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FOCUSED GROUNDWATER ELEVATION INVESTIGATION STUDY SUMMARY REPORT

Cold Springs Northern Terminal

Lysander, New York

June 15, 2018

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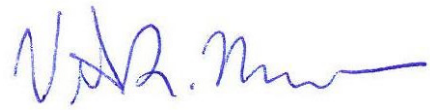

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1 INTRODUCTION

This Focused Groundwater Elevation Investigation Summary Report (Report) summarizes the work performed pursuant to and the findings of the Focused Investigation Work Plan (Arcadis, 2016) (FIWP) regarding the study of groundwater-surface water interaction (including related soil sampling and ground water elevation monitoring) in the vicinity of the vacant property (former terminal facility) located north of Hillside Road in Lysander, New York (Northern Property). The Site is described below, and its location is shown on Figure 1. The work under the FIWP (Focused Investigation) consisted of, among other work:

- Installing a network of nested specifically-screened piezometers, along with surface water staff gauges, and collecting continuous water level measurements to: (1) study the groundwater-surface water interaction at the Site; and (2) assess the horizontal and vertical gradients that may be present at the study area.

The Focused Investigation was performed in accordance with the FIWP and in accordance with New York State Department of Environmental Conservation (NYSDEC), Department of Environmental Remediation Program Policy DER-10, Technical Guidance for Site Investigation and Remediation (DER-10, May 2010). The FIWP, which is attached as Appendix A. The FIWP was submitted to NYSDEC February 22, 2016, but was not reviewed or formally approved.

At the time of the data collection, the Site consisted of the over grown, wooded, vacant Northern Property, the delivery line right-of-way (ROW), and the two inactive terminals located on the southeastern and southwestern sides of the property immediately south of Hillside Road (respectively Southeastern Terminal and Southwestern Terminal, and collectively Southern Terminals). The Southern Terminals contained several standing above ground storage tanks (ASTs), loading racks, pipe chases, and assumed but not mapped subsurface utilities. To facilitate a focused remedial assessment and account for the differing Site conditions, the FIWP was broken into four distinctive areas based on the results of previous investigations (see Figure 2) and access to the property. These areas are as follows:

- Area 1 – Area proximal to monitoring well BMW5
- Area 2 – Former transfer pump area
- Area 3 – Delivery line ROW between the two Southern Terminals
- Area 4 – Area proximal to monitoring well B18

1.1 Groundwater Flow Pattern Overview and Summary

This document reports on the groundwater / surface water interaction investigation as well as the soil data collected during the installation of the piezometers used for the study. As will be discussed in detail below, depth to groundwater and surface water was recorded at the piezometer and surface water gauging locations every 30 minutes over a period of 12-weeks. This was conducted to assess groundwater flow direction and the relationship to the Seneca River to the site groundwater. Additionally, all precipitation events were researched over the same12-week period. The purpose of the data gathering was to understand the groundwater flow patterns at the site and how they are related to the elevation of the Seneca River and precipitation events.

During the 12-week period, there was a detectable correlation between precipitation events and groundwater flow direction. Following some precipitation events, the groundwater flow is from the south to the north (away from the Seneca River) and this flow is sustained for a period of time. This northerly flow condition was observed multiple times during the 12-week period.

In analyzing the data, there is not a direct correlation between the amount of rain and groundwater flow pattern, but there is a correlation between rain intensity, duration and groundwater flow reversal. Rain events that had a longer duration and or were of lower intensity yielded a greater influence on the water table and groundwater flow pattern. In other words, it appears that slow soaking storms allow for increased infiltration to the groundwater table causing the overall groundwater flow to reverse towards the north. In contrast, one intense high production storm passed through the Site during the study period but yielded little response to the water table and no reverse flow was observed. Therefore, it appears that the slow soaking storms, which would likely include snow melt events, will have a greater impact on the groundwater flow reversal.

It is also of important note that the relationship between the Seneca River and the site groundwater is changeable over time. There are times during the study that the River was in a gaining condition with respect to groundwater and other times when it is in a losing condition.

The groundwater / surface water interaction study was conducted over a 12-week period, and there were multiple times that the groundwater flow was reversed indicating there is fluctuation and changeability in the groundwater flow direction. Given this complex groundwater / surface water relationship that was observed in the 12-week period, it is reasonable to conclude that there has been contaminant transport to the north and south over the multi-decade operation of the terminals at the Site.

The details of the groundwater / surface water study conducted are set forth below.

2 FOCUSED INVESTIGATION FIELD ACTIVITIES AND METHODS

Key work activities performed as part of the FIWP are described under the following subsections:

Subsection 2.1 – Site Reconnaissance and Pre-Investigation Activities

Subsection 2.2 – Groundwater/Surface Water Interaction Study Field Activities

Subsection 2.3 – Survey

2.1 Site Reconnaissance and Pre-Investigation Activities

Prior to mobilization, Parratt-Wolff provided notification of ground disturbance as required by law to the NY Underground Facility Protection Organization (aka DigSafeNY) for locating all subsurface utilities. Additionally, prior to initiating drilling activities, a private utility locator, Master Locators using ground penetrating radar (GPR) and electromagnetic detection tools, provided additional utility mark outs in the proposed areas of investigation.

A pre-entry safety meeting and Site walk (reconnaissance) was conducted prior to drilling mobilization and attended by personnel from Buckeye Pipeline Company, L.P.(Buckeye), Arcadis, and Parratt-Wolff Drilling Inc. (Parratt-Wolff). The tailgate meeting was held to discuss the scope of work and coordinate logistics (Site access, work hours, health and safety expectations, etc.). The meeting was followed by a reconnaissance Site walk to: (1) observe infrastructure locations and assess the location of any utilities that would cause scope modifications; and (2) observe site conditions and potential constraints such as vehicular traffic, steep slopes north of investigation area, brush, etc. Sample locations were adjusted accordingly to Site conditions to ensure work was completed in an efficient manner.

2.2 Groundwater/Surface Water Interaction Study Field Activities

Six pairs of nested piezometers (PZ101S/D through PZ106S/D, 12 total piezometers) were proposed as part of the FIWP for installation starting on the north side of Hillside Drive (Area 1, Area 2 and Area 4) and progressing into the ROW (Area 3), towards the Seneca River. These areas are shown on Figures 2, 3, and 4. Piezometer location and construction information is shown on Table 1. The locations were chosen based upon access to the property. All proposed piezometers were installed according the FIWP except PZ106D. The borehole for PZ106S terminated at basal till and thus there was no opportunity to install a deeply screened piezometer at this location. Figure 2 shows the surveyed locations of each of the piezometers.

The soil borings for each of the piezometers were drilled using hollow stem auger rotary methodology. Soil samples were continuously collected from grade to termination depth using 2-inch-diameter 4-foot-long macro-core liners or 2-inch diameter 2-foot long split spoon samplers. All collected soil samples were field screened for volatile organic compounds (VOCs) using a calibrated field photo-ionization detector (PID). These data are presented on Table 2 and 3 as discussed below. Select soil samples with measurable PID readings were retained and submitted for laboratory analysis. Soil characteristics were continuously logged by an Arcadis geologist for texture, grainsize, moisture content, and the potential presence of impacts via field PID instrumentation. Each boring termination depth was determined in the

field by the on-site geologist and by the goals of the specific piezometer location. Boring termination depth was based on field indication of absence of impacts or 10 feet below first detection of the water table, whichever was first encountered for the deeper screened piezometers.

Soil samples retained for laboratory analysis were analyzed by PACE Analytical Services, Inc. in Pittsburgh, Pennsylvania for constituents listed in NYSDEC Policy CP-51 (Policy CP-51), Tables 2 and 3 (Soil Cleanup Levels for Gasoline and Fuel Oil Contaminated Soils, respectively). Samples were also analyzed for methyl-tert-butyl-ether (MTBE) and ethanol. Analytical methods used were USEPA 8260 and 8270.

The piezometers located in Area 3, PZ104 and 105 locations were selected and adjusted based on information learned from previous site investigations and available historic facility maps. This information indicated that there are three suspected shallow distribution lines oriented north-south through Area 3. These shallow distribution lines were uncovered by hand / soft digging methods to visually verify their location, depth, orientation, and direction. Boring locations were subsequently adjusted in an east/west direction based on these utilities.

Piezometers were constructed using 2-inch inside diameter (ID) schedule 40 polyvinyl chloride (PVC) material. Shallow piezometers (PZ-101S though PZ-106S) extend to approximately 20 feet bgs and are constructed with a 15-foot 0.010-inch slot screen placed to straddle the water table (i.e., 10 feet below the average water table elevation and 5 feet above the average water table elevation). Deeper piezometers (PZ-101D though PZ-105D) were extended to the top of the glacial till and were fitted with short screen sections. The deeper piezometers were constructed using 2-foot long 0.010-inch slot screens utilizing standard well construction methods with appropriately sized clean imported sand pack. An approximate 5-foot bentonite seal was placed approximately 1 foot above the top of the piezometer screen. Piezometers were completed at grade with bolting curb-boxes. Soil boring and piezometer construction logs are provided in Appendix B. The 2-foot long screened sections of the deeper piezometers overlap with the bottom section of the longer screens of the S series piezometers. The D series piezometers measure the head conditions at the bottom of the unit while the S series piezometers measure the average head across the entire water bearing unit located above the basal till.

Seneca River water levels were monitored via two (redundant) staff gauges installed on the proximal Mid Lakes Navigation tour boat dock. These staff gauges were designed to provide a location from which the water elevation of the Seneca River could be recorded during the study period.

Automatic pressure transducers (Solinst Level Troll 700) were installed on April 22, 2016, inside each piezometer and in the two staff gauges. Pressure transducers allowed for the collection of nearly continuous water levels (30-minute intervals) over the twelve-week study period. Data were downloaded and processed from the transducers on a weekly basis. Groundwater and surface water elevations were evaluated to assess the magnitude and direction of hydraulic gradients (i.e., groundwater flow direction) across the study area. The combined data set of measured groundwater levels and the surface water level in Seneca River enabled an evaluation of groundwater gradient interaction with the river.

As a redundant step, manual water-level measurements were completed at each piezometer and river gauge weekly throughout the study period. All transducers were inspected, and data downloaded each week during the manual gauging events.

2.3 Survey

All soil borings, piezometers, and surface water measurement locations were surveyed by C.T. Male & Associates, a NYS licensed surveyor, on April 26 and August 29, 2016, relative to the datum that has been established for the Site. Survey information was used to convert depths to elevations at each boring location and establish reference elevations for each piezometer.

3 SOIL SAMPLING AND GROUNDWATER ELEVATION MONITORING RESULTS

3.1 Groundwater/Surface Water Interaction Data Collection

As discussed above, 11 piezometers (PZ101S/D through PZ106S) and two (2) staff gauges (SG-1 and SG-2) were installed throughout the study area. (Figure 2). Solinst Level Toll 700 pressure transducers were installed in each of the piezometers and staff gauges. Each transducer was programmed to measure groundwater or surface water elevation by sensing the water pressure in the well and knowing the depth at which the transducer is placed in the piezometer (or staff gauge) as well as the elevation of the top of casing. Each transducer was programed to collect water elevation every 30 minutes for the duration of the study period (12 weeks). The raw transducer data is provided in Appendix C. Throughout the study period, manual depth to water, transducer inspections, and downloads occurred on a weekly basis. The installation depth of each transducer was marked, measured, and used to calculate groundwater elevations from the recorded water measurements. During each weekly inspection, the transducers were inspected and any change in installation depth was noted and factored into the groundwater conversions.

The manual gauging data collected each week was used to verify and ensure that the transducers were working correctly. Weekly review and comparison of the manual gauging and transducer data identified minor issues with some transducers which are described below, along with the steps taken to correct these issues:

- PZ102S – The transducer was replaced on June 15, 2016, after it was determined that it was malfunctioning. This determination was based upon a comparison of the manually collected weekly data comparison found the manual gauging data showed a different and less changeable data pattern. The malfunctioning transducer was replaced on June 15, 2016, with no additional issues for the remainder of the study period. The data gathered before June 15, 2016 was not used in the evaluation of groundwater flow across the site since it was deemed unreliable.
- PZ103D – At the beginning of the study period, the transducer and manual gauging data were consistent; however, due to a low battery the transducer had to be replaced. The second transducer consistently recorded the groundwater elevation 1.5 feet greater than the previous instrument and when compared to the manual gauging data but maintained the same trend as the manual gauging data. In an attempt to have the transducer collected data and the manually collected data match, the second transducer was replaced with a third instrument. The third instrument consistently measured groundwater elevation 2 feet lower than the manually collected data. When compared to the manual gauging data this transducer displayed the same trend. Both the data collected from the second and third transducer was adjusted based on the manually collected to align with the manual gauging data (and by default the initial transducer data). With this correction all the data from PZ103D was used in the evaluation.
- PZ106S – When compared to the other site-wide transducers, the water elevation data and data trend at this piezometer was substantively different from the others. Evaluation of the manual gauging and transducer data indicated parity verifying that the data from PZ106S is accurate.

3.2 Shallow Piezometer Data Findings

Shallow piezometers PZ101S through PZ106S were screened across the water table and down to the top of the till unit. Thus the “shallow” piezometers are measuring an average head for the formation at each location. The historical groundwater monitoring well network established at the site by Aztec and other firms were generally installed in this same manner with relatively long screens straddling the water table. Historic data suggested a consistent general pattern of groundwater flow from the north to the south with an inferred groundwater discharge point of the Seneca River. This study was designed to evaluate this former conclusion via the installation of a transect of piezometers parallel and orthogonal to the historic indicated groundwater flow direction and its interaction with precipitation events.

A relationship was observed in the data between the occurrence of precipitation events and groundwater flow direction. In general, during periods of non-precipitation, (i.e., dry periods) the historic general groundwater flow from north to south conclusion was confirmed by this study whereby the highest heads in the shallow piezometer set were measured in the most northern locations of the study. Figure 5 depicts this condition in which there is a gradient from the northern area, across the southern terminal with the lowest water elevation data found at the Seneca River.

However, data collected during the study period also documented occurrences of groundwater flow reversals. Groundwater flow reversals (for the purpose of this document the phrase “groundwater flow reversal” refers to groundwater flowing from south to north) are indicated when shallow piezometers closer to the southern edge of the study area (closer to the Seneca River) are documented to have a higher head than piezometers located further north in the study area. The data depicted on Figure 6 indicated head data from PZ104S higher than head data from PZ101S, PZ102S, and PZ103S. The occurrences of groundwater flow reversals were observed several times during the 12-week study period. A second example is presented on Figure 7. These occurrences of reversal where PZ104S indicates the highest head of the group PZ101, PZ102, PZ103, and PZ104 are relatively short lived, lasting anywhere from about an hour to about three and one-half days. However, a more sustained groundwater flow reversal was indicated by the data generated from PZ103S and PZ102S as compared to PZ104S. Beginning on May 26, 2016, through the end of the study period on July 1, 2016, PZ104S indicated a higher head than PZ102S and PZ103S, Figure 8 illustrates this sustained condition as an overall hydrograph of all the shallow piezometer data as well as the staff gauges with the following exceptions:

- PZ102S: Data from this piezometer is presented from June 15, 2016, to the end of the study. As noted above there was some functionality issues with this transducer prior to this date.
- PZ106S: Data from this piezometer is not presented on Figure 8. This data is consistently higher than any of the head data from any of the other piezometers. Since it is consistently higher it caused a scale issue with the usability and interpretability of other comparable heads.

3.3 Deeper Screened Piezometer Data Findings

Deeper discreetly screened piezometers PZ101D through PZ105D were constructed with 2-foot long screens located at the bottom of the first water bearing unit, terminating at the top of the basal till. These locations measure the head at the bottom of the first water bearing unit. This represents new Site project

data for which there was no history of discreetly screened piezometers or groundwater monitoring wells at the project site.

This study was designed to evaluate the following concepts:

- These locations are located proximal to their shallow pair and as such they can measure the presence of the vertical gradients compared to the average head across the unit as measured by the “shallow” piezometers.
- The deeper discreet piezometer set can be used to get a sense of alignment or discrepancy between the heads at the top of the water bearing unit and can be used to infer groundwater flow directions along with the shallowly screened piezometers.

In general terms, the deeper piezometer data do not consistently line up with either the historic shallow aquifer data set that is part of the project data history or those data generated by the shallow piezometer study as discussed above in section 3.3. The following key observations illustrate this:

1. PZ105D, which is the closest piezometer location to the Seneca river, has a consistent head higher than PZ104D located more distal to the river.
2. During one post precipitation event on May 2, 2016, PZ105D had the highest head when compared with PZ101D, PZ102D, PZ103D, and PZ104D. This represents a strong groundwater flow reversal and mirrors the precipitation driven events noted in the shallow piezometer discussion above.
3. PZ103D consistently has a higher head than PZ102D.
4. PZ104D periodically has a head lower than the Seneca River.

Similar to the shallow piezometer data set, these data illustrate the changeable nature of the groundwater flow direction throughout the first water bearing unit. Although PZ105D has a consistent head above PZ104D, the flow “reversal” was exaggerated following the May 2, 2016 precipitation event as noted above. The post precipitation events presented are lined up with the same time horizons as the shallow piezometer study. Figures 9, 10, and 11 show the head data for these events and demonstrate these key observations. An overall deeper piezometer hydrograph is provided as Figure 12.

3.4 Vertical Gradient Evaluation

In order to evaluate vertical gradients at the Site, head data from each piezometer pair was compared over the study period. Vertical gradient can be used to as one line of evidence when evaluating vertical contaminant distribution at any given location. Each pair is discussed below.

- PZ101: An intermittent weak upward gradient is documented beginning on May 26, 2016, and persisting to the end of the study on July 1, 2016 (Figure 13).
- PZ102: There was no vertical gradient documented by this study at PZ102 (Figure 14).
- PZ103: A weak inconsistent and changeable gradient was documented as part of this study. There are periods when there is an upward gradient and periods when there is a downward gradient documented during the study (Figure 15).

- PZ104: When compared with the other nested piezometer pairs PZ104 exhibits the strongest vertical gradient of any set (Figure 16). The documented gradient is downward with a typical delta between the shallow and deep zoned measured in the range of 1 foot. This delta is relatively consistent throughout the study period. It is noted that PZ104D is the only head data that overlaps directly with the elevations of the Seneca River. There are brief but documented periods where the surface water elevation and the groundwater head at this piezometer data are equal.
- PZ105: The vertical gradient measured at PZ105 is consistently upward. The delta between the deeper and shallower data typically ranges less than 0.5 feet with the notable exception of a post precipitation event on May 2, 2016 when the delta was documented in the range of 1.5 feet. It is noted that this post precipitation event is the strongest vertical gradient recorded during the study period (Figure 17).
- PZ106: As noted above a nested piezometer set was not installed at the PZ106 location because the unit above the basal till in this location was too thin to support a nested pair. Instead one piezometer was installed in this location and constructed to match the shallow set of piezometers at the other locations. A hydrograph of the data collected from PZ106S is presented as Figure 18. The data from this piezometer is markedly different from the other piezometers and, as discussed above, documents head conditions in the more northerly sand dominated formation, rather than the complex interbedded sand-silt-clay unit in which the other piezometers are installed.

4 SOIL BORING SAMPLING RESULTS FROM PIEZOMETER LOCATIONS

The underlying Site stratigraphy was found to be consistent with the project record documents. Borings advanced in the more northerly portion of the study area investigated generally encountered a sand dominated regime. Sand ranged from medium to fine and was present in all the borings completed in the northern portions of the study areas investigated. Geologic information from the more southerly PZ104 and PZ105 encountered a more complex, interbedded sand-silt-clay subsurface. Basal glacial till, when encountered, was dense and firm, poorly sorted, and highly compacted. The till was not penetrated at any location. All borings terminated at or above the basal till unit. Boring logs are included in Appendix B.

The soil sample results have been sorted based on sample collection relative to the water table at each location. Segregating the samples into unsaturated and saturated samples allowed for an assessment of the likely impact history at any given location. Samples above the water table, referred to as unsaturated zone samples, are summarized in Table 2. Soil samples collected at or below the water table are referred to as saturated zone samples and are summarized on Table 3. Laboratory reports are provided in Appendix D. A brief summary of the soil results is presented below.

4.1 Unsaturated Zone Soil Findings

As noted above, unsaturated soils are those soils located above the water table at any given sample collection location. Generally speaking these are samples collected between grade and six (6) to eight (8) feet below grade. A single sample from the unsaturated zone that indicated concentrations above SCGs for volatile organic compounds. The sample collected from PZ103 6-8 feet below ground surface indicated a total volatile organic concentration of 2,376 ug/kg which included a detection of 643 ug/kg of total mixed xylenes above the SGC for this compound. While there were detections of other VOCs and SVOCs in the unsaturated zone, there were no other compounds were detected above the SCGs. All shallow zone soil data is presented on Table 1. Volatile detections are graphically depicted on Figure 3. Semi-volatile range compounds were not graphically depicted on a figure since there are no detections above SCGs in the data set.

4.2 Saturated Zone Soil Findings

Detections of VOCs in saturated soil zone above SCG were observed in three (3) of the six (6) piezometer locations. PZ101, PZ102, and PZ103 each had a maximum of 11 CP-51 listed volatile range compounds above the SGC for soils at various depths below the water table at one or more sampling horizon. Soil samples from the saturated zone at borings PZ104, 105, and 106 had no detections above SCGs.

At borings with soil detections above SCG (PZ101, 102, and 103), maximum detections of total volatiles ranged from 1,030,920 ug/kg at PZ103 10-14 feet below ground surface to 1,466,760 ug/kg at PZ102 12-14 feet below ground surface. Regarding the thickness of the horizon exhibiting SCG exceedances, there was at least one compound detected above the SGC from 8 feet below ground surface to 18 feet below ground surface at PZ101. The sampling horizons that had a least one compound above SCGs at PZ102 and PZ103 were from 8 feet below grade 24 feet below grade. There were no compounds above SCG at

PZ104, PZ105, or PZ106 in the saturated zones for VOCs. There were no exceedances of SVOCs in any of the saturated soil samples collected at the PZ locations. All saturated zone soil data is presented on Table 3. Figure 4 graphically depicts the deeper zone maximum total volatile detections.

5 CONCLUSIONS

The objectives of the Focused Investigation were achieved by the completion of the field activities described in this report. Conclusions based on a review of the Focused Investigation data are discussed further in the subsection below.

5.1 Groundwater Flow Pattern

As discussed above, a network of six (6) shallow and five (5) deep piezometers were installed throughout the site along with two (2) staff gauges along the Seneca River. Each of these piezometers were equipped with a transducer which via programing was able to record depth to water head every 30 minutes over a 12-week period. During the study period it was observed that the overall groundwater flow direction based on the average head across the water bearing unit is from the north to the south; from the Northern Property towards the Seneca River. However, this general flow direction is intermittently reversed during and immediately following precipitation events as discussed in section 3.3 and below. The observed changeable groundwater flow direction at the site is likely exaggerated by the complex river plain formational sequence found in the study area. It is also likely affected by the conversion of the Seneca River into the NYS Barge Canal causing controlled and potentially exaggerated river stage reaction to precipitation and snow melt events.

During the 12-week study period there was a detectable correlation between precipitation events and groundwater flow direction. Following precipitation events, the groundwater flow is from the south to the north and is sustained for a period of time. The data indicate precipitation is causal to groundwater flow reversals. When a reversal occurs, the flow direction is away from the river, away from the Southern Terminals, and toward the northern extent of the study area.

One of these distinct flow reversal events occurred on May 2, 2016 (Figure 6), and shows a higher water table elevation measured at PZ104S when compared to PZ101S, 102S, and 103S. Furthermore, this reverse gradient was induced by the rain event, which propagated a minimum of 150 feet horizontally into the historically interpreted “upgradient” direction. This finding cannot be overstated as it suggests the historically proposed site conceptual contaminant transport model proposed by others is dramatically oversimplified and less than completely accurate. The reversals were observed multiple times at the site during the 12-week study period.

Upon further review, it was determined there was not a direct correlation between the amount of total rain and flow reversal but rather a correlation between rain intensity, duration and flow reversal. Rain events which had a longer duration or were of lower intensity yielded a greater influence on the water table and thus flow reversal. It is hypothesized that these types of slow soaking storms allow for increased infiltration to the groundwater table causing the overall groundwater flow to reverse so that groundwater flows from south to north as was the case during the May 2, 2016, event. Similar slow soaking events can be imagined during snow melt times. The opposite effect was observed during the May 29, 2016, event in which an intense high production storm passed through the site and yielded little response to the water table and no reversal in flow was observed. The suggestion is that this type of event was able to run off (via overland flow vs infiltration) without significant impact to the water table gradient pattern.

There are also times when the surface water is at higher elevation than the groundwater elevation at the bottom of the formation at PZ104D. Note, this is not the piezometer that is closest to the Seneca River. However, this does suggest that at times the Seneca River is in a losing condition (meaning that the River is losing water to the groundwater system) and times when it is in a gaining condition (meaning that the River is a receiving water from the groundwater system) with respect to the Site groundwater.

The correlation between groundwater flow reversal and rain intensity is a newly measured observation at the Site and provides an additional line of evidence to support the previously discussed concept that contaminant transport in the environment can migrate towards the Northern Property under certain conditions. The other lines of evidence in the project historical record that support this conclusion are:

1. Apparent extreme product thickness measured at BMW-5 during the spring of 1993.
2. Detection of gasoline additives via the Zymax forensic report at GWMPTW-1.

5.2 Contaminant Mass Distribution Conclusions

When these lines of evidence are considered using a multiple line of evidence approach the following conclusions can be drawn:

- The historical fate and transport conceptual model suggesting that the Southern Terminals are downgradient of the Northern Property is at minimum oversimplified and more likely not completely accurate.
- The lines of evidence noted above provide evidence of transport of contaminant mass from the south to the northern portions of the study area.
- The groundwater-surface water relationship is complex and changeable based on river stage and precipitation activity. There are times when the Seneca River is a gaining river and times when it is a losing river. Although not measured during the study period due to the limited time of data collection, this relationship is complex and complicated by annual controlled raising and lowering of the Seneca River as part of the NYS Barge Canal System.
- Given that a 12-week study can detect gross fluctuations and changeability in groundwater flow directions, it is reasonable to conclude a Site hydrogeologic history coupled with a multi decade contaminant mass in the subsurface has likely undergone innumerable groundwater flow direction changes.
- The impacts detected in the vicinity of Hillside Drive have the potential to have migrated from source areas located south of Hillside Drive. This conclusion, however, requires additional data collection in the Northern Property area.

5.3 Adsorbed Phase Contaminant Distribution

To assess contaminant distribution patterns, soil samples were collected from one piezometer penetration per pair. Each sample collected was evaluated and categorized as either unsaturated (shallow) or saturated (deeper). This determination was based on the location of the water table observed during drilling and consideration of historic site wide water table elevations.

Therefore, any soil samples collected above indications of water table are considered unsaturated and not historically influenced by the water table or capillary fringe. Soil samples collected below the water table elevation are interpreted to be influenced by the water table/capillary fringe and are considered saturated zone samples. Segregating the samples into unsaturated and saturated samples allowed for an assessment of the likely impact history at any given location. The premise being when shallow, above water table, impacts are detected, then the boring is directly in contact with, or very close to, the spill source. Conversely, samples collected in the unsaturated zone with constituent concentration below SCG, indicate that there is little or no (surface) spill history at or near the subject location. In that way, mapping shallow impacts has the potential ability to identify surface and near surface spills and spill sources.

5.3.1 Unsaturated Zone Soil Data

An assessment of the shallow soil detections above SCGs shows there is no indication of spill history or overland transport of petroleum in the specific areas investigated by the advancement of the piezometers.

Shallow VOC concentrations were above SCGs only in PZ103 in the 6-8 foot sample with no concentrations of other VOCs or SVOCs above SCGs detected above this horizon. Based on the location of PZ103 and the lack of impacts between grade and 6 feet, it is unlikely that this data is reflective of a surface spill in this area. These data are presented on Table 2 and Figure 3.

SVOCs were not detected in the shallow zone above SCG in the other piezometer locations.

5.3.2 Saturated Soil Data

An examination of the saturated zone soil samples from the piezometer borings suggests that there is a mass of contaminant above SCGs located in the vicinity of PZ101, PZ102, and PZ103 at and below the water table.

As noted above, data collected from the saturated zone indicated compounds detected above the SCGs must be compared to the unsaturated zone samples from the same locations. This allows for an interpretation as to the potential source for the impacts. Impacts at the water table not connected to shallow impacts at the same or immediately proximal locations are not likely locally sourced. This type of finding suggests that the mass has been transported from a spill location different from the location where they have been detected.

This is demonstrated by the constituent compounds above SCGs documented at PZ101, PZ102, and PZ103 since there are nearly no corresponding shallow zone concentrations above SCGs. Conclusions about likely source areas for the constituent mass detected at PZ101, PZ102, and PZ103 locations cannot be drawn based strictly on this data set. The locations of this group of soil borings are horizontally between potential source infrastructure on both the northern terminal and the southwestern terminal.

The presence of minimal surface impacts and lack of distinct connection between impacts present in the saturated and unsaturated zones supports the conclusion that the impacts were transported via fluid transport at or in conjunction with the water table and not from historic surface spills in these investigated areas of the site. As discussed above, the hydraulic gradient in this area of the site is variable and the area of these three piezometers is not consistently downgradient or upgradient of either the northern or southern terminals.

TABLES

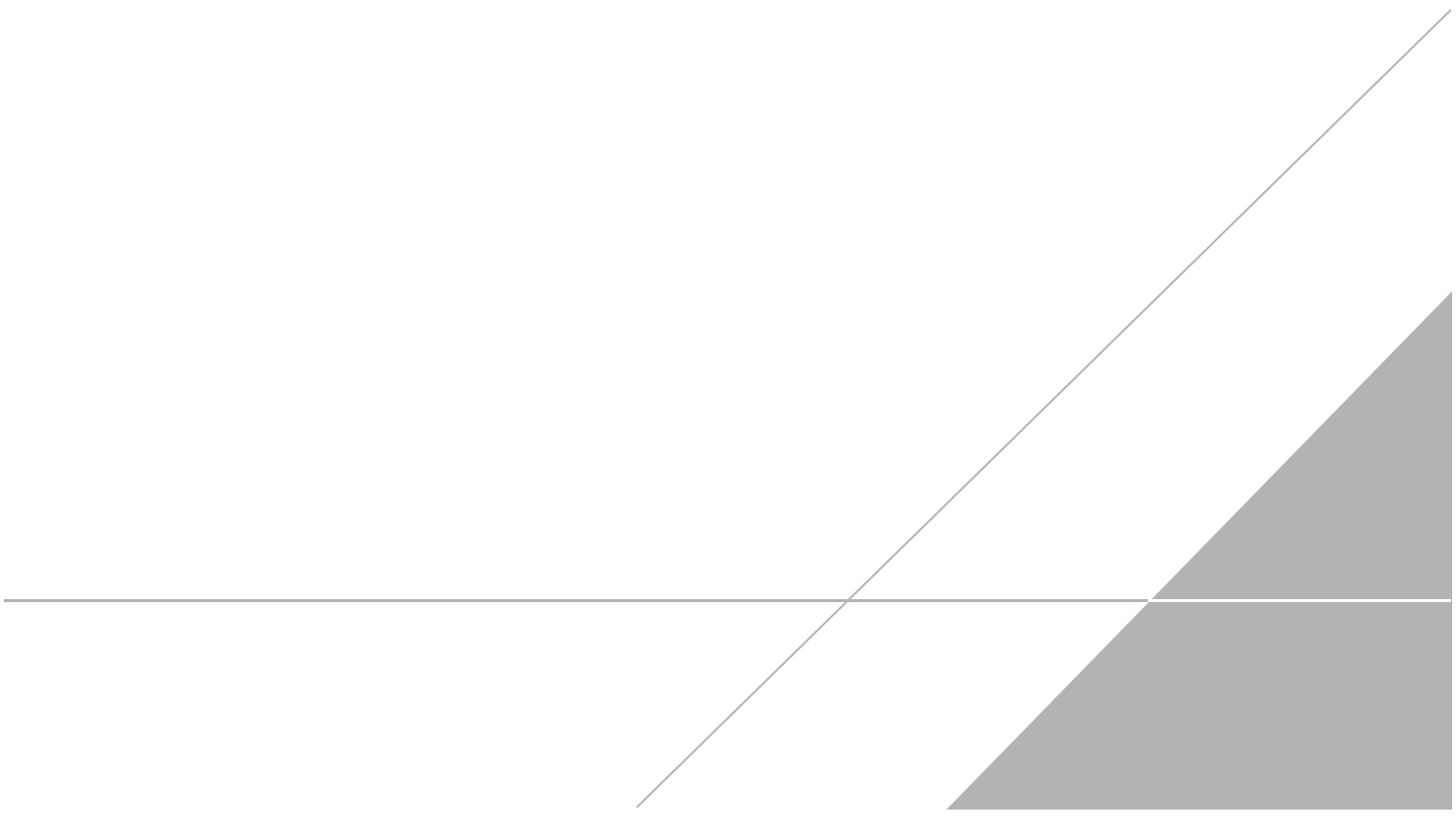


Table 1
Piezometer Information Summary Table

Focused Groundwater Elevation Investigation Study Summary Report
Cold Springs Northern Terminal
Lysander, New York

Well Name	Northing	Easting	Top of Casing	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
PZ101S	1141201.60	908825.26	379.32	375.32 (4)	360.32 (19)
PZ101D	1141202.22	908828.54	379.37	359.37(20)	357.37 (22)
PZ102S	1141209.50	908962.03	378.06	374.06 (4)	359.06 (19)
PZ102D	1141209.64	908965.29	377.96	356.96 (21)	354.96 (23)
PZ103S	1141188.99	908991.64	377.66	372.66 (5)	357.66(20)
PZ103D	1141188.45	908997.05	377.65	353.65 (24)	351.65 (26)
PZ104S	1141105.98	909024.96	373.88	368.88 (5)	353.88 (20)
PZ104D	1141108.91	909024.65	373.98	350.98 (23)	348.98 (25)
PZ105S	1141062.75	909032.42	373.47	368.47 (5)	353.47 (20)
PZ105D	1141062.30	909029.55	373.41	349.41 (24)	347.41 (26)
PZ106S	1141279.48	909152.97	374.02	368.52 (5.5)	358.52 (15.5)

Notes:
Elevations are based on NAVD 88 Datum.
Coordinates are based on the Central Zone of the NYS Plane Coordinate System NAD 83.
ft bgs = feet below ground surface

Table 2
Summary of Unsaturated Zone Soil Analytical Results

Focused Groundwater Elevation Investigation Study Summary Report
Cold Springs Northern Terminal
Lysander, New York

Location ID:	CP51 Table 2 Gasoline Contaminated Soils	CP51 Table 3 Fuel Oil Contaminated Soils	Units	PZ101			PZ102			PZ103				
Sample Depth(ft):				2 - 4	4 - 6	6 - 8	2 - 4	4 - 6	6 - 8	0 - 1	1 - 3	3 - 5	4 - 6	6 - 8
Date Collected:				04/04/16	04/18/16	04/18/16	04/04/16	04/14/16	04/14/16	04/08/16	04/08/16	04/08/16	04/08/16	04/13/16
VOCs (EPA 8260C)														
1,2,4-Trimethylbenzene	3,600	3,600	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	327
1,3,5-Trimethylbenzene	8,400	8,400	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	262 U
Benzene	60	60	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	262 U
Ethanol	- -	- -	ug/kg	261 U	213 U	229 U	222 U	222 U	215 U	249 U	211 U	233 U	NA	10,500 U
Ethylbenzene	1,000	1,000	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	262 U
Isopropylbenzene	2,300	2,300	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	262 U
m&p-Xylene	- -	- -	ug/kg	13.1 U	10.7 U	11.5 U	11.1 U	11.1 U	10.8 U	12.4 U	10.6 U	11.7 U	NA	643
Methyl-Tert-Butyl-Ether	930	- -	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	262 U
Naphthalene	12,000	12,000	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	5.3 U	5.2 U	5.8 U	NA	871
n-Butylbenzene	12,000	12,000	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	262 U
n-Propylbenzene	3,900	3,900	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	262 U
o-Xylene	- -	- -	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	262 U
p-Isopropyltoluene	10,000	10,000	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	262 U
sec-Butylbenzene	11,000	11,000	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	5.3 U	5.2 U	5.8 U	NA	262 U
Tert-Butylbenzene	5,900	5,900	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	262 U
Toluene	700	700	ug/kg	6.5 U	5.3 U	5.7 U	5.6 U	5.6 U	5.4 U	6.2 U	5.3 U	5.8 U	NA	535
Total VOCs	- -	- -	ug/kg	261 U	213 U	229 U	222 U	222 U	215 U	249 U	211 U	233 U	NA	2,376
Xylene (Total)	260	260	ug/kg	13.1 U	10.7 U	11.5 U	11.1 U	11.1 U	10.8 U	12.4 U	10.6 U	11.7 U	NA	**643**
SVOCs (EPA 8270D by SIM)														
Acenaphthene	- -	20,000	ug/kg	8.6 U	8.1 U	7.7 U	8.4 U	8.2 U	8.1 U	75.1 U	7.7 U	8.3 U	NA	8.1 U
Acenaphthylene	- -	100,000	ug/kg	8.6 U	8.1 U	7.7 U	90.2	8.2 U	8.1 U	90.7	7.7 U	8.3 U	NA	8.1 U
Anthracene	- -	100,000	ug/kg	8.6 U	8.1 U	7.7 U	81.7	8.2 U	8.1 U	75.1 U	7.7 U	8.3 U	NA	8.1 U
Benz(a)Anthracene	- -	1,000	ug/kg	8.6 U	8.1 U	7.7 U	671	8.2 U	8.1 U	329	7.7 U	8.3 U	NA	8.1 U
Benzo(a)Pyrene	- -	1,000	ug/kg	8.6 U	8.1 U	7.7 U	749	8.2 U	8.1 U	433	7.7 U	8.3 U	NA	8.1 U
Benzo(b)Fluoranthene	- -	1,000	ug/kg	14.8	8.1 U	7.7 U	884	8.2 U	8.1 U	761	8.7	13.2	NA	8.1 U
Benzo(g,h,i)Perylene	- -	100,000	ug/kg	8.6 U	8.1 U	7.7 U	327	8.2 U	8.1 U	313	7.7 U	8.3 U	NA	8.1 U
Benzo(k)Fluoranthene	- -	800	ug/kg	13.1	8.1 U	7.7 U	373	8.2 U	8.1 U	755	8.6	13.2	NA	8.1 U
Chrysene	- -	1,000	ug/kg	8.6 U	8.1 U	7.7 U	665	8.2 U	8.1 U	317	7.7 U	8.3 U	NA	8.1 U
Dibenzo(a,h)Anthracene	- -	330	ug/kg	8.6 U	8.1 U	7.7 U	135	8.2 U	8.1 U	92.6	7.7 U	8.3 U	NA	8.1 U
Fluoranthene	- -	100,000	ug/kg	10.8	8.1 U	7.7 U	810	8.2 U	8.1 U	293	7.7 U	8.3 U	NA	8.1 U
Fluorene	- -	30,000	ug/kg	8.6 U	8.1 U	7.7 U	8.4 U	8.2 U	8.1 U	75.1 U	7.7 U	8.3 U	NA	8.1 U
Indeno(1,2,3-cd)Pyrene	- -	500	ug/kg	8.6 U	8.1 U	7.7 U	382	8.2 U	8.1 U	261	7.7 U	8.3 U	NA	8.1 U
Phenanthrene	- -	100,000	ug/kg	8.6 U	8.1 U	7.7 U	117	8.2 U	8.1 U	75.1 U	7.7 U	8.3 U	NA	8.1 U
Pyrene	- -	100,000	ug/kg	9.8	8.1 U	7.7 U	834	8.2 U	8.1 U	391	7.7 U	8.3 U	NA	8.1 U
Total SVOCs	- -	- -	ug/kg	48.5	8.1 U	7.7 U	6,118.9	8.2 U	8.1 U	4,036.3	17.3	26.4	NA	8.1 U
PID														
PID	- -	- -	ppm	0	69.7	105.8	0	17	240.2	0.1	0.2	0	0.2	277.1
Percent Moisture by Method ASTM D2974-87														
Percent Moisture	- -	- -	%	22.9	17.2	14.1	20.8	19.1	19.3	11.1	14.9	20.4	NA	19.3

Note:
U - Indicates the compound was analyzed for, but not detected.

