8/3/17
8/23/17
9/12/17
10/2/17
10/22/17
11/11/17


AW-82: LNAPL Volumetric Recovery Decline Curve Analysis
LNAPL Recovery Rate (gallons per day)
Cumulative Volume of Recovered LNAPL (gallons)
16
14
12
10
8
6
4
2
0
300
400
500
600
700
800
900
Current Recovered LNAPL Volume: 642 gallons
Estimated Volume of Recoverable LNAPL: ~ 742 gallons
y = -0.0119x + 8.8272


AW-82: LNAPL Transmissivity Decline Curve Analysis
LNAPL Transmissivity (ft²/day)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
300
350
400
450
500
550
600
650
Cumulative Volume of Recovered LNAPL (gallons)
Trendline
De Minimis Tn
Criterion (0.8 ft²/day)

Appendix B
Engineering Fees Summary
May 1, 2017 through November 11, 2017

Appendix B

Engineering Fees
Epic Midstream Savannah North Terminal
Savannah, Georgia

89400
Epic Midstream
Savannah, Georgia
May 1, 2017 through November 11, 2017

Employee	Hours		Effort
Pyle, Robert T.	4.75	$	788.50
Ramacciotti, Francis	7	$	1,036.00
Rousseau, Matthew	3.5	$	518.00
Dizinno, John	237.5	$	35,150.00
Pyle, Robert T.	8	$	1,120.00
Dizinno, John	53	$	6,095.00
Labbe, Marissa	2	$	230.00
Talbert, Matthew	197	$	18,715.00
Lindo, Stephanie	20	$	1,900.00
Brennan, Deborah	1	$	115.00
Grace, Steven	348	$	31,348.00
Singleton, Amy	1	$	80.00
Balzer, Gerard R.	7.5	$	750.00
McLean, Peter A	0.5	$	50.00
Tomlinson, Stephen P	2	$	150.00
Bouquet, Holly	8	$	600.00
Cameron, Mary	0.5	$	58.00
Grana, Laura	3	$	135.00
	904.25	$	98,838.50

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