Table 2
Summary of Unsaturated Zone Soil Analytical Results

ARCADIS Design & Consultancy for natural and built assets

Focused Groundwater Elevation Investigation Study Summary Report
Cold Springs Northern Terminal
Lysander, New York

Location ID:	CP51 Table 2 Gasoline Contaminated Soils	CP51 Table 3 Fuel Oil Contaminated Soils	Units	PZ104				PZ105					PZ106			
Sample Depth(ft):				0.7 - 2	2 - 4	4 - 6	6 - 8	0 - 0.9	0.9 - 2.1	2.1 - 4	4 - 6	6 - 8	0 - 2	2 - 4	4 - 6	6 - 8
Date Collected:				04/07/16	04/07/16	04/07/16	04/07/16	04/07/16	04/07/16	04/07/16	04/07/16	04/07/16	04/13/16	04/13/16	04/13/16	04/13/16
VOCs (EPA 8260C)																
1,2,4-Trimethylbenzene	3,600	3,600	ug/kg	5.2 U	345 U	3,000	5.3 U	4.2 U	5.8 U	13.3	7.1	269 U	NA	NA	5.3 U	5.5 U
1,3,5-Trimethylbenzene	8,400	8,400	ug/kg	5.2 U	345 U	1,180	5.3 U	4.2 U	5.8 U	32.6	5.6 U	269 U	NA	NA	5.3 U	5.5 U
Benzene	60	60	ug/kg	5.2 U	345 U	309 U	5.3 U	4.2 U	5.8 U	5.5 U	5.6 U	269 U	NA	NA	5.3 U	5.5 U
Ethanol	- -	- -	ug/kg	210 U	13,800 U	12,400 U	211 U	170 U	233 U	220 U	223 U	10,800 U	NA	NA	210 U	221 U
Ethylbenzene	1,000	1,000	ug/kg	5.2 U	345 U	559	5.3 U	4.2 U	5.8 U	5.5 U	5.6 U	269 U	NA	NA	5.3 U	5.5 U
Isopropylbenzene	2,300	2,300	ug/kg	5.2 U	345 U	309 U	5.3 U	4.2 U	5.8 U	5.5 U	5.6 U	269 U	NA	NA	5.3 U	5.5 U
m&p-Xylene	- -	- -	ug/kg	10.5 U	690 U	618 U	10.6 U	8.5 U	11.7 U	11 U	11.2 U	538 U	NA	NA	10.5 U	11.1 U
Methyl-Tert-Butyl-Ether	930	- -	ug/kg	5.2 U	345 U	309 U	5.3 U	4.2 U	5.8 U	5.5 U	5.6 U	269 U	NA	NA	5.3 U	5.5 U
Naphthalene	12,000	12,000	ug/kg	5.5 U	345 U	309 U	5.8 U	4.5 U	5.6 U	5.5 U	5.5 U	269 U	NA	NA	5.3 U	5.5 U
n-Butylbenzene	12,000	12,000	ug/kg	5.2 U	345 U	651	5.3 U	4.2 U	5.8 U	5.5 U	5.6 U	290	NA	NA	5.3 U	5.5 U
n-Propylbenzene	3,900	3,900	ug/kg	5.2 U	345 U	856	5.3 U	4.2 U	5.8 U	9.4	5.6 U	290	NA	NA	5.3 U	5.5 U
o-Xylene	- -	- -	ug/kg	5.2 U	345 U	309 U	5.3 U	4.2 U	5.8 U	5.5 U	5.6 U	269 U	NA	NA	5.3 U	5.5 U
p-Isopropyltoluene	10,000	10,000	ug/kg	5.2 U	345 U	309 U	5.3 U	4.2 U	5.8 U	5.5 U	5.6 U	269 U	NA	NA	5.3 U	5.5 U
sec-Butylbenzene	11,000	11,000	ug/kg	5.5 U	345 U	309 U	5.8 U	4.5 U	5.6 U	5.5 U	5.5 U	269 U	NA	NA	5.3 U	5.5 U
Tert-Butylbenzene	5,900	5,900	ug/kg	5.2 U	345 U	309 U	5.3 U	4.2 U	5.8 U	5.5 U	5.6 U	269 U	NA	NA	5.3 U	5.5 U
Toluene	700	700	ug/kg	5.2 U	345 U	309 U	5.3 U	4.2 U	5.8 U	5.5 U	5.6 U	269 U	NA	NA	5.3 U	5.5 U
Total VOCs	- -	- -	ug/kg	210 U	13,800 U	6,246	211 U	170 U	233 U	55.3	7.1	580	NA	NA	210 U	221 U
Xylene (Total)	260	260	ug/kg	10.5 U	690 U	618 U	10.6 U	8.5 U	11.7 U	11 U	11.2 U	538 U	NA	NA	10.5 U	11.1 U
SVOCs (EPA 8270D by SIM)																
Acenaphthene	- -	20,000	ug/kg	7.5 U	106	62.3	8.5 U	7.2 U	7.6 U	23.7	30.3	61.4	NA	NA	8.1 U	8.2 U
Acenaphthylene	- -	100,000	ug/kg	26.5	17	19.2	8.5 U	10.2	28	8.1 U	8.3	32.2	NA	NA	8.1 U	8.2 U
Anthracene	- -	100,000	ug/kg	24.8	91.6	85.8	8.5 U	43.4	51.2	21.6	8.3 U	26.1	NA	NA	8.1 U	8.2 U
Benz(a)Anthracene	- -	1,000	ug/kg	81.6	60.1	163	9.1	275	178	12.1	9.2	11.4	NA	NA	8.1 U	8.2 U
Benzo(a)Pyrene	- -	1,000	ug/kg	149	41.3	232	9.8	453	223	8.1 U	8.3 U	12.3	NA	NA	8.1 U	8.2 U
Benzo(b)Fluoranthene	- -	1,000	ug/kg	291	82.5	460	18.7	799	391	18.4	17	22.2	NA	NA	8.1 U	8.2 U
Benzo(g,h,i)Perylene	- -	100,000	ug/kg	83.5	29.2	192	14.5	381	202	8.3	8.3 U	11.4	NA	NA	8.1 U	8.2 U
Benzo(k)Fluoranthene	- -	800	ug/kg	288	81.9	456	18.6	792	388	17.9	16.9	22.1	NA	NA	8.1 U	8.2 U
Chrysene	- -	1,000	ug/kg	102	54.1	202	8.5 U	323	212	12.3	8.3	10.4	NA	NA	8.1 U	8.2 U
Dibenzo(a,h)Anthracene	- -	330	ug/kg	32	8.4 U	49.2	8.5 U	105	57.4	8.1 U	8.3 U	8.1 U	NA	NA	8.1 U	8.2 U
Fluoranthene	- -	100,000	ug/kg	135	184	480	11	331	234	33.8	13.2	27.8	NA	NA	8.1 U	8.2 U
Fluorene	- -	30,000	ug/kg	7.5 U	161	141	8.5 U	10.6	14.5	23	37.3	139	NA	NA	8.1 U	8.2 U
Indeno(1,2,3-cd)Pyrene	- -	500	ug/kg	80.9	24.3	159	10.5	318	163	8.1 U	8.3 U	8.2	NA	NA	8.1 U	8.2 U
Phenanthrene	- -	100,000	ug/kg	30.2	353	322	8.5 U	87.4	90	48.6	20.8	89.4	NA	NA	8.1 U	8.2 U
Pyrene	- -	100,000	ug/kg	136	202	444	24.2	333	230	37.1	17.3	39.3	NA	NA	8.1 U	8.2 U
Total SVOCs	- -	- -	ug/kg	1,460.5	1,488	3,467.5	116.4	4,261.6	2,462.1	256.8	178.6	513.2	NA	NA	8.1 U	8.2 U
PID																
PID	- -	- -	ppm	0.3	76.9	376.4	0	NA	NA	48.4	70.3	49.1	0	0	0.3	23.5
Percent Moisture by Method ASTM D2974-87																
Percent Moisture	- -	- -	%	12.1	21.8	14.5	21.2	7.5	12.4	18.1	19.6	19.1	NA	NA	17.8	19.3

Note:
U - Indicates the compound was analyzed for, but not detected.

Table 3
Summary of Saturated Zone Soil Analytical Results

Focused Groundwater Elevation Investigation Study Summary Report
Cold Springs Northern Terminal
Lysander, New York

Location ID:	CP51 Table 2 Gasoline Contaminated Soils	CP51 Table 3 Fuel Oil Contaminated Soils	Units	PZ101							PZ102							
Sample Depth(ft):				8 - 10	10 - 12	12 - 14	14 - 16	16 - 18	18 - 20	20 - 22	8 - 10	10 - 12	12 - 14	14 - 16	16 - 18	18 - 20	20 - 22	22 - 24
Date Collected:				04/18/16	04/18/16	04/18/16	04/18/16	04/18/16	04/18/16	04/18/16	04/14/16	04/14/16	04/14/16	04/14/16	04/14/16	04/14/16	04/14/16	04/14/16
VOCs (EPA 8260C)																		
1,2,4-Trimethylbenzene	3,600	3,600	ug/kg	2,090	**128,000**	**199,000**	**31,100**	2,320	NA	772	1,470	**326,000**	**231,000**	**4,740**	1,200	840	266 U	266
1,3,5-Trimethylbenzene	8,400	8,400	ug/kg	966	**60,700**	**84,300**	**8,870**	201	NA	200	797	**128,000**	**72,900**	1,470	363	279 U	266 U	226 U
Benzene	60	60	ug/kg	310 U	281 U	**5,570**	**453**	57.4	NA	23.1	6.5 U	**2,210**	**12,900**	**3,390**	**1,650**	**2,440**	**1,960**	**597**
Ethanol	- -	- -	ug/kg	12,400 U	11,200 U	106,000 U	9,950 U	215 U	NA	288 U	259 U	12,800 U	117,000 U	NA	10,500 U	11,200 U	10,600 U	9,050 U
Ethylbenzene	1,000	1,000	ug/kg	310	**35,600**	**89,300**	**10,600**	**1,030**	NA	360	157	**83,400**	**97,700**	**2,410**	667	564	269	226 U
Isopropylbenzene	2,300	2,300	ug/kg	310 U	**6,670**	**10,800**	1,110	29.8	NA	30.7	27	**11,400**	**10,000**	315 U	262 U	279 U	266 U	226 U
m&p-Xylene	- -	- -	ug/kg	1,350	134,000	383,000	53,600	4,200	NA	1,740	1,500	385,000	444,000	9,700	2,740	2,360	1,060	564
Methyl-Tert-Butyl-Ether	930	- -	ug/kg	310 U	281 U	2,650 U	249 U	5.4 U	NA	7.2 U	6.5 U	320 U	2,930 U	315 U	262 U	279 U	266 U	226 U
Naphthalene	12,000	12,000	ug/kg	310 U	6,700	**53,600**	6,480	191	NA	125	118	**71,900**	**57,800**	1,180	425	306	266 U	226 U
n-Butylbenzene	12,000	12,000	ug/kg	310 U	**12,200**	**16,400**	1,700	19.8	NA	23.1	50.5	**17,400**	**14,100**	315 U	262 U	279 U	266 U	226 U
n-Propylbenzene	3,900	3,900	ug/kg	412	**28,500**	**40,100**	**4,220**	92.2	NA	92.9	63.3	**47,700**	**34,400**	764	262 U	279 U	266 U	226 U
o-Xylene	- -	- -	ug/kg	612	54,900	140,000	16,400	1,720	NA	554	733	164,000	159,000	3,710	1,100	970	411	226 U
p-Isopropyltoluene	10,000	10,000	ug/kg	310 U	3,260	3,050	323	5.4 U	NA	7.2 U	112	**14,800**	**10,800**	315 U	262 U	279 U	266 U	226 U
sec-Butylbenzene	11,000	11,000	ug/kg	310 U	3,510	4,320	421	7.1	NA	7.9	23.9	5,390	4,160	315 U	262 U	279 U	266 U	226 U
Tert-Butylbenzene	5,900	5,900	ug/kg	310 U	281 U	**37,700**	249 U	5.4 U	NA	7.2 U	6.5 U	3,200 U	2,930 U	315 U	262 U	279 U	266 U	226 U
Toluene	700	700	ug/kg	310 U	**19,900**	**211,000**	**37,000**	**5,950**	NA	**1,460**	109	**193,000**	**318,000**	**11,400**	**4,030**	**3,050**	690	341
Total VOCs	- -	- -	ug/kg	5,740	493,940	1,278,140	172,277	15,818.3	NA	5,388.7	5,160.7	1,450,200	1,466,760	38,764	12,175	10,530	4,390	1,768
Xylene (Total)	260	260	ug/kg	**1,962**	**188,900**	**523,000**	**70,000**	**5,920**	NA	**2,294**	**2,233**	**549,000**	**603,000**	**13,410**	**3,840**	**3,330**	**1,471**	**564**
SVOCs (EPA 8270D by SIM)																		
Acenaphthene	- -	20,000	ug/kg	7.5 U	40.5	53.1	34.9	24.1	NA	8.5 U	14.5	171	127	9.9	7.9 U	NA	NA	NA
Acenaphthylene	- -	100,000	ug/kg	7.5 U	8.9	8.2 U	8.6 U	8.9 U	NA	8.5 U	7.9 U	170	85.1	8.5 U	7.9 U	NA	NA	NA
Anthracene	- -	100,000	ug/kg	7.5 U	24.8	38.3	13.1	12.3	NA	8.5 U	7.9 U	56.6	41.1	8.5 U	7.9 U	NA	NA	NA
Benz(a)Anthracene	- -	1,000	ug/kg	7.5 U	12.9	8.3	8.6 U	8.9 U	NA	8.5 U	7.9 U	21.5	15.7	8.5 U	7.9 U	NA	NA	NA
Benzo(a)Pyrene	- -	1,000	ug/kg	7.5 U	7.8 U	8.2 U	8.6 U	8.9 U	NA	8.5 U	7.9 U	8.5 U	8.1 U	8.5 U	7.9 U	NA	NA	NA
Benzo(b)Fluoranthene	- -	1,000	ug/kg	7.5 U	12	9	8.6 U	8.9 U	NA	8.5 U	7.9 U	17.7	11.5	8.5 U	7.9 U	NA	NA	NA
Benzo(g,h,i)Perylene	- -	100,000	ug/kg	7.5 U	7.8 U	8.2 U	8.6 U	8.9 U	NA	8.5 U	7.9 U	8.5 U	8.1 U	8.5 U	7.9 U	NA	NA	NA
Benzo(k)Fluoranthene	- -	800	ug/kg	7.5 U	9.8	8.2 U	8.6 U	8.9 U	NA	8.5 U	7.9 U	11.8	8.1 U	8.5 U	7.9 U	NA	NA	NA
Chrysene	- -	1,000	ug/kg	7.5 U	8.5	8.2 U	8.6 U	8.9 U	NA	8.5 U	7.9 U	16.5	11.3	8.5 U	7.9 U	NA	NA	NA
Dibenzo(a,h)Anthracene	- -	330	ug/kg	7.5 U	7.8 U	8.2 U	8.6 U	8.9 U	NA	8.5 U	7.9 U	8.5 U	8.1 U	8.5 U	7.9 U	NA	NA	NA
Fluoranthene	- -	100,000	ug/kg	7.5 U	25.1	22.6	8.6 U	16.4	NA	8.5 U	7.9 U	55.9	39.6	8.5 U	7.9 U	NA	NA	NA
Fluorene	- -	30,000	ug/kg	7.5 U	53.1	79.7	33	31.4	NA	8.5 U	9.2	238	149	8.5 U	7.9 U	NA	NA	NA
Indeno(1,2,3-cd)Pyrene	- -	500	ug/kg	7.5 U	7.8 U	8.2 U	8.6 U	8.9 U	NA	8.5 U	7.9 U	8.5 U	8.1 U	8.5 U	7.9 U	NA	NA	NA
Phenanthrene	- -	100,000	ug/kg	7.5 U	32.1	98	37.4	43.6	NA	8.5 U	9	209	158	10.4	7.9 U	NA	NA	NA
Pyrene	- -	100,000	ug/kg	7.5 U	44.1	29.9	11.3	20.2	NA	8.5 U	14.2	61.9	44.2	8.5 U	7.9 U	NA	NA	NA
Total SVOCs	- -	- -	ug/kg	7.5 U	271.8	338.9	129.7	148	NA	8.5 U	46.9	1,029.9	682.5	20.3	7.9 U	NA	NA	NA
PID																		
PID	- -	- -	ppm	1,400	2,105	2,780	780.3	1,805	0	NA	716.9	1,847	2,095	1,209.4	778.1	112.5	136.5	345.2
Percent Moisture by Method ASTM D2974-87																		
Percent Moisture	- -	- -	%	12.4	14.8	18.6	23.8	24.6	NA	22.7	15.2	22.1	19.6	23.9	16.8	13.2	17.9	15

Note:
U - Indicates the compound was analyzed for, but not detected.

Table 3
Summary of Saturated Zone Soil Analytical Results

Focused Groundwater Elevation Investigation Study Summary Report
Cold Springs Northern Terminal
Lysander, New York

Location ID:	CP51 Table 2 Gasoline Contaminated Soils	CP51 Table 3 Fuel Oil Contaminated Soils	Units	PZ103								PZ104						
Sample Depth(ft):				8 - 10	10 - 12	12 - 14	14 - 16	16 - 18	18 - 20	20 - 22	22 - 24	8 - 10	10 - 12	12 - 14	14 - 16	16 - 18	18 - 20	20 - 22
Date Collected:				04/13/16	04/13/16	04/13/16	04/13/16	04/13/16	04/13/16	04/13/16	04/13/16	04/11/16	04/11/16	04/11/16	04/11/16	04/11/16	04/11/16	04/11/16
VOCs (EPA 8260C)																		
1,2,4-Trimethylbenzene	3,600	3,600	ug/kg	1,640	**228,000**	**108,000**	**11,500**	**4,840**	1,330	102	107	578	1,160	439	5.2 U	331 U	268 U	10.5
1,3,5-Trimethylbenzene	8,400	8,400	ug/kg	947	**80,800**	**35,300**	3,820	249	172	30.1	30.1	332 U	1,500	319 U	5.2 U	331 U	268 U	20
Benzene	60	60	ug/kg	255 U	**4,680**	**3,360**	274 U	29.3	**96.8**	**624**	**1,230**	332 U	6.4 U	319 U	5.2 U	331 U	268 U	5.3 U
Ethanol	- -	- -	ug/kg	10,200 U	14,700 U	10,600 U	11,000 U	207 U	224 U	200 U	202 U	13,300 U	257 U	12,800 U	209 U	13,300 U	10,700 U	213 U
Ethylbenzene	1,000	1,000	ug/kg	255 U	**34,300**	**33,800**	**2,190**	102	145	86.7	87.6	332 U	101	319 U	5.2 U	331 U	268 U	40
Isopropylbenzene	2,300	2,300	ug/kg	255 U	**5,640**	**3,640**	441	23.8	15.7	5 U	5.1 U	332 U	327	319 U	5.2 U	331 U	268 U	5.3 U
m&p-Xylene	- -	- -	ug/kg	2,150	308,000	151,000	9,880	443	591	135	218	664 U	59.6	638 U	10.4 U	663 U	536 U	70.6
Methyl-Tert-Butyl-Ether	930	- -	ug/kg	255 U	368 U	265 U	274 U	5.2 U	5.6 U	5 U	5.1 U	332 U	6.4 U	319 U	5.2 U	331 U	268 U	5.3 U
Naphthalene	12,000	12,000	ug/kg	394	**49,800**	**15,900**	2,300	118	141	75.3	71.3	332 U	168	319 U	5.2 U	331 U	268 U	41.4
n-Butylbenzene	12,000	12,000	ug/kg	255 U	**13,800**	5,590	745	31.8	13.4	5 U	5.1 U	435	395	844	5.2 U	331 U	268 U	5.3 U
n-Propylbenzene	3,900	3,900	ug/kg	255 U	**18,400**	**12,700**	1,590	81.9	47.8	9.7	9.6	332 U	1,190	709	5.2 U	331 U	268 U	14
o-Xylene	- -	- -	ug/kg	472	120,000	53,700	1,690	74.4	128	140	146	332 U	22.5	319 U	5.2 U	331 U	268 U	45.7
p-Isopropyltoluene	10,000	10,000	ug/kg	255 U	**14,100**	4,640	700	14	23	5 U	5.1 U	332 U	191	319 U	5.2 U	331 U	268 U	5.3 U
sec-Butylbenzene	11,000	11,000	ug/kg	255 U	4,400	1,750	274 U	13.1	6.5	5 U	5.1 U	332 U	232	498	5.2 U	331 U	268 U	5.3 U
Tert-Butylbenzene	5,900	5,900	ug/kg	255 U	368 U	265 U	274 U	5.2 U	5.6 U	5 U	5.1 U	332 U	6.4 U	319 U	5.2 U	331 U	268 U	5.3 U
Toluene	700	700	ug/kg	594	**149,000**	**58,300**	**943**	84.2	223	118	173	332 U	6.4 U	319 U	5.2 U	331 U	268 U	29.1
Total VOCs	- -	- -	ug/kg	6,197	1,030,920	487,680	35,799	6,104.5	2,933.2	1,320.8	2,072.6	1,013	5,346.1	2,490	209 U	13,300 U	10,700 U	271.3
Xylene (Total)	260	260	ug/kg	**2,622**	**428,000**	**204,700**	**11,570**	**517.4**	**719**	**275**	**364**	664 U	82.1	638 U	10.4 U	663 U	536 U	116.3
SVOCs (EPA 8270D by SIM)																		
Acenaphthene	- -	20,000	ug/kg	27.1	145	89.3	8.8 U	7.9 U	8.5 U	8 U	8.3 U	87	81.6	35.6	8 U	8.5 U	7.8 U	8.3 U
Acenaphthylene	- -	100,000	ug/kg	14.1	14.2	8.4 U	8.8 U	7.9 U	8.5 U	8 U	8.3 U	42.5	20.9	9.9	8 U	8.5 U	7.8 U	8.3 U
Anthracene	- -	100,000	ug/kg	19.8	53.7	37	8.8 U	7.9 U	8.5 U	8 U	8.3 U	71.1	65.2	17.3	8 U	8.5 U	7.8 U	8.3 U
Benz(a)Anthracene	- -	1,000	ug/kg	18.2	20	12	8.8 U	7.9 U	8.5 U	8 U	8.3 U	36.1	8.6 U	8.1	8 U	8.5 U	7.8 U	8.3 U
Benzo(a)Pyrene	- -	1,000	ug/kg	16.3	8.3	8.4 U	8.8 U	7.9 U	8.5 U	8 U	8.3 U	22.7	8.6 U	7.9 U	8 U	8.5 U	7.8 U	8.3 U
Benzo(b)Fluoranthene	- -	1,000	ug/kg	35.2	17	10.6	8.8 U	7.9 U	8.5 U	8 U	8.3 U	57.6	9.9	8.9	8 U	8.5 U	7.8 U	8.3 U
Benzo(g,h,i)Perylene	- -	100,000	ug/kg	8.7	8.1 U	8.4 U	8.8 U	7.9 U	8.5 U	8 U	8.3 U	10.8	8.6 U	7.9 U	8 U	8.5 U	7.8 U	8.3 U
Benzo(k)Fluoranthene	- -	800	ug/kg	34.9	16.9	10.6	8.8 U	7.9 U	8.5 U	8 U	8.3 U	38.7	8.6 U	7.9 U	8 U	8.5 U	7.8 U	8.3 U
Chrysene	- -	1,000	ug/kg	14.8	18.9	11	8.8 U	7.9 U	8.5 U	8 U	8.3 U	31.9	12.5	7.9 U	8 U	8.5 U	7.8 U	8.3 U
Dibenzo(a,h)Anthracene	- -	330	ug/kg	8.3 U	8.1 U	8.4 U	8.8 U	7.9 U	8.5 U	8 U	8.3 U	8.1 U	8.6 U	7.9 U	8 U	8.5 U	7.8 U	8.3 U
Fluoranthene	- -	100,000	ug/kg	16.9	48.1	28.9	8.8 U	7.9 U	8.5 U	8 U	8.3 U	94.8	28.4	15.5	8 U	8.5 U	7.8 U	8.3 U
Fluorene	- -	30,000	ug/kg	28.7	235	172	8.8 U	7.9 U	8.5 U	8 U	8.3 U	96.4	71.8	56.2	8 U	8.5 U	7.8 U	8.3 U
Indeno(1,2,3-cd)Pyrene	- -	500	ug/kg	8.3 U	8.1 U	8.4 U	8.8 U	7.9 U	8.5 U	8 U	8.3 U	8.9	8.6 U	7.9 U	8 U	8.5 U	7.8 U	8.3 U
Phenanthrene	- -	100,000	ug/kg	15.5	205	134	8.8 U	10	8.5 U	8 U	8.3 U	258	349	130	17.5	18.9	13.9	12.2
Pyrene	- -	100,000	ug/kg	55.3	70.7	43.5	8.8 U	7.9 U	8.5 U	8 U	8.3 U	142	70.3	30.8	8 U	8.5 U	7.8 U	8.3 U
Total SVOCs	- -	- -	ug/kg	305.5	852.8	548.9	8.8 U	10	8.5 U	8 U	8.3 U	998.5	709.6	312.3	17.5	18.9	13.9	12.2
PID																		
PID	- -	- -	ppm	162.5	1,596	1,116	549.1	571.8	42.7	51.4	29.2	381.3	742.1	238	0.3	0	0.1	0
Percent Moisture by Method ASTM D2974-87																		
Percent Moisture	- -	- -	%	19.9	18	20.3	24.1	16.9	22.9	16.8	21.5	17.8	22.2	16.2	16.9	22.9	16.2	19.2

Note:
U - Indicates the compound was analyzed for, but not detected.

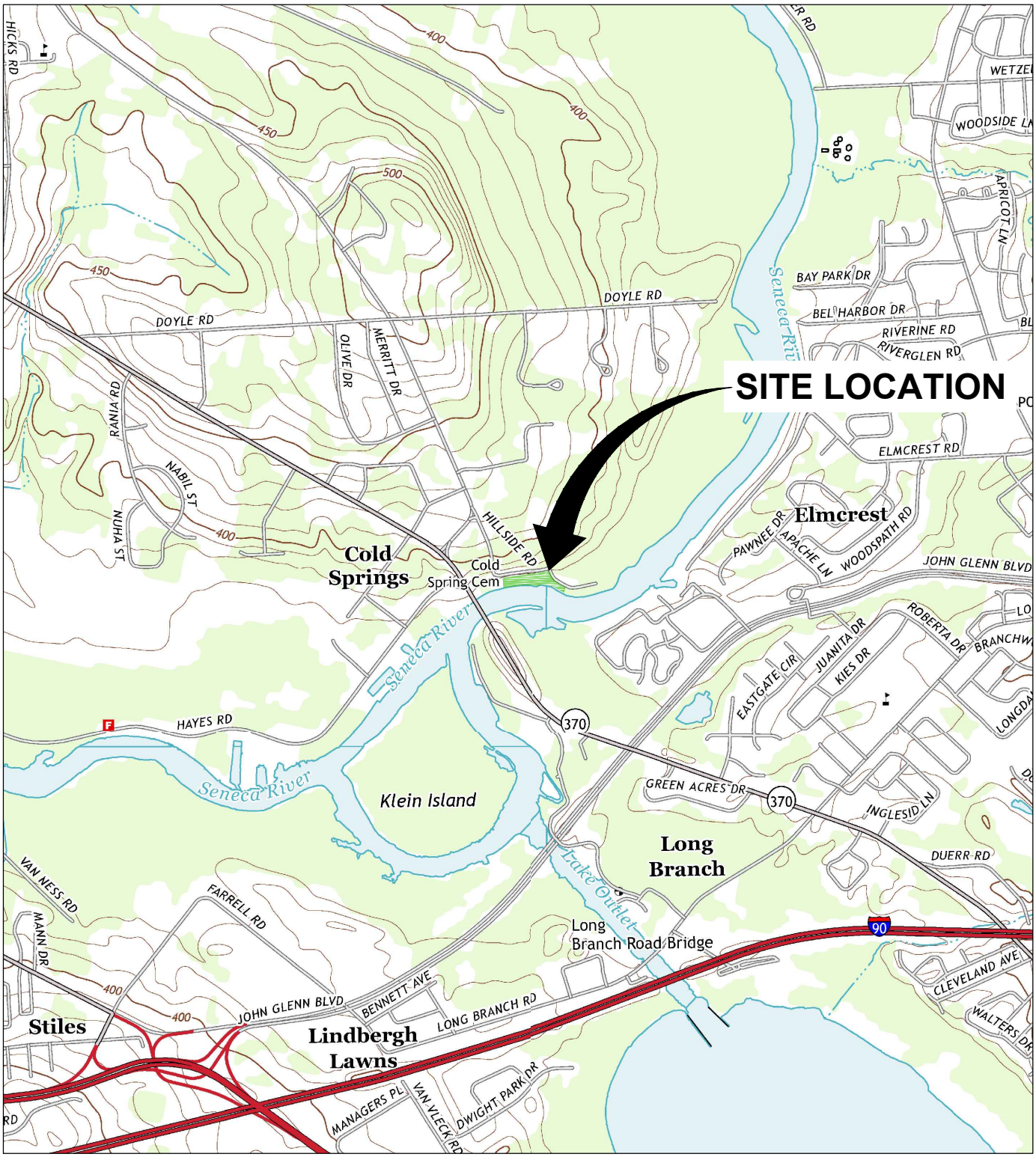
Table 3
Summary of Saturated Zone Soil Analytical Results

Focused Groundwater Elevation Investigation Study Summary Report
Cold Springs Northern Terminal
Lysander, New York

Location ID:	CP51 Table 2 Gasoline Contaminated Soils	CP51 Table 3 Fuel Oil Contaminated Soils	Units	PZ104			PZ105				PZ106			
Sample Depth(ft):				22 - 24	24 - 26	26 - 26.7	8 - 10	10 - 12	12 - 14	14 - 16	8 - 10	10 - 12	12 - 14	14 - 16
Date Collected:				04/11/16	04/11/16	04/11/16	04/12/16	04/12/16	04/12/16	04/12/16	04/13/16	04/13/16	04/13/16	04/13/16
VOCs (EPA 8260C)														
1,2,4-Trimethylbenzene	3,600	3,600	ug/kg	5.3 U	28.7	8.8	347 U	257	305 U	320 U	5.5 U	5.3 U	NA	NA
1,3,5-Trimethylbenzene	8,400	8,400	ug/kg	5.3 U	6.6	5.5 U	394	101	305 U	320 U	5.5 U	5.3 U	NA	NA
Benzene	60	60	ug/kg	5.3 U	30.3	5.5 U	347 U	7 U	305 U	320 U	5.5 U	5.3 U	NA	NA
Ethanol	- -	- -	ug/kg	211 U	191 U	218 U	13,900 U	281 U	12,200 U	12,800 U	219 U	210 U	NA	NA
Ethylbenzene	1,000	1,000	ug/kg	5.3 U	23.3	5.5 U	347 U	13.5	305 U	320 U	5.5 U	5.3 U	NA	NA
Isopropylbenzene	2,300	2,300	ug/kg	5.3 U	4.8 U	5.5 U	812	221	305 U	320 U	5.5 U	5.3 U	NA	NA
m&p-Xylene	- -	- -	ug/kg	10.5 U	46.4	10.9 U	695 U	14 U	609 U	639 U	10.9 U	10.5 U	NA	NA
Methyl-Tert-Butyl-Ether	930	- -	ug/kg	5.3 U	4.8 U	5.5 U	347 U	7 U	305 U	320 U	5.5 U	5.3 U	NA	NA
Naphthalene	12,000	12,000	ug/kg	5.3 U	18	13.8	347 U	7 U	305 U	320 U	5.5 U	5.3 U	NA	NA
n-Butylbenzene	12,000	12,000	ug/kg	5.3 U	4.8 U	5.5 U	1,160	173	305 U	320 U	5.5 U	5.3 U	NA	NA
n-Propylbenzene	3,900	3,900	ug/kg	5.3 U	9.5	5.5 U	2,770	486	305 U	320 U	5.5 U	5.3 U	NA	NA
o-Xylene	- -	- -	ug/kg	5.3 U	17	5.5 U	347 U	7 U	305 U	320 U	5.5 U	5.3 U	NA	NA
p-Isopropyltoluene	10,000	10,000	ug/kg	5.3 U	4.8 U	5.5 U	347 U	62.3	305 U	320 U	5.5 U	5.3 U	NA	NA
sec-Butylbenzene	11,000	11,000	ug/kg	5.3 U	4.8 U	5.5 U	707	150	305 U	320 U	5.5 U	5.3 U	NA	NA
Tert-Butylbenzene	5,900	5,900	ug/kg	5.3 U	4.8 U	5.5 U	347 U	48.6	305 U	320 U	5.5 U	5.3 U	NA	NA
Toluene	700	700	ug/kg	5.3 U	10.5	5.5 U	347 U	7 U	305 U	320 U	5.5 U	5.3 U	NA	NA
Total VOCs	- -	- -	ug/kg	211 U	190.3	22.6	5,843	1,512.4	12,200 U	12,800 U	219 U	210 U	NA	NA
Xylene (Total)	260	260	ug/kg	10.5 U	63.4	10.9 U	695 U	14 U	609 U	639 U	10.9 U	10.5 U	NA	NA
SVOCs (EPA 8270D by SIM)														
Acenaphthene	- -	20,000	ug/kg	8.1 U	7.8 U	8 U	340	42.4	204	8.8 U	8 U	8.1 U	NA	NA
Acenaphthylene	- -	100,000	ug/kg	8.1 U	7.8 U	8 U	142	14.9	49.7	8.8 U	8 U	8.1 U	NA	NA
Anthracene	- -	100,000	ug/kg	8.1 U	7.8 U	8 U	45.6	13	53.7	8.8 U	8 U	8.1 U	NA	NA
Benz(a)Anthracene	- -	1,000	ug/kg	8.1 U	7.8 U	8 U	8.8 U	9.1 U	10.7	8.8 U	8 U	8.1 U	NA	NA
Benzo(a)Pyrene	- -	1,000	ug/kg	8.1 U	7.8 U	8 U	8.8 U	9.1 U	8 U	8.8 U	8 U	8.1 U	NA	NA
Benzo(b)Fluoranthene	- -	1,000	ug/kg	8.1 U	7.8 U	8 U	8.8	13.7	17.3	9.5	8 U	8.1 U	NA	NA
Benzo(g,h,i)Perylene	- -	100,000	ug/kg	8.1 U	7.8 U	8 U	8.8 U	9.1 U	8 U	8.8 U	8 U	8.1 U	NA	NA
Benzo(k)Fluoranthene	- -	800	ug/kg	8.1 U	7.8 U	8 U	8.8 U	9.2	11.9	8.8 U	8 U	8.1 U	NA	NA
Chrysene	- -	1,000	ug/kg	8.1 U	7.8 U	8 U	8.8 U	9.1 U	11.2	8.8 U	8 U	8.1 U	NA	NA
Dibenzo(a,h)Anthracene	- -	330	ug/kg	8.1 U	7.8 U	8 U	8.8 U	9.1 U	8 U	8.8 U	8 U	8.1 U	NA	NA
Fluoranthene	- -	100,000	ug/kg	8.1 U	7.8 U	8 U	19.3	13.4	24.1	10.4	8 U	8.1 U	NA	NA
Fluorene	- -	30,000	ug/kg	8.1 U	7.8 U	8 U	422	66.9	312	14.8	8 U	8.1 U	NA	NA
Indeno(1,2,3-cd)Pyrene	- -	500	ug/kg	8.1 U	7.8 U	8 U	8.8 U	9.1 U	8 U	8.8 U	8 U	8.1 U	NA	NA
Phenanthrene	- -	100,000	ug/kg	9.2	8	8 U	316	66.2	325	15.7	8 U	8.1 U	NA	NA
Pyrene	- -	100,000	ug/kg	8.1 U	7.8 U	8 U	35	12.4	49.7	10.7	8 U	8.1 U	NA	NA
Total SVOCs	- -	- -	ug/kg	9.2	8	8 U	1,328.7	252.1	1,069.3	61.1	8 U	8.1 U	NA	NA
PID														
PID	- -	- -	ppm	0	5	2.2	109.1	100.6	280.7	5.1	45	9.4	1.1	0
Percent Moisture by Method ASTM D2974-87														
Percent Moisture	- -	- -	%	18.1	14.4	16.9	23.9	27.9	16.6	24.4	18.2	18	NA	NA

Note:
U - Indicates the compound was analyzed for, but not detected.

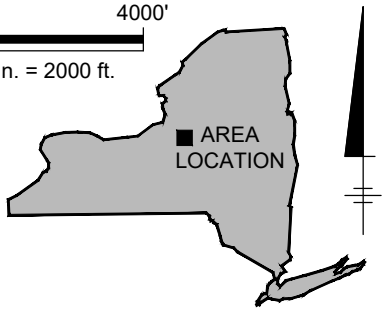
FIGURES



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., BALDWINSVILLE, BREWERTON, CAMILLUS & SYRACUSE WEST, NY, 2013.

0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.



HILLSIDE ROAD, COLD SPRINGS TERMINALS
LYSANDER, NEW YORK

FOCUSED GROUNDWATER ELEVATION INVESTIGATION STUDY SUMMARY REPORT

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER PIC: PM: V. MARESCO TM: R. HENSEL TR: K. ROSKOFF LYR:(Opt)ON=*;OFF=*REF*
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XREFS: X-FGE-Title Block PROJECTNAME: ----

LEGEND:

- PIEZOMETER
- STAFF GAUGE
- FORMER AST
- FENCE
- RETAINING WALL
- EDGE OF WATER
- EDGE OF BANK
- INVESTIGATION AREA

NOTE:

1. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
2. LOCATION OF PIEZOMETERS (PZ101-PZ106) WERE SURVEYED ON APRIL 26, 2016 BY C.T. MALE.
3. AST = ABOVE GROUND STORAGE TANK.

0 100' 200'

GRAPHIC SCALE

HILLSIDE ROAD, COLD SPRINGS TERMINALS
LYSANDER, NEW YORK

FOCUSED GROUNDWATER ELEVATION INVESTIGATION STUDY SUMMARY REPORT

SITE LAYOUT AND PIEZOMETER LOCATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER PIC: PM: V. MARESCO TM: R. HENSEL TR: K. ROSKOFF LYR:(Opt)ON=*;OFF=*REF*
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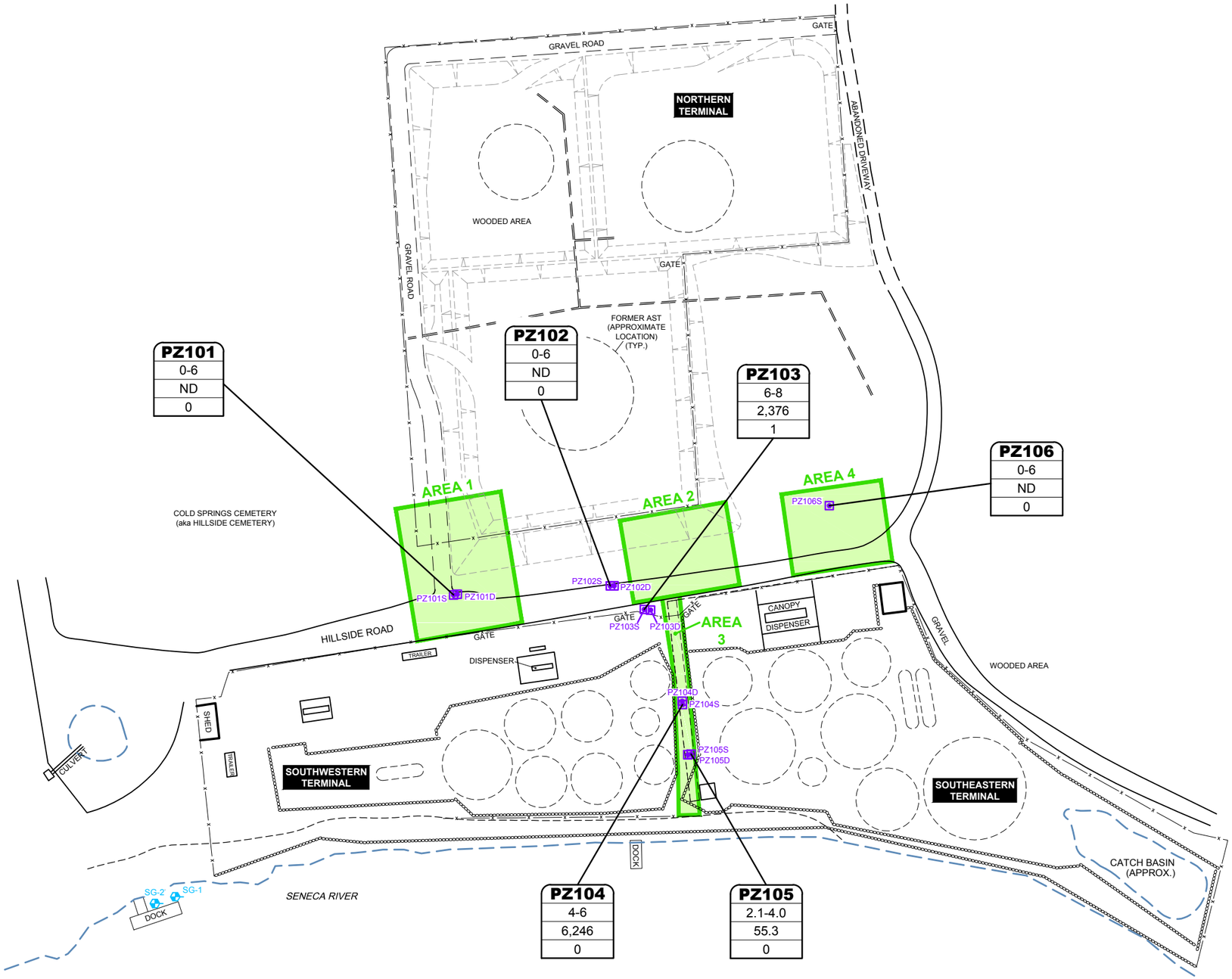
X-Base Map



LEGEND:

- PIEZOMETER
- STAFF GAUGE
- FORMER AST
- FENCE
- RETAINING WALL
- EDGE OF WATER
- EDGE OF BANK
- INVESTIGATION AREA

PZ101
0-6
ND
0

- SAMPLE ID
- FEET BELOW GROUND SURFACE
- TOTAL VOC (ppb)
- NUMBER OF COMPOUNDS THAT EXCEED NYSDEC CP 51 GUIDANCE

NOTES:

1. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
2. LOCATION OF PIEZOMETERS (PZ101-PZ106) WERE SURVEYED ON APRIL 26, 2016 BY C.T. MALE.

0 100' 200'

GRAPHIC SCALE

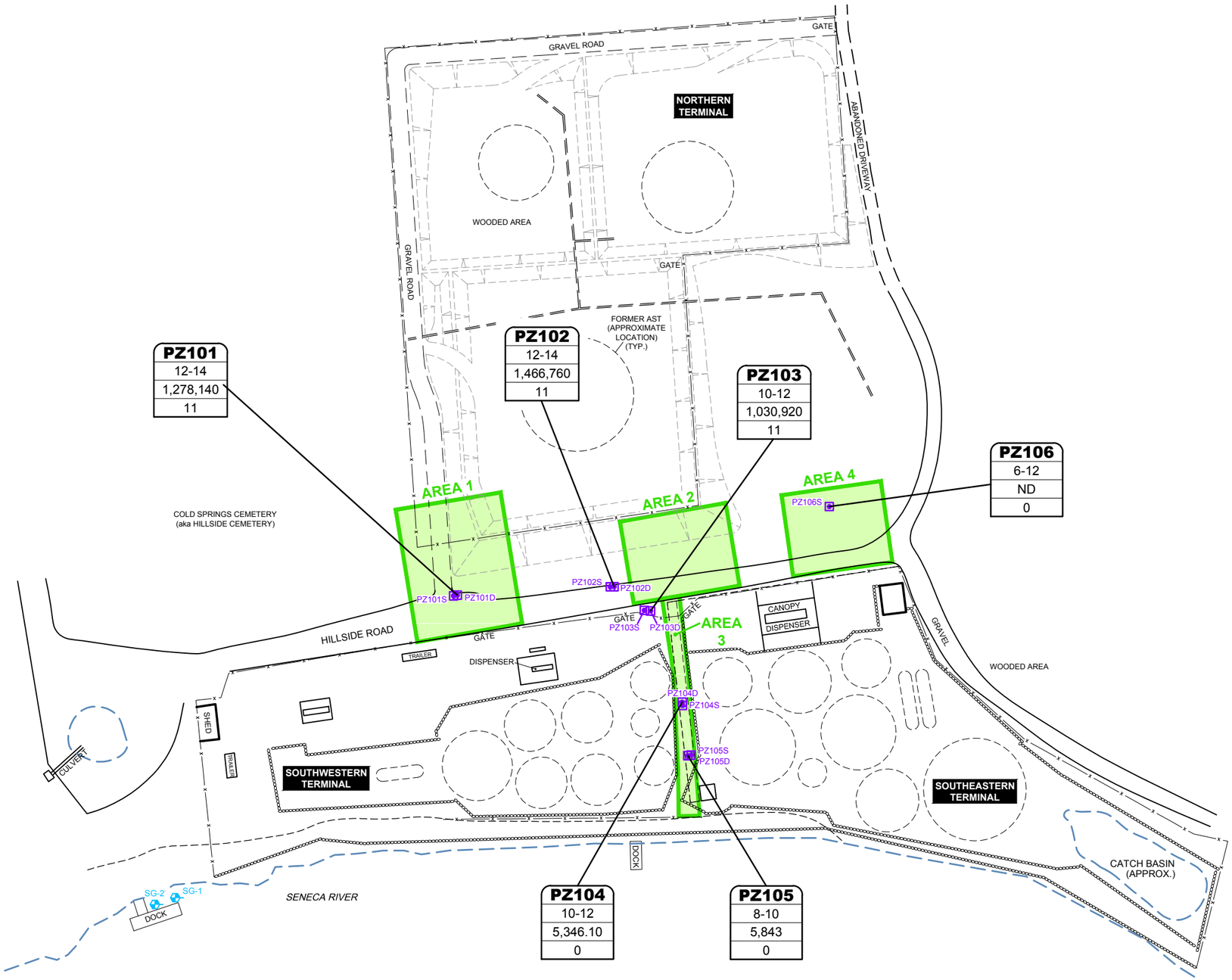
HILLSIDE ROAD, COLD SPRINGS TERMINALS
LYSANDER, NEW YORK

FOCUSED GROUNDWATER ELEVATION INVESTIGATION STUDY SUMMARY REPORT

TOTAL VOLATILES IN SOIL - SHALLOW ZONE - APRIL 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3



LEGEND:

- PIEZOMETER
- STAFF GAUGE
- FORMER AST
- FENCE
- RETAINING WALL
- EDGE OF WATER
- EDGE OF BANK
- INVESTIGATION AREA

PZ101	SAMPLE ID
12-14	FEET BELOW GROUND SURFACE
1,278,140	TOTAL VOC (ppb)
11	NUMBER OF COMPOUNDS THAT EXCEED NYSDEC CP 51 GUIDANCE

NOTES:

1. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
2. LOCATION OF PIEZOMETERS (PZ101-PZ106) WERE SURVEYED ON APRIL 26, 2016 BY C.T. MALE.

0 100' 200'

GRAPHIC SCALE

HILLSIDE ROAD, COLD SPRINGS TERMINALS
LYSANDER, NEW YORK

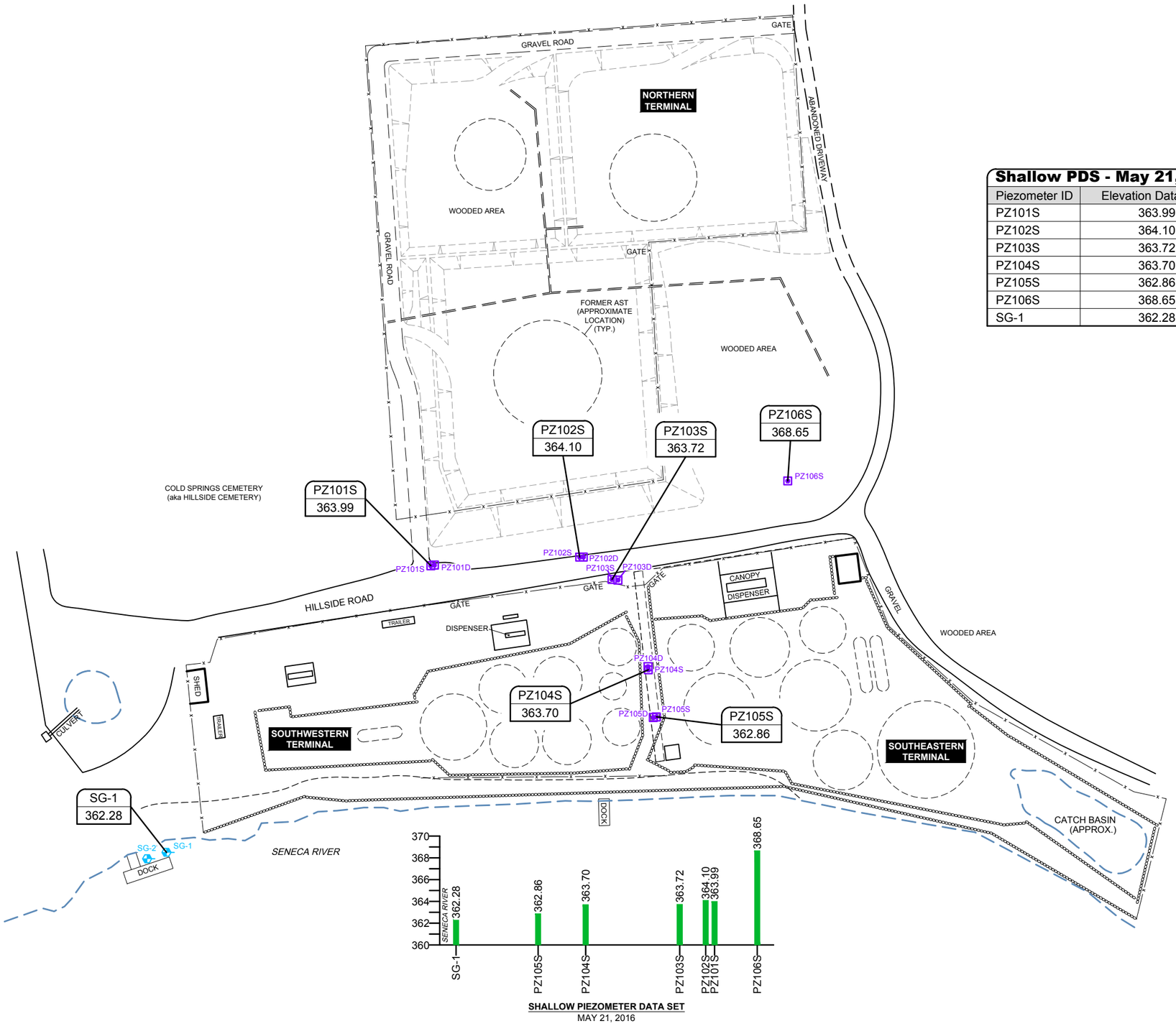
FOCUSED GROUNDWATER ELEVATION INVESTIGATION STUDY SUMMARY REPORT

TOTAL VOLATILES IN SOIL - DEEPER ZONE - APRIL 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER PIC: PM: V. MARESCO TM: R. HENSEL TR: K. ROSKOFF LYR:(Opt)ON=*;OFF=*REF*
C:\Users\roberlander\OneDrive - ARCADIS\BIM 360 Docs\BP AMOCO CORPORATION\Buckeye Pipeline Company\2018\B0090004.0008\01-DWG\90004-Fig4 TTL Volatiles Deep.dwg LAYOUT: 4 SAVED: 6/14/2018 11:39 AM PLOTTED: 6/14/2018 11:39 AM BY: OBERLANDER, ROSEANNE
XREFS: IMAGES: PROJECTNAME: ----
X-FGE-Title Block
X-Base Map



SHALLOW PIEZOMETER DATA SET
MAY 21, 2016

Shallow PDS - May 21, 2016

Piezometer ID	Elevation Data (feet)
PZ101S	363.99
PZ102S	364.10
PZ103S	363.72
PZ104S	363.70
PZ105S	362.86
PZ106S	368.65
SG-1	362.28

LEGEND:

- PIEZOMETER
- STAFF GAUGE
- FORMER AST
- FENCE
- RETAINING WALL
- EDGE OF WATER
- EDGE OF BANK

PZ101S / 363.99 — SAMPLE ID / GROUNDWATER ELEVATION (FT AMSL)

NOTES:

1. ALL ELEVATIONS ARE SHOWN IN FEET ABOVE MEAN SEA LEVEL (FT AMSL).
2. PDS = PIEZOMETER DATA SET.
3. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
4. LOCATION OF PIEZOMETERS (PZ101-PZ106) WERE SURVEYED ON APRIL 26, 2016 BY C.T. MALE.

0 100' 200'
GRAPHIC SCALE

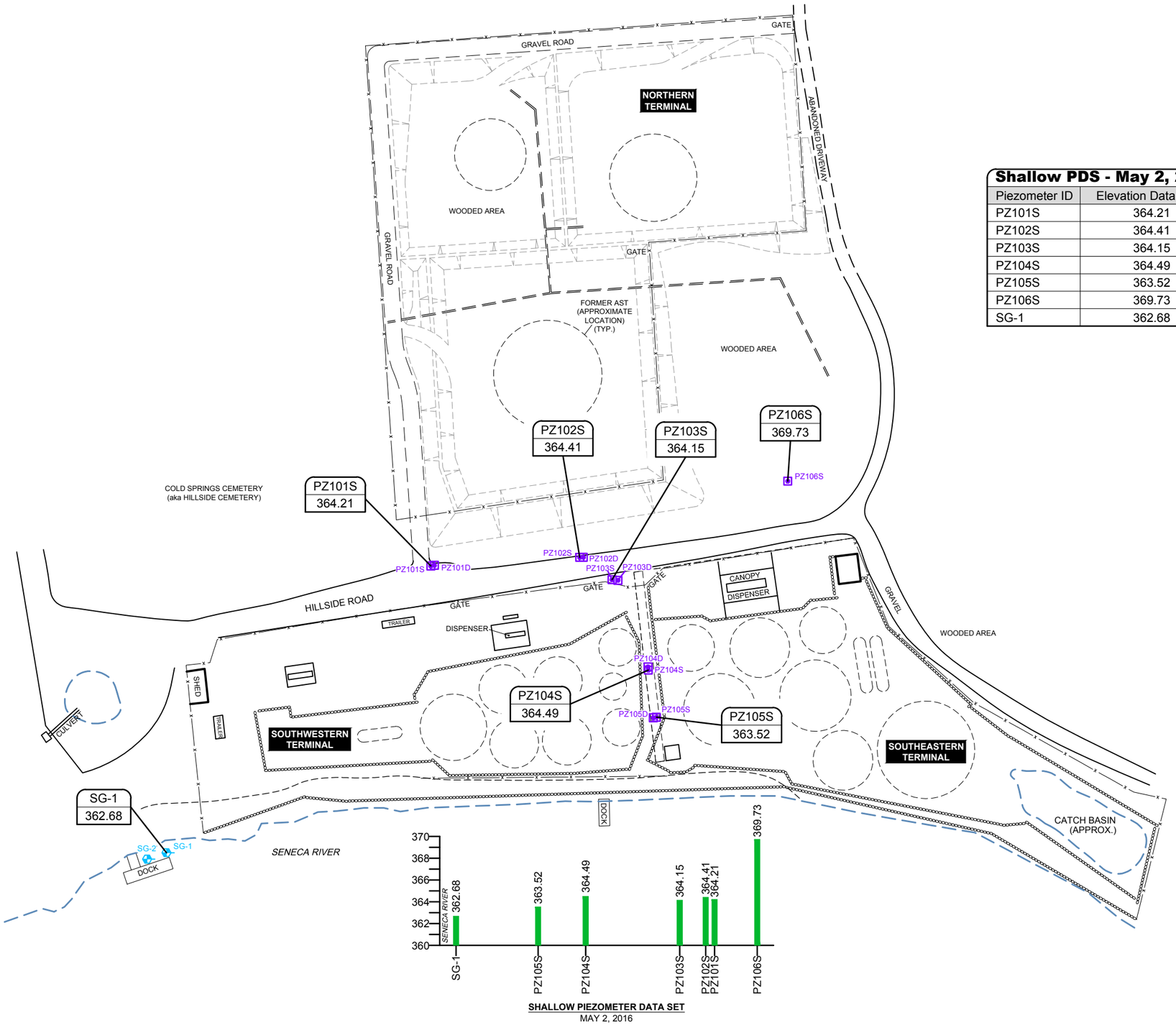
HILLSIDE ROAD, COLD SPRINGS TERMINALS
LYSANDER, NEW YORK
FOCUSED GROUNDWATER ELEVATION INVESTIGATION STUDY SUMMARY REPORT

SHALLOW PIEZOMETER GROUNDWATER ELEVATION DATA - MAY 21, 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE 5

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER PIC: PM: V. MARESCO TM: R. HENSEL TR: K. ROSKOFF LYR:(Opt)ON=*;OFF=*REF*
C:\Users\roberlander\OneDrive - ARCADIS\BIM 360 Docs\BP\Buckeye Pipeline Company\2018\B0090004.0008\01-DWG\90004-Fig5 Piezo GW Elev.dwg LAYOUT: 5 SAVED: 6/4/2018 2:07 PM PLOTTED: 6/4/2018 2:07 PM BY: OBERLANDER, ROSEANNE
XREFS: IMAGES: PROJECTNAME: ----
X-FGE-Title Block
X-Base Map



SHALLOW PIEZOMETER DATA SET
MAY 2, 2016

Shallow PDS - May 2, 2016

Piezometer ID	Elevation Data (feet)
PZ101S	364.21
PZ102S	364.41
PZ103S	364.15
PZ104S	364.49
PZ105S	363.52
PZ106S	369.73
SG-1	362.68

LEGEND:

- PIEZOMETER
- STAFF GAUGE
- FORMER AST
- FENCE
- RETAINING WALL
- EDGE OF WATER
- EDGE OF BANK
- PZ101S / 364.21 — SAMPLE ID / GROUNDWATER ELEVATION (FT AMSL)

NOTES:

1. ALL ELEVATIONS ARE SHOWN IN FEET ABOVE MEAN SEA LEVEL (FT AMSL).
2. PDS = PIEZOMETER DATA SET.
3. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
4. LOCATION OF PIEZOMETERS (PZ101-PZ106) WERE SURVEYED ON APRIL 26, 2016 BY C.T. MALE.

0 100' 200'
GRAPHIC SCALE

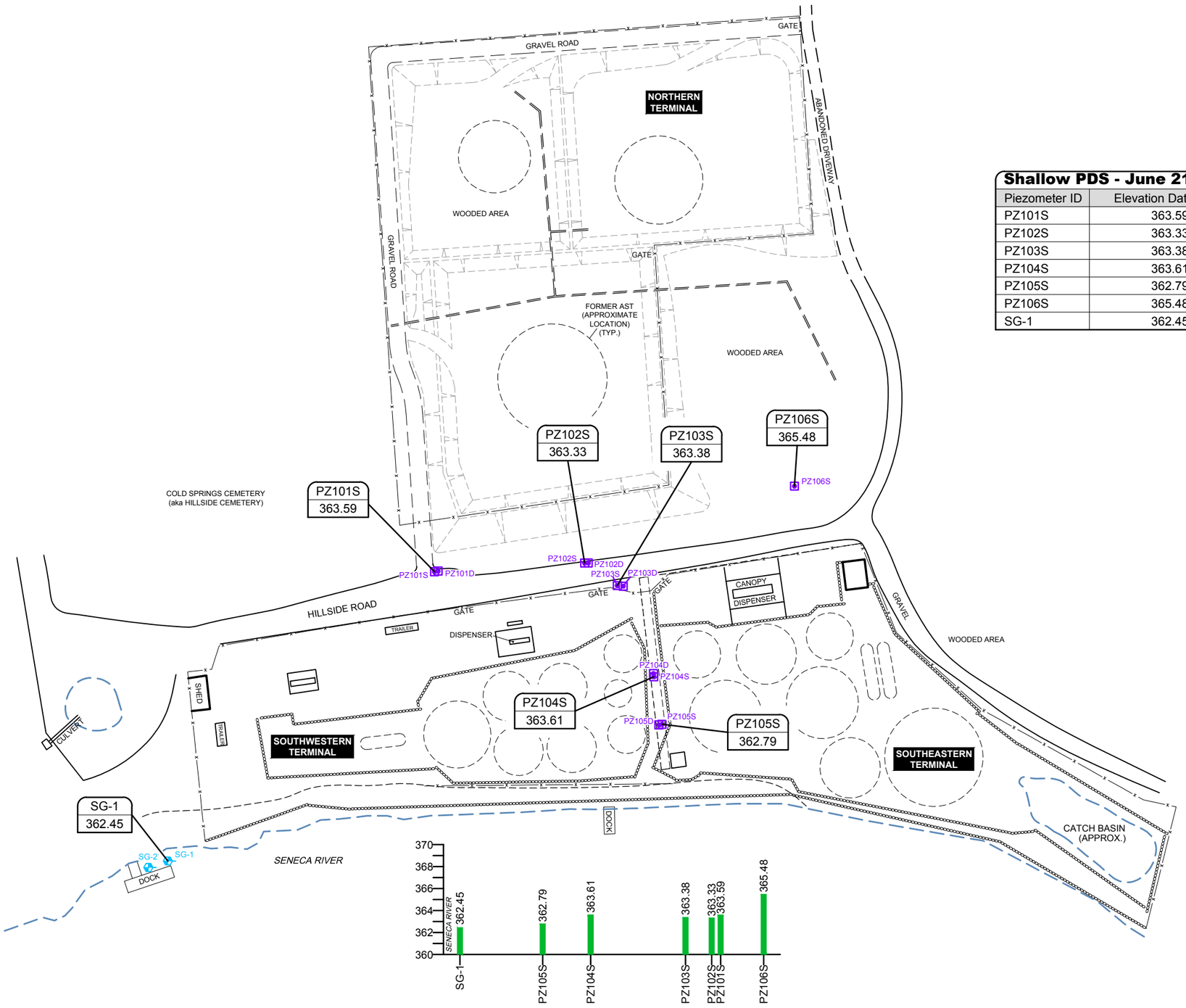
HILLSIDE ROAD, COLD SPRINGS TERMINALS
LYSANDER, NEW YORK
FOCUSED GROUNDWATER ELEVATION INVESTIGATION STUDY SUMMARY REPORT

SHALLOW PIEZOMETER GROUNDWATER ELEVATION DATA - MAY 2, 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE 6

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER PIC: PM: V. MARESCO TM: R. HENSEL TR: K. ROSKOFF LYR:(Opt)ON=*;OFF=*REF*
C:\Users\roberlander\OneDrive - ARCADIS\BIM 360 Docs\BP\Buckeye Pipeline Company\2018\B0090004.0008\01-DWG\90004-Fig6 Piezo GW Elev.dwg LAYOUT: 6 SAVED: 6/4/2018 2:07 PM PLOTTED: 6/4/2018 2:07 PM BY: OBERLANDER, ROSEANNE
XREFS: IMAGES: PROJECTNAME: ----
X-FGE-Title Block
X-Base Map



SHALLOW PIEZOMETER DATA SET
JUNE 21, 2016

Shallow PDS - June 21, 2016

Piezometer ID	Elevation Data (feet)
PZ101S	363.59
PZ102S	363.33
PZ103S	363.38
PZ104S	363.61
PZ105S	362.79
PZ106S	365.48
SG-1	362.45

LEGEND:

- PIEZOMETER
- STAFF GAUGE
- FORMER AST
- FENCE
- RETAINING WALL
- EDGE OF WATER
- EDGE OF BANK

PZ101S / 363.59 — SAMPLE ID / GROUNDWATER ELEVATION (FT AMSL)

NOTES:

1. ALL ELEVATIONS ARE SHOWN IN FEET ABOVE MEAN SEA LEVEL (FT AMSL).
2. PDS = PIEZOMETER DATA SET.
3. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
4. LOCATION OF PIEZOMETERS (PZ101-PZ106) WERE SURVEYED ON APRIL 26, 2016 BY C.T. MALE.

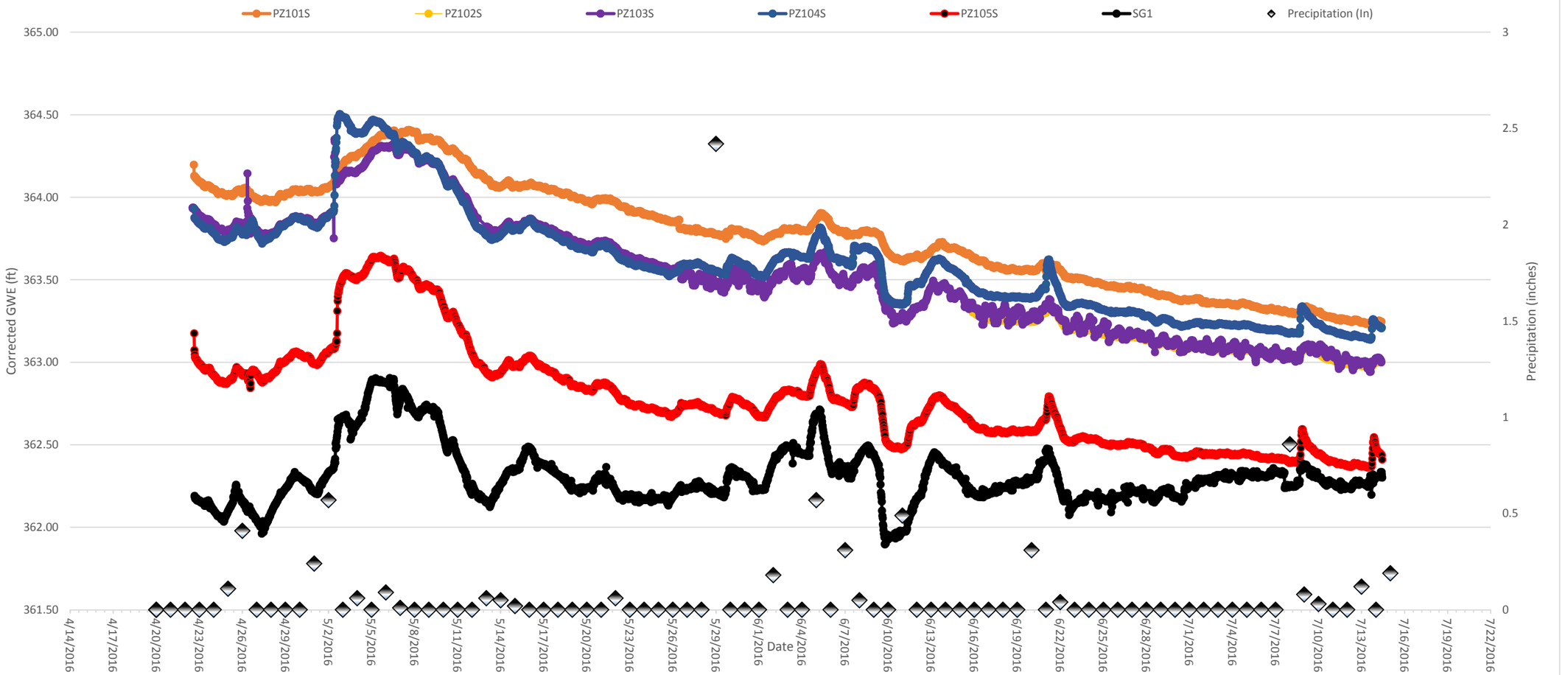
0 100' 200'
GRAPHIC SCALE

HILLSIDE ROAD, COLD SPRINGS TERMINALS
LYSANDER, NEW YORK
FOCUSED GROUNDWATER ELEVATION INVESTIGATION STUDY SUMMARY REPORT

SHALLOW PIEZOMETER GROUNDWATER ELEVATION DATA - JUNE 21, 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE 7



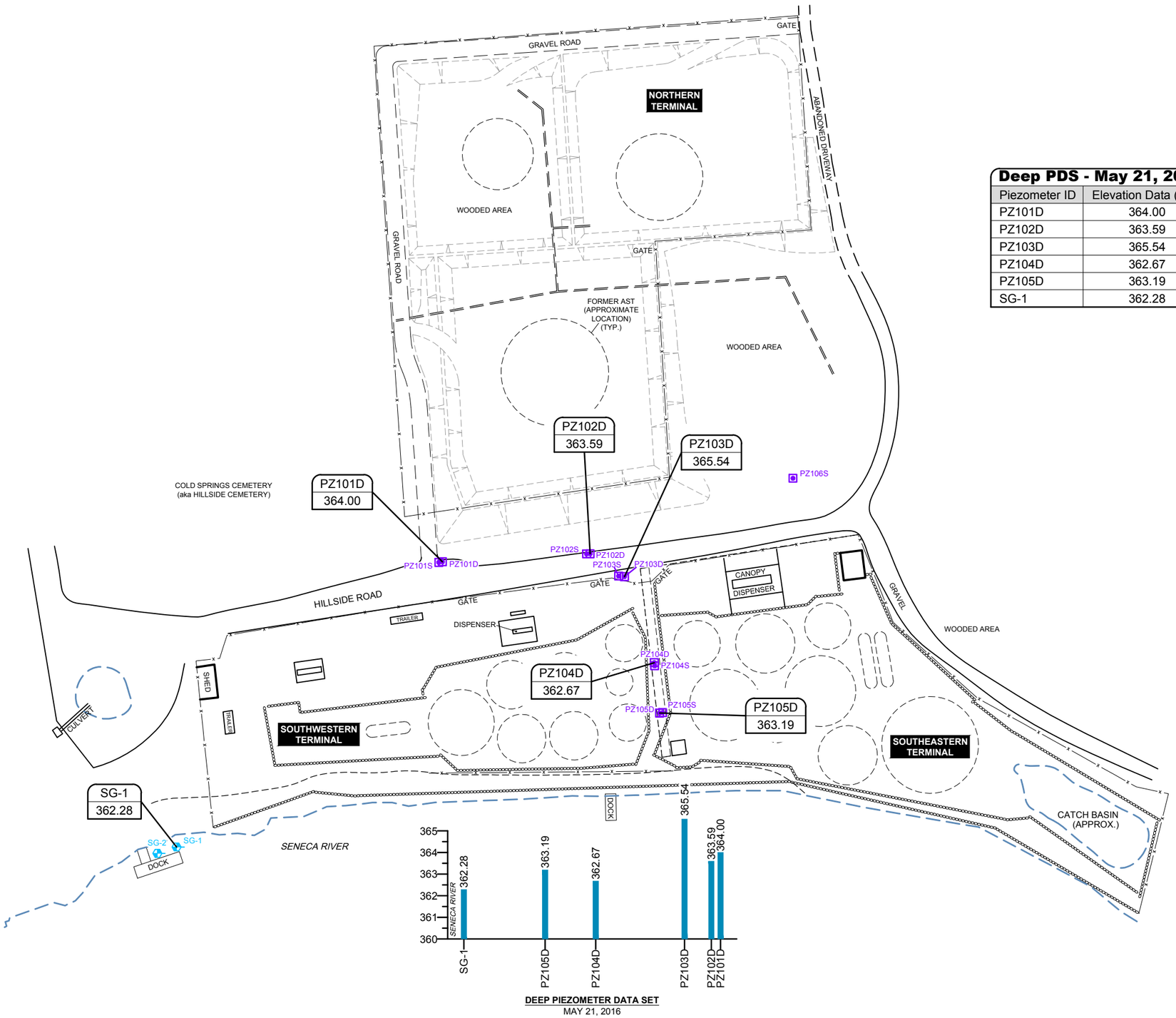
Notes:
ft amsl = feet above mean sea level

COLD SPRINGS TERMINAL
HILLSIDE ROAD, LYSANDER, NEW YORK
Focused Groundwater Elevation Summary Report

SUMMARY OF SHALLOW TRANSDUCER DATA

ARCADIS Design & Consultancy for natural and built assets

FIGURE
8



DEEP PIEZOMETER DATA SET
MAY 21, 2016

Deep PDS - May 21, 2016	
Piezometer ID	Elevation Data (feet)
PZ101D	364.00
PZ102D	363.59
PZ103D	365.54
PZ104D	362.67
PZ105D	363.19
SG-1	362.28

LEGEND:

- PIEZOMETER
- STAFF GAUGE
- FORMER AST
- FENCE
- RETAINING WALL
- EDGE OF WATER
- EDGE OF BANK

PZ101D / 364.00 — SAMPLE ID / GROUNDWATER ELEVATION (FT AMSL)

NOTES:

1. ALL ELEVATIONS ARE SHOWN IN FEET ABOVE MEAN SEA LEVEL (FT AMSL).
2. PDS = PIEZOMETER DATA SET.
3. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
4. LOCATION OF PIEZOMETERS (PZ101-PZ106) WERE SURVEYED ON APRIL 26, 2016 BY C.T. MALE.

0 100' 200'
GRAPHIC SCALE

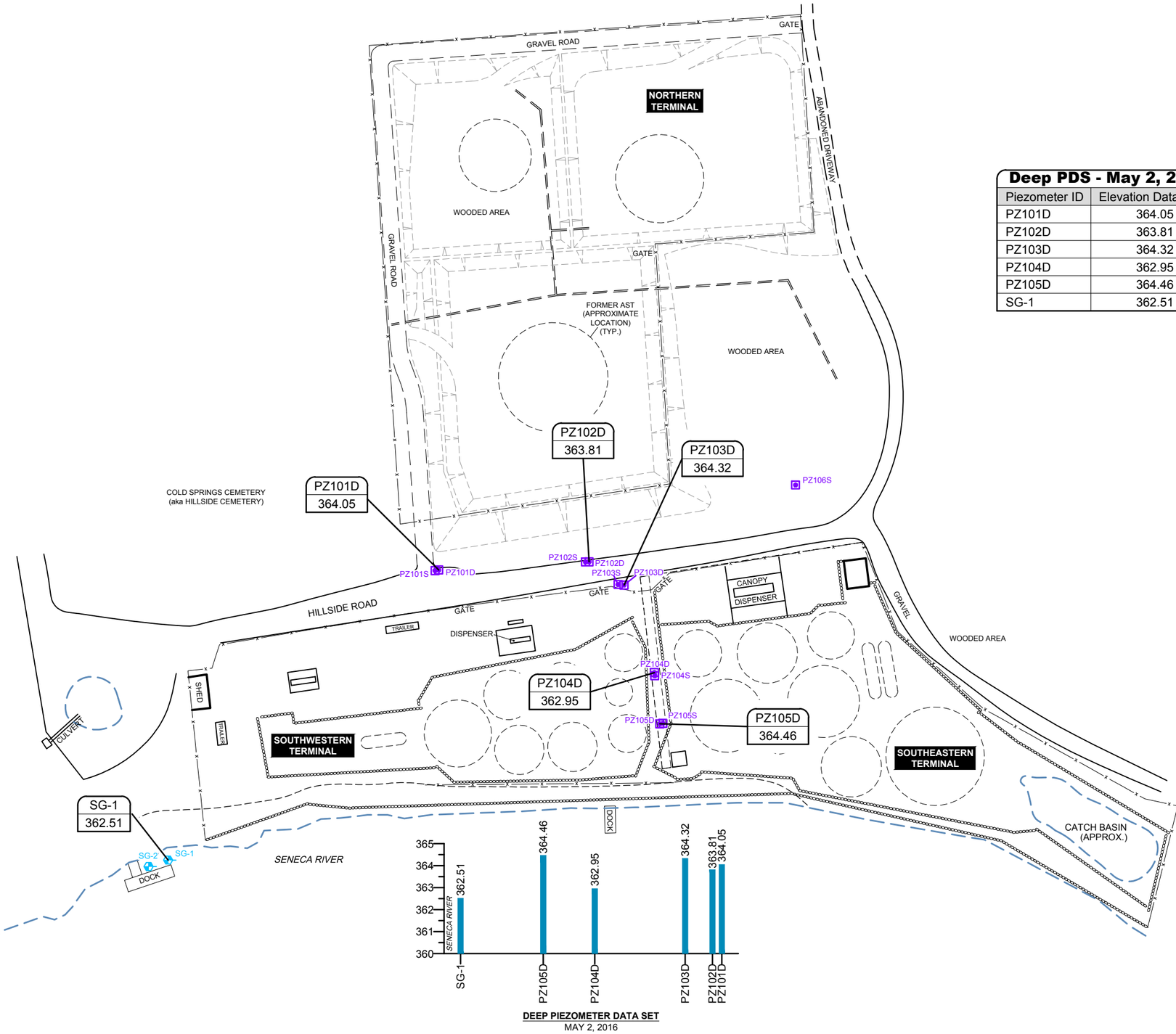
HILLSIDE ROAD, COLD SPRINGS TERMINALS
LYSANDER, NEW YORK
FOCUSED GROUNDWATER ELEVATION INVESTIGATION STUDY SUMMARY REPORT

DEEP PIEZOMETER GROUNDWATER ELEVATION DATA - MAY 21, 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE 9

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER PIC: PM: V. MARESCO TM: R. HENSEL TR: K. ROSKOFF LYR:(Opt)ON=*;OFF=*REF*
C:\Users\roberlander\OneDrive - ARCADIS\BIM 360 Docs\BP\Buckeye Pipeline Company\2018\B0090004.0008101-DWG\90004-Fig9 Piezo GW Elev.dwg LAYOUT: 9 SAVED: 6/4/2018 2:05 PM PLOTTED: 6/4/2018 2:08 PM BY: OBERLANDER, ROSEANNE
XREFS: IMAGES: PROJECTNAME: ----
X-FGE-Title Block
X-Base Map



DEEP PIEZOMETER DATA SET
MAY 2, 2016

Deep PDS - May 2, 2016

Piezometer ID	Elevation Data (feet)
PZ101D	364.05
PZ102D	363.81
PZ103D	364.32
PZ104D	362.95
PZ105D	364.46
SG-1	362.51

LEGEND:

- PIEZOMETER
- FORMER AST
- STAFF GAUGE
- FENCE
- RETAINING WALL
- EDGE OF WATER
- EDGE OF BANK

PZ101D / 364.05 — SAMPLE ID / GROUNDWATER ELEVATION (FT AMSL)

NOTES:

1. ALL ELEVATIONS ARE SHOWN IN FEET ABOVE MEAN SEA LEVEL (FT AMSL).
2. PDS = PIEZOMETER DATA SET.
3. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
4. LOCATION OF PIEZOMETERS (PZ101-PZ106) WERE SURVEYED ON APRIL 26, 2016 BY C.T. MALE.

0 100' 200'
GRAPHIC SCALE

HILLSIDE ROAD, COLD SPRINGS TERMINALS
LYSANDER, NEW YORK

FOCUSED GROUNDWATER ELEVATION INVESTIGATION STUDY SUMMARY REPORT

DEEP PIEZOMETER GROUNDWATER ELEVATION DATA - MAY 2, 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE 10

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER PIC: PM: V. MARESCO TM: R. HENSEL TR: K. ROSKOFF LYR:(Opt)ON=*;OFF=*REF*
C:\Users\roberlander\OneDrive - ARCADIS\BIM 360 Docs\BP\Buckeye Pipeline Company\2018\B0090004.0008\01-DWG\90004-Fig10 Piezo GW Elev.dwg LAYOUT: 10 SAVED: 6/4/2018 2:06 PM PLOTTED: 6/4/2018 2:08 PM BY: OBERLANDER, ROSEANNE
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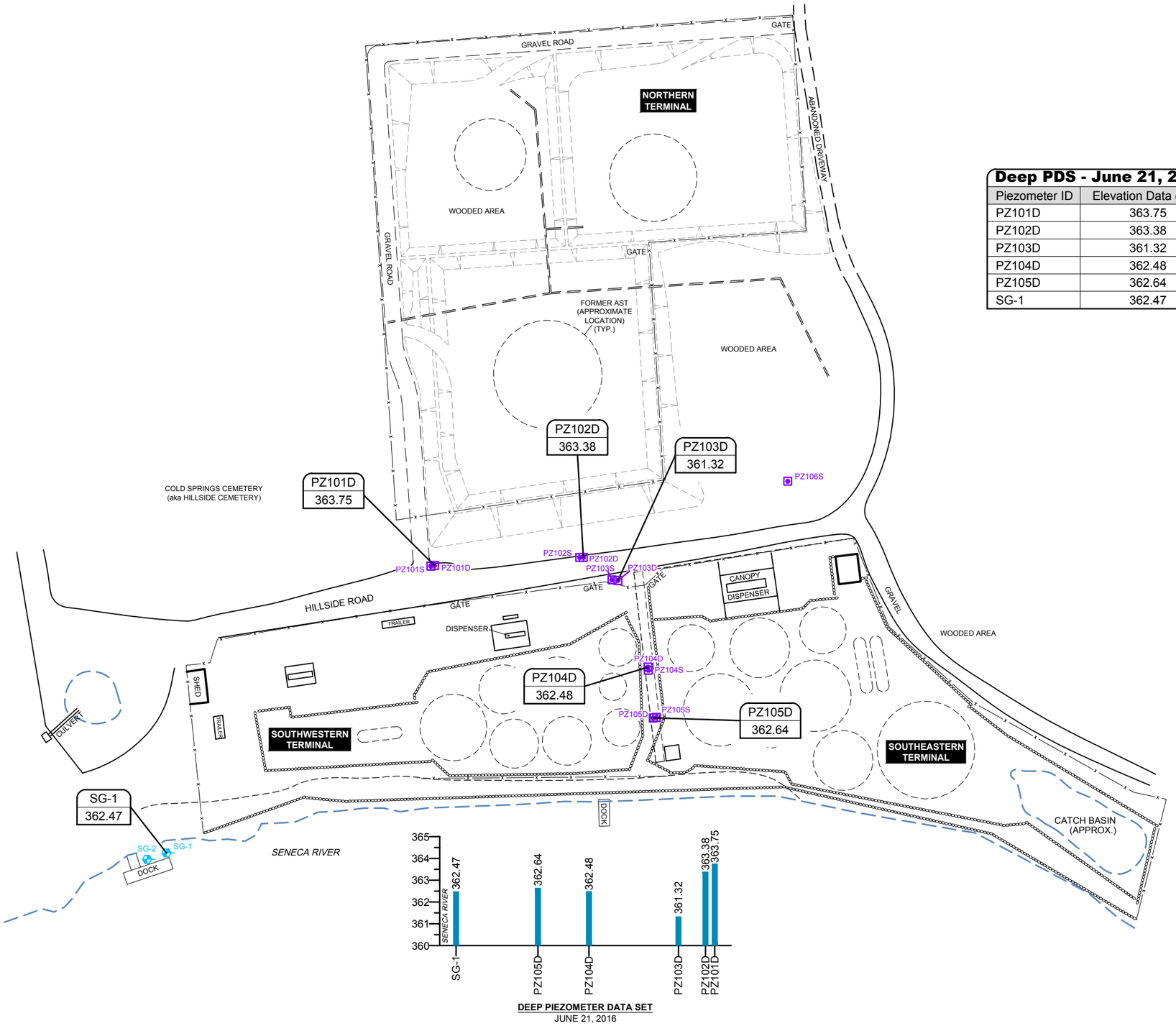
X-FGE-Title Block
X-Base Map



DEEP PIEZOMETER DATA SET
JUNE 21, 2016

Deep PDS - June 21, 2016	
Piezometer ID	Elevation Data (feet)
PZ101D	363.75
PZ102D	363.38
PZ103D	361.32
PZ104D	362.48
PZ105D	362.64
SG-1	362.47

LEGEND:

- PIEZOMETER
- STAFF GAUGE
- FORMER AST
- FENCE
- RETAINING WALL
- EDGE OF WATER
- EDGE OF BANK

PZ101D / 363.75 — SAMPLE ID / GROUNDWATER ELEVATION (FT AMSL)

NOTES:

1. ALL ELEVATIONS ARE SHOWN IN FEET ABOVE MEAN SEA LEVEL (FT AMSL).
2. PDS = PIEZOMETER DATA SET.
3. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
4. LOCATION OF PIEZOMETERS (PZ101-PZ106) WERE SURVEYED ON APRIL 26, 2016 BY C.T. MALE.

0 100' 200'
GRAPHIC SCALE

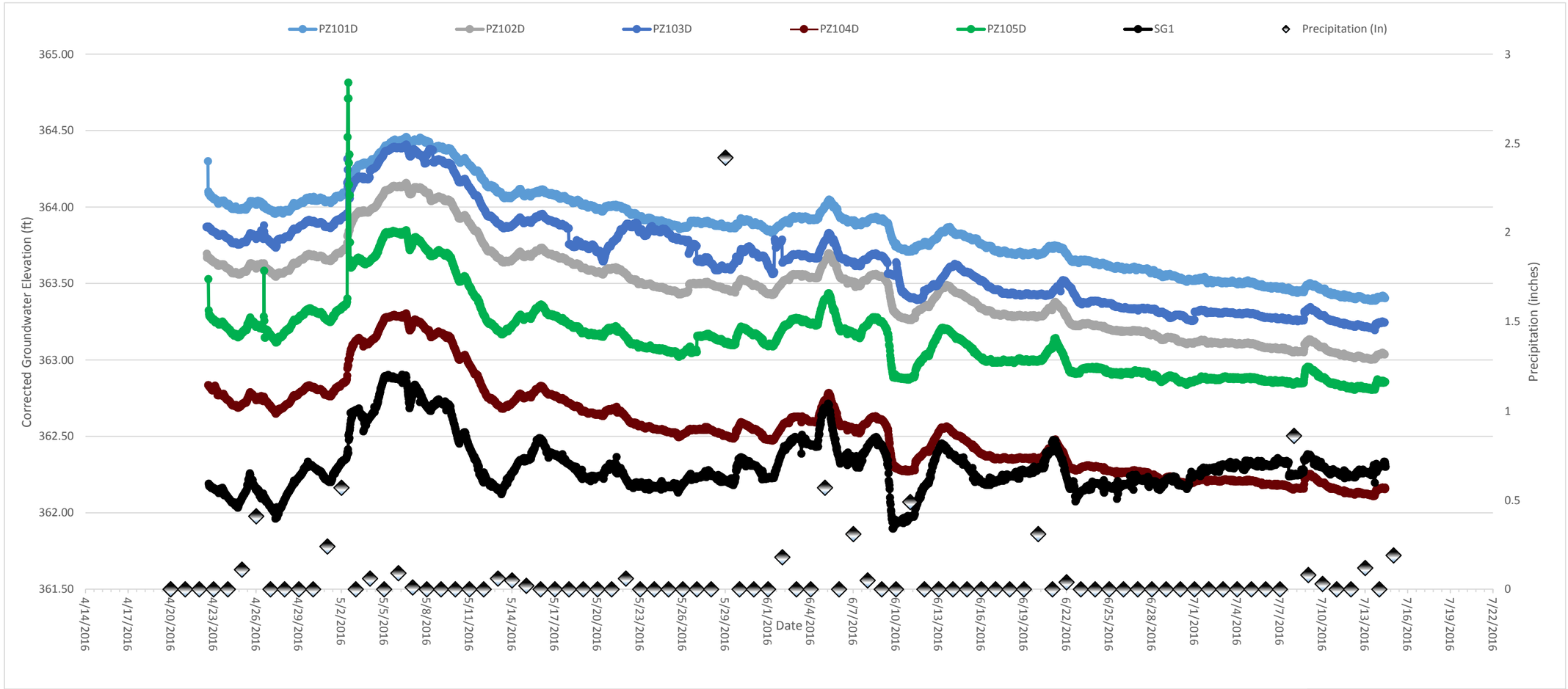
HILLSIDE ROAD, COLD SPRINGS TERMINALS
LYSANDER, NEW YORK
FOCUSED GROUNDWATER ELEVATION INVESTIGATION STUDY SUMMARY REPORT

DEEP PIEZOMETER GROUNDWATER ELEVATION DATA - JUNE 21, 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE 11

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER PIC: PM: V. MARESCO TM: R. HENSEL TR: K. ROSKOFF LYR:(Opt)ON=*;OFF=*REF*
C:\Users\roberlander\OneDrive - ARCADIS\BIM 360 Docs\BP\Buckeye Pipeline Company\2018\B0090004.0008\01-DWG\90004-Fig11 Piezo GW Elev.dwg LAYOUT: 11 SAVED: 6/4/2018 2:07 PM PLOTTED: 6/4/2018 2:09 PM BY: OBERLANDER, ROSEANNE
XREFS: IMAGES: PROJECTNAME: ----
X-FGE-Title Block
X-Base Map



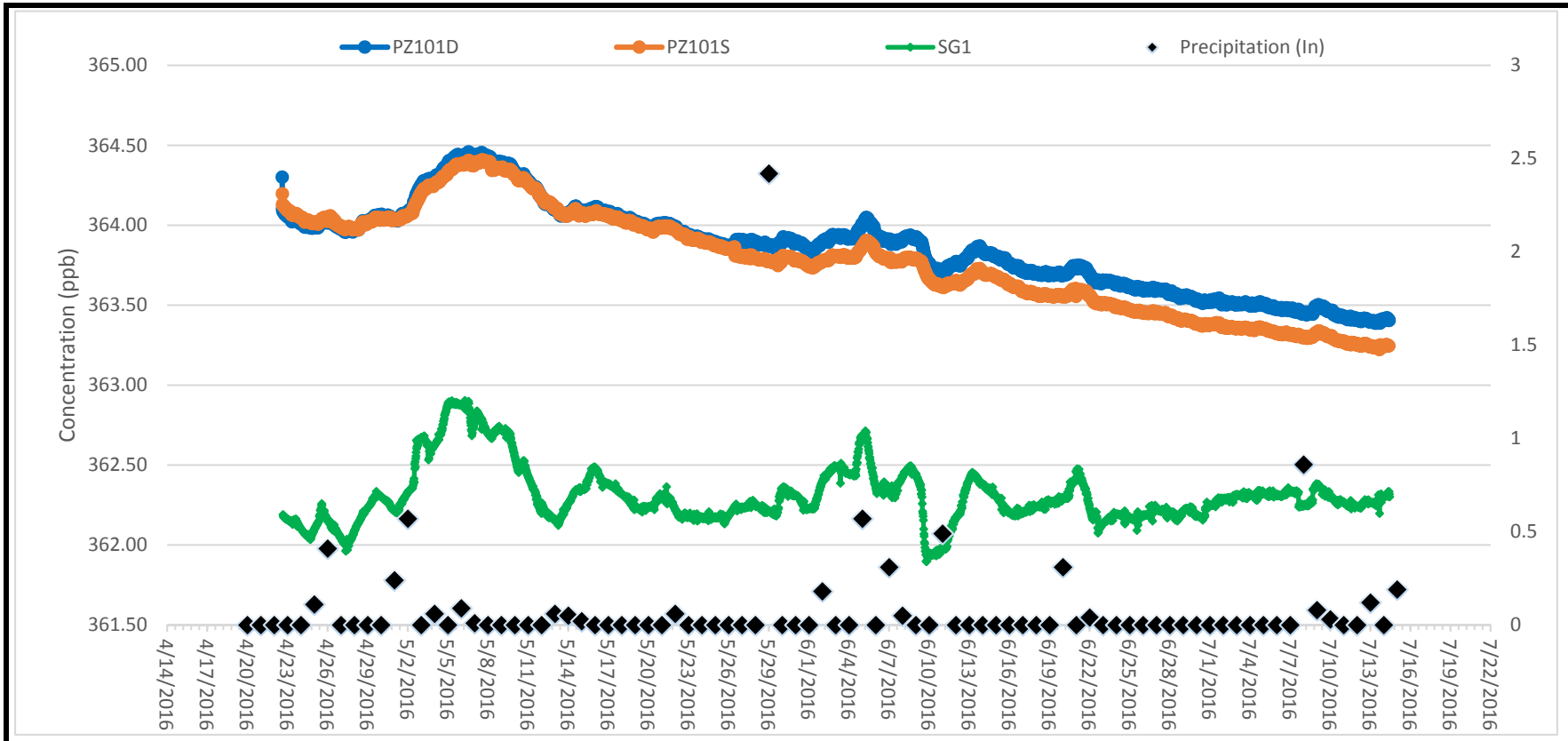
Notes:
ft amsl = feet above mean sea level

COLD SPRINGS TERMINAL
HILLSIDE ROAD, LYSANDER, NEW YORK
Focused Groundwater Elevation Summary Report

SUMMARY OF DEEP TRANSDUCER DATA

ARCADIS Design & Consultancy for natural and built assets

FIGURE
12



Notes:

ft amsl = feet above mean sea level

COLD SPRINGS TERMINAL

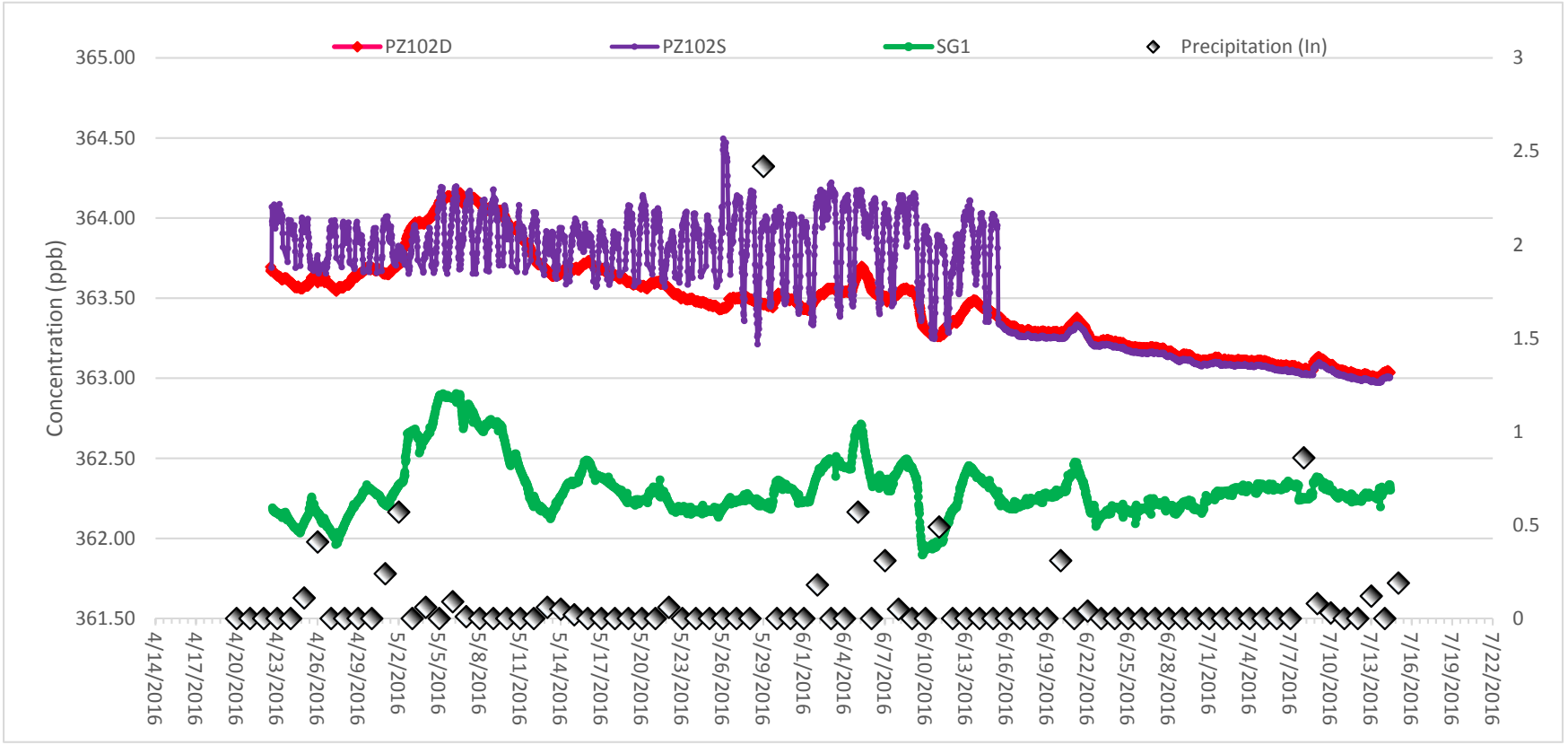
HILLSIDE ROAD, LYSANDER, NEW YORK

Focused Groundwater Elevation Investigation Summary

PZ101 DATA HYDROGRAPH

ARCADIS Figure 13

WELL ID PZ101S



Notes:

ft amsl = feet above mean sea level

COLD SPRINGS TERMINAL

HILLSIDE ROAD, LYSANDER, NEW YORK

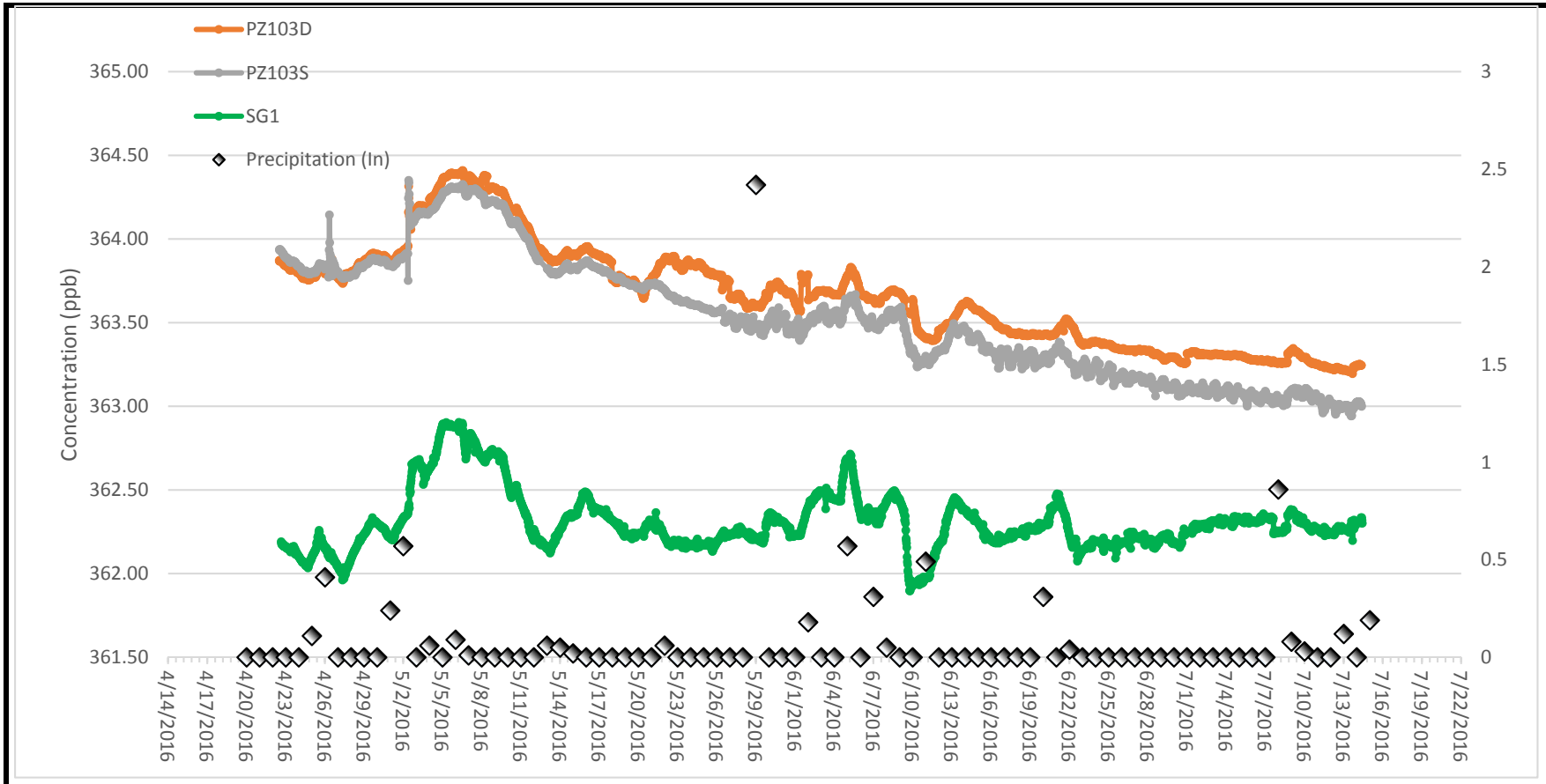
Focused Groundwater Elevation Investigation Summary

PZ102 DATA HYDROGRAPH

ARCADIS

Figure 14

WELL ID
PZ102S



Notes:

ft amsl = feet above mean sea level

COLD SPRINGS TERMINAL

HILLSIDE ROAD, LYSANDER, NEW YORK

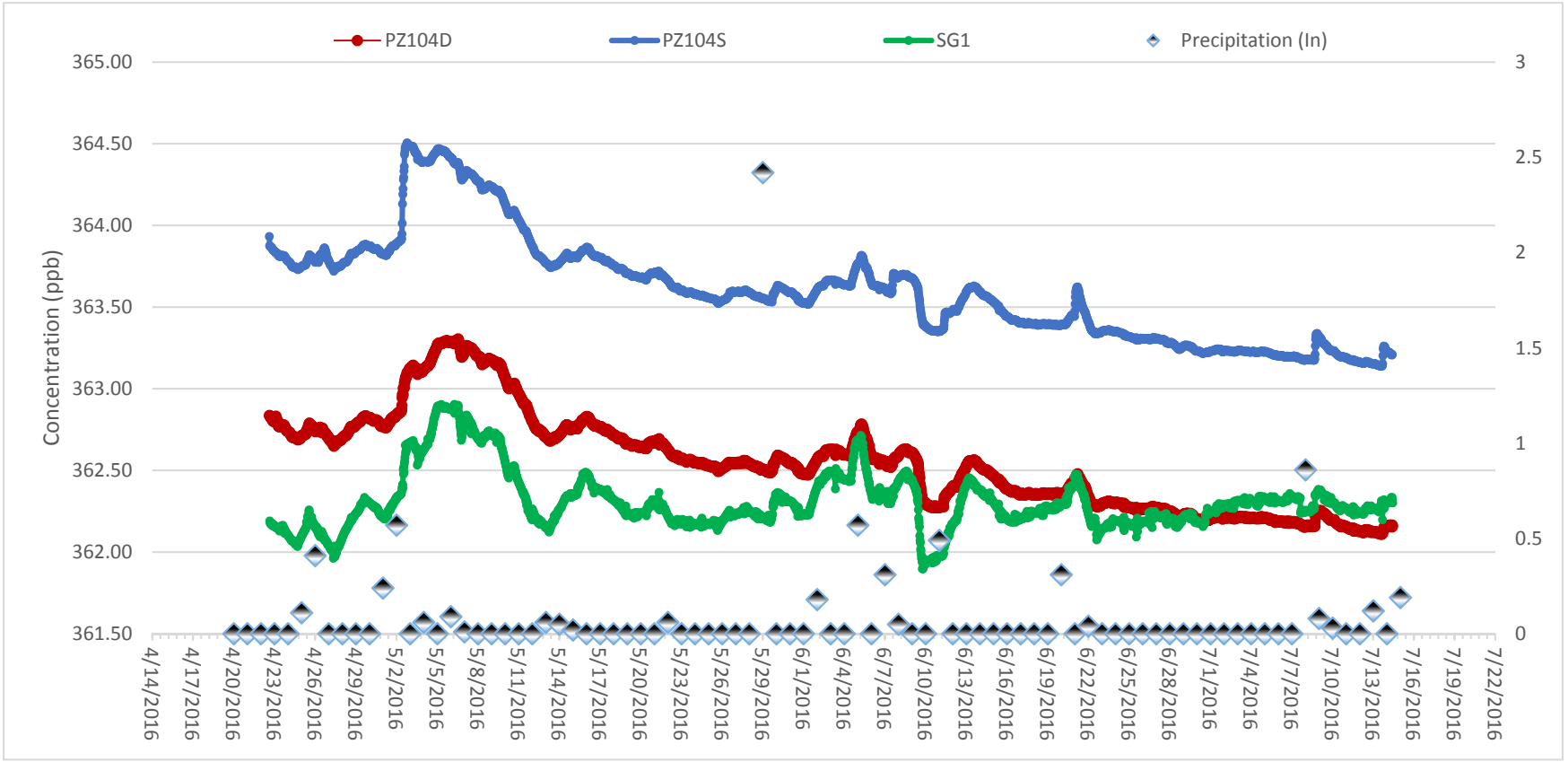
Focused Groundwater Elevation Investigation Summary

PZ103 DATA HYDROGRAPH

ARCADIS

Figure 15

WELL ID
PZ103S



Notes:

ft amsl = feet above mean sea level

COLD SPRINGS TERMINAL

HILLSIDE ROAD, LYSANDER, NEW YORK

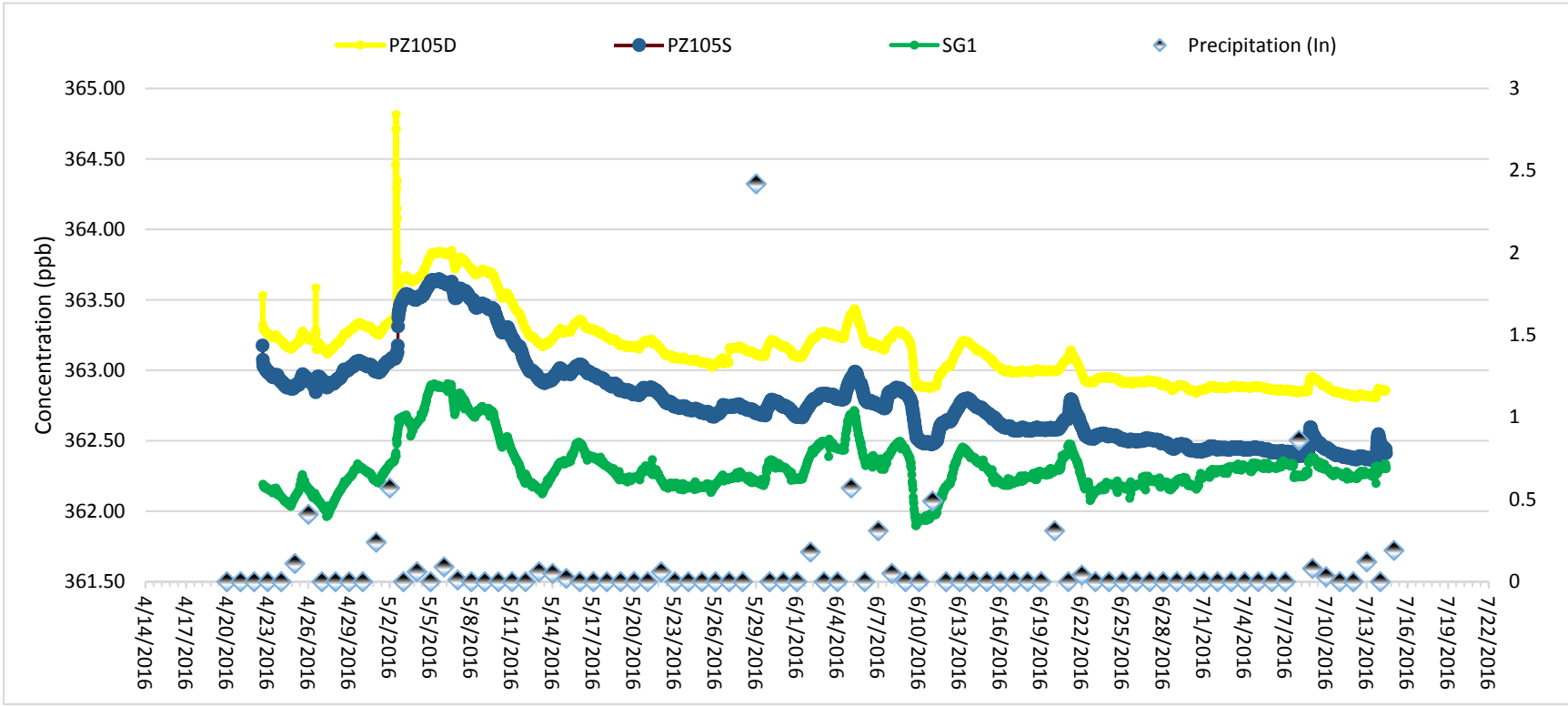
Focused Groundwater Elevation Investigation Summary

PZ104 DATA HYDROGRAPH

ARCADIS

Figure 16

WELL ID
PZ104S



Notes:

ft amsl = feet above mean sea level

COLD SPRINGS TERMINAL

HILLSIDE ROAD, LYSANDER, NEW YORK

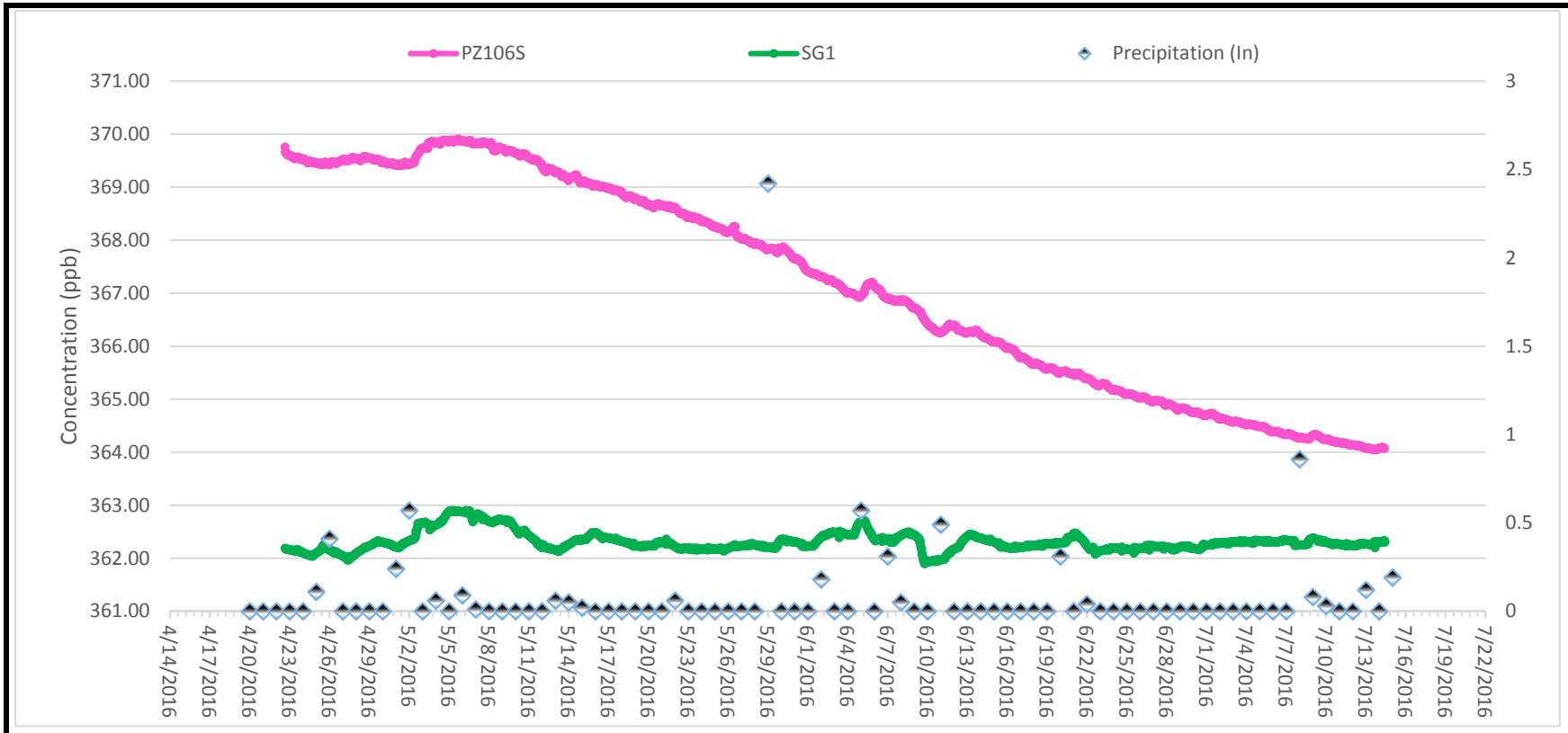
Focused Groundwater Elevation Investigation Summary

PZ105 DATA HYDROGRAPH

ARCADIS

Figure 17

WELL ID
PZ105S



Notes:

ft amsl = feet above mean sea level

COLD SPRINGS TERMINAL

HILLSIDE ROAD, LYSANDER, NEW YORK

Focused Groundwater Elevation Investigation Summary

PZ106 DATA HYDROGRAPH

ARCADIS

Figure 18

WELL ID
PZ106S

APPENDIX A

Focused Investigation Work Plan

ARCADIS Design & Consultancy for natural and built assets

Richard Brazell, PE
Region 7 Regional Spill Engineer
New York State Department of Environmental Conservation
615 Erie Blvd. West
Syracuse, New York 13204

Arcadis of New York, Inc.
6723 Towpath Road
PO Box 66
Syracuse
New York 13214-0066
Tel 315 446 9120
Fax 315 449 0017
www.arcadis.com

Subject:
Focused Investigation Work Plan
Hillside Road, Northern Terminal Study Area,
Lysander, New York

ENVIRONMENT

Date:
February 22, 2016

Contact:
Vin Maresco

Phone:
315 671 9256

Email:
vin.maresco@arcadis.com

Our ref:
B0090004.0001

Dear Mr. Brazell:

Arcadis U.S., Inc. (Arcadis) has prepared this Focused Investigation Work Plan (Work Plan) for the Northern Cold Springs Terminal (the Northern Terminal) on behalf of Buckeye and BP. The purpose of this Work Plan is to collect and evaluate data to assist in determining remedial options and strategies for the Northern Terminal. The specific objective of the work described in this Work Plan is to better define subsurface stratigraphy, assess the nature and extent subsurface impacts within these focus areas, and study the groundwater-surface water interaction at the Site. This work plan proposes drilling soil borings and collecting soil samples for analytical testing, installing nested discretely-screened piezometers, and water-level monitoring. A detailed description of these activities is provided below. The activities will be conducted in accordance with New York State Department of Environmental Conservation (NYSDEC) Department of Environmental Remediation DER-10 (May 2010).

Areas of Investigation

To facilitate a focused remedial effort, the Work Plan has been broken into four distinctive study areas based on the location of known spills and the results of previous investigations (see Figure 1). These areas are as follows:

- Area 1 – Area proximal to monitoring well BMW5
- Area 2 – Former transfer pump area
- Area 3 – Delivery line right of way (ROW) between the two southern terminals
- Area 4 – Area proximal to monitoring well B18

1. Pre-Investigation Activities

Prior to initiating drilling activities public utilities will be marked out by contacting Dig Safely New York to locate and mark all utilities near the areas of investigation. A private utility locator will be also be contracted to provide additional utility mark out in the proposed areas of investigation. In accordance with Arcadis subsurface clearance policy, each drilling location will also be hand-cleared to a minimum of 5 feet below ground surface (bgs) before drilling.

Based on information learned from previous site investigations and available historic facility maps, there are three suspected distributions lines that run north-south though Area 3. These distribution lines will be uncovered by hand or soft digging methods at three separate points (northern, middle and southern regions) to visually verify their location, orientation, and direction. Proposed sample locations may be adjusted in an east/west direction based on proximity to utilities.

2. Soil Boring and Sampling Activities

This Work Plan proposes a total of 18 soil borings and installation of 6 nested piezometer pairs (B-101 through B-118 and PZ-101S/D though PZ-106S/D) throughout the four areas proposed for investigation (see Figure 2). Soil borings will be advanced using direct-push drilling methods. Soil samples will be continuously collected from grade to terminal depth using 2-inch diameter 4 or 5-foot long macrocores liners. Representative soils samples will be collected approximately every 2-feet and screened for volatile organic compounds (VOC) using a photo-ionization detector (PID). Soil characteristics will be logged continuously by a geologist for texture, grains size, moisture content, geologic origin, and the potential presence of impacts via field instrumentation. Each boring termination depth will be determined in the field by the on-site geologist and will be based on field indication of absence of impacts or 10 feet below first detection of the water table, whichever is shallower. For the purposes of this investigation field determination of absence of impact will be a detection of 50ppm on a field PID or less. Based on a review of historical data the anticipated terminal depth of each boring is estimated as follows:

Area 1 – Seven total soil borings, four in the northern portion to approximately 30 feet bgs and three in the southern portion to approximately 20 feet bgs

Area 2 – Six soil borings to approximately 18 to 20 feet bgs

Area 3 – Five soil borings to approximately 18 to 20 feet bgs

Area 4 – Six soil borings to approximately 22 feet bgs

Soil samples will be collected from each interval and analyzed by PACE Analytical Services, Inc. in Pittsburgh PA for constituents listed in NYSDEC Policy CP-51: Tables 2 and 3 (Soil Cleanup Levels for Gasoline and Fuel Oil Contaminated Soils, respectively). Samples will also be analyzed for methyl-tert-butyl-ether (MTBE) and ethanol.

Soil borings will be abandoned by backfilling each borehole with pelletized bentonite while removing the drilling tools. Soil cuttings generated during soil sampling activities will be temporally contained in 55-gallon drums on site in the northern portion of investigation Area 4. Composite samples of generated waste material will be collected for waste characterization analysis in accordance with applicable laws and regulations. All waste will be disposed of at an off-site location based on the results of laboratory analytical testing.

3. Groundwater/Surface water Interaction Activities

Six pairs of nested piezometers (PZ-101S/D through PZ-106S/D, 12 total piezometers) will be installed starting on the north side of Hillside Drive (Area 1, Area 2 and Area 4) and progressing into the ROW (Area 3), towards the Seneca River. These proposed locations are shown on Figure 3. Water-levels will be measured in the piezometers to better understand the groundwater-to-surface water interaction.

The soil borings for each of the piezometers will be drilled using the direct-push drilling procedure described above or a hollow stem auger rotary method. Piezometers will be constructed using 2-inch inside diameter (ID) schedule 40 polyvinyl chloride (PVC) material. Shallow piezometers (PZ-101S though PZ-106S) will extend to approximately 20 feet bgs and will be constructed with a 15 foot screen intended to straddle the water table (i.e., 10 feet below the average water table elevation and 5 feet above the average water table elevation). Deeper piezometers (PZ-101D though PZ-106D) will extend to the top of the glacial till or an elevation of 345 feet above mean sea level (amsl) (whichever is shallower). The deeper piezometers will be constructed using 2-foot long screens utilizing standard well construction methods with appropriately sized clean sand pack. An approximate 5-foot bentonite seal will be placed starting at approximately 1 foot above the piezometer screen.

Automatic pressure transducers will be installed inside each piezometer and in the two staff gauges installed in the Seneca River. One staff gauge will be installed along the nearby boat dock and the other along the bulk head near Area 3. Pressure transducers will allow collection of relatively continuous water levels over a several month period. Water levels will be evaluated to assess the magnitude and direction of hydraulic gradients (i.e., groundwater flow direction) in the horizontal and vertical direction. Measure groundwater levels at the same time as the surface water level in Seneca River will enable an evaluation of groundwater interaction with the river. Transducers will be installed in the piezometers and river gauges approximately one month prior to the opening of the NYS Barge Canal system and will collect data over the course of approximately three months.

Manual water-level measurements will be obtained at piezometers and river gauges once at the beginning of the study every week thereafter. All transducers will be inspected and data will be downloaded during the manual gauging events.

4. Survey

All soil borings, piezometers, and surface water measurement locations will be surveyed by a NYS licensed surveyor relative to the datum that has been established for the site. Survey information will be used to convert depths to elevations at each boring location and to establish reference elevations for each piezometer.

5. Reporting

The results of the activities described in this Work Plan will be presented in one final report which will summarize soil boring, sampling activities, and the groundwater-surface water interaction study. The report is anticipated to include, at a minimum, the following:

- Brief narrative describing the field activities, observations, and results
- Updated site plan showing the actual locations of all soil borings and/or piezometer locations
- Soil boring and piezometer logs
- Copies of laboratory testing reports
- Hydrographs of the transducer and manual water-level measurements (groundwater-surface water interaction report, only)

6. Schedule

Ideally field activities described herein will be initiated no later than March 2016, approximately one month prior to the target NYS Canal system opening in April 2016. The installation of piezometers, transducers and initiation of the groundwater-surface water interaction study will immediately follow the completion of the drilling activities. Groundwater and surface water monitoring activities will continue for a minimum of two months after the transducers are installed. The report discussed in Section 5 above will be submitted within approximately 60 days after completion of all field activities.

If you have any questions or require additional information, please call me at 315.671.9256.

Sincerely,

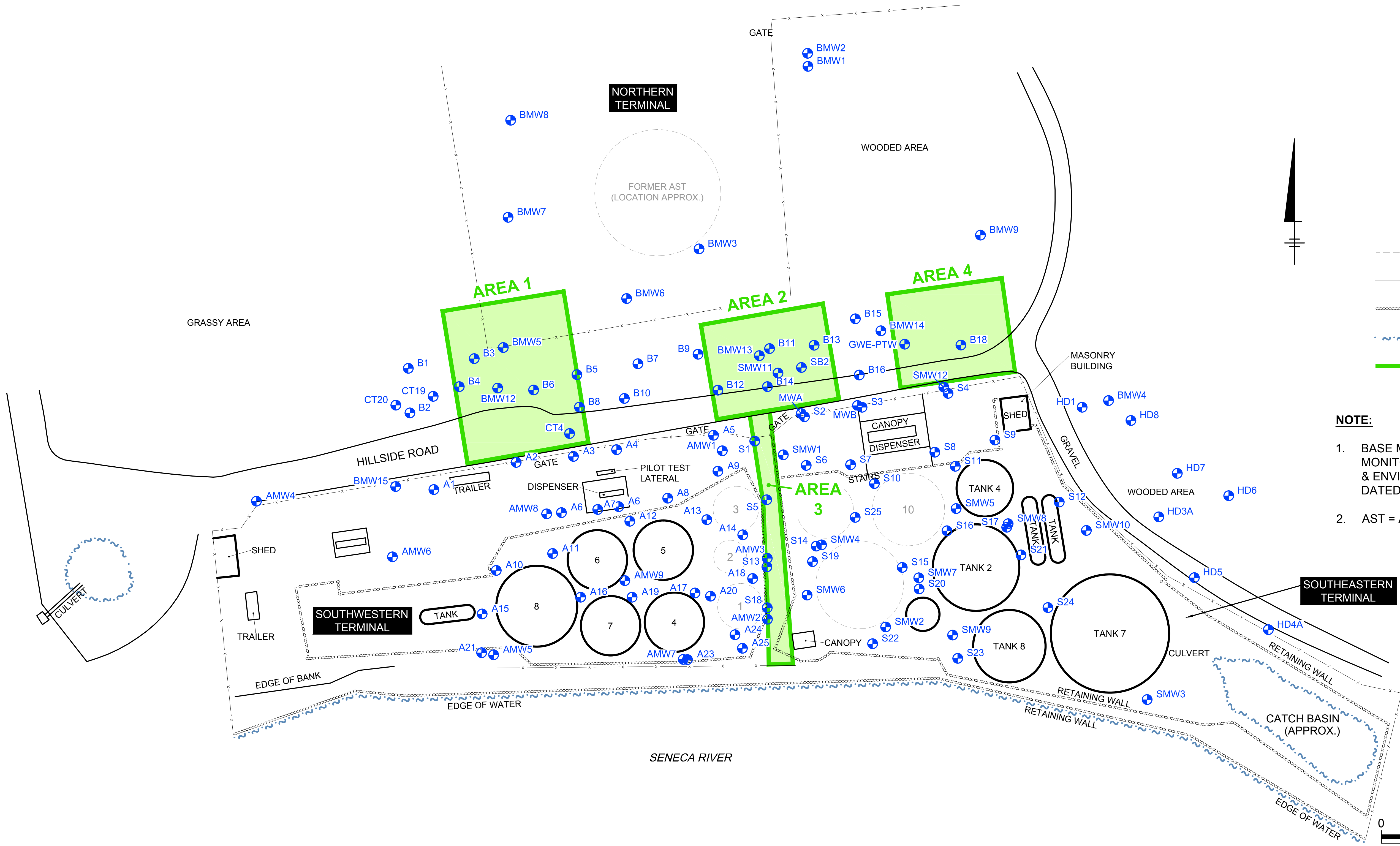
Arcadis of New York, Inc.

Vincent S. Maresco
Principal Geologist

Enclosures:

Figures

1 Northern Terminal Areas of Investigation
2 Proposed Soil Boring Locations
3 Proposed Piezometer Locations



LEGEND:

- MONITORING WELL
- FORMER AST
- FENCE
- TOP OF WALL
- EDGE OF WATER
- INVESTIGATION AREA

NOTE:

1. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
2. AST = ABOVE GROUND STORAGE TANK.

0 80' 160'

GRAPHIC SCALE

COLD SPRINGS TERMINAL
HILLSIDE ROAD, LYSANDER, NEW YORK
FOCUSED INVESTIGATION WORK PLAN

NORTHERN TERMINAL AREAS OF INVESTIGATION

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FIGURE
1

LEGEND:

- PROPOSED SOIL BORING
- MONITORING WELL
- FORMER AST
- FENCE
- TOP OF WALL
- EDGE OF WATER
- INVESTIGATION AREA

NOTE:

1. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
2. AST = ABOVE GROUND STORAGE TANK.

COLD SPRINGS TERMINAL
HILLSIDE ROAD, LYSANDER, NEW YORK
FOCUSED INVESTIGATION WORK PLAN

PROPOSED SOIL BORING LOCATIONS

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FIGURE 2

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER PIC: PM: V. MARESCO TM: TR: R. HENSEL LYR:(Opt)ON="OFF=*REF*
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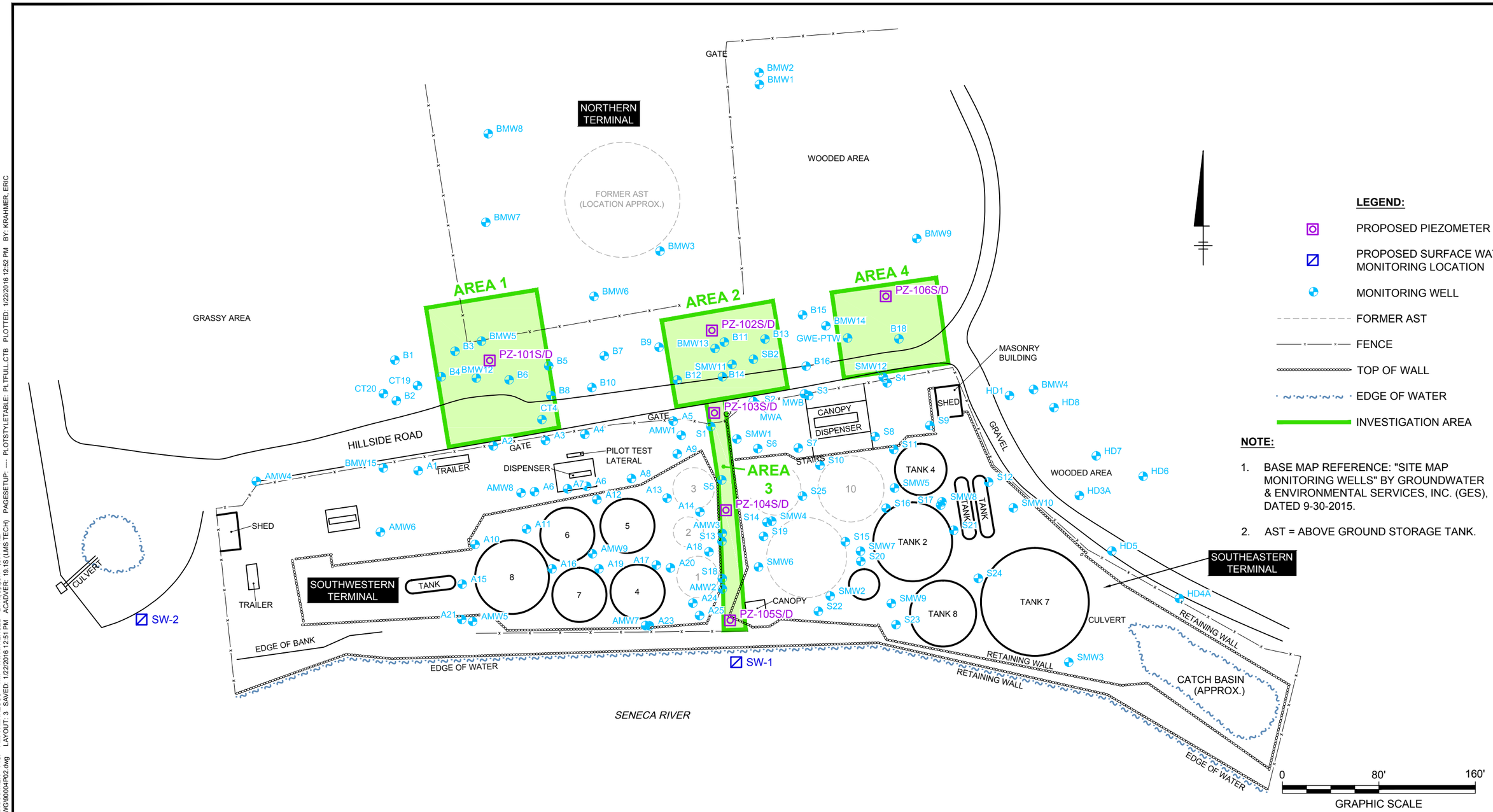
XREFS: IMAGES: PROJECTNAME: ----
90004XLB
90004X01



LEGEND:

- PROPOSED PIEZOMETER
- PROPOSED SURFACE WATER MONITORING LOCATION
- MONITORING WELL
- FORMER AST
- FENCE
- TOP OF WALL
- EDGE OF WATER
- INVESTIGATION AREA

NOTE:

1. BASE MAP REFERENCE: "SITE MAP MONITORING WELLS" BY GROUNDWATER & ENVIRONMENTAL SERVICES, INC. (GES), DATED 9-30-2015.
2. AST = ABOVE GROUND STORAGE TANK.

COLD SPRINGS TERMINAL
HILLSIDE ROAD, LYSANDER, NEW YORK
FOCUSED INVESTIGATION WORK PLAN

PROPOSED PIEZOMETER LOCATIONS

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FIGURE 3

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER PIC: PM: V. MARESCO TM: TR: R. HENSEL LYR:(Opt)ON=*;OFF=*REF*
Z:\ENVCAD\SYRACUSE\ACTIVE\B009\90004\00001\0000\1\DWG\90004P02.dwg LAYOUT: 3 SAVED: 1/22/2016 12:51 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 1/22/2016 12:52 PM BY: KRAHMER, ERIC
XREFS: 90004XLB 90004X01 IMAGES: PROJECTNAME: ----

APPENDIX B

Soil Boring and Piezometer Construction Logs

Date Start/Finish: 4/4/16 - 4/18/16
Drilling Company: Parratt-Wolff
Driller's Name: Mark Eaves
Drilling Method: Direct Push / HSA
Auger Size: 4.25" ID
Rig Type: Truck-Mounted Geoprobe Rig
Sampling Method: 4' x 2" Acetate Liner

Northing: 1141202.22
Easting: 908828.54
Casing Elevation: D 379.37' AMSL
Addit. Casing Elevation: S 379.32' AMSL
Borehole Depth: 23.3' bgs
Surface Elevation: 379.63' AMSL

Descriptions By: Ethan Ulm

Well/Boring ID: **PZ101D / PZ101S**

Client: Cold Springs Northen Terminal

Location: Lysander, NY

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
	380								
0							0.0		Asphalt surface.
							0.0		Grey fine to medium angular GRAVEL, little Silty Sand, dry-moist (road base).
							0.1		Light brown CLAYEY SILT with thin laminations of Silty Sand, firm, moist.
		1	0-4	NA	NA	NA			
									Light brown CLAYEY SILT with thin laminations of Silty Sand increasing clay, firm, slightly plastic, moist.
							0.0		
5	375	2	4-8	2.5	NA	NA	1058		
							1915		
10	370	3	8-12	3.2	NA	NA			Light brown/grey fine SAND and SILT, red staining, odors.
							2105		
							2780		
		4	12-16	3.1	NA	NA			Running sands begin from 13.1-15.1'bgs
15	365						780.3		

Well/Boring Construction

- Concrete Pad (0-0.5' bgs)
- Steel flushmount cover
- Locking J-Plug
- Sand Drain (0.5-1' bgs)
- Bentonite Seal (1-3' bgs)
- 2" Sch 40 PVC Riser (0.5'-4' bgs)
- 2" Sch 40 PVC Riser (0.5'-20' bgs)
- Bentonite/concrete Grout (1-16' bgs)
- #1 Silica Sand Pack (3-19' bgs)
- 2" Sch 40 PVC 0.010" Slot Screen (4-19' bgs)

ARCADIS Design & Consultancy for natural and built assets

Remarks: ags = above ground surface; bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level; HSA = Hollow-stem augers.

PZ101S was drilled and installed based on information collected at PZ101D

Client: Cold Springs Northen Terminal

Well/Boring ID: **PZ101D / PZ101S**

Site Location:
Lysander, NY

Borehole Depth: 23.3' bgs

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
		5	16-20	2.0	NA	NA	1805		Light brown/grey fine SAND and SILT, red staining, odors.	#1 Silica Sand Pack (3-19' bgs); Bentonite Seal (16-18' bgs); 2" Sch 40 PVC 0.010" Slot Screen (4-19' bgs); 2" Sch 40 PVC Riser (0.5'-20' bgs); #1 Silica Sand Pack (18-22' bgs); 2" Sch 40 PVC 0.010" Slot Screen (20-22' bgs)
20	360						20.9			
		6	20-23.3	3.3	NA	NA	2.1		Dark grey to black fine-medium SAND and coarse SAND to fine subangular Gravel, compact, stiff, wet.	
							0.4		Red/brown CLAYEY SILT, trace fine Sand, stiff, dry.	
25	355								Boring terminated at 23.3' bgs.	
30	350									
35	345									

ARCADIS Design & Consultancy for natural and built assets

Remarks: ags = above ground surface; bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level; HSA = Hollow-stem augers.

PZ101S was drilled and installed based on information collected at PZ101D

Date Start/Finish: 4/4/16 - 4/14/16
Drilling Company: Parratt Wolff
Driller's Name: Mike Evans
Drilling Method: Hollow Stem Auger
Auger Size: 4.25" ID
Rig Type: CME-55
Sampling Method: 2" x 2' Split Spoon

Northing: 1141209.64
Easting: 908965.29
Casing Elevation: D 377.96' AMSL
Addit. Casing Elevation: S 378.06' AMSL
Borehole Depth: 24.9' bgs
Surface Elevation: 378.52' AMSL

Descriptions By: Ethan Ulm

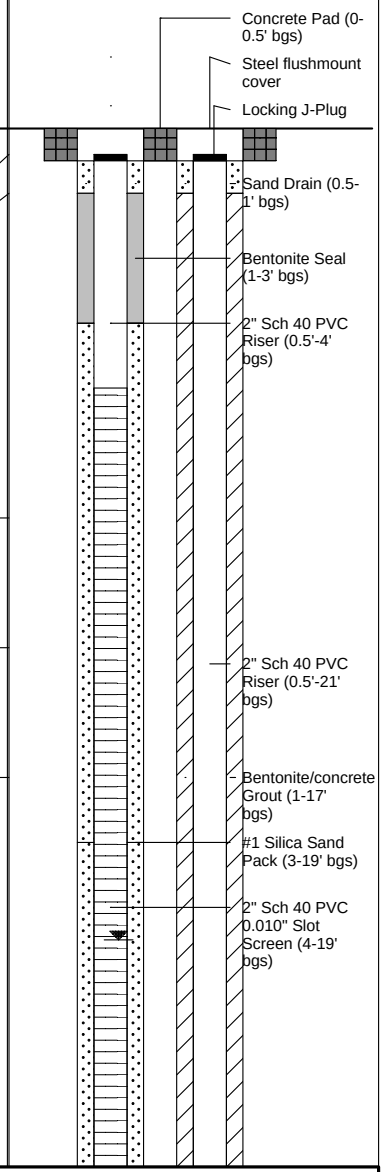
Well/Boring ID: **PZ102D / PZ102S**

Client: Cold Springs Northern Terminal

Location: Lysander, NY

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
380								
0						0.0		ASPHALT.
								Fine to medium angular GRAVEL, light grey Silty Sand, wet-moist (road base)
						0.0		Light brown CLAYEY SILT with interbedded Silty Sand, increase moisture with depth, increase density.
	NA	NA	NA	NA	NA	0.0		
375						0.0		
5	1	5-6	0.3	4 3	7	17		Gravel content increasing to some below 4.7' bgs.
	2	6-8	2.0	3 3 3 4	6	210.2		Light brown CLAYEY SILT with interbedded Silty Sand, dry, increase density, odor.
370	3	8-10	1.5	2 2 2 3	4	716.9		Light to medium brown SILTY SAND, trace Silt lenses, loose to firm, moist.
10	4	10-12	1.6	3 3 2 4	5	1847		Light to medium brown SILTY SAND, trace Silt lenses, loose to firm, moist to wet at 12.5' bgs (running sand).
	5	12-14	1.5	2 4 4 4	8	2095		
365								Color change to brown below 14' bgs.
15	6	14-16	1.7	4 5 4 5	9	1209		

Well/Boring Construction



ARCADIS Design & Consultancy for natural and built assets

Remarks: ags = above ground surface; bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level; HSA = Hollow-stem augers.

PZ102S was drilled and installed based on information collected at PZ102D

Client: Cold Springs Northern Terminal

Well/Boring ID: **PZ102D / PZ102S**

Borehole Depth: 24.9' bgs

Site Location:
Lysander, NY

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
		7	16-18	1.6	6 7 7 8	14	778.1		Light to medium brown SILTY SAND, trace Silt lenses, loose to firm, moist to wet at 12.5' bgs (running sand).	#1 Silica Sand Pack (3-19' bgs) Bentonite/concrete Grout (1-17' bgs) Bentonite Seal (17-19' bgs) 2" Sch 40 PVC 0.010" Slot Screen (4-19' bgs) 2" Sch 40 PVC Riser (0.5'-21' bgs) #1 Silica Sand Pack (19-23' bgs) 2" Sch 40 PVC 0.010" Slot Screen (21-23' bgs)
	360	8	18-20	1.5	2 2 4 6	6	112.5			
20		9	20-22	1.3	2 1 21 11	22	136.5 136.5		Dark grey to black medium to fine SAND and fine angular to subangular GRAVEL, trace Silt.	
		10	22-24	1.9	7 7 9 17	16	345.2 345.2			
	355	11	24-24.9	0.9	50/0.9	NA	20.7		Dark grey to black medium to fine SAND and fine angular to subangular GRAVEL, trace Silt, firm, dense, compact. [TILL]	
25									Boring refusal at 24.9' bgs.	
	350									
30										
	345									
35										

ARCADIS Design & Consultancy for natural and built assets

Remarks: ags = above ground surface; bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level; HSA = Hollow-stem augers.

PZ102S was drilled and installed based on information collected at PZ102D

Date Start/Finish: 4/8/16 - 4/13/16
Drilling Company: Parratt Wolff
Driller's Name: Mike Evans
Drilling Method: Hollow Stem Auger
Auger Size: 4.25" ID
Rig Type: CME-55
Sampling Method: 2" x 2' Split Spoon

Northing: 1141188.45
Easting: 908997.05
Casing Elevation: D 377.65' AMSL
Addit. Casing Elevation: S 377.66' AMSL
Borehole Depth: 26.0' bgs
Surface Elevation: 378.05' AMSL

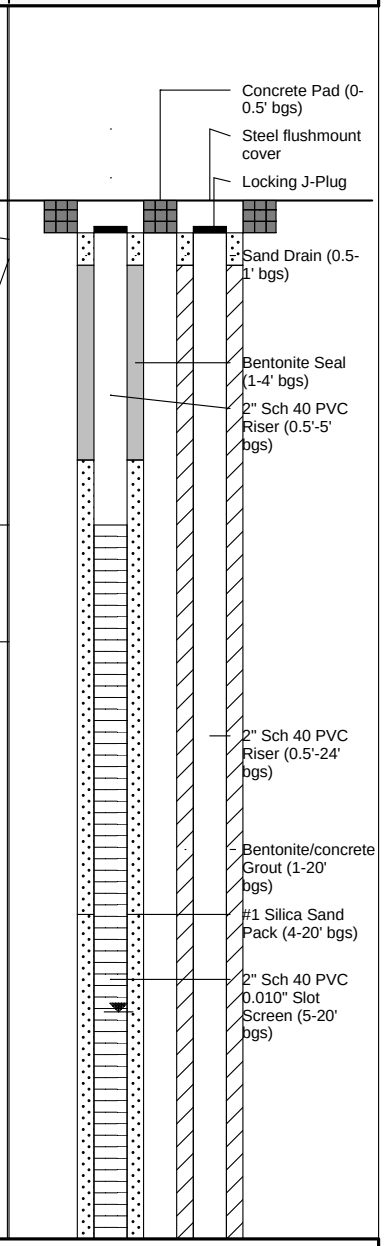
Descriptions By: Ethan Ulm

Well/Boring ID: **PZ103D / PZ103S**

Client: Cold Springs Northern Terminal

Location: Lysander, NY

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
	380								
0							0.0		Asphalt
							0.0		Light brown SANDY SILT, some fine to medium angular Gravel, firm, dry-moist, dense
							0.0		Light brown fine SAND, trace clayey silts, roots, firm.
		NA	0-5	NA	NA	NA			
	375						0.0		
5		1	5-6	0.6	2 3	NA	0.2 0.2		Light to medium brown SILTY SAND, trace clayey silts, firm, slightly plastic, moist, no odors.
		2	6-8	1.7	2 3 3 3	6	169.3 277.1		More clayey silts, dark staining, odors. Medium brown/grey fine SAND, moist to wet, odors.
	370	3	8-10	0.8	1 2 2 4	4	162.5		
10		4	10-12	1.5	3 3 3 3	6	1596		
	365	5	12-14	1.3	2 3 3 3	6	1116		
15		6	14-16	1.0	wt wt wt 3	NA	549.1		



ARCADIS Design & Consultancy for natural and built assets

Remarks: ags = above ground surface; bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level; HSA = Hollow-stem augers.

PZ103S was drilled and installed based on information collected at PZ103D

Client: Cold Springs Northern Terminal

Well/Boring ID: **PZ103D / PZ103S**

Site Location:
Lysander, NY

Borehole Depth: 26.0' bgs

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
		7	16-18	2.0	5 5 7 7	12	571.8 7.1		Medium brown/grey fine SAND, moist to wet, odors. no staining, odors	#1 Silica Sand Pack (4-20' bgs)
	360	8	18-20	1.4	wt wt 5 6	NA	42.7			Bentonite/concrete Grout (1-20' bgs) 2" Sch 40 PVC 0.010" Slot Screen (5-20' bgs)
20		9	20-22	1.9	5 5 9 7	14	51.4		medium to dark staining, wet, odors	2" Sch 40 PVC Riser (0.5'-24' bgs) Bentonite Seal (20-22' bgs)
	355	10	22-24	1.5	8 8 19 14	27	29.2 5.7		Dark grey to black medium to fine SAND and fine angular to subangular GRAVEL, trace Silt, firm, dense, compact. [TILL]	#1 Silica Sand Pack (22-26' bgs)
25		11	24-26	1.8	25 31 34 40	64	NA			2" Sch 40 PVC 0.010" Slot Screen (24-26' bgs)
									Boring terminated at 26' bgs.	
	350									
30										
	345									
35										

ARCADIS Design & Consultancy for natural and built assets

Remarks: ags = above ground surface; bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level; HSA = Hollow-stem augers.

PZ103S was drilled and installed based on information collected at PZ103D

Date Start/Finish: 4/7/16-4/11/16
Drilling Company: Parratt Wolff
Driller's Name: Mike Evans
Drilling Method: Hollow Stem Auger
Auger Size: 4.25" ID
Rig Type: CME-55
Sampling Method: JRO

Northing: 1141108.91
Easting: 909024.65
Casing Elevation: D 373.98' AMSL
Addit. Casing Elevation: S 373.88' AMSL
Borehole Depth: 26.7' bgs
Surface Elevation: 374.24' AMSL

Descriptions By: Ethan Ulm

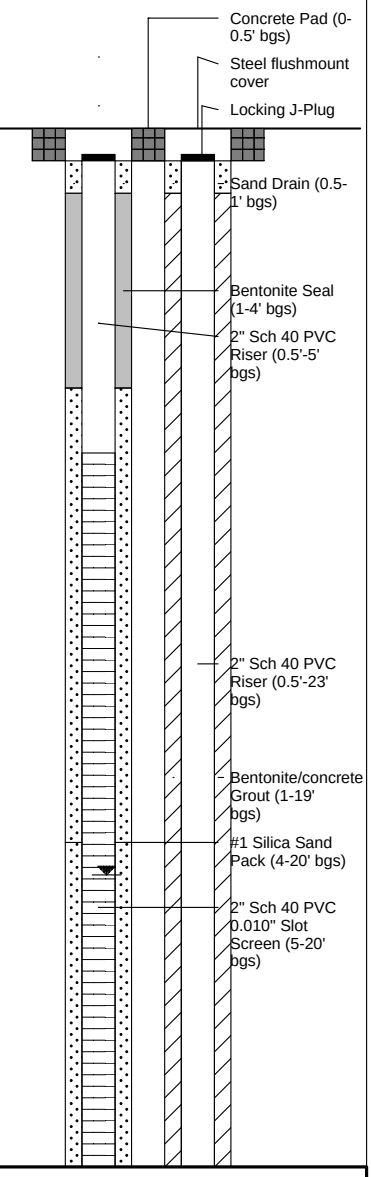
Well/Boring ID: **PZ104D / PZ104S**

Client: Cold Springs Northern Terminal

Location: Lysander, NY

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
	375								
0							0.2		Grass at surface, medium to light brown/grey SANDY SILT, little fine subabngular to angular Gravel, wet, firm
							0.3		Light to medium brown CLAYEY SILT, very dense, dry to moist, slightly plastic.
							73.9		Light to medium brown CLAYEY SILT, grey staining, very dense, dry to moist, slightly plastic, odor
	370	NA	0-8	NA	NA	NA			Light grey, CLAYEY SILT, trace fine Sand, trace Organics, trace subrounded fine to medium Gravel, moist, odors.
5							376.4		
							NA		Light grey SILTY SAND, trace fine subangular Gravel, black staining, odor.
	365	1	8-10	1.1	2 2 3 3	5	381.3		Light grey to black SILTY SAND, trace Clayey Silt, dark staining, loose, moist to wet, odors.
10					1		742.1		
		2	10-12	1.0	2 4 4	6	97.3		Light grey fine SAND, trace Silt, moist-wet, staining, odor.
		3	12-14	1.3	6 4 4 5	8	176.1 238		Light brown fine to medium SAND, wet, sheen at 12.9', loose, odors.
	360								
15		4	14-16	1.3	2 3 3 5	6	0.3		Light brown fine to medium SAND, wet, loose.

Well/Boring Construction



ARCADIS Design & Consultancy for natural and built assets

Remarks: ags = above ground surface; bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level.

PZ104S was drilled and installed based on information collected at PZ104D

Client: Cold Springs Northern Terminal

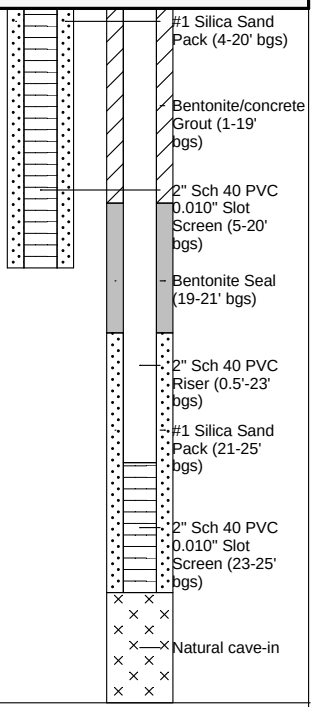
Well/Boring ID: PZ104D / PZ104S

Site Location:
Lysander, NY

Borehole Depth: 26.7' bgs

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
		5	16-18	1.6	4 5 5 7	10	0.0		Light brown fine to medium SAND, wet, loose.
	355	6	18-20	1.4	4 5 5 5	10	0.1		
20		7	20-22	1.3	2 3 3 4	6	0.0		Medium brown fine to medium SAND, wet, moderately firm/dense.
		8	22-24	1.6	4 8 8 6	16	0.0 0.0		Medium brown fine to medium SAND, wet, moderately firm/dense. Fine to medium SAND and fine subrounded to subangular GRAVEL, firm, wet.
	350								
25		9	24-26	1.2	10 8 20 30	28	5 NA		Medium brown fine to medium SAND, wet, moderately firm/dense (running sands). Dark black fine angular GRAVEL, odor.
		10	26-26.7	0.7	46	NA	2.2 2.2		Fine to medium SAND and fine subrounded to subangular GRAVEL, firm, wet.
									Boring terminated at 26.7' bgs.
	345								
30									
	340								
35									

Well/Boring Construction



ARCADIS Design & Consultancy for natural and built assets

Remarks: ags = above ground surface; bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level.

PZ104S was drilled and installed based on information collected at PZ104D

Date Start/Finish: 4/7/16-4/12/16
Drilling Company: Parratt Wolff
Driller's Name: Mike Evans
Drilling Method: Hollow Stem Auger
Auger Size: 4.25" ID
Rig Type: CME-55
Sampling Method: 2" x 2' Split Spoon

Northing: 1141062.30
Easting: 909029.55
Casing Elevation: D 373.41' AMSL
Addit. Casing Elevation: S 373.47' AMSL
Borehole Depth: 27.1' bgs
Surface Elevation: 373.70' AMSL

Descriptions By: Ethan Ulm

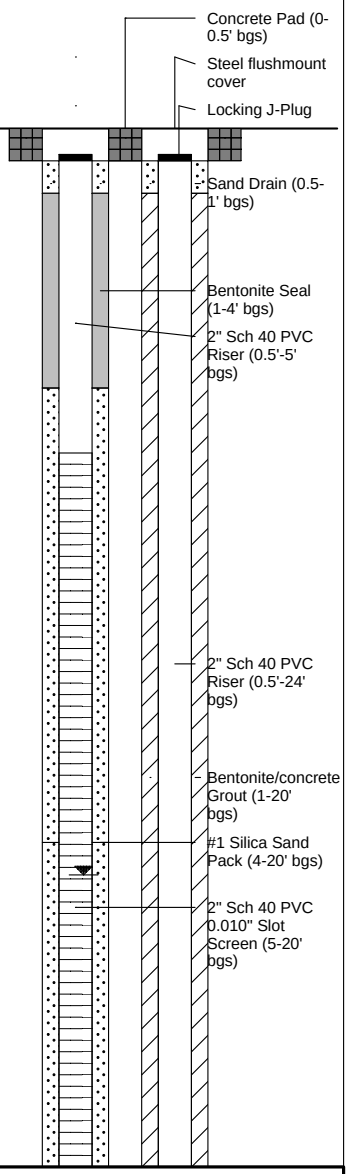
Well/Boring ID: **PZ105D / PZ105S**

Client: Cold Springs Northern Terminal

Location: Lysander, NY

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
375 / 0						1		Grass and roots at the surface. Dark grey to brown SILTY SAND, some fine subangular Gravel, wet.
						0.6		Light to medium CLAYEY SILT, trace fine Sand, firm, moist.
370 / 5	NA	0-8	NA	NA	NA	48.4		Light to medium brown CLAYEY SILT, trace fine Sand, trace fine subangular Gravel, trace Clay, firm.
365 / 10	1	8-10	NR	2 3 3 3	6	70.3		
	2	10-12	1.6	1 2 5 6	7	49.1 100.6		Light brown to light grey CLAYEY SILT, trace coarse Sand, slightly plastic, wet, odor. Light brown to grey fine SILTY SAND, trace Clayey Silt, wet, odor.
360 / 15	3	12-14	1.5	5 6 8 9	14	280.7 280.7 280.7		Light grey/brown fine to medium SAND, trace Clayey Silt, moist- wet, firm, odor.
	4	14-16	1.5	4 5 7 5	12	3.6		

Well/Boring Construction



Remarks: ags = above ground surface; bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level.

PZ105S was drilled and installed based on information collected at PZ105D

ARCADIS Design & Consultancy for natural and built assets

Client: Cold Springs Northern Terminal

Well/Boring ID: **PZ105D / PZ105S**

Site Location:
Lysander, NY

Borehole Depth: 27.1' bgs

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
		5	16-18	1.6	8 7 7 6	14	5.1		Light grey/brown fine to medium SAND, trace Clayey Silt, moist- wet, firm, odor.	#1 Silica Sand Pack (4-20' bgs)
	355	6	18-20	1.4	5 7 9 8	16	1.3			Bentonite/concrete Grout (1-20' bgs) 2" Sch 40 PVC 0.010" Slot Screen (5-20' bgs)
20		7	20-22	1.2	7 6 8 8	14	2.7			2" Sch 40 PVC Riser (0.5'-24' bgs) Bentonite Seal (20-22' bgs)
		8	22-24	1.8	9 9 8 9	17	1.8			#1 Silica Sand Pack (22-26' bgs)
	350	9	24-26	1.5	6 7 10 9	17	3.2			2" Sch 40 PVC 0.010" Slot Screen (24-26' bgs)
25		10	26-27.1	1.1	6 21	NA	3.2 3.2		Green/red/tan/grey medium to coarse SAND with subrounded clasts of coarse Sand/ fine Gravel.	Natural cave-in
									Boring terminated at 27.1' bgs.	
	345									
30										
	340									
35										

Remarks: ags = above ground surface; bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level.

PZ105S was drilled and installed based on information collected at PZ105D

ARCADIS Design & Consultancy for natural and built assets

Date Start/Finish: 4/13/16
Drilling Company: Parratt Wolff
Driller's Name: Mike Evans
Drilling Method: Hollow Stem Auger
Auger Size: 4.25" ID
Rig Type: CME-55
Sampling Method: 2" x 2' Split Spoon

Northing: 1141279.48
Easting: 909152.97
Casing Elevation: 374.02' AMSL
Addit. Casing Elevation: NA
Borehole Depth: 15.5' bgs
Surface Elevation: 374.51' AMSL

Descriptions By: Ethan Ulm

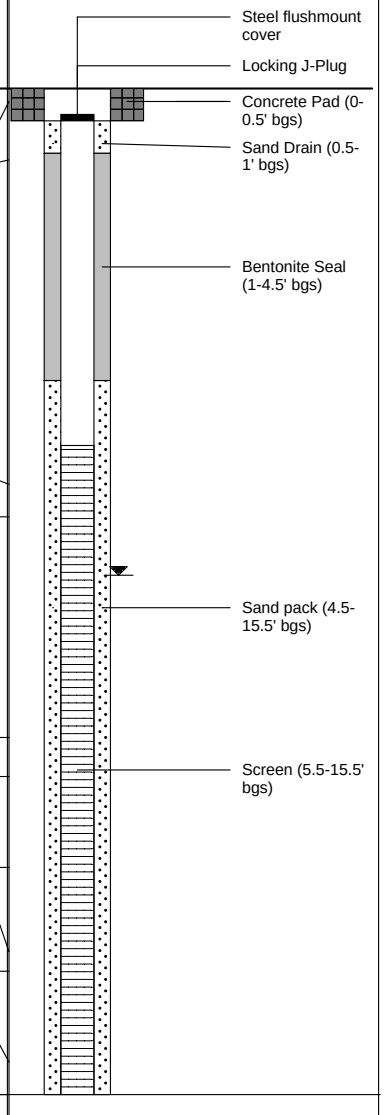
Well/Boring ID: **PZ106S**

Client: Cold Springs Northern Terminal

Location: Lysander, NY

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
	375								
0							0.0		Asphalt.
							0.0		Light grey fine angular GRAVEL, some medium to coarse Sand, moist to wet,
									Light brown SILTY SAND, Organics (roots), thin lmainations of light grey Silt, increase Clayey Silt with depth, dry to moist, dense.
		NA	0-5	NA	NA	NA	0.0		
	370								
5		1	5-6	1.0	6 6	NA	0.3		
					4		7.5		Light brown fine SAND, trace Silt, moist-wet.
		2	6-8	1.5	6 6	12	7.5		Light brown fine SAND, trace Silty Sand, moist-wet, grey to black staining, odor.
					8		23.5		
		3	8-10	1.1	3 4 5	9	45		
	365				4				
10					2		9.4		Medium to dark grey SILTY SAND, loose to firm, wet, trace NAPL/staining.
		4	10-12	1.5	6 9 8	15	9.4		Light brown/tan fine SAND with coarse Sand, fine angular Gravel, trace Silt, moist-dry.
					8		0.4		Medium to dark grey SILTY SAND, loose to firm, wet, trace NAPL/staining.
		5	12-14	2.0	8 10	18	1.1		Light brown/tan/ olive green fine SAND and SILT, trace subrounded-subangular Gravel, moist.
					10		1.1		Light to medium grey/brown fine SAND, little subangular Gravel, moist.
	360				6				
15		6	14-15.5	1.5	8 20 36/0.0	28	0.0 0.0		Medium to fine SAND, some fine subangular Gravel, dense, compact, dry-moist.
									Refusal at 15.5' bgs (possible Till).

Well/Boring Construction



Remarks: ags = above ground surface; bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level.

ARCADIS Design & Consultancy for natural and built assets

APPENDIX C

Raw Transducer Data

Raw transducer data was too voluminous to produce in PDF or hard copy form. An electronic file of this data was provided to the NYSDEC with the original hard copy of the report.

APPENDIX D

Laboratory Analytical Reports

Please note that there are laboratory data included in this Appendix that are not summarized in this report. Only the data from PZ101-106 are summarized in this report. The data from these additional samples will be summarized in subsequent reporting.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 05, 2016

Vin Maresco
Arcadis
6723 Towpath Road
Syracuse, NY 13214

RE: Project: Lysander, NY
Pace Project No.: 30178706

Dear Vin Maresco:
Enclosed are the analytical results for sample(s) received by the laboratory on April 06, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Revision 1 - This report was reissued on July 1, 2016 to include revised Sample IDs for 30178706003 and 30178706006 per client's request.

Revision 2 - This report was reissued on October 5, 2016 to update the sample IDs on 30178706001 and 30178706002 per client's request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rachel D Christner

Rachel Christner
rachel.christner@pacelabs.com
Project Manager

Enclosures

cc: Mr. Edward Mason, Arcadis

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Lysander, NY
Pace Project No.: 30178706

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Lysander, NY
Pace Project No.: 30178706

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30178706001	**PZ-102 (2-4)**	Solid	04/04/16 13:50	04/06/16 09:15
30178706002	**PZ-101 (2-4)**	Solid	04/04/16 15:20	04/06/16 09:15
30178706003	**B115 (1.5-2.0)**	Solid	04/05/16 09:20	04/06/16 09:15
30178706004	**B116 (4.0-5.0)**	Solid	04/05/16 10:00	04/06/16 09:15
30178706005	**TRIP BLANKS**	Water	04/05/16 00:01	04/06/16 09:15
30178706006	**B117 (2.5-3.0)**	Solid	04/05/16 11:25	04/06/16 09:15
30178706007	**B118 (1-3)**	Solid	04/05/16 13:05	04/06/16 09:15
30178706008	**B118 (3-5)**	Solid	04/05/16 13:15	04/06/16 09:15
30178706009	**B114 (1.0-3.0)**	Solid	04/05/16 14:20	04/06/16 09:15
30178706010	**B104 (3.0-5.0)**	Solid	04/05/16 15:05	04/06/16 09:15
30178706011	**B103 (1.0-3.0)**	Solid	04/05/16 15:40	04/06/16 09:15
30178706012	**B101 (2.0-4.0)**	Solid	04/05/16 16:10	04/06/16 09:15

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Lysander, NY
Pace Project No.: 30178706

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30178706001	**PZ-102 (2-4)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30178706002	**PZ-101 (2-4)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30178706003	**B115 (1.5-2.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30178706004	**B116 (4.0-5.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30178706005	**TRIP BLANKS**	EPA 8260C	LEL	20	PASI-PA
30178706006	**B117 (2.5-3.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30178706007	**B118 (1-3)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30178706008	**B118 (3-5)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30178706009	**B114 (1.0-3.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30178706010	**B104 (3.0-5.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30178706011	**B103 (1.0-3.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30178706012	**B101 (2.0-4.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: PZ-102 (2-4) **Lab ID: 30178706001** Collected: 04/04/16 13:50 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.4	0.74	1	04/08/16 14:15	04/11/16 18:03	83-32-9	IS
Acenaphthylene	**90.2**	ug/kg	8.4	0.72	1	04/08/16 14:15	04/11/16 18:03	208-96-8	IS
Anthracene	**81.7**	ug/kg	8.4	0.82	1	04/08/16 14:15	04/11/16 18:03	120-12-7	IS
Benzo(a)anthracene	**671**	ug/kg	8.4	2.1	1	04/08/16 14:15	04/11/16 18:03	56-55-3	IS
Benzo(a)pyrene	**749**	ug/kg	8.4	0.80	1	04/08/16 14:15	04/11/16 18:03	50-32-8	IS
Benzo(b)fluoranthene	**884**	ug/kg	8.4	0.74	1	04/08/16 14:15	04/11/16 18:03	205-99-2	IS
Benzo(g,h,i)perylene	**327**	ug/kg	8.4	1.3	1	04/08/16 14:15	04/11/16 18:03	191-24-2	IS
Benzo(k)fluoranthene	**373**	ug/kg	8.4	0.79	1	04/08/16 14:15	04/11/16 18:03	207-08-9	IS
Chrysene	**665**	ug/kg	8.4	0.55	1	04/08/16 14:15	04/11/16 18:03	218-01-9	IS
Dibenz(a,h)anthracene	**135**	ug/kg	8.4	1.1	1	04/08/16 14:15	04/11/16 18:03	53-70-3	IS
Fluoranthene	**810**	ug/kg	8.4	0.55	1	04/08/16 14:15	04/11/16 18:03	206-44-0	IS
Fluorene	ND	ug/kg	8.4	0.73	1	04/08/16 14:15	04/11/16 18:03	86-73-7	IS
Indeno(1,2,3-cd)pyrene	**382**	ug/kg	8.4	0.99	1	04/08/16 14:15	04/11/16 18:03	193-39-5	IS
Phenanthrene	**117**	ug/kg	8.4	0.84	1	04/08/16 14:15	04/11/16 18:03	85-01-8	IS
Pyrene	**834**	ug/kg	8.4	0.68	1	04/08/16 14:15	04/11/16 18:03	129-00-0	IS
Surrogates									
2-Fluorobiphenyl (S)	63	%	35-141		1	04/08/16 14:15	04/11/16 18:03	321-60-8	IS
Terphenyl-d14 (S)	89	%	64-141		1	04/08/16 14:15	04/11/16 18:03	1718-51-0	IS
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.6	1.5	1	04/13/16 12:00	04/13/16 12:06	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.6	2.7	1	04/13/16 12:00	04/13/16 12:06	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.6	2.8	1	04/13/16 12:00	04/13/16 12:06	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.6	2.7	1	04/13/16 12:00	04/13/16 12:06	98-06-6	1c
Ethanol	ND	ug/kg	222	62.9	1	04/13/16 12:00	04/13/16 12:06	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.6	1.1	1	04/13/16 12:00	04/13/16 12:06	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.6	1.9	1	04/13/16 12:00	04/13/16 12:06	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.6	2.4	1	04/13/16 12:00	04/13/16 12:06	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.6	2.7	1	04/13/16 12:00	04/13/16 12:06	1634-04-4	1c
Naphthalene	ND	ug/kg	5.6	1.1	1	04/13/16 12:00	04/13/16 12:06	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.6	1.9	1	04/13/16 12:00	04/13/16 12:06	103-65-1	1c
Toluene	ND	ug/kg	5.6	1.7	1	04/13/16 12:00	04/13/16 12:06	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.6	1.6	1	04/13/16 12:00	04/13/16 12:06	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.6	1.9	1	04/13/16 12:00	04/13/16 12:06	108-67-8	1c
m&p-Xylene	ND	ug/kg	11.1	2.1	1	04/13/16 12:00	04/13/16 12:06	179601-23-1	1c
o-Xylene	ND	ug/kg	5.6	1.1	1	04/13/16 12:00	04/13/16 12:06	95-47-6	1c
Surrogates									
Toluene-d8 (S)	101	%	68-135		1	04/13/16 12:00	04/13/16 12:06	2037-26-5	
4-Bromofluorobenzene (S)	99	%	65-146		1	04/13/16 12:00	04/13/16 12:06	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	69-137		1	04/13/16 12:00	04/13/16 12:06	17060-07-0	
Dibromofluoromethane (S)	89	%	70-130		1	04/13/16 12:00	04/13/16 12:06	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.8**	%	0.10	0.10	1		04/16/16 16:50		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: PZ-101 (2-4) **Lab ID: 30178706002** Collected: 04/04/16 15:20 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.6	0.76	1	04/08/16 14:15	04/11/16 18:20	83-32-9	IS
Acenaphthylene	ND	ug/kg	8.6	0.73	1	04/08/16 14:15	04/11/16 18:20	208-96-8	IS
Anthracene	ND	ug/kg	8.6	0.83	1	04/08/16 14:15	04/11/16 18:20	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.6	2.2	1	04/08/16 14:15	04/11/16 18:20	56-55-3	IS
Benzo(a)pyrene	ND	ug/kg	8.6	0.82	1	04/08/16 14:15	04/11/16 18:20	50-32-8	IS
Benzo(b)fluoranthene	**14.8**	ug/kg	8.6	0.76	1	04/08/16 14:15	04/11/16 18:20	205-99-2	IS,ip
Benzo(g,h,i)perylene	ND	ug/kg	8.6	1.3	1	04/08/16 14:15	04/11/16 18:20	191-24-2	IS
Benzo(k)fluoranthene	**13.1**	ug/kg	8.6	0.81	1	04/08/16 14:15	04/11/16 18:20	207-08-9	IS,ip
Chrysene	ND	ug/kg	8.6	0.57	1	04/08/16 14:15	04/11/16 18:20	218-01-9	IS
Dibenz(a,h)anthracene	ND	ug/kg	8.6	1.1	1	04/08/16 14:15	04/11/16 18:20	53-70-3	IS
Fluoranthene	**10.8**	ug/kg	8.6	0.57	1	04/08/16 14:15	04/11/16 18:20	206-44-0	
Fluorene	ND	ug/kg	8.6	0.74	1	04/08/16 14:15	04/11/16 18:20	86-73-7	IS
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.6	1.0	1	04/08/16 14:15	04/11/16 18:20	193-39-5	IS
Phenanthrene	ND	ug/kg	8.6	0.86	1	04/08/16 14:15	04/11/16 18:20	85-01-8	
Pyrene	**9.8**	ug/kg	8.6	0.69	1	04/08/16 14:15	04/11/16 18:20	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%	35-141		1	04/08/16 14:15	04/11/16 18:20	321-60-8	IS
Terphenyl-d14 (S)	75	%	64-141		1	04/08/16 14:15	04/11/16 18:20	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	6.5	1.8	1	04/13/16 12:00	04/13/16 12:32	71-43-2	1c
n-Butylbenzene	ND	ug/kg	6.5	3.2	1	04/13/16 12:00	04/13/16 12:32	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	6.5	3.3	1	04/13/16 12:00	04/13/16 12:32	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	6.5	3.2	1	04/13/16 12:00	04/13/16 12:32	98-06-6	1c
Ethanol	ND	ug/kg	261	74.1	1	04/13/16 12:00	04/13/16 12:32	64-17-5	1c
Ethylbenzene	ND	ug/kg	6.5	1.3	1	04/13/16 12:00	04/13/16 12:32	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	6.5	2.3	1	04/13/16 12:00	04/13/16 12:32	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	6.5	2.8	1	04/13/16 12:00	04/13/16 12:32	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	6.5	3.2	1	04/13/16 12:00	04/13/16 12:32	1634-04-4	1c
Naphthalene	ND	ug/kg	6.5	1.3	1	04/13/16 12:00	04/13/16 12:32	91-20-3	1c
n-Propylbenzene	ND	ug/kg	6.5	2.3	1	04/13/16 12:00	04/13/16 12:32	103-65-1	1c
Toluene	ND	ug/kg	6.5	2.0	1	04/13/16 12:00	04/13/16 12:32	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	6.5	1.9	1	04/13/16 12:00	04/13/16 12:32	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	6.5	2.2	1	04/13/16 12:00	04/13/16 12:32	108-67-8	1c
m&p-Xylene	ND	ug/kg	13.1	2.4	1	04/13/16 12:00	04/13/16 12:32	179601-23-1	1c
o-Xylene	ND	ug/kg	6.5	1.3	1	04/13/16 12:00	04/13/16 12:32	95-47-6	1c
Surrogates									
Toluene-d8 (S)	101	%	68-135		1	04/13/16 12:00	04/13/16 12:32	2037-26-5	
4-Bromofluorobenzene (S)	98	%	65-146		1	04/13/16 12:00	04/13/16 12:32	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	69-137		1	04/13/16 12:00	04/13/16 12:32	17060-07-0	
Dibromofluoromethane (S)	89	%	70-130		1	04/13/16 12:00	04/13/16 12:32	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**22.9**	%	0.10	0.10	1		04/16/16 16:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: B115 (1.5-2.0) **Lab ID: 30178706003** Collected: 04/05/16 09:20 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	9.1	0.80	1	04/08/16 14:15	04/11/16 18:38	83-32-9	
Acenaphthylene	ND	ug/kg	9.1	0.77	1	04/08/16 14:15	04/11/16 18:38	208-96-8	
Anthracene	ND	ug/kg	9.1	0.88	1	04/08/16 14:15	04/11/16 18:38	120-12-7	
Benzo(a)anthracene	ND	ug/kg	9.1	2.3	1	04/08/16 14:15	04/11/16 18:38	56-55-3	IS
Benzo(a)pyrene	ND	ug/kg	9.1	0.87	1	04/08/16 14:15	04/11/16 18:38	50-32-8	IS
Benzo(b)fluoranthene	**13.4**	ug/kg	9.1	0.80	1	04/08/16 14:15	04/11/16 18:38	205-99-2	IS,ip
Benzo(g,h,i)perylene	ND	ug/kg	9.1	1.4	1	04/08/16 14:15	04/11/16 18:38	191-24-2	IS
Benzo(k)fluoranthene	**11.9**	ug/kg	9.1	0.86	1	04/08/16 14:15	04/11/16 18:38	207-08-9	IS,ip
Chrysene	ND	ug/kg	9.1	0.60	1	04/08/16 14:15	04/11/16 18:38	218-01-9	IS
Dibenz(a,h)anthracene	ND	ug/kg	9.1	1.2	1	04/08/16 14:15	04/11/16 18:38	53-70-3	IS
Fluoranthene	**13.2**	ug/kg	9.1	0.60	1	04/08/16 14:15	04/11/16 18:38	206-44-0	
Fluorene	ND	ug/kg	9.1	0.79	1	04/08/16 14:15	04/11/16 18:38	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	9.1	1.1	1	04/08/16 14:15	04/11/16 18:38	193-39-5	IS
Phenanthrene	**15.7**	ug/kg	9.1	0.91	1	04/08/16 14:15	04/11/16 18:38	85-01-8	
Pyrene	**11.2**	ug/kg	9.1	0.73	1	04/08/16 14:15	04/11/16 18:38	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	65	%	35-141		1	04/08/16 14:15	04/11/16 18:38	321-60-8	
Terphenyl-d14 (S)	86	%	64-141		1	04/08/16 14:15	04/11/16 18:38	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	7.3	2.0	1	04/13/16 12:00	04/13/16 12:58	71-43-2	1c
n-Butylbenzene	ND	ug/kg	7.3	3.6	1	04/13/16 12:00	04/13/16 12:58	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	7.3	3.7	1	04/13/16 12:00	04/13/16 12:58	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	7.3	3.5	1	04/13/16 12:00	04/13/16 12:58	98-06-6	1c
Ethanol	ND	ug/kg	293	83.1	1	04/13/16 12:00	04/13/16 12:58	64-17-5	1c
Ethylbenzene	ND	ug/kg	7.3	1.5	1	04/13/16 12:00	04/13/16 12:58	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	7.3	2.5	1	04/13/16 12:00	04/13/16 12:58	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	7.3	3.1	1	04/13/16 12:00	04/13/16 12:58	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	7.3	3.6	1	04/13/16 12:00	04/13/16 12:58	1634-04-4	1c
Naphthalene	ND	ug/kg	7.3	1.4	1	04/13/16 12:00	04/13/16 12:58	91-20-3	1c
n-Propylbenzene	ND	ug/kg	7.3	2.6	1	04/13/16 12:00	04/13/16 12:58	103-65-1	1c
Toluene	ND	ug/kg	7.3	2.3	1	04/13/16 12:00	04/13/16 12:58	108-88-3	1c
1,2,4-Trimethylbenzene	**10.1**	ug/kg	7.3	2.1	1	04/13/16 12:00	04/13/16 12:58	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	7.3	2.5	1	04/13/16 12:00	04/13/16 12:58	108-67-8	1c
m&p-Xylene	ND	ug/kg	14.7	2.7	1	04/13/16 12:00	04/13/16 12:58	179601-23-1	1c
o-Xylene	ND	ug/kg	7.3	1.5	1	04/13/16 12:00	04/13/16 12:58	95-47-6	1c
Surrogates									
Toluene-d8 (S)	104	%	68-135		1	04/13/16 12:00	04/13/16 12:58	2037-26-5	
4-Bromofluorobenzene (S)	103	%	65-146		1	04/13/16 12:00	04/13/16 12:58	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	69-137		1	04/13/16 12:00	04/13/16 12:58	17060-07-0	
Dibromofluoromethane (S)	89	%	70-130		1	04/13/16 12:00	04/13/16 12:58	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**27.3**	%	0.10	0.10	1		04/16/16 16:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: B116 (4.0-5.0) **Lab ID: 30178706004** Collected: 04/05/16 10:00 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.4	0.74	1	04/08/16 14:15	04/11/16 18:55	83-32-9	
Acenaphthylene	ND	ug/kg	8.4	0.72	1	04/08/16 14:15	04/11/16 18:55	208-96-8	
Anthracene	ND	ug/kg	8.4	0.82	1	04/08/16 14:15	04/11/16 18:55	120-12-7	IS
Benzo(a)anthracene	ND	ug/kg	8.4	2.2	1	04/08/16 14:15	04/11/16 18:55	56-55-3	IS
Benzo(a)pyrene	ND	ug/kg	8.4	0.81	1	04/08/16 14:15	04/11/16 18:55	50-32-8	IS
Benzo(b)fluoranthene	ND	ug/kg	8.4	0.74	1	04/08/16 14:15	04/11/16 18:55	205-99-2	IS,ip
Benzo(g,h,i)perylene	ND	ug/kg	8.4	1.3	1	04/08/16 14:15	04/11/16 18:55	191-24-2	IS
Benzo(k)fluoranthene	ND	ug/kg	8.4	0.79	1	04/08/16 14:15	04/11/16 18:55	207-08-9	IS,ip
Chrysene	ND	ug/kg	8.4	0.55	1	04/08/16 14:15	04/11/16 18:55	218-01-9	IS
Dibenz(a,h)anthracene	ND	ug/kg	8.4	1.1	1	04/08/16 14:15	04/11/16 18:55	53-70-3	IS
Fluoranthene	ND	ug/kg	8.4	0.55	1	04/08/16 14:15	04/11/16 18:55	206-44-0	IS
Fluorene	ND	ug/kg	8.4	0.73	1	04/08/16 14:15	04/11/16 18:55	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.4	1.0	1	04/08/16 14:15	04/11/16 18:55	193-39-5	IS
Phenanthrene	ND	ug/kg	8.4	0.84	1	04/08/16 14:15	04/11/16 18:55	85-01-8	IS
Pyrene	ND	ug/kg	8.4	0.68	1	04/08/16 14:15	04/11/16 18:55	129-00-0	IS
Surrogates									
2-Fluorobiphenyl (S)	62	%	35-141		1	04/08/16 14:15	04/11/16 18:55	321-60-8	
Terphenyl-d14 (S)	91	%	64-141		1	04/08/16 14:15	04/11/16 18:55	1718-51-0	IS
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.9	1.6	1	04/13/16 12:00	04/13/16 13:23	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.9	2.9	1	04/13/16 12:00	04/13/16 13:23	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.9	2.9	1	04/13/16 12:00	04/13/16 13:23	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.9	2.8	1	04/13/16 12:00	04/13/16 13:23	98-06-6	1c
Ethanol	ND	ug/kg	235	66.6	1	04/13/16 12:00	04/13/16 13:23	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.9	1.2	1	04/13/16 12:00	04/13/16 13:23	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.9	2.0	1	04/13/16 12:00	04/13/16 13:23	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.9	2.5	1	04/13/16 12:00	04/13/16 13:23	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.9	2.9	1	04/13/16 12:00	04/13/16 13:23	1634-04-4	1c
Naphthalene	ND	ug/kg	5.9	1.1	1	04/13/16 12:00	04/13/16 13:23	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.9	2.1	1	04/13/16 12:00	04/13/16 13:23	103-65-1	1c
Toluene	ND	ug/kg	5.9	1.8	1	04/13/16 12:00	04/13/16 13:23	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.9	1.7	1	04/13/16 12:00	04/13/16 13:23	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.9	2.0	1	04/13/16 12:00	04/13/16 13:23	108-67-8	1c
m&p-Xylene	ND	ug/kg	11.8	2.2	1	04/13/16 12:00	04/13/16 13:23	179601-23-1	1c
o-Xylene	ND	ug/kg	5.9	1.2	1	04/13/16 12:00	04/13/16 13:23	95-47-6	1c
Surrogates									
Toluene-d8 (S)	101	%	68-135		1	04/13/16 12:00	04/13/16 13:23	2037-26-5	
4-Bromofluorobenzene (S)	97	%	65-146		1	04/13/16 12:00	04/13/16 13:23	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	69-137		1	04/13/16 12:00	04/13/16 13:23	17060-07-0	
Dibromofluoromethane (S)	91	%	70-130		1	04/13/16 12:00	04/13/16 13:23	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.8**	%	0.10	0.10	1		04/16/16 16:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: TRIP BLANKS **Lab ID: 30178706005** Collected: 04/05/16 00:01 Received: 04/06/16 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV	Analytical Method: EPA 8260C								
Benzene	ND	ug/L	1.0	0.16	1		04/19/16 15:03	71-43-2	M5
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/19/16 15:03	104-51-8	M5
sec-Butylbenzene	ND	ug/L	1.0	0.21	1		04/19/16 15:03	135-98-8	M5
tert-Butylbenzene	ND	ug/L	1.0	0.19	1		04/19/16 15:03	98-06-6	M5
Ethanol	ND	ug/L	200	26.1	1		04/19/16 15:03	64-17-5	M5
Ethylbenzene	ND	ug/L	1.0	0.23	1		04/19/16 15:03	100-41-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.14	1		04/19/16 15:03	98-82-8	M5
p-Isopropyltoluene	ND	ug/L	1.0	0.22	1		04/19/16 15:03	99-87-6	M5
Methyl-tert-butyl ether	ND	ug/L	1.0	0.17	1		04/19/16 15:03	1634-04-4	M5
Naphthalene	ND	ug/L	2.0	0.19	1		04/19/16 15:03	91-20-3	M5
n-Propylbenzene	ND	ug/L	1.0	0.15	1		04/19/16 15:03	103-65-1	M5
Toluene	ND	ug/L	1.0	0.13	1		04/19/16 15:03	108-88-3	M5
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.12	1		04/19/16 15:03	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.12	1		04/19/16 15:03	108-67-8	M5
m&p-Xylene	ND	ug/L	2.0	0.32	1		04/19/16 15:03	179601-23-1	M5
o-Xylene	ND	ug/L	1.0	0.22	1		04/19/16 15:03	95-47-6	M5
Surrogates									
4-Bromofluorobenzene (S)	106	%	81-119		1		04/19/16 15:03	460-00-4	M5
1,2-Dichloroethane-d4 (S)	114	%	77-126		1		04/19/16 15:03	17060-07-0	M5
Toluene-d8 (S)	97	%	84-115		1		04/19/16 15:03	2037-26-5	M5
Dibromofluoromethane (S)	110	%	70-130		1		04/19/16 15:03	1868-53-7	M5

Sample: B117 (2.5-3.0) **Lab ID: 30178706006** Collected: 04/05/16 11:25 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.3	0.73	1	04/08/16 14:15	04/11/16 19:13	83-32-9	IS
Acenaphthylene	ND	ug/kg	8.3	0.71	1	04/08/16 14:15	04/11/16 19:13	208-96-8	IS
Anthracene	ND	ug/kg	8.3	0.81	1	04/08/16 14:15	04/11/16 19:13	120-12-7	IS
Benzo(a)anthracene	ND	ug/kg	8.3	2.1	1	04/08/16 14:15	04/11/16 19:13	56-55-3	IS
Benzo(a)pyrene	ND	ug/kg	8.3	0.80	1	04/08/16 14:15	04/11/16 19:13	50-32-8	IS
Benzo(b)fluoranthene	ND	ug/kg	8.3	0.73	1	04/08/16 14:15	04/11/16 19:13	205-99-2	IS
Benzo(g,h,i)perylene	ND	ug/kg	8.3	1.3	1	04/08/16 14:15	04/11/16 19:13	191-24-2	IS
Benzo(k)fluoranthene	ND	ug/kg	8.3	0.78	1	04/08/16 14:15	04/11/16 19:13	207-08-9	IS
Chrysene	ND	ug/kg	8.3	0.55	1	04/08/16 14:15	04/11/16 19:13	218-01-9	IS
Dibenz(a,h)anthracene	ND	ug/kg	8.3	1.1	1	04/08/16 14:15	04/11/16 19:13	53-70-3	IS
Fluoranthene	ND	ug/kg	8.3	0.55	1	04/08/16 14:15	04/11/16 19:13	206-44-0	IS
Fluorene	ND	ug/kg	8.3	0.72	1	04/08/16 14:15	04/11/16 19:13	86-73-7	IS
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.3	0.98	1	04/08/16 14:15	04/11/16 19:13	193-39-5	IS
Phenanthrene	ND	ug/kg	8.3	0.83	1	04/08/16 14:15	04/11/16 19:13	85-01-8	IS
Pyrene	ND	ug/kg	8.3	0.67	1	04/08/16 14:15	04/11/16 19:13	129-00-0	IS
Surrogates									
2-Fluorobiphenyl (S)	64	%	35-141		1	04/08/16 14:15	04/11/16 19:13	321-60-8	IS

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: B117 (2.5-3.0) **Lab ID: 30178706006** Collected: 04/05/16 11:25 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Surrogates									
Terphenyl-d14 (S)	89	%	64-141		1	04/08/16 14:15	04/11/16 19:13	1718-51-0	IS
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	6.2	1.7	1	04/13/16 12:00	04/13/16 13:49	71-43-2	1c
n-Butylbenzene	ND	ug/kg	6.2	3.0	1	04/13/16 12:00	04/13/16 13:49	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	6.2	3.1	1	04/13/16 12:00	04/13/16 13:49	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	6.2	3.0	1	04/13/16 12:00	04/13/16 13:49	98-06-6	1c
Ethanol	ND	ug/kg	249	70.5	1	04/13/16 12:00	04/13/16 13:49	64-17-5	1c
Ethylbenzene	ND	ug/kg	6.2	1.3	1	04/13/16 12:00	04/13/16 13:49	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	6.2	2.2	1	04/13/16 12:00	04/13/16 13:49	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	6.2	2.6	1	04/13/16 12:00	04/13/16 13:49	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	6.2	3.0	1	04/13/16 12:00	04/13/16 13:49	1634-04-4	1c
Naphthalene	ND	ug/kg	6.2	1.2	1	04/13/16 12:00	04/13/16 13:49	91-20-3	1c
n-Propylbenzene	ND	ug/kg	6.2	2.2	1	04/13/16 12:00	04/13/16 13:49	103-65-1	1c
Toluene	ND	ug/kg	6.2	1.9	1	04/13/16 12:00	04/13/16 13:49	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	6.2	1.8	1	04/13/16 12:00	04/13/16 13:49	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	6.2	2.1	1	04/13/16 12:00	04/13/16 13:49	108-67-8	1c
m&p-Xylene	ND	ug/kg	12.4	2.3	1	04/13/16 12:00	04/13/16 13:49	179601-23-1	1c
o-Xylene	ND	ug/kg	6.2	1.2	1	04/13/16 12:00	04/13/16 13:49	95-47-6	1c
Surrogates									
Toluene-d8 (S)	103	%	68-135		1	04/13/16 12:00	04/13/16 13:49	2037-26-5	
4-Bromofluorobenzene (S)	99	%	65-146		1	04/13/16 12:00	04/13/16 13:49	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	69-137		1	04/13/16 12:00	04/13/16 13:49	17060-07-0	
Dibromofluoromethane (S)	86	%	70-130		1	04/13/16 12:00	04/13/16 13:49	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.6**	%	0.10	0.10	1		04/16/16 16:52		

Sample: B118 (1-3) **Lab ID: 30178706007** Collected: 04/05/16 13:05 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**2070**	ug/kg	166	14.6	20	04/08/16 14:15	04/13/16 14:11	83-32-9	
Acenaphthylene	**761**	ug/kg	8.3	0.70	1	04/08/16 14:15	04/11/16 19:30	208-96-8	
Anthracene	**5270**	ug/kg	166	16.1	20	04/08/16 14:15	04/13/16 14:11	120-12-7	
Benzo(a)anthracene	**8820**	ug/kg	166	42.3	20	04/08/16 14:15	04/13/16 14:11	56-55-3	
Benzo(a)pyrene	**10100**	ug/kg	166	15.8	20	04/08/16 14:15	04/13/16 14:11	50-32-8	
Benzo(b)fluoranthene	**11000**	ug/kg	166	14.6	20	04/08/16 14:15	04/13/16 14:11	205-99-2	
Benzo(g,h,i)perylene	**3190**	ug/kg	166	25.5	20	04/08/16 14:15	04/13/16 14:11	191-24-2	
Benzo(k)fluoranthene	**5330**	ug/kg	166	15.6	20	04/08/16 14:15	04/13/16 14:11	207-08-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: B118 (1-3) **Lab ID: 30178706007** Collected: 04/05/16 13:05 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Chrysene	**7950**	ug/kg	166	10.9	20	04/08/16 14:15	04/13/16 14:11	218-01-9	
Dibenz(a,h)anthracene	**1300**	ug/kg	8.3	1.1	1	04/08/16 14:15	04/11/16 19:30	53-70-3	IS
Fluoranthene	**20600**	ug/kg	166	10.9	20	04/08/16 14:15	04/13/16 14:11	206-44-0	
Fluorene	**2540**	ug/kg	166	14.3	20	04/08/16 14:15	04/13/16 14:11	86-73-7	
Indeno(1,2,3-cd)pyrene	**3910**	ug/kg	166	19.5	20	04/08/16 14:15	04/13/16 14:11	193-39-5	
Phenanthrene	**12100**	ug/kg	166	16.6	20	04/08/16 14:15	04/13/16 14:11	85-01-8	
Pyrene	**17800**	ug/kg	166	13.4	20	04/08/16 14:15	04/13/16 14:11	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	64	%	35-141		1	04/08/16 14:15	04/11/16 19:30	321-60-8	
Terphenyl-d14 (S)	71	%	64-141		1	04/08/16 14:15	04/11/16 19:30	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**31.3**	ug/kg	6.1	1.7	1	04/13/16 08:00	04/13/16 14:15	71-43-2	1c
n-Butylbenzene	**79.0**	ug/kg	6.1	3.0	1	04/13/16 08:00	04/13/16 14:15	104-51-8	1c
sec-Butylbenzene	**48.1**	ug/kg	6.1	3.0	1	04/13/16 08:00	04/13/16 14:15	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	6.1	2.9	1	04/13/16 08:00	04/13/16 14:15	98-06-6	1c
Ethanol	ND	ug/kg	243	68.8	1	04/13/16 08:00	04/13/16 14:15	64-17-5	1c
Ethylbenzene	**1830**	ug/kg	298	60.2	50	04/14/16 08:00	04/14/16 11:46	100-41-4	1c
Isopropylbenzene (Cumene)	**129**	ug/kg	6.1	2.1	1	04/13/16 08:00	04/13/16 14:15	98-82-8	1c
p-Isopropyltoluene	**42.2**	ug/kg	6.1	2.6	1	04/13/16 08:00	04/13/16 14:15	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	6.1	2.9	1	04/13/16 08:00	04/13/16 14:15	1634-04-4	1c
Naphthalene	**3190**	ug/kg	298	57.8	50	04/14/16 08:00	04/14/16 11:46	91-20-3	1c
n-Propylbenzene	**440**	ug/kg	6.1	2.1	1	04/13/16 08:00	04/13/16 14:15	103-65-1	1c
Toluene	**18.9**	ug/kg	6.1	1.9	1	04/13/16 08:00	04/13/16 14:15	108-88-3	1c
1,2,4-Trimethylbenzene	**2780**	ug/kg	298	85.3	50	04/14/16 08:00	04/14/16 11:46	95-63-6	1c
1,3,5-Trimethylbenzene	**81.0**	ug/kg	6.1	2.0	1	04/13/16 08:00	04/13/16 14:15	108-67-8	1c
m&p-Xylene	**523**	ug/kg	12.1	2.2	1	04/13/16 08:00	04/13/16 14:15	179601-23-1	1c
o-Xylene	**41.9**	ug/kg	6.1	1.2	1	04/13/16 08:00	04/13/16 14:15	95-47-6	1c
Surrogates									
Toluene-d8 (S)	112	%	68-135		1	04/13/16 08:00	04/13/16 14:15	2037-26-5	
4-Bromofluorobenzene (S)	113	%	65-146		1	04/13/16 08:00	04/13/16 14:15	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	69-137		1	04/13/16 08:00	04/13/16 14:15	17060-07-0	
Dibromofluoromethane (S)	83	%	70-130		1	04/13/16 08:00	04/13/16 14:15	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.7**	%	0.10	0.10	1		04/16/16 16:52		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: B118 (3-5) **Lab ID: 30178706008** Collected: 04/05/16 13:15 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**3380**	ug/kg	161	14.2	20	04/08/16 14:15	04/13/16 14:28	83-32-9	
Acenaphthylene	**1070**	ug/kg	8.1	0.69	1	04/08/16 14:15	04/11/16 19:48	208-96-8	
Anthracene	**8260**	ug/kg	161	15.7	20	04/08/16 14:15	04/13/16 14:28	120-12-7	
Benzo(a)anthracene	**13200**	ug/kg	161	41.2	20	04/08/16 14:15	04/13/16 14:28	56-55-3	
Benzo(a)pyrene	**13600**	ug/kg	161	15.4	20	04/08/16 14:15	04/13/16 14:28	50-32-8	
Benzo(b)fluoranthene	**16900**	ug/kg	161	14.2	20	04/08/16 14:15	04/13/16 14:28	205-99-2	
Benzo(g,h,i)perylene	**3830**	ug/kg	161	24.8	20	04/08/16 14:15	04/13/16 14:28	191-24-2	
Benzo(k)fluoranthene	**8360**	ug/kg	161	15.2	20	04/08/16 14:15	04/13/16 14:28	207-08-9	
Chrysene	**11200**	ug/kg	161	10.6	20	04/08/16 14:15	04/13/16 14:28	218-01-9	
Dibenz(a,h)anthracene	**1420**	ug/kg	8.1	1.1	1	04/08/16 14:15	04/11/16 19:48	53-70-3	IS
Fluoranthene	**27600**	ug/kg	161	10.6	20	04/08/16 14:15	04/13/16 14:28	206-44-0	
Fluorene	**4530**	ug/kg	161	14.0	20	04/08/16 14:15	04/13/16 14:28	86-73-7	
Indeno(1,2,3-cd)pyrene	**4870**	ug/kg	161	19.0	20	04/08/16 14:15	04/13/16 14:28	193-39-5	
Phenanthrene	**19500**	ug/kg	161	16.1	20	04/08/16 14:15	04/13/16 14:28	85-01-8	
Pyrene	**23100**	ug/kg	161	13.0	20	04/08/16 14:15	04/13/16 14:28	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	62	%	35-141		1	04/08/16 14:15	04/11/16 19:48	321-60-8	
Terphenyl-d14 (S)	69	%	64-141		1	04/08/16 14:15	04/11/16 19:48	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	320	87.0	50	04/14/16 12:00	04/14/16 12:11	71-43-2	1c
n-Butylbenzene	ND	ug/kg	320	157	50	04/14/16 12:00	04/14/16 12:11	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	320	160	50	04/14/16 12:00	04/14/16 12:11	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	320	154	50	04/14/16 12:00	04/14/16 12:11	98-06-6	1c
Ethanol	ND	ug/kg	12800	3630	50	04/14/16 12:00	04/14/16 12:11	64-17-5	1c
Ethylbenzene	**819**	ug/kg	320	64.6	50	04/14/16 12:00	04/14/16 12:11	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	320	111	50	04/14/16 12:00	04/14/16 12:11	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	320	136	50	04/14/16 12:00	04/14/16 12:11	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	320	155	50	04/14/16 12:00	04/14/16 12:11	1634-04-4	1c
Naphthalene	**5050**	ug/kg	320	62.0	50	04/14/16 12:00	04/14/16 12:11	91-20-3	1c
n-Propylbenzene	**509**	ug/kg	320	112	50	04/14/16 12:00	04/14/16 12:11	103-65-1	1c
Toluene	ND	ug/kg	320	99.7	50	04/14/16 12:00	04/14/16 12:11	108-88-3	1c
1,2,4-Trimethylbenzene	**1020**	ug/kg	320	91.4	50	04/14/16 12:00	04/14/16 12:11	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	320	107	50	04/14/16 12:00	04/14/16 12:11	108-67-8	1c
m&p-Xylene	ND	ug/kg	639	118	50	04/14/16 12:00	04/14/16 12:11	179601-23-1	1c
o-Xylene	ND	ug/kg	320	63.3	50	04/14/16 12:00	04/14/16 12:11	95-47-6	1c
Surrogates									
Toluene-d8 (S)	101	%	68-135		50	04/14/16 12:00	04/14/16 12:11	2037-26-5	
4-Bromofluorobenzene (S)	98	%	65-146		50	04/14/16 12:00	04/14/16 12:11	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	69-137		50	04/14/16 12:00	04/14/16 12:11	17060-07-0	
Dibromofluoromethane (S)	82	%	70-130		50	04/14/16 12:00	04/14/16 12:11	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**17.9**	%	0.10	0.10	1		04/16/16 16:53		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: B114 (1.0-3.0) **Lab ID: 30178706009** Collected: 04/05/16 14:20 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.1	0.72	1	04/08/16 14:15	04/11/16 20:06	83-32-9	IS
Acenaphthylene	ND	ug/kg	8.1	0.69	1	04/08/16 14:15	04/11/16 20:06	208-96-8	IS
Anthracene	ND	ug/kg	8.1	0.79	1	04/08/16 14:15	04/11/16 20:06	120-12-7	IS
Benzo(a)anthracene	ND	ug/kg	8.1	2.1	1	04/08/16 14:15	04/11/16 20:06	56-55-3	IS
Benzo(a)pyrene	**18.3**	ug/kg	8.1	0.78	1	04/08/16 14:15	04/11/16 20:06	50-32-8	IS
Benzo(b)fluoranthene	**19.6**	ug/kg	8.1	0.72	1	04/08/16 14:15	04/11/16 20:06	205-99-2	IS,ip
Benzo(g,h,i)perylene	**25.9**	ug/kg	8.1	1.3	1	04/08/16 14:15	04/11/16 20:06	191-24-2	IS
Benzo(k)fluoranthene	**16.6**	ug/kg	8.1	0.77	1	04/08/16 14:15	04/11/16 20:06	207-08-9	IS,ip
Chrysene	ND	ug/kg	8.1	0.53	1	04/08/16 14:15	04/11/16 20:06	218-01-9	IS
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/08/16 14:15	04/11/16 20:06	53-70-3	IS
Fluoranthene	ND	ug/kg	8.1	0.53	1	04/08/16 14:15	04/11/16 20:06	206-44-0	IS
Fluorene	ND	ug/kg	8.1	0.70	1	04/08/16 14:15	04/11/16 20:06	86-73-7	IS
Indeno(1,2,3-cd)pyrene	**19.3**	ug/kg	8.1	0.96	1	04/08/16 14:15	04/11/16 20:06	193-39-5	IS
Phenanthrene	ND	ug/kg	8.1	0.81	1	04/08/16 14:15	04/11/16 20:06	85-01-8	IS
Pyrene	ND	ug/kg	8.1	0.66	1	04/08/16 14:15	04/11/16 20:06	129-00-0	IS
Surrogates									
2-Fluorobiphenyl (S)	56	%	35-141		1	04/08/16 14:15	04/11/16 20:06	321-60-8	IS
Terphenyl-d14 (S)	87	%	64-141		1	04/08/16 14:15	04/11/16 20:06	1718-51-0	IS
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.6	1.5	1	04/13/16 12:00	04/13/16 15:06	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.6	2.7	1	04/13/16 12:00	04/13/16 15:06	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.6	2.8	1	04/13/16 12:00	04/13/16 15:06	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.6	2.7	1	04/13/16 12:00	04/13/16 15:06	98-06-6	1c
Ethanol	ND	ug/kg	223	63.2	1	04/13/16 12:00	04/13/16 15:06	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.6	1.1	1	04/13/16 12:00	04/13/16 15:06	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.6	1.9	1	04/13/16 12:00	04/13/16 15:06	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.6	2.4	1	04/13/16 12:00	04/13/16 15:06	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.6	2.7	1	04/13/16 12:00	04/13/16 15:06	1634-04-4	1c
Naphthalene	ND	ug/kg	5.6	1.1	1	04/13/16 12:00	04/13/16 15:06	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.6	1.9	1	04/13/16 12:00	04/13/16 15:06	103-65-1	1c
Toluene	ND	ug/kg	5.6	1.7	1	04/13/16 12:00	04/13/16 15:06	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.6	1.6	1	04/13/16 12:00	04/13/16 15:06	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.6	1.9	1	04/13/16 12:00	04/13/16 15:06	108-67-8	1c
m&p-Xylene	ND	ug/kg	11.1	2.1	1	04/13/16 12:00	04/13/16 15:06	179601-23-1	1c
o-Xylene	ND	ug/kg	5.6	1.1	1	04/13/16 12:00	04/13/16 15:06	95-47-6	1c
Surrogates									
Toluene-d8 (S)	102	%	68-135		1	04/13/16 12:00	04/13/16 15:06	2037-26-5	
4-Bromofluorobenzene (S)	100	%	65-146		1	04/13/16 12:00	04/13/16 15:06	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	69-137		1	04/13/16 12:00	04/13/16 15:06	17060-07-0	
Dibromofluoromethane (S)	88	%	70-130		1	04/13/16 12:00	04/13/16 15:06	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**18.4**	%	0.10	0.10	1		04/16/16 16:53		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: B104 (3.0-5.0) **Lab ID: 30178706010** Collected: 04/05/16 15:05 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.8	0.77	1	04/08/16 14:15	04/11/16 20:23	83-32-9	
Acenaphthylene	**12.8**	ug/kg	8.8	0.75	1	04/08/16 14:15	04/11/16 20:23	208-96-8	
Anthracene	**26.2**	ug/kg	8.8	0.85	1	04/08/16 14:15	04/11/16 20:23	120-12-7	
Benzo(a)anthracene	**59.8**	ug/kg	8.8	2.2	1	04/08/16 14:15	04/11/16 20:23	56-55-3	
Benzo(a)pyrene	**60.2**	ug/kg	8.8	0.84	1	04/08/16 14:15	04/11/16 20:23	50-32-8	IS
Benzo(b)fluoranthene	**107**	ug/kg	8.8	0.77	1	04/08/16 14:15	04/11/16 20:23	205-99-2	IS,ip
Benzo(g,h,i)perylene	**22.6**	ug/kg	8.8	1.3	1	04/08/16 14:15	04/11/16 20:23	191-24-2	IS
Benzo(k)fluoranthene	**92.5**	ug/kg	8.8	0.82	1	04/08/16 14:15	04/11/16 20:23	207-08-9	IS,ip
Chrysene	**50.1**	ug/kg	8.8	0.58	1	04/08/16 14:15	04/11/16 20:23	218-01-9	
Dibenz(a,h)anthracene	**9.9**	ug/kg	8.8	1.2	1	04/08/16 14:15	04/11/16 20:23	53-70-3	IS
Fluoranthene	**89.1**	ug/kg	8.8	0.58	1	04/08/16 14:15	04/11/16 20:23	206-44-0	
Fluorene	**12.0**	ug/kg	8.8	0.76	1	04/08/16 14:15	04/11/16 20:23	86-73-7	
Indeno(1,2,3-cd)pyrene	**23.9**	ug/kg	8.8	1.0	1	04/08/16 14:15	04/11/16 20:23	193-39-5	IS
Phenanthrene	**62.4**	ug/kg	8.8	0.88	1	04/08/16 14:15	04/11/16 20:23	85-01-8	
Pyrene	**83.9**	ug/kg	8.8	0.71	1	04/08/16 14:15	04/11/16 20:23	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	50	%	35-141		1	04/08/16 14:15	04/11/16 20:23	321-60-8	
Terphenyl-d14 (S)	84	%	64-141		1	04/08/16 14:15	04/11/16 20:23	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	6.7	1.8	1	04/13/16 12:00	04/13/16 15:32	71-43-2	1c
n-Butylbenzene	ND	ug/kg	6.7	3.3	1	04/13/16 12:00	04/13/16 15:32	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	6.7	3.3	1	04/13/16 12:00	04/13/16 15:32	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	6.7	3.2	1	04/13/16 12:00	04/13/16 15:32	98-06-6	1c
Ethanol	ND	ug/kg	267	75.7	1	04/13/16 12:00	04/13/16 15:32	64-17-5	1c
Ethylbenzene	ND	ug/kg	6.7	1.3	1	04/13/16 12:00	04/13/16 15:32	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	6.7	2.3	1	04/13/16 12:00	04/13/16 15:32	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	6.7	2.8	1	04/13/16 12:00	04/13/16 15:32	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	6.7	3.2	1	04/13/16 12:00	04/13/16 15:32	1634-04-4	1c
Naphthalene	ND	ug/kg	6.7	1.3	1	04/13/16 12:00	04/13/16 15:32	91-20-3	1c
n-Propylbenzene	ND	ug/kg	6.7	2.3	1	04/13/16 12:00	04/13/16 15:32	103-65-1	1c
Toluene	ND	ug/kg	6.7	2.1	1	04/13/16 12:00	04/13/16 15:32	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	6.7	1.9	1	04/13/16 12:00	04/13/16 15:32	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	6.7	2.2	1	04/13/16 12:00	04/13/16 15:32	108-67-8	1c
m&p-Xylene	ND	ug/kg	13.3	2.5	1	04/13/16 12:00	04/13/16 15:32	179601-23-1	1c
o-Xylene	ND	ug/kg	6.7	1.3	1	04/13/16 12:00	04/13/16 15:32	95-47-6	1c
Surrogates									
Toluene-d8 (S)	101	%	68-135		1	04/13/16 12:00	04/13/16 15:32	2037-26-5	
4-Bromofluorobenzene (S)	100	%	65-146		1	04/13/16 12:00	04/13/16 15:32	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	69-137		1	04/13/16 12:00	04/13/16 15:32	17060-07-0	
Dibromofluoromethane (S)	91	%	70-130		1	04/13/16 12:00	04/13/16 15:32	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.3**	%	0.10	0.10	1		04/16/16 16:53		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: B103 (1.0-3.0) **Lab ID: 30178706011** Collected: 04/05/16 15:40 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.1	0.71	1	04/08/16 14:15	04/11/16 20:41	83-32-9	IS
Acenaphthylene	ND	ug/kg	8.1	0.69	1	04/08/16 14:15	04/11/16 20:41	208-96-8	IS
Anthracene	ND	ug/kg	8.1	0.78	1	04/08/16 14:15	04/11/16 20:41	120-12-7	IS
Benzo(a)anthracene	**15.3**	ug/kg	8.1	2.1	1	04/08/16 14:15	04/11/16 20:41	56-55-3	IS
Benzo(a)pyrene	**14.4**	ug/kg	8.1	0.77	1	04/08/16 14:15	04/11/16 20:41	50-32-8	IS
Benzo(b)fluoranthene	**30.0**	ug/kg	8.1	0.71	1	04/08/16 14:15	04/11/16 20:41	205-99-2	IS,ip
Benzo(g,h,i)perylene	**10.3**	ug/kg	8.1	1.2	1	04/08/16 14:15	04/11/16 20:41	191-24-2	IS
Benzo(k)fluoranthene	**26.5**	ug/kg	8.1	0.76	1	04/08/16 14:15	04/11/16 20:41	207-08-9	IS,ip
Chrysene	**13.9**	ug/kg	8.1	0.53	1	04/08/16 14:15	04/11/16 20:41	218-01-9	IS
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/08/16 14:15	04/11/16 20:41	53-70-3	IS
Fluoranthene	**20.5**	ug/kg	8.1	0.53	1	04/08/16 14:15	04/11/16 20:41	206-44-0	IS
Fluorene	ND	ug/kg	8.1	0.70	1	04/08/16 14:15	04/11/16 20:41	86-73-7	IS
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.1	0.95	1	04/08/16 14:15	04/11/16 20:41	193-39-5	IS
Phenanthrene	ND	ug/kg	8.1	0.81	1	04/08/16 14:15	04/11/16 20:41	85-01-8	IS
Pyrene	**19.6**	ug/kg	8.1	0.65	1	04/08/16 14:15	04/11/16 20:41	129-00-0	IS
Surrogates									
2-Fluorobiphenyl (S)	54	%	35-141		1	04/08/16 14:15	04/11/16 20:41	321-60-8	IS
Terphenyl-d14 (S)	87	%	64-141		1	04/08/16 14:15	04/11/16 20:41	1718-51-0	IS
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	6.7	1.8	1	04/13/16 12:00	04/13/16 15:57	71-43-2	1c
n-Butylbenzene	ND	ug/kg	6.7	3.3	1	04/13/16 12:00	04/13/16 15:57	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	6.7	3.4	1	04/13/16 12:00	04/13/16 15:57	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	6.7	3.2	1	04/13/16 12:00	04/13/16 15:57	98-06-6	1c
Ethanol	ND	ug/kg	269	76.2	1	04/13/16 12:00	04/13/16 15:57	64-17-5	1c
Ethylbenzene	ND	ug/kg	6.7	1.4	1	04/13/16 12:00	04/13/16 15:57	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	6.7	2.3	1	04/13/16 12:00	04/13/16 15:57	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	6.7	2.8	1	04/13/16 12:00	04/13/16 15:57	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	6.7	3.3	1	04/13/16 12:00	04/13/16 15:57	1634-04-4	1c
Naphthalene	ND	ug/kg	6.7	1.3	1	04/13/16 12:00	04/13/16 15:57	91-20-3	1c
n-Propylbenzene	ND	ug/kg	6.7	2.4	1	04/13/16 12:00	04/13/16 15:57	103-65-1	1c
Toluene	ND	ug/kg	6.7	2.1	1	04/13/16 12:00	04/13/16 15:57	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	6.7	1.9	1	04/13/16 12:00	04/13/16 15:57	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	6.7	2.3	1	04/13/16 12:00	04/13/16 15:57	108-67-8	1c
m&p-Xylene	ND	ug/kg	13.4	2.5	1	04/13/16 12:00	04/13/16 15:57	179601-23-1	1c
o-Xylene	ND	ug/kg	6.7	1.3	1	04/13/16 12:00	04/13/16 15:57	95-47-6	1c
Surrogates									
Toluene-d8 (S)	101	%	68-135		1	04/13/16 12:00	04/13/16 15:57	2037-26-5	
4-Bromofluorobenzene (S)	99	%	65-146		1	04/13/16 12:00	04/13/16 15:57	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	69-137		1	04/13/16 12:00	04/13/16 15:57	17060-07-0	
Dibromofluoromethane (S)	88	%	70-130		1	04/13/16 12:00	04/13/16 15:57	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**18.2**	%	0.10	0.10	1		04/16/16 16:54		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30178706

Sample: B101 (2.0-4.0) **Lab ID: 30178706012** Collected: 04/05/16 16:10 Received: 04/06/16 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.7	0.68	1	04/08/16 14:15	04/11/16 20:58	83-32-9	IS
Acenaphthylene	ND	ug/kg	7.7	0.66	1	04/08/16 14:15	04/11/16 20:58	208-96-8	IS
Anthracene	ND	ug/kg	7.7	0.75	1	04/08/16 14:15	04/11/16 20:58	120-12-7	
Benzo(a)anthracene	ND	ug/kg	7.7	2.0	1	04/08/16 14:15	04/11/16 20:58	56-55-3	
Benzo(a)pyrene	ND	ug/kg	7.7	0.74	1	04/08/16 14:15	04/11/16 20:58	50-32-8	IS
Benzo(b)fluoranthene	ND	ug/kg	7.7	0.68	1	04/08/16 14:15	04/11/16 20:58	205-99-2	IS,ip
Benzo(g,h,i)perylene	ND	ug/kg	7.7	1.2	1	04/08/16 14:15	04/11/16 20:58	191-24-2	IS
Benzo(k)fluoranthene	ND	ug/kg	7.7	0.72	1	04/08/16 14:15	04/11/16 20:58	207-08-9	IS,ip
Chrysene	ND	ug/kg	7.7	0.51	1	04/08/16 14:15	04/11/16 20:58	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	7.7	1.0	1	04/08/16 14:15	04/11/16 20:58	53-70-3	IS
Fluoranthene	ND	ug/kg	7.7	0.51	1	04/08/16 14:15	04/11/16 20:58	206-44-0	
Fluorene	ND	ug/kg	7.7	0.67	1	04/08/16 14:15	04/11/16 20:58	86-73-7	IS
Indeno(1,2,3-cd)pyrene	ND	ug/kg	7.7	0.91	1	04/08/16 14:15	04/11/16 20:58	193-39-5	IS
Phenanthrene	ND	ug/kg	7.7	0.77	1	04/08/16 14:15	04/11/16 20:58	85-01-8	
Pyrene	ND	ug/kg	7.7	0.62	1	04/08/16 14:15	04/11/16 20:58	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	62	%	35-141		1	04/08/16 14:15	04/11/16 20:58	321-60-8	IS
Terphenyl-d14 (S)	77	%	64-141		1	04/08/16 14:15	04/11/16 20:58	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.8	1.6	1	04/13/16 12:00	04/13/16 16:23	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.8	2.8	1	04/13/16 12:00	04/13/16 16:23	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.8	2.9	1	04/13/16 12:00	04/13/16 16:23	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.8	2.8	1	04/13/16 12:00	04/13/16 16:23	98-06-6	1c
Ethanol	ND	ug/kg	232	65.9	1	04/13/16 12:00	04/13/16 16:23	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.8	1.2	1	04/13/16 12:00	04/13/16 16:23	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.8	2.0	1	04/13/16 12:00	04/13/16 16:23	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.8	2.5	1	04/13/16 12:00	04/13/16 16:23	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.8	2.8	1	04/13/16 12:00	04/13/16 16:23	1634-04-4	1c
Naphthalene	ND	ug/kg	5.8	1.1	1	04/13/16 12:00	04/13/16 16:23	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.8	2.0	1	04/13/16 12:00	04/13/16 16:23	103-65-1	1c
Toluene	ND	ug/kg	5.8	1.8	1	04/13/16 12:00	04/13/16 16:23	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.8	1.7	1	04/13/16 12:00	04/13/16 16:23	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.8	2.0	1	04/13/16 12:00	04/13/16 16:23	108-67-8	1c
m&p-Xylene	ND	ug/kg	11.6	2.1	1	04/13/16 12:00	04/13/16 16:23	179601-23-1	1c
o-Xylene	ND	ug/kg	5.8	1.2	1	04/13/16 12:00	04/13/16 16:23	95-47-6	1c
Surrogates									
Toluene-d8 (S)	102	%	68-135		1	04/13/16 12:00	04/13/16 16:23	2037-26-5	
4-Bromofluorobenzene (S)	100	%	65-146		1	04/13/16 12:00	04/13/16 16:23	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	69-137		1	04/13/16 12:00	04/13/16 16:23	17060-07-0	
Dibromofluoromethane (S)	90	%	70-130		1	04/13/16 12:00	04/13/16 16:23	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**13.6**	%	0.10	0.10	1		04/16/16 16:54		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30178706

QC Batch: 216427 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30178706001, 30178706002, 30178706003, 30178706004, 30178706006, 30178706007, 30178706009, 30178706010, 30178706011, 30178706012

METHOD BLANK: 1057698 Matrix: Solid
Associated Lab Samples: 30178706001, 30178706002, 30178706003, 30178706004, 30178706006, 30178706007, 30178706009, 30178706010, 30178706011, 30178706012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	1.4	04/13/16 11:32	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.7	04/13/16 11:32	
Benzene	ug/kg	ND	5.0	1.4	04/13/16 11:32	
Ethanol	ug/kg	ND	200	56.7	04/13/16 11:32	
Ethylbenzene	ug/kg	ND	5.0	1.0	04/13/16 11:32	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.7	04/13/16 11:32	
m&p-Xylene	ug/kg	ND	10.0	1.8	04/13/16 11:32	
Methyl-tert-butyl ether	ug/kg	ND	5.0	2.4	04/13/16 11:32	
n-Butylbenzene	ug/kg	ND	5.0	2.4	04/13/16 11:32	
n-Propylbenzene	ug/kg	ND	5.0	1.8	04/13/16 11:32	
Naphthalene	ug/kg	ND	5.0	0.97	04/13/16 11:32	
o-Xylene	ug/kg	ND	5.0	0.99	04/13/16 11:32	
p-Isopropyltoluene	ug/kg	ND	5.0	2.1	04/13/16 11:32	
sec-Butylbenzene	ug/kg	ND	5.0	2.5	04/13/16 11:32	
tert-Butylbenzene	ug/kg	ND	5.0	2.4	04/13/16 11:32	
Toluene	ug/kg	ND	5.0	1.6	04/13/16 11:32	
1,2-Dichloroethane-d4 (S)	%	95	69-137		04/13/16 11:32	
4-Bromofluorobenzene (S)	%	101	65-146		04/13/16 11:32	
Dibromofluoromethane (S)	%	90	70-130		04/13/16 11:32	
Toluene-d8 (S)	%	101	68-135		04/13/16 11:32	

LABORATORY CONTROL SAMPLE: 1057699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	20.2	101	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	20.2	101	74-129	
Benzene	ug/kg	20	19.7	99	71-137	
Ethanol	ug/kg	200	241	120	23-168	
Ethylbenzene	ug/kg	20	19.5	97	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	20.1	100	78-133	
m&p-Xylene	ug/kg	40	39.0	98	77-129	
Methyl-tert-butyl ether	ug/kg	20	16.2	81	77-141	
n-Butylbenzene	ug/kg	20	20.4	102	74-140	
n-Propylbenzene	ug/kg	20	21.8	109	70-140	
Naphthalene	ug/kg	20	21.0	105	81-126	
o-Xylene	ug/kg	20	19.5	98	80-125	
p-Isopropyltoluene	ug/kg	20	19.9	99	74-136	
sec-Butylbenzene	ug/kg	20	18.8	94	81-132	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30178706

LABORATORY CONTROL SAMPLE: 1057699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/kg	20	19.3	97	77-129	
Toluene	ug/kg	20	20.2	101	72-127	
1,2-Dichloroethane-d4 (S)	%			97	69-137	
4-Bromofluorobenzene (S)	%			101	65-146	
Dibromofluoromethane (S)	%			95	70-130	
Toluene-d8 (S)	%			102	68-135	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30178706

QC Batch: 216627 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30178706007, 30178706008

METHOD BLANK: 1058581 Matrix: Solid
Associated Lab Samples: 30178706007, 30178706008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	250	71.5	04/14/16 09:34	
1,3,5-Trimethylbenzene	ug/kg	ND	250	84.0	04/14/16 09:34	
Benzene	ug/kg	ND	250	68.0	04/14/16 09:34	
Ethanol	ug/kg	ND	10000	2840	04/14/16 09:34	
Ethylbenzene	ug/kg	ND	250	50.5	04/14/16 09:34	
Isopropylbenzene (Cumene)	ug/kg	ND	250	86.5	04/14/16 09:34	
m&p-Xylene	ug/kg	ND	500	92.5	04/14/16 09:34	
Methyl-tert-butyl ether	ug/kg	ND	250	122	04/14/16 09:34	
n-Butylbenzene	ug/kg	ND	250	122	04/14/16 09:34	
n-Propylbenzene	ug/kg	ND	250	87.5	04/14/16 09:34	
Naphthalene	ug/kg	ND	250	48.5	04/14/16 09:34	
o-Xylene	ug/kg	ND	250	49.5	04/14/16 09:34	
p-Isopropyltoluene	ug/kg	ND	250	106	04/14/16 09:34	
sec-Butylbenzene	ug/kg	ND	250	126	04/14/16 09:34	
tert-Butylbenzene	ug/kg	ND	250	120	04/14/16 09:34	
Toluene	ug/kg	ND	250	78.0	04/14/16 09:34	
1,2-Dichloroethane-d4 (S)	%	94	69-137		04/14/16 09:34	
4-Bromofluorobenzene (S)	%	101	65-146		04/14/16 09:34	
Dibromofluoromethane (S)	%	84	70-130		04/14/16 09:34	
Toluene-d8 (S)	%	103	68-135		04/14/16 09:34	

LABORATORY CONTROL SAMPLE: 1058582

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	19.3	97	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	18.8	94	74-129	
Benzene	ug/kg	20	18.9	94	71-137	
Ethanol	ug/kg	200	183J	92	23-168	
Ethylbenzene	ug/kg	20	18.2	91	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	18.6	93	78-133	
m&p-Xylene	ug/kg	40	35.7	89	77-129	
Methyl-tert-butyl ether	ug/kg	20	15.9	79	77-141	
n-Butylbenzene	ug/kg	20	18.5	93	74-140	
n-Propylbenzene	ug/kg	20	19.7	99	70-140	
Naphthalene	ug/kg	20	20.8	104	81-126	
o-Xylene	ug/kg	20	18.2	91	80-125	
p-Isopropyltoluene	ug/kg	20	18.0	90	74-136	
sec-Butylbenzene	ug/kg	20	17.0	85	81-132	
tert-Butylbenzene	ug/kg	20	17.2	86	77-129	
Toluene	ug/kg	20	18.9	95	72-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30178706

LABORATORY CONTROL SAMPLE: 1058582

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			94	69-137	
4-Bromofluorobenzene (S)	%			98	65-146	
Dibromofluoromethane (S)	%			96	70-130	
Toluene-d8 (S)	%			102	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30178706

QC Batch: 217104 Analysis Method: EPA 8260C
QC Batch Method: EPA 8260C Analysis Description: 8260C MSV
Associated Lab Samples: 30178706005

METHOD BLANK: 1061121 Matrix: Water
Associated Lab Samples: 30178706005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.12	04/19/16 13:47	M5
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.12	04/19/16 13:47	M5
Benzene	ug/L	ND	1.0	0.16	04/19/16 13:47	M5
Ethanol	ug/L	ND	200	26.1	04/19/16 13:47	M5
Ethylbenzene	ug/L	ND	1.0	0.23	04/19/16 13:47	M5
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.14	04/19/16 13:47	M5
m&p-Xylene	ug/L	ND	2.0	0.32	04/19/16 13:47	M5
Methyl-tert-butyl ether	ug/L	ND	1.0	0.17	04/19/16 13:47	M5
n-Butylbenzene	ug/L	ND	1.0	0.15	04/19/16 13:47	M5
n-Propylbenzene	ug/L	ND	1.0	0.15	04/19/16 13:47	M5
Naphthalene	ug/L	ND	2.0	0.19	04/19/16 13:47	M5
o-Xylene	ug/L	ND	1.0	0.22	04/19/16 13:47	M5
p-Isopropyltoluene	ug/L	ND	1.0	0.22	04/19/16 13:47	M5
sec-Butylbenzene	ug/L	ND	1.0	0.21	04/19/16 13:47	M5
tert-Butylbenzene	ug/L	ND	1.0	0.19	04/19/16 13:47	M5
Toluene	ug/L	ND	1.0	0.13	04/19/16 13:47	M5
1,2-Dichloroethane-d4 (S)	%	116	77-126		04/19/16 13:47	M5
4-Bromofluorobenzene (S)	%	101	81-119		04/19/16 13:47	M5
Dibromofluoromethane (S)	%	107	70-130		04/19/16 13:47	M5
Toluene-d8 (S)	%	98	84-115		04/19/16 13:47	M5

LABORATORY CONTROL SAMPLE: 1061122

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	18.7	93	75-128	M5
1,3,5-Trimethylbenzene	ug/L	20	19.5	98	74-125	M5
Benzene	ug/L	20	20.3	102	69-115	M5
Ethanol	ug/L	200	218	109	10-175	M5
Ethylbenzene	ug/L	20	19.6	98	71-116	M5
Isopropylbenzene (Cumene)	ug/L	20	20.0	100	79-121	M5
m&p-Xylene	ug/L	40	39.8	99	74-118	M5
Methyl-tert-butyl ether	ug/L	20	21.0	105	83-140	M5
n-Butylbenzene	ug/L	20	19.8	99	64-128	M5
n-Propylbenzene	ug/L	20	19.3	96	70-123	M5
Naphthalene	ug/L	20	19.6	98	64-140	M5
o-Xylene	ug/L	20	20.1	101	71-119	M5
p-Isopropyltoluene	ug/L	20	20.1	100	68-129	M5
sec-Butylbenzene	ug/L	20	19.5	98	70-126	M5
tert-Butylbenzene	ug/L	20	20.0	100	72-123	M5
Toluene	ug/L	20	19.7	99	70-115	M5

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30178706

LABORATORY CONTROL SAMPLE: 1061122

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			107	77-126	M5
4-Bromofluorobenzene (S)	%			105	81-119	M5
Dibromofluoromethane (S)	%			109	70-130	M5
Toluene-d8 (S)	%			93	84-115	M5

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30178706

QC Batch: 215981 Analysis Method: EPA 8270D by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270D/3546 MSSV PAH by SIM
Associated Lab Samples: 30178706001, 30178706002, 30178706003, 30178706004, 30178706006, 30178706007, 30178706008, 30178706009, 30178706010, 30178706011, 30178706012

METHOD BLANK: 1055522 Matrix: Solid
Associated Lab Samples: 30178706001, 30178706002, 30178706003, 30178706004, 30178706006, 30178706007, 30178706008, 30178706009, 30178706010, 30178706011, 30178706012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	6.7	0.59	04/11/16 16:00	
Acenaphthylene	ug/kg	ND	6.7	0.57	04/11/16 16:00	
Anthracene	ug/kg	ND	6.7	0.65	04/11/16 16:00	
Benzo(a)anthracene	ug/kg	ND	6.7	1.7	04/11/16 16:00	
Benzo(a)pyrene	ug/kg	ND	6.7	0.64	04/11/16 16:00	
Benzo(b)fluoranthene	ug/kg	ND	6.7	0.59	04/11/16 16:00	
Benzo(g,h,i)perylene	ug/kg	ND	6.7	1.0	04/11/16 16:00	
Benzo(k)fluoranthene	ug/kg	ND	6.7	0.63	04/11/16 16:00	
Chrysene	ug/kg	ND	6.7	0.44	04/11/16 16:00	
Dibenz(a,h)anthracene	ug/kg	ND	6.7	0.88	04/11/16 16:00	
Fluoranthene	ug/kg	ND	6.7	0.44	04/11/16 16:00	
Fluorene	ug/kg	ND	6.7	0.58	04/11/16 16:00	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	6.7	0.79	04/11/16 16:00	
Phenanthrene	ug/kg	ND	6.7	0.67	04/11/16 16:00	
Pyrene	ug/kg	ND	6.7	0.54	04/11/16 16:00	
2-Fluorobiphenyl (S)	%	57	35-141		04/11/16 16:00	
Terphenyl-d14 (S)	%	81	64-141		04/11/16 16:00	

LABORATORY CONTROL SAMPLE: 1055523

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	133	127	95	43-113	IS
Acenaphthylene	ug/kg	133	102	76	41-114	IS
Anthracene	ug/kg	133	142	106	59-115	IS
Benzo(a)anthracene	ug/kg	133	144	108	62-122	IS
Benzo(a)pyrene	ug/kg	133	142	107	56-113	IS
Benzo(b)fluoranthene	ug/kg	133	119	89	43-138	IS
Benzo(g,h,i)perylene	ug/kg	133	138	103	47-143	IS
Benzo(k)fluoranthene	ug/kg	133	135	101	52-138	IS
Chrysene	ug/kg	133	152	114	64-119	IS
Dibenz(a,h)anthracene	ug/kg	133	142	106	59-133	IS
Fluoranthene	ug/kg	133	138	104	64-122	IS
Fluorene	ug/kg	133	103	77	46-114	IS
Indeno(1,2,3-cd)pyrene	ug/kg	133	142	107	59-132	IS
Phenanthrene	ug/kg	133	128	96	42-122	IS
Pyrene	ug/kg	133	140	105	64-117	IS
2-Fluorobiphenyl (S)	%			69	35-141	IS
Terphenyl-d14 (S)	%			94	64-141	IS

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30178706

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1055524 1055525

Parameter	Units	30178775005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	0.038 mg/kg	617	617	572	425	87	62	43-113	30	20	R1
Acenaphthylene	ug/kg	0.029J mg/kg	617	617	416	353	63	52	41-114	16	20	
Anthracene	ug/kg	0.098 mg/kg	617	617	674	745	93	104	59-115	10	20	IS
Benzo(a)anthracene	ug/kg	0.093 mg/kg	617	617	775	778	111	111	62-122	1	20	IS
Benzo(a)pyrene	ug/kg	0.084 mg/kg	617	617	694	827	99	120	56-113	17	20	IS,M1
Benzo(b)fluoranthene	ug/kg	0.19 mg/kg	617	617	710	953	85	124	43-138	29	20	IS,R1
Benzo(g,h,i)perylene	ug/kg	0.062 mg/kg	617	617	559	562	81	81	47-143	1	20	IS
Benzo(k)fluoranthene	ug/kg	0.17 mg/kg	617	617	612	686	72	84	52-138	12	20	IS
Chrysene	ug/kg	0.12 mg/kg	617	617	785	779	108	106	64-119	1	20	IS
Dibenz(a,h)anthracene	ug/kg	0.011J mg/kg	617	617	523	493	83	78	59-133	6	20	IS
Fluoranthene	ug/kg	0.32 mg/kg	617	617	999	1290	110	156	64-122	25	20	IS,M1, R1
Fluorene	ug/kg	0.070 mg/kg	617	617	545	498	77	69	46-114	9	20	
Indeno(1,2,3-cd)pyrene	ug/kg	0.042 mg/kg	617	617	560	582	84	87	59-132	4	20	IS
Phenanthrene	ug/kg	0.26 mg/kg	617	617	912	1100	105	135	42-122	19	20	IS,M1
Pyrene	ug/kg	0.26 mg/kg	617	617	905	1170	105	147	64-117	25	20	IS,M1, R1
2-Fluorobiphenyl (S)	%						56	43	35-141			
Terphenyl-d14 (S)	%						68	69	64-141			IS

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30178706

QC Batch: 216870 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30178706001, 30178706002, 30178706003, 30178706004, 30178706006, 30178706007, 30178706008, 30178706009, 30178706010, 30178706011, 30178706012

SAMPLE DUPLICATE: 1060186

Parameter	Units	30177690001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.6	13.0	3	20	

SAMPLE DUPLICATE: 1060187

Parameter	Units	30178706001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	20.8	19.7	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Lysander, NY
Pace Project No.: 30178706

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: 216427

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 216627

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 217104

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
IS	The internal standard response is below criteria. Results may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
R1	RPD value was outside control limits.
ip	Benzo(b)fluoranthene and benzo(k)fluoranthene were separated in the check standard but did not meet the resolution criteria in SW846 Method 8270D. Whereas sample results included are reported as individual isomers, the lab and the customer must recognize them as an isomeric pair.

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lysander, NY
Pace Project No.: 30178706

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30178706001	**PZ-102 (2-4)**	EPA 3546	215981	EPA 8270D by SIM	216140
30178706002	**PZ-101 (2-4)**	EPA 3546	215981	EPA 8270D by SIM	216140
30178706003	**B115 (1.5-2.0)**	EPA 3546	215981	EPA 8270D by SIM	216140
30178706004	**B116 (4.0-5.0)**	EPA 3546	215981	EPA 8270D by SIM	216140
30178706006	**B117 (2.5-3.0)**	EPA 3546	215981	EPA 8270D by SIM	216140
30178706007	**B118 (1-3)**	EPA 3546	215981	EPA 8270D by SIM	216140
30178706008	**B118 (3-5)**	EPA 3546	215981	EPA 8270D by SIM	216140
30178706009	**B114 (1.0-3.0)**	EPA 3546	215981	EPA 8270D by SIM	216140
30178706010	**B104 (3.0-5.0)**	EPA 3546	215981	EPA 8270D by SIM	216140
30178706011	**B103 (1.0-3.0)**	EPA 3546	215981	EPA 8270D by SIM	216140
30178706012	**B101 (2.0-4.0)**	EPA 3546	215981	EPA 8270D by SIM	216140
30178706001	**PZ-102 (2-4)**	EPA 5035A	216427	EPA 8260C	216468
30178706002	**PZ-101 (2-4)**	EPA 5035A	216427	EPA 8260C	216468
30178706003	**B115 (1.5-2.0)**	EPA 5035A	216427	EPA 8260C	216468
30178706004	**B116 (4.0-5.0)**	EPA 5035A	216427	EPA 8260C	216468
30178706006	**B117 (2.5-3.0)**	EPA 5035A	216427	EPA 8260C	216468
30178706007	**B118 (1-3)**	EPA 5035A	216427	EPA 8260C	216468
30178706007	**B118 (1-3)**	EPA 5035A	216627	EPA 8260C	216682
30178706008	**B118 (3-5)**	EPA 5035A	216627	EPA 8260C	216682
30178706009	**B114 (1.0-3.0)**	EPA 5035A	216427	EPA 8260C	216468
30178706010	**B104 (3.0-5.0)**	EPA 5035A	216427	EPA 8260C	216468
30178706011	**B103 (1.0-3.0)**	EPA 5035A	216427	EPA 8260C	216468
30178706012	**B101 (2.0-4.0)**	EPA 5035A	216427	EPA 8260C	216468
30178706005	**TRIP BLANKS**	EPA 8260C	217104		
30178706001	**PZ-102 (2-4)**	ASTM D2974-87	216870		
30178706002	**PZ-101 (2-4)**	ASTM D2974-87	216870		
30178706003	**B115 (1.5-2.0)**	ASTM D2974-87	216870		
30178706004	**B116 (4.0-5.0)**	ASTM D2974-87	216870		
30178706006	**B117 (2.5-3.0)**	ASTM D2974-87	216870		
30178706007	**B118 (1-3)**	ASTM D2974-87	216870		
30178706008	**B118 (3-5)**	ASTM D2974-87	216870		
30178706009	**B114 (1.0-3.0)**	ASTM D2974-87	216870		
30178706010	**B104 (3.0-5.0)**	ASTM D2974-87	216870		
30178706011	**B103 (1.0-3.0)**	ASTM D2974-87	216870		
30178706012	**B101 (2.0-4.0)**	ASTM D2974-87	216870		

Laboratory Management Program LaMP Chain of Custody Record 30178706 Page 1 of 2

BP Site Node Path: _____ Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X

BP Facility No: _____ Lab Work Order Number: _____

Lab Name: Pace Analytical Serices	Facility Address: 7430 Hillside Rd,	Consultant/Contractor: Arcadis
Lab Address: 1638 Roseytown Rd, Greensburg, PA 15601	City, State, ZIP Code: Lysand	Consultant/Contractor Project No:
Lab PM: Tina Sayer	Lead Regulatory Agency: NYS	Address: B0090004.0002.00001
Lab Phone: 317-228-3127	California Global ID No.:	Consultant/Contractor PM: Vin Maresco
Lab Shipping A Yes	Enfos Proposal No:	Phone: 315-671-9256 Email: vin.maresco@arcadis.com
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor ___

BP Project Manager (PM): John A. Frankenthal

BP PM Phone: 312.809.4117

BP PM Email: John.Frankenthal@bp.com

Report Type & QC Level: Standard ___ Full Data Package ___

WO#:30178706

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: CP-51 listed vols for via 8260	MTBE	Ethanal	CP-51 listed semi-vols for via 8270	
	PZ-102S(2-4)	4/4/16	1350	X					2					X	X	X	X	001
	PZ-101S(2-4)	4/4/16	1520	X					2					X	X	X	X	002
	B115B(1.5-2.0)	4/5/16	0920	X					2					X	X	X	X	003
	B116(4.0-5.0)	4/5/16	1000	X					2					X	X	X	X	004
	TRIP BLANKS	4/5/16	—		X							2		X	X	X	X	005
	B117A(2.5-3.0)	4/5/16	1125	X					2					X	X	X	X	006
	B118(1-3)	4/5/16	1305	X					2					X	X	X	X	007
	B118(3-5)	4/5/16	1315	X					2					X	X	X	X	008
	B114(1.0-3.0)	4/5/16	1420	X					2					X	X	X	X	009
	B104(3.0-5.0)	4/5/16	1505	X					2					X	X	X	X	010

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Ethan Ulm						
Sampler's Company: ARCADIS	[signature] / ARCADIS	4/5/16	1620	[signature] / PACE	4/5/16	16:20
Shipment Method: Courier Pickup Ship Date:	[signature] PACE	4/5/16	17:00	[signature]	4-6-16	0915
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 8.8 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Page 8 of 30

BP Remediation Management COC - Effective Date: starting August 16, 2011.

BP LaMP COC Rev. 8, 24 June 2012

Laboratory Management Program LaMP Chain of Custody Record

30178706

BP Site Node Path: _____ Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X

BP Facility No: _____ Lab Work Order Number: _____

Lab Name: Pace Analytical Serices	Facility Address: 7430 Hillside Rd,	Consultant/Contractor: Arcadis
Lab Address: 1638 Roseytown Rd, Greensburg, PA 15601	City, State, ZIP Code: Lysand	Consultant/Contractor Project No:
Lab PM: Tina Sayer	Lead Regulatory Agency: NYS	Address: B0090004.0002.00001
Lab Phone: 317-228-3127	California Global ID No.:	Consultant/Contractor PM: Vin Maresco
Lab Shipping A Yes	Enfos Proposal No:	Phone: 315-671-9256 Email: vin.maresco@arcadis.com
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor ___

BP Project Manager (PM): John A. Frankenthal

BP PM Phone: 312.809.4117

BP PM Email: John.Frankenthal@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: CP-51 listed vols for via 8260	MTBE	Ethanol	CP-51 listed semi-vols for via 8270	Report Type & QC Level
	B103(1.0-3.0)	4/5/16	1540	X					2					X	X	X	X	011
	B101(2.0-4.0)	4/5/16	1610	X					2					X	X	X	X	012

Report Type & QC Level: Standard ___ Full Data Package ___

Comments
Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Ethan Ulm						
Sampler's Company: ARCADIS	Ethan Ulm / ARCADIS	4/5/16	1620	[illegible] PACE	4/5/16	16:20
Shipment Method: Courier Pickup Ship Date:	[illegible] PACE	4/5/16	17:00	[illegible]	4-6-16	0915
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) No | Temp Blank: (Yes) No | Cooler Temp on Receipt: 0.8 °F/C | Trip Blank: (Yes) No | MS/MSD Sample Submitted: Yes (No)

30178706

Sample Condition Upon Receipt

Pace Analytical

Client Name: Buckeye - Arcadis Project #

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 776045025312

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no Biological Tissue Is Frozen: Yes No

Packing Material: Bubble Wrap ___ Bubble Bags X None ___ Other

Thermometer Used 6 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temp.: Observed Temp.: 0.8 °C Correction Factor: 0.0 °C Final Temp: 0.8 °C

Date and Initials of person examining contents: 4-6-16 NJV

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SL/WT		
All containers needing preservation have been checked.	☐Yes ☐No ☒N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	Initial when completed NJV Lot # of added preservative
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes ☐No	
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.
Trip Blank Present:	☒Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☒Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Rachel L Mather Date: 4/7/16

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 26, 2016

Vin Maresco
Arcadis
6723 Towpath Road
Syracuse, NY 13214

RE: Project: Lysander, NY
Pace Project No.: 30179203

Dear Vin Maresco:
Enclosed are the analytical results for sample(s) received by the laboratory on April 09, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rachel D Christner

Rachel Christner
rachel.christner@pacelabs.com
Project Manager

Enclosures

cc: Mr. Edward Mason, Arcadis

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Lysander, NY
Pace Project No.: 30179203

Pennsylvania Certification IDs

Georgia Certification #: C040
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Lysander, NY
Pace Project No.: 30179203

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30179203001	**PZ105(0-0.9)**	Solid	04/07/16 08:00	04/09/16 10:00
30179203002	**PZ105(0.9-2.1)**	Solid	04/07/16 08:05	04/09/16 10:00
30179203003	**PZ105(2.1-4.0)**	Solid	04/07/16 08:10	04/09/16 10:00
30179203004	**PZ105(4.0-6.0)**	Solid	04/07/16 08:15	04/09/16 10:00
30179203005	**PZ105(6.0-8.0)**	Solid	04/07/16 08:20	04/09/16 10:00
30179203006	**PZ104(2.0-4.0)**	Solid	04/07/16 11:05	04/09/16 10:00
30179203007	**PZ104(4.0-6.0)**	Solid	04/07/16 11:50	04/09/16 10:00
30179203008	**PZ104(6.0-8.0)**	Solid	04/07/16 13:00	04/09/16 10:00
30179203009	**Trip Blank**	Water	04/07/16 00:00	04/09/16 10:00
30179203010	**PZ103(0-1.0)**	Solid	04/08/16 08:25	04/09/16 10:00
30179203011	**PZ103(1.0-3.0)**	Solid	04/08/16 08:40	04/09/16 10:00
30179203012	**PZ103(3.0-5.0)**	Solid	04/08/16 09:00	04/09/16 10:00
30179203013	**B109(0-2.0)**	Solid	04/08/16 11:00	04/09/16 10:00
30179203014	**B109(2.0-4.0)**	Solid	04/08/16 11:05	04/09/16 10:00
30179203015	**B109(4.0-6.0)**	Solid	04/08/16 11:10	04/09/16 10:00
30179203016	**B109(6.0-8.0)**	Solid	04/08/16 11:15	04/09/16 10:00
30179203017	**B107(0-1.0)**	Solid	04/08/16 11:30	04/09/16 10:00
30179203018	**B107(1.0-3.0)**	Solid	04/08/16 11:35	04/09/16 10:00
30179203019	**B107(3.0-5.0)**	Solid	04/08/16 11:40	04/09/16 10:00
30179203020	**B108(0-1.0)**	Solid	04/08/16 12:30	04/09/16 10:00
30179203021	**B108(1.0-3.0)**	Solid	04/08/16 12:35	04/09/16 10:00
30179203022	**B108(3.0-5.0)**	Solid	04/08/16 12:40	04/09/16 10:00
30179203023	**PZ104(0.7-2.0)**	Solid	04/07/16 10:45	04/09/16 10:00

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Lysander, NY
Pace Project No.: 30179203

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30179203001	**PZ105(0-0.9)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203002	**PZ105(0.9-2.1)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203003	**PZ105(2.1-4.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203004	**PZ105(4.0-6.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203005	**PZ105(6.0-8.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203006	**PZ104(2.0-4.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203007	**PZ104(4.0-6.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203008	**PZ104(6.0-8.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203009	**Trip Blank**	EPA 8260C	LEL	20	PASI-PA
30179203010	**PZ103(0-1.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203011	**PZ103(1.0-3.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203012	**PZ103(3.0-5.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203013	**B109(0-2.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Lysander, NY
Pace Project No.: 30179203

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30179203014	**B109(2.0-4.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203015	**B109(4.0-6.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203016	**B109(6.0-8.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179203017	**B107(0-1.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30179203018	**B107(1.0-3.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30179203019	**B107(3.0-5.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30179203020	**B108(0-1.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30179203021	**B108(1.0-3.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30179203022	**B108(3.0-5.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30179203023	**PZ104(0.7-2.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ105(0-0.9) **Lab ID: 30179203001** Collected: 04/07/16 08:00 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.2	0.63	1	04/12/16 16:49	04/20/16 10:58	83-32-9	
Acenaphthylene	**10.2**	ug/kg	7.2	0.61	1	04/12/16 16:49	04/20/16 10:58	208-96-8	
Anthracene	**43.4**	ug/kg	7.2	0.70	1	04/12/16 16:49	04/20/16 10:58	120-12-7	
Benzo(a)anthracene	**275**	ug/kg	7.2	1.8	1	04/12/16 16:49	04/20/16 10:58	56-55-3	M1,R1
Benzo(a)pyrene	**453**	ug/kg	7.2	0.69	1	04/12/16 16:49	04/20/16 10:58	50-32-8	M1,R1
Benzo(b)fluoranthene	**799**	ug/kg	7.2	0.63	1	04/12/16 16:49	04/20/16 10:58	205-99-2	M1,R1, ip
Benzo(g,h,i)perylene	**381**	ug/kg	7.2	1.1	1	04/12/16 16:49	04/20/16 10:58	191-24-2	M1,R1
Benzo(k)fluoranthene	**792**	ug/kg	7.2	0.68	1	04/12/16 16:49	04/20/16 10:58	207-08-9	M1,R1, ip
Chrysene	**323**	ug/kg	7.2	0.47	1	04/12/16 16:49	04/20/16 10:58	218-01-9	M1,R1
Dibenz(a,h)anthracene	**105**	ug/kg	7.2	0.95	1	04/12/16 16:49	04/20/16 10:58	53-70-3	
Fluoranthene	**331**	ug/kg	7.2	0.47	1	04/12/16 16:49	04/20/16 10:58	206-44-0	M1,R1
Fluorene	**10.6**	ug/kg	7.2	0.62	1	04/12/16 16:49	04/20/16 10:58	86-73-7	
Indeno(1,2,3-cd)pyrene	**318**	ug/kg	7.2	0.85	1	04/12/16 16:49	04/20/16 10:58	193-39-5	M1,R1
Phenanthrene	**87.4**	ug/kg	7.2	0.72	1	04/12/16 16:49	04/20/16 10:58	85-01-8	
Pyrene	**333**	ug/kg	7.2	0.58	1	04/12/16 16:49	04/20/16 10:58	129-00-0	M1,R1
Surrogates									
2-Fluorobiphenyl (S)	67	%	35-141		1	04/12/16 16:49	04/20/16 10:58	321-60-8	
Terphenyl-d14 (S)	90	%	64-141		1	04/12/16 16:49	04/20/16 10:58	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	4.2	1.2	1	04/18/16 12:00	04/18/16 13:53	71-43-2	
n-Butylbenzene	ND	ug/kg	4.2	2.1	1	04/18/16 12:00	04/18/16 13:53	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	4.5	2.3	1	04/19/16 10:00	04/19/16 11:47	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	4.2	2.0	1	04/18/16 12:00	04/18/16 13:53	98-06-6	1c
Ethanol	ND	ug/kg	170	48.1	1	04/18/16 12:00	04/18/16 13:53	64-17-5	1c
Ethylbenzene	ND	ug/kg	4.2	0.86	1	04/18/16 12:00	04/18/16 13:53	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	4.2	1.5	1	04/18/16 12:00	04/18/16 13:53	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.2	1.8	1	04/18/16 12:00	04/18/16 13:53	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	4.2	2.1	1	04/18/16 12:00	04/18/16 13:53	1634-04-4	
Naphthalene	ND	ug/kg	4.5	0.87	1	04/19/16 10:00	04/19/16 11:47	91-20-3	1c
n-Propylbenzene	ND	ug/kg	4.2	1.5	1	04/18/16 12:00	04/18/16 13:53	103-65-1	1c
Toluene	ND	ug/kg	4.2	1.3	1	04/18/16 12:00	04/18/16 13:53	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	4.2	1.2	1	04/18/16 12:00	04/18/16 13:53	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.2	1.4	1	04/18/16 12:00	04/18/16 13:53	108-67-8	
m&p-Xylene	ND	ug/kg	8.5	1.6	1	04/18/16 12:00	04/18/16 13:53	179601-23-1	
o-Xylene	ND	ug/kg	4.2	0.84	1	04/18/16 12:00	04/18/16 13:53	95-47-6	
Surrogates									
Toluene-d8 (S)	97	%	68-135		1	04/19/16 10:00	04/19/16 11:47	2037-26-5	
4-Bromofluorobenzene (S)	104	%	65-146		1	04/19/16 10:00	04/19/16 11:47	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	69-137		1	04/19/16 10:00	04/19/16 11:47	17060-07-0	
Dibromofluoromethane (S)	108	%	70-130		1	04/19/16 10:00	04/19/16 11:47	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**7.5**	%	0.10	0.10	1		04/21/16 14:48		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ105(0.9-2.1) **Lab ID: 30179203002** Collected: 04/07/16 08:05 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.6	0.67	1	04/12/16 16:49	04/20/16 11:51	83-32-9	
Acenaphthylene	**28.0**	ug/kg	7.6	0.65	1	04/12/16 16:49	04/20/16 11:51	208-96-8	
Anthracene	**51.2**	ug/kg	7.6	0.74	1	04/12/16 16:49	04/20/16 11:51	120-12-7	
Benzo(a)anthracene	**178**	ug/kg	7.6	1.9	1	04/12/16 16:49	04/20/16 11:51	56-55-3	
Benzo(a)pyrene	**223**	ug/kg	7.6	0.73	1	04/12/16 16:49	04/20/16 11:51	50-32-8	
Benzo(b)fluoranthene	**391**	ug/kg	7.6	0.67	1	04/12/16 16:49	04/20/16 11:51	205-99-2	ip
Benzo(g,h,i)perylene	**202**	ug/kg	7.6	1.2	1	04/12/16 16:49	04/20/16 11:51	191-24-2	
Benzo(k)fluoranthene	**388**	ug/kg	7.6	0.72	1	04/12/16 16:49	04/20/16 11:51	207-08-9	ip
Chrysene	**212**	ug/kg	7.6	0.50	1	04/12/16 16:49	04/20/16 11:51	218-01-9	
Dibenz(a,h)anthracene	**57.4**	ug/kg	7.6	1.0	1	04/12/16 16:49	04/20/16 11:51	53-70-3	
Fluoranthene	**234**	ug/kg	7.6	0.50	1	04/12/16 16:49	04/20/16 11:51	206-44-0	
Fluorene	**14.5**	ug/kg	7.6	0.66	1	04/12/16 16:49	04/20/16 11:51	86-73-7	
Indeno(1,2,3-cd)pyrene	**163**	ug/kg	7.6	0.90	1	04/12/16 16:49	04/20/16 11:51	193-39-5	
Phenanthrene	**90.0**	ug/kg	7.6	0.76	1	04/12/16 16:49	04/20/16 11:51	85-01-8	
Pyrene	**230**	ug/kg	7.6	0.61	1	04/12/16 16:49	04/20/16 11:51	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	63	%	35-141		1	04/12/16 16:49	04/20/16 11:51	321-60-8	
Terphenyl-d14 (S)	88	%	64-141		1	04/12/16 16:49	04/20/16 11:51	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.8	1.6	1	04/18/16 12:00	04/18/16 14:19	71-43-2	
n-Butylbenzene	ND	ug/kg	5.8	2.9	1	04/18/16 12:00	04/18/16 14:19	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.6	2.8	1	04/19/16 10:00	04/19/16 12:11	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.8	2.8	1	04/18/16 12:00	04/18/16 14:19	98-06-6	
Ethanol	ND	ug/kg	233	66.2	1	04/18/16 12:00	04/18/16 14:19	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.8	1.2	1	04/18/16 12:00	04/18/16 14:19	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.8	2.0	1	04/18/16 12:00	04/18/16 14:19	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.8	2.5	1	04/18/16 12:00	04/18/16 14:19	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	5.8	2.8	1	04/18/16 12:00	04/18/16 14:19	1634-04-4	
Naphthalene	ND	ug/kg	5.6	1.1	1	04/19/16 10:00	04/19/16 12:11	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.8	2.0	1	04/18/16 12:00	04/18/16 14:19	103-65-1	
Toluene	ND	ug/kg	5.8	1.8	1	04/18/16 12:00	04/18/16 14:19	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.8	1.7	1	04/18/16 12:00	04/18/16 14:19	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.8	2.0	1	04/18/16 12:00	04/18/16 14:19	108-67-8	
m&p-Xylene	ND	ug/kg	11.7	2.2	1	04/18/16 12:00	04/18/16 14:19	179601-23-1	
o-Xylene	ND	ug/kg	5.8	1.2	1	04/18/16 12:00	04/18/16 14:19	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	68-135		1	04/18/16 12:00	04/18/16 14:19	2037-26-5	
Toluene-d8 (S)	98	%	68-135		1	04/19/16 10:00	04/19/16 12:11	2037-26-5	
4-Bromofluorobenzene (S)	104	%	65-146		1	04/18/16 12:00	04/18/16 14:19	460-00-4	
4-Bromofluorobenzene (S)	99	%	65-146		1	04/19/16 10:00	04/19/16 12:11	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	69-137		1	04/18/16 12:00	04/18/16 14:19	17060-07-0	
1,2-Dichloroethane-d4 (S)	101	%	69-137		1	04/19/16 10:00	04/19/16 12:11	17060-07-0	
Dibromofluoromethane (S)	101	%	70-130		1	04/18/16 12:00	04/18/16 14:19	1868-53-7	
Dibromofluoromethane (S)	105	%	70-130		1	04/19/16 10:00	04/19/16 12:11	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ105(0.9-2.1) **Lab ID: 30179203002** Collected: 04/07/16 08:05 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.4**	%	0.10	0.10	1		04/21/16 14:50		

Sample: PZ105(2.1-4.0) **Lab ID: 30179203003** Collected: 04/07/16 08:10 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**23.7**	ug/kg	8.1	0.71	1	04/12/16 16:49	04/20/16 12:08	83-32-9	
Acenaphthylene	ND	ug/kg	8.1	0.69	1	04/12/16 16:49	04/20/16 12:08	208-96-8	
Anthracene	**21.6**	ug/kg	8.1	0.79	1	04/12/16 16:49	04/20/16 12:08	120-12-7	
Benzo(a)anthracene	**12.1**	ug/kg	8.1	2.1	1	04/12/16 16:49	04/20/16 12:08	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.1	0.78	1	04/12/16 16:49	04/20/16 12:08	50-32-8	
Benzo(b)fluoranthene	**18.4**	ug/kg	8.1	0.71	1	04/12/16 16:49	04/20/16 12:08	205-99-2	ip
Benzo(g,h,i)perylene	**8.3**	ug/kg	8.1	1.2	1	04/12/16 16:49	04/20/16 12:08	191-24-2	
Benzo(k)fluoranthene	**17.9**	ug/kg	8.1	0.76	1	04/12/16 16:49	04/20/16 12:08	207-08-9	ip
Chrysene	**12.3**	ug/kg	8.1	0.53	1	04/12/16 16:49	04/20/16 12:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/12/16 16:49	04/20/16 12:08	53-70-3	
Fluoranthene	**33.8**	ug/kg	8.1	0.53	1	04/12/16 16:49	04/20/16 12:08	206-44-0	
Fluorene	**23.0**	ug/kg	8.1	0.70	1	04/12/16 16:49	04/20/16 12:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.1	0.96	1	04/12/16 16:49	04/20/16 12:08	193-39-5	
Phenanthrene	**48.6**	ug/kg	8.1	0.81	1	04/12/16 16:49	04/20/16 12:08	85-01-8	
Pyrene	**37.1**	ug/kg	8.1	0.65	1	04/12/16 16:49	04/20/16 12:08	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	64	%	35-141		1	04/12/16 16:49	04/20/16 12:08	321-60-8	
Terphenyl-d14 (S)	85	%	64-141		1	04/12/16 16:49	04/20/16 12:08	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.5	1.5	1	04/20/16 10:45	04/20/16 12:47	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.5	2.7	1	04/20/16 10:45	04/20/16 12:47	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.5	2.8	1	04/20/16 10:45	04/20/16 12:47	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.5	2.7	1	04/20/16 10:45	04/20/16 12:47	98-06-6	1c
Ethanol	ND	ug/kg	220	62.4	1	04/20/16 10:45	04/20/16 12:47	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.5	1.1	1	04/20/16 10:45	04/20/16 12:47	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.5	1.9	1	04/20/16 10:45	04/20/16 12:47	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.5	2.3	1	04/20/16 10:45	04/20/16 12:47	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.5	2.7	1	04/20/16 10:45	04/20/16 12:47	1634-04-4	1c
Naphthalene	ND	ug/kg	5.5	1.1	1	04/20/16 10:45	04/20/16 12:47	91-20-3	1c
n-Propylbenzene	**9.4**	ug/kg	5.5	1.9	1	04/20/16 10:45	04/20/16 12:47	103-65-1	1c
Toluene	ND	ug/kg	5.5	1.7	1	04/20/16 10:45	04/20/16 12:47	108-88-3	1c
1,2,4-Trimethylbenzene	**13.3**	ug/kg	5.5	1.6	1	04/20/16 10:45	04/20/16 12:47	95-63-6	1c
1,3,5-Trimethylbenzene	**32.6**	ug/kg	5.5	1.8	1	04/20/16 10:45	04/20/16 12:47	108-67-8	1c
m&p-Xylene	ND	ug/kg	11.0	2.0	1	04/20/16 10:45	04/20/16 12:47	179601-23-1	1c

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ105(2.1-4.0) **Lab ID: 30179203003** Collected: 04/07/16 08:10 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
o-Xylene	ND	ug/kg	5.5	1.1	1	04/20/16 10:45	04/20/16 12:47	95-47-6	1c
Surrogates									
Toluene-d8 (S)	94	%	68-135		1	04/20/16 10:45	04/20/16 12:47	2037-26-5	
4-Bromofluorobenzene (S)	101	%	65-146		1	04/20/16 10:45	04/20/16 12:47	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	69-137		1	04/20/16 10:45	04/20/16 12:47	17060-07-0	
Dibromofluoromethane (S)	110	%	70-130		1	04/20/16 10:45	04/20/16 12:47	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**18.1**	%	0.10	0.10	1		04/21/16 14:51		

Sample: PZ105(4.0-6.0) **Lab ID: 30179203004** Collected: 04/07/16 08:15 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**30.3**	ug/kg	8.3	0.73	1	04/12/16 16:49	04/20/16 12:25	83-32-9	
Acenaphthylene	**8.3**	ug/kg	8.3	0.71	1	04/12/16 16:49	04/20/16 12:25	208-96-8	
Anthracene	ND	ug/kg	8.3	0.80	1	04/12/16 16:49	04/20/16 12:25	120-12-7	
Benzo(a)anthracene	**9.2**	ug/kg	8.3	2.1	1	04/12/16 16:49	04/20/16 12:25	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.3	0.79	1	04/12/16 16:49	04/20/16 12:25	50-32-8	
Benzo(b)fluoranthene	**17.0**	ug/kg	8.3	0.73	1	04/12/16 16:49	04/20/16 12:25	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.3	1.3	1	04/12/16 16:49	04/20/16 12:25	191-24-2	
Benzo(k)fluoranthene	**16.9**	ug/kg	8.3	0.78	1	04/12/16 16:49	04/20/16 12:25	207-08-9	ip
Chrysene	**8.3**	ug/kg	8.3	0.54	1	04/12/16 16:49	04/20/16 12:25	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.3	1.1	1	04/12/16 16:49	04/20/16 12:25	53-70-3	
Fluoranthene	**13.2**	ug/kg	8.3	0.54	1	04/12/16 16:49	04/20/16 12:25	206-44-0	
Fluorene	**37.3**	ug/kg	8.3	0.72	1	04/12/16 16:49	04/20/16 12:25	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.3	0.98	1	04/12/16 16:49	04/20/16 12:25	193-39-5	
Phenanthrene	**20.8**	ug/kg	8.3	0.83	1	04/12/16 16:49	04/20/16 12:25	85-01-8	
Pyrene	**17.3**	ug/kg	8.3	0.67	1	04/12/16 16:49	04/20/16 12:25	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	64	%	35-141		1	04/12/16 16:49	04/20/16 12:25	321-60-8	
Terphenyl-d14 (S)	87	%	64-141		1	04/12/16 16:49	04/20/16 12:25	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.6	1.5	1	04/18/16 12:00	04/18/16 15:11	71-43-2	
n-Butylbenzene	ND	ug/kg	5.6	2.7	1	04/18/16 12:00	04/18/16 15:11	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.5	2.8	1	04/19/16 12:00	04/19/16 14:59	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.6	2.7	1	04/18/16 12:00	04/18/16 15:11	98-06-6	
Ethanol	ND	ug/kg	223	63.2	1	04/18/16 12:00	04/18/16 15:11	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.6	1.1	1	04/18/16 12:00	04/18/16 15:11	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.6	1.9	1	04/18/16 12:00	04/18/16 15:11	98-82-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ105(4.0-6.0) **Lab ID: 30179203004** Collected: 04/07/16 08:15 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
p-Isopropyltoluene	ND	ug/kg	5.6	2.4	1	04/18/16 12:00	04/18/16 15:11	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	5.6	2.7	1	04/18/16 12:00	04/18/16 15:11	1634-04-4	
Naphthalene	ND	ug/kg	5.5	1.1	1	04/19/16 12:00	04/19/16 14:59	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.6	2.0	1	04/18/16 12:00	04/18/16 15:11	103-65-1	
Toluene	ND	ug/kg	5.6	1.7	1	04/18/16 12:00	04/18/16 15:11	108-88-3	
1,2,4-Trimethylbenzene	**7.1**	ug/kg	5.6	1.6	1	04/18/16 12:00	04/18/16 15:11	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.6	1.9	1	04/18/16 12:00	04/18/16 15:11	108-67-8	
m&p-Xylene	ND	ug/kg	11.2	2.1	1	04/18/16 12:00	04/18/16 15:11	179601-23-1	
o-Xylene	ND	ug/kg	5.6	1.1	1	04/18/16 12:00	04/18/16 15:11	95-47-6	
Surrogates									
Toluene-d8 (S)	96	%	68-135		1	04/19/16 12:00	04/19/16 14:59	2037-26-5	
Toluene-d8 (S)	97	%	68-135		1	04/18/16 12:00	04/18/16 15:11	2037-26-5	
4-Bromofluorobenzene (S)	108	%	65-146		1	04/18/16 12:00	04/18/16 15:11	460-00-4	
4-Bromofluorobenzene (S)	99	%	65-146		1	04/19/16 12:00	04/19/16 14:59	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	69-137		1	04/19/16 12:00	04/19/16 14:59	17060-07-0	
1,2-Dichloroethane-d4 (S)	101	%	69-137		1	04/18/16 12:00	04/18/16 15:11	17060-07-0	
Dibromofluoromethane (S)	110	%	70-130		1	04/19/16 12:00	04/19/16 14:59	1868-53-7	
Dibromofluoromethane (S)	99	%	70-130		1	04/18/16 12:00	04/18/16 15:11	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.6**	%	0.10	0.10	1		04/21/16 14:52		

Sample: PZ105(6.0-8.0) **Lab ID: 30179203005** Collected: 04/07/16 08:20 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**61.4**	ug/kg	8.1	0.71	1	04/12/16 16:49	04/20/16 12:43	83-32-9	
Acenaphthylene	**32.2**	ug/kg	8.1	0.69	1	04/12/16 16:49	04/20/16 12:43	208-96-8	
Anthracene	**26.1**	ug/kg	8.1	0.78	1	04/12/16 16:49	04/20/16 12:43	120-12-7	
Benzo(a)anthracene	**11.4**	ug/kg	8.1	2.1	1	04/12/16 16:49	04/20/16 12:43	56-55-3	
Benzo(a)pyrene	**12.3**	ug/kg	8.1	0.77	1	04/12/16 16:49	04/20/16 12:43	50-32-8	
Benzo(b)fluoranthene	**22.2**	ug/kg	8.1	0.71	1	04/12/16 16:49	04/20/16 12:43	205-99-2	ip
Benzo(g,h,i)perylene	**11.4**	ug/kg	8.1	1.2	1	04/12/16 16:49	04/20/16 12:43	191-24-2	
Benzo(k)fluoranthene	**22.1**	ug/kg	8.1	0.76	1	04/12/16 16:49	04/20/16 12:43	207-08-9	ip
Chrysene	**10.4**	ug/kg	8.1	0.53	1	04/12/16 16:49	04/20/16 12:43	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/12/16 16:49	04/20/16 12:43	53-70-3	
Fluoranthene	**27.8**	ug/kg	8.1	0.53	1	04/12/16 16:49	04/20/16 12:43	206-44-0	
Fluorene	**139**	ug/kg	8.1	0.70	1	04/12/16 16:49	04/20/16 12:43	86-73-7	
Indeno(1,2,3-cd)pyrene	**8.2**	ug/kg	8.1	0.95	1	04/12/16 16:49	04/20/16 12:43	193-39-5	
Phenanthrene	**89.4**	ug/kg	8.1	0.81	1	04/12/16 16:49	04/20/16 12:43	85-01-8	
Pyrene	**39.3**	ug/kg	8.1	0.65	1	04/12/16 16:49	04/20/16 12:43	129-00-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ105(6.0-8.0) **Lab ID: 30179203005** Collected: 04/07/16 08:20 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Surrogates									
2-Fluorobiphenyl (S)	93	%	35-141		1	04/12/16 16:49	04/20/16 12:43	321-60-8	
Terphenyl-d14 (S)	87	%	64-141		1	04/12/16 16:49	04/20/16 12:43	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	269	73.2	50	04/20/16 10:47	04/20/16 14:05	71-43-2	1c
n-Butylbenzene	**290**	ug/kg	269	132	50	04/20/16 10:47	04/20/16 14:05	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	269	135	50	04/20/16 10:47	04/20/16 14:05	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	269	130	50	04/20/16 10:47	04/20/16 14:05	98-06-6	1c
Ethanol	ND	ug/kg	10800	3050	50	04/20/16 10:47	04/20/16 14:05	64-17-5	1c
Ethylbenzene	ND	ug/kg	269	54.4	50	04/20/16 10:47	04/20/16 14:05	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	269	93.1	50	04/20/16 10:47	04/20/16 14:05	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	269	114	50	04/20/16 10:47	04/20/16 14:05	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	269	131	50	04/20/16 10:47	04/20/16 14:05	1634-04-4	1c
Naphthalene	ND	ug/kg	269	52.2	50	04/20/16 10:47	04/20/16 14:05	91-20-3	1c
n-Propylbenzene	**290**	ug/kg	269	94.2	50	04/20/16 10:47	04/20/16 14:05	103-65-1	1c
Toluene	ND	ug/kg	269	84.0	50	04/20/16 10:47	04/20/16 14:05	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	269	77.0	50	04/20/16 10:47	04/20/16 14:05	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	269	90.4	50	04/20/16 10:47	04/20/16 14:05	108-67-8	1c
m&p-Xylene	ND	ug/kg	538	99.6	50	04/20/16 10:47	04/20/16 14:05	179601-23-1	1c
o-Xylene	ND	ug/kg	269	53.3	50	04/20/16 10:47	04/20/16 14:05	95-47-6	1c
Surrogates									
Toluene-d8 (S)	94	%	68-135		50	04/20/16 10:47	04/20/16 14:05	2037-26-5	
4-Bromofluorobenzene (S)	92	%	65-146		50	04/20/16 10:47	04/20/16 14:05	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	69-137		50	04/20/16 10:47	04/20/16 14:05	17060-07-0	
Dibromofluoromethane (S)	109	%	70-130		50	04/20/16 10:47	04/20/16 14:05	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.1**	%	0.10	0.10	1		04/21/16 14:52		

Sample: PZ104(2.0-4.0) **Lab ID: 30179203006** Collected: 04/07/16 11:05 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**106**	ug/kg	8.4	0.74	1	04/12/16 16:49	04/20/16 13:00	83-32-9	
Acenaphthylene	**17.0**	ug/kg	8.4	0.72	1	04/12/16 16:49	04/20/16 13:00	208-96-8	
Anthracene	**91.6**	ug/kg	8.4	0.82	1	04/12/16 16:49	04/20/16 13:00	120-12-7	
Benzo(a)anthracene	**60.1**	ug/kg	8.4	2.2	1	04/12/16 16:49	04/20/16 13:00	56-55-3	
Benzo(a)pyrene	**41.3**	ug/kg	8.4	0.81	1	04/12/16 16:49	04/20/16 13:00	50-32-8	
Benzo(b)fluoranthene	**82.5**	ug/kg	8.4	0.74	1	04/12/16 16:49	04/20/16 13:00	205-99-2	ip
Benzo(g,h,i)perylene	**29.2**	ug/kg	8.4	1.3	1	04/12/16 16:49	04/20/16 13:00	191-24-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ104(2.0-4.0) **Lab ID: 30179203006** Collected: 04/07/16 11:05 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Benzo(k)fluoranthene	**81.9**	ug/kg	8.4	0.79	1	04/12/16 16:49	04/20/16 13:00	207-08-9	ip
Chrysene	**54.1**	ug/kg	8.4	0.55	1	04/12/16 16:49	04/20/16 13:00	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.4	1.1	1	04/12/16 16:49	04/20/16 13:00	53-70-3	
Fluoranthene	**184**	ug/kg	8.4	0.55	1	04/12/16 16:49	04/20/16 13:00	206-44-0	
Fluorene	**161**	ug/kg	8.4	0.73	1	04/12/16 16:49	04/20/16 13:00	86-73-7	
Indeno(1,2,3-cd)pyrene	**24.3**	ug/kg	8.4	1.0	1	04/12/16 16:49	04/20/16 13:00	193-39-5	
Phenanthrene	**353**	ug/kg	8.4	0.84	1	04/12/16 16:49	04/20/16 13:00	85-01-8	
Pyrene	**202**	ug/kg	8.4	0.68	1	04/12/16 16:49	04/20/16 13:00	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	62	%	35-141		1	04/12/16 16:49	04/20/16 13:00	321-60-8	
Terphenyl-d14 (S)	86	%	64-141		1	04/12/16 16:49	04/20/16 13:00	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	345	93.9	50	04/20/16 10:47	04/20/16 14:31	71-43-2	1c
n-Butylbenzene	ND	ug/kg	345	169	50	04/20/16 10:47	04/20/16 14:31	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	345	173	50	04/20/16 10:47	04/20/16 14:31	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	345	166	50	04/20/16 10:47	04/20/16 14:31	98-06-6	1c
Ethanol	ND	ug/kg	13800	3910	50	04/20/16 10:47	04/20/16 14:31	64-17-5	1c
Ethylbenzene	ND	ug/kg	345	69.7	50	04/20/16 10:47	04/20/16 14:31	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	345	119	50	04/20/16 10:47	04/20/16 14:31	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	345	146	50	04/20/16 10:47	04/20/16 14:31	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	345	168	50	04/20/16 10:47	04/20/16 14:31	1634-04-4	1c
Naphthalene	ND	ug/kg	345	67.0	50	04/20/16 10:47	04/20/16 14:31	91-20-3	1c
n-Propylbenzene	ND	ug/kg	345	121	50	04/20/16 10:47	04/20/16 14:31	103-65-1	1c
Toluene	ND	ug/kg	345	108	50	04/20/16 10:47	04/20/16 14:31	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	345	98.7	50	04/20/16 10:47	04/20/16 14:31	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	345	116	50	04/20/16 10:47	04/20/16 14:31	108-67-8	1c
m&p-Xylene	ND	ug/kg	690	128	50	04/20/16 10:47	04/20/16 14:31	179601-23-1	1c
o-Xylene	ND	ug/kg	345	68.3	50	04/20/16 10:47	04/20/16 14:31	95-47-6	1c
Surrogates									
Toluene-d8 (S)	99	%	68-135		50	04/20/16 10:47	04/20/16 14:31	2037-26-5	
4-Bromofluorobenzene (S)	97	%	65-146		50	04/20/16 10:47	04/20/16 14:31	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	69-137		50	04/20/16 10:47	04/20/16 14:31	17060-07-0	
Dibromofluoromethane (S)	108	%	70-130		50	04/20/16 10:47	04/20/16 14:31	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**21.8**	%	0.10	0.10	1		04/21/16 14:53		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ104(4.0-6.0) **Lab ID: 30179203007** Collected: 04/07/16 11:50 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**62.3**	ug/kg	7.8	0.68	1	04/12/16 16:49	04/20/16 13:18	83-32-9	
Acenaphthylene	**19.2**	ug/kg	7.8	0.66	1	04/12/16 16:49	04/20/16 13:18	208-96-8	
Anthracene	**85.8**	ug/kg	7.8	0.75	1	04/12/16 16:49	04/20/16 13:18	120-12-7	
Benzo(a)anthracene	**163**	ug/kg	7.8	2.0	1	04/12/16 16:49	04/20/16 13:18	56-55-3	
Benzo(a)pyrene	**232**	ug/kg	7.8	0.74	1	04/12/16 16:49	04/20/16 13:18	50-32-8	
Benzo(b)fluoranthene	**460**	ug/kg	7.8	0.68	1	04/12/16 16:49	04/20/16 13:18	205-99-2	ip
Benzo(g,h,i)perylene	**192**	ug/kg	7.8	1.2	1	04/12/16 16:49	04/20/16 13:18	191-24-2	
Benzo(k)fluoranthene	**456**	ug/kg	7.8	0.73	1	04/12/16 16:49	04/20/16 13:18	207-08-9	ip
Chrysene	**202**	ug/kg	7.8	0.51	1	04/12/16 16:49	04/20/16 13:18	218-01-9	
Dibenz(a,h)anthracene	**49.2**	ug/kg	7.8	1.0	1	04/12/16 16:49	04/20/16 13:18	53-70-3	
Fluoranthene	**480**	ug/kg	7.8	0.51	1	04/12/16 16:49	04/20/16 13:18	206-44-0	
Fluorene	**141**	ug/kg	7.8	0.67	1	04/12/16 16:49	04/20/16 13:18	86-73-7	
Indeno(1,2,3-cd)pyrene	**159**	ug/kg	7.8	0.91	1	04/12/16 16:49	04/20/16 13:18	193-39-5	
Phenanthrene	**322**	ug/kg	7.8	0.78	1	04/12/16 16:49	04/20/16 13:18	85-01-8	
Pyrene	**444**	ug/kg	7.8	0.63	1	04/12/16 16:49	04/20/16 13:18	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	62	%	35-141		1	04/12/16 16:49	04/20/16 13:18	321-60-8	
Terphenyl-d14 (S)	87	%	64-141		1	04/12/16 16:49	04/20/16 13:18	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	309	84.0	50	04/20/16 10:47	04/20/16 14:57	71-43-2	1c
n-Butylbenzene	**651**	ug/kg	309	151	50	04/20/16 10:47	04/20/16 14:57	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	309	155	50	04/20/16 10:47	04/20/16 14:57	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	309	149	50	04/20/16 10:47	04/20/16 14:57	98-06-6	1c
Ethanol	ND	ug/kg	12400	3500	50	04/20/16 10:47	04/20/16 14:57	64-17-5	1c
Ethylbenzene	**559**	ug/kg	309	62.4	50	04/20/16 10:47	04/20/16 14:57	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	309	107	50	04/20/16 10:47	04/20/16 14:57	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	309	131	50	04/20/16 10:47	04/20/16 14:57	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	309	150	50	04/20/16 10:47	04/20/16 14:57	1634-04-4	1c
Naphthalene	ND	ug/kg	309	59.9	50	04/20/16 10:47	04/20/16 14:57	91-20-3	1c
n-Propylbenzene	**856**	ug/kg	309	108	50	04/20/16 10:47	04/20/16 14:57	103-65-1	1c
Toluene	ND	ug/kg	309	96.4	50	04/20/16 10:47	04/20/16 14:57	108-88-3	1c
1,2,4-Trimethylbenzene	**3000**	ug/kg	309	88.4	50	04/20/16 10:47	04/20/16 14:57	95-63-6	1c
1,3,5-Trimethylbenzene	**1180**	ug/kg	309	104	50	04/20/16 10:47	04/20/16 14:57	108-67-8	1c
m&p-Xylene	ND	ug/kg	618	114	50	04/20/16 10:47	04/20/16 14:57	179601-23-1	1c
o-Xylene	ND	ug/kg	309	61.2	50	04/20/16 10:47	04/20/16 14:57	95-47-6	1c
Surrogates									
Toluene-d8 (S)	91	%	68-135		50	04/20/16 10:47	04/20/16 14:57	2037-26-5	
4-Bromofluorobenzene (S)	95	%	65-146		50	04/20/16 10:47	04/20/16 14:57	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	69-137		50	04/20/16 10:47	04/20/16 14:57	17060-07-0	
Dibromofluoromethane (S)	103	%	70-130		50	04/20/16 10:47	04/20/16 14:57	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**14.5**	%	0.10	0.10	1		04/21/16 14:54		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ104(6.0-8.0) **Lab ID: 30179203008** Collected: 04/07/16 13:00 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.5	0.74	1	04/12/16 16:49	04/20/16 13:35	83-32-9	
Acenaphthylene	ND	ug/kg	8.5	0.72	1	04/12/16 16:49	04/20/16 13:35	208-96-8	
Anthracene	ND	ug/kg	8.5	0.82	1	04/12/16 16:49	04/20/16 13:35	120-12-7	
Benzo(a)anthracene	**9.1**	ug/kg	8.5	2.2	1	04/12/16 16:49	04/20/16 13:35	56-55-3	
Benzo(a)pyrene	**9.8**	ug/kg	8.5	0.81	1	04/12/16 16:49	04/20/16 13:35	50-32-8	
Benzo(b)fluoranthene	**18.7**	ug/kg	8.5	0.74	1	04/12/16 16:49	04/20/16 13:35	205-99-2	ip
Benzo(g,h,i)perylene	**14.5**	ug/kg	8.5	1.3	1	04/12/16 16:49	04/20/16 13:35	191-24-2	
Benzo(k)fluoranthene	**18.6**	ug/kg	8.5	0.79	1	04/12/16 16:49	04/20/16 13:35	207-08-9	ip
Chrysene	ND	ug/kg	8.5	0.55	1	04/12/16 16:49	04/20/16 13:35	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.5	1.1	1	04/12/16 16:49	04/20/16 13:35	53-70-3	
Fluoranthene	**11.0**	ug/kg	8.5	0.55	1	04/12/16 16:49	04/20/16 13:35	206-44-0	
Fluorene	ND	ug/kg	8.5	0.73	1	04/12/16 16:49	04/20/16 13:35	86-73-7	
Indeno(1,2,3-cd)pyrene	**10.5**	ug/kg	8.5	1.0	1	04/12/16 16:49	04/20/16 13:35	193-39-5	
Phenanthrene	ND	ug/kg	8.5	0.85	1	04/12/16 16:49	04/20/16 13:35	85-01-8	
Pyrene	**24.2**	ug/kg	8.5	0.68	1	04/12/16 16:49	04/20/16 13:35	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%	35-141		1	04/12/16 16:49	04/20/16 13:35	321-60-8	
Terphenyl-d14 (S)	84	%	64-141		1	04/12/16 16:49	04/20/16 13:35	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.3	1.4	1	04/18/16 12:00	04/18/16 15:37	71-43-2	
n-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/18/16 12:00	04/18/16 15:37	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.8	2.9	1	04/19/16 10:00	04/19/16 12:35	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.3	2.5	1	04/18/16 12:00	04/18/16 15:37	98-06-6	1c
Ethanol	ND	ug/kg	211	59.8	1	04/18/16 12:00	04/18/16 15:37	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.3	1.1	1	04/18/16 12:00	04/18/16 15:37	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.3	1.8	1	04/18/16 12:00	04/18/16 15:37	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.3	2.2	1	04/18/16 12:00	04/18/16 15:37	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.3	2.6	1	04/18/16 12:00	04/18/16 15:37	1634-04-4	
Naphthalene	ND	ug/kg	5.8	1.1	1	04/19/16 10:00	04/19/16 12:35	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.3	1.8	1	04/18/16 12:00	04/18/16 15:37	103-65-1	1c
Toluene	ND	ug/kg	5.3	1.6	1	04/18/16 12:00	04/18/16 15:37	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.3	1.5	1	04/18/16 12:00	04/18/16 15:37	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.3	1.8	1	04/18/16 12:00	04/18/16 15:37	108-67-8	
m&p-Xylene	ND	ug/kg	10.6	2.0	1	04/18/16 12:00	04/18/16 15:37	179601-23-1	
o-Xylene	ND	ug/kg	5.3	1.0	1	04/18/16 12:00	04/18/16 15:37	95-47-6	
Surrogates									
Toluene-d8 (S)	80	%	68-135		1	04/19/16 10:00	04/19/16 12:35	2037-26-5	
4-Bromofluorobenzene (S)	60	%	65-146		1	04/19/16 10:00	04/19/16 12:35	460-00-4	S0
1,2-Dichloroethane-d4 (S)	95	%	69-137		1	04/19/16 10:00	04/19/16 12:35	17060-07-0	
Dibromofluoromethane (S)	105	%	70-130		1	04/19/16 10:00	04/19/16 12:35	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**21.2**	%	0.10	0.10	1		04/21/16 14:55		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: Trip Blank **Lab ID: 30179203009** Collected: 04/07/16 00:00 Received: 04/09/16 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV	Analytical Method: EPA 8260C								
Benzene	ND	ug/L	1.0	0.16	1		04/21/16 14:14	71-43-2	M5
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/21/16 14:14	104-51-8	M5
sec-Butylbenzene	ND	ug/L	1.0	0.21	1		04/21/16 14:14	135-98-8	M5
tert-Butylbenzene	ND	ug/L	1.0	0.19	1		04/21/16 14:14	98-06-6	M5
Ethanol	ND	ug/L	200	26.1	1		04/21/16 14:14	64-17-5	M5
Ethylbenzene	ND	ug/L	1.0	0.23	1		04/21/16 14:14	100-41-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.14	1		04/21/16 14:14	98-82-8	M5
p-Isopropyltoluene	ND	ug/L	1.0	0.22	1		04/21/16 14:14	99-87-6	M5
Methyl-tert-butyl ether	ND	ug/L	1.0	0.17	1		04/21/16 14:14	1634-04-4	M5
Naphthalene	ND	ug/L	2.0	0.19	1		04/21/16 14:14	91-20-3	M5
n-Propylbenzene	ND	ug/L	1.0	0.15	1		04/21/16 14:14	103-65-1	M5
Toluene	ND	ug/L	1.0	0.13	1		04/21/16 14:14	108-88-3	M5
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.12	1		04/21/16 14:14	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.12	1		04/21/16 14:14	108-67-8	M5
m&p-Xylene	ND	ug/L	2.0	0.32	1		04/21/16 14:14	179601-23-1	M5
o-Xylene	ND	ug/L	1.0	0.22	1		04/21/16 14:14	95-47-6	M5
Surrogates									
4-Bromofluorobenzene (S)	101	%	81-119		1		04/21/16 14:14	460-00-4	M5
1,2-Dichloroethane-d4 (S)	115	%	77-126		1		04/21/16 14:14	17060-07-0	M5
Toluene-d8 (S)	102	%	84-115		1		04/21/16 14:14	2037-26-5	M5
Dibromofluoromethane (S)	106	%	70-130		1		04/21/16 14:14	1868-53-7	M5

Sample: PZ103(0-1.0) **Lab ID: 30179203010** Collected: 04/08/16 08:25 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.
Comments: • 8270DSJ: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	75.1	6.6	10	04/12/16 16:49	04/20/16 13:53	83-32-9	
Acenaphthylene	**90.7**	ug/kg	75.1	6.4	10	04/12/16 16:49	04/20/16 13:53	208-96-8	
Anthracene	ND	ug/kg	75.1	7.3	10	04/12/16 16:49	04/20/16 13:53	120-12-7	
Benzo(a)anthracene	**329**	ug/kg	75.1	19.2	10	04/12/16 16:49	04/20/16 13:53	56-55-3	
Benzo(a)pyrene	**433**	ug/kg	75.1	7.2	10	04/12/16 16:49	04/20/16 13:53	50-32-8	
Benzo(b)fluoranthene	**761**	ug/kg	75.1	6.6	10	04/12/16 16:49	04/20/16 13:53	205-99-2	ip
Benzo(g,h,i)perylene	**313**	ug/kg	75.1	11.5	10	04/12/16 16:49	04/20/16 13:53	191-24-2	
Benzo(k)fluoranthene	**755**	ug/kg	75.1	7.1	10	04/12/16 16:49	04/20/16 13:53	207-08-9	ip
Chrysene	**317**	ug/kg	75.1	4.9	10	04/12/16 16:49	04/20/16 13:53	218-01-9	
Dibenz(a,h)anthracene	**92.6**	ug/kg	75.1	9.9	10	04/12/16 16:49	04/20/16 13:53	53-70-3	
Fluoranthene	**293**	ug/kg	75.1	4.9	10	04/12/16 16:49	04/20/16 13:53	206-44-0	
Fluorene	ND	ug/kg	75.1	6.5	10	04/12/16 16:49	04/20/16 13:53	86-73-7	
Indeno(1,2,3-cd)pyrene	**261**	ug/kg	75.1	8.9	10	04/12/16 16:49	04/20/16 13:53	193-39-5	
Phenanthrene	ND	ug/kg	75.1	7.5	10	04/12/16 16:49	04/20/16 13:53	85-01-8	
Pyrene	**391**	ug/kg	75.1	6.1	10	04/12/16 16:49	04/20/16 13:53	129-00-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ103(0-1.0) **Lab ID: 30179203010** Collected: 04/08/16 08:25 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • 8270DSJ: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Surrogates									
2-Fluorobiphenyl (S)	70	%	35-141		10	04/12/16 16:49	04/20/16 13:53	321-60-8	
Terphenyl-d14 (S)	68	%	64-141		10	04/12/16 16:49	04/20/16 13:53	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	6.2	1.7	1	04/18/16 12:00	04/18/16 16:03	71-43-2	
n-Butylbenzene	ND	ug/kg	6.2	3.0	1	04/18/16 12:00	04/18/16 16:03	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.3	2.7	1	04/19/16 12:00	04/19/16 15:23	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	6.2	3.0	1	04/18/16 12:00	04/18/16 16:03	98-06-6	
Ethanol	ND	ug/kg	249	70.6	1	04/18/16 12:00	04/18/16 16:03	64-17-5	1c
Ethylbenzene	ND	ug/kg	6.2	1.3	1	04/18/16 12:00	04/18/16 16:03	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	6.2	2.2	1	04/18/16 12:00	04/18/16 16:03	98-82-8	
p-Isopropyltoluene	ND	ug/kg	6.2	2.6	1	04/18/16 12:00	04/18/16 16:03	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	6.2	3.0	1	04/18/16 12:00	04/18/16 16:03	1634-04-4	
Naphthalene	ND	ug/kg	5.3	1.0	1	04/19/16 12:00	04/19/16 15:23	91-20-3	1c
n-Propylbenzene	ND	ug/kg	6.2	2.2	1	04/18/16 12:00	04/18/16 16:03	103-65-1	
Toluene	ND	ug/kg	6.2	1.9	1	04/18/16 12:00	04/18/16 16:03	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	6.2	1.8	1	04/18/16 12:00	04/18/16 16:03	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	6.2	2.1	1	04/18/16 12:00	04/18/16 16:03	108-67-8	
m&p-Xylene	ND	ug/kg	12.4	2.3	1	04/18/16 12:00	04/18/16 16:03	179601-23-1	
o-Xylene	ND	ug/kg	6.2	1.2	1	04/18/16 12:00	04/18/16 16:03	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	68-135		1	04/19/16 12:00	04/19/16 15:23	2037-26-5	
Toluene-d8 (S)	98	%	68-135		1	04/18/16 12:00	04/18/16 16:03	2037-26-5	
4-Bromofluorobenzene (S)	103	%	65-146		1	04/19/16 12:00	04/19/16 15:23	460-00-4	
4-Bromofluorobenzene (S)	105	%	65-146		1	04/18/16 12:00	04/18/16 16:03	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	69-137		1	04/18/16 12:00	04/18/16 16:03	17060-07-0	
1,2-Dichloroethane-d4 (S)	99	%	69-137		1	04/19/16 12:00	04/19/16 15:23	17060-07-0	
Dibromofluoromethane (S)	103	%	70-130		1	04/18/16 12:00	04/18/16 16:03	1868-53-7	
Dibromofluoromethane (S)	107	%	70-130		1	04/19/16 12:00	04/19/16 15:23	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**11.1**	%	0.10	0.10	1		04/21/16 14:55		

Sample: PZ103(1.0-3.0) **Lab ID: 30179203011** Collected: 04/08/16 08:40 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.7	0.68	1	04/12/16 16:49	04/20/16 14:10	83-32-9	
Acenaphthylene	ND	ug/kg	7.7	0.66	1	04/12/16 16:49	04/20/16 14:10	208-96-8	
Anthracene	ND	ug/kg	7.7	0.75	1	04/12/16 16:49	04/20/16 14:10	120-12-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ103(1.0-3.0) **Lab ID: 30179203011** Collected: 04/08/16 08:40 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Benzo(a)anthracene	ND	ug/kg	7.7	2.0	1	04/12/16 16:49	04/20/16 14:10	56-55-3	
Benzo(a)pyrene	ND	ug/kg	7.7	0.74	1	04/12/16 16:49	04/20/16 14:10	50-32-8	
Benzo(b)fluoranthene	**8.7**	ug/kg	7.7	0.68	1	04/12/16 16:49	04/20/16 14:10	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	7.7	1.2	1	04/12/16 16:49	04/20/16 14:10	191-24-2	
Benzo(k)fluoranthene	**8.6**	ug/kg	7.7	0.73	1	04/12/16 16:49	04/20/16 14:10	207-08-9	ip
Chrysene	ND	ug/kg	7.7	0.51	1	04/12/16 16:49	04/20/16 14:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	7.7	1.0	1	04/12/16 16:49	04/20/16 14:10	53-70-3	
Fluoranthene	ND	ug/kg	7.7	0.51	1	04/12/16 16:49	04/20/16 14:10	206-44-0	
Fluorene	ND	ug/kg	7.7	0.67	1	04/12/16 16:49	04/20/16 14:10	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	7.7	0.91	1	04/12/16 16:49	04/20/16 14:10	193-39-5	
Phenanthrene	ND	ug/kg	7.7	0.77	1	04/12/16 16:49	04/20/16 14:10	85-01-8	
Pyrene	ND	ug/kg	7.7	0.62	1	04/12/16 16:49	04/20/16 14:10	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	86	%	35-141		1	04/12/16 16:49	04/20/16 14:10	321-60-8	
Terphenyl-d14 (S)	83	%	64-141		1	04/12/16 16:49	04/20/16 14:10	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.3	1.4	1	04/18/16 12:00	04/18/16 16:29	71-43-2	
n-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/18/16 12:00	04/18/16 16:29	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.2	2.6	1	04/19/16 12:00	04/19/16 15:47	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.3	2.5	1	04/18/16 12:00	04/18/16 16:29	98-06-6	
Ethanol	ND	ug/kg	211	59.9	1	04/18/16 12:00	04/18/16 16:29	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.3	1.1	1	04/18/16 12:00	04/18/16 16:29	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.3	1.8	1	04/18/16 12:00	04/18/16 16:29	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.3	2.2	1	04/18/16 12:00	04/18/16 16:29	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	5.3	2.6	1	04/18/16 12:00	04/18/16 16:29	1634-04-4	
Naphthalene	ND	ug/kg	5.2	1.0	1	04/19/16 12:00	04/19/16 15:47	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.3	1.8	1	04/18/16 12:00	04/18/16 16:29	103-65-1	
Toluene	ND	ug/kg	5.3	1.6	1	04/18/16 12:00	04/18/16 16:29	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.3	1.5	1	04/18/16 12:00	04/18/16 16:29	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.3	1.8	1	04/18/16 12:00	04/18/16 16:29	108-67-8	
m&p-Xylene	ND	ug/kg	10.6	2.0	1	04/18/16 12:00	04/18/16 16:29	179601-23-1	
o-Xylene	ND	ug/kg	5.3	1.0	1	04/18/16 12:00	04/18/16 16:29	95-47-6	
Surrogates									
Toluene-d8 (S)	96	%	68-135		1	04/18/16 12:00	04/18/16 16:29	2037-26-5	
Toluene-d8 (S)	100	%	68-135		1	04/19/16 12:00	04/19/16 15:47	2037-26-5	
4-Bromofluorobenzene (S)	102	%	65-146		1	04/19/16 12:00	04/19/16 15:47	460-00-4	
4-Bromofluorobenzene (S)	104	%	65-146		1	04/18/16 12:00	04/18/16 16:29	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	69-137		1	04/18/16 12:00	04/18/16 16:29	17060-07-0	
1,2-Dichloroethane-d4 (S)	107	%	69-137		1	04/19/16 12:00	04/19/16 15:47	17060-07-0	
Dibromofluoromethane (S)	101	%	70-130		1	04/19/16 12:00	04/19/16 15:47	1868-53-7	
Dibromofluoromethane (S)	101	%	70-130		1	04/18/16 12:00	04/18/16 16:29	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**14.9**	%	0.10	0.10	1		04/21/16 14:56		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ103(3.0-5.0) **Lab ID: 30179203012** Collected: 04/08/16 09:00 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.3	0.73	1	04/12/16 16:49	04/20/16 14:28	83-32-9	
Acenaphthylene	ND	ug/kg	8.3	0.70	1	04/12/16 16:49	04/20/16 14:28	208-96-8	
Anthracene	ND	ug/kg	8.3	0.80	1	04/12/16 16:49	04/20/16 14:28	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.3	2.1	1	04/12/16 16:49	04/20/16 14:28	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.3	0.79	1	04/12/16 16:49	04/20/16 14:28	50-32-8	
Benzo(b)fluoranthene	**13.2**	ug/kg	8.3	0.73	1	04/12/16 16:49	04/20/16 14:28	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.3	1.3	1	04/12/16 16:49	04/20/16 14:28	191-24-2	
Benzo(k)fluoranthene	**13.2**	ug/kg	8.3	0.78	1	04/12/16 16:49	04/20/16 14:28	207-08-9	ip
Chrysene	ND	ug/kg	8.3	0.54	1	04/12/16 16:49	04/20/16 14:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.3	1.1	1	04/12/16 16:49	04/20/16 14:28	53-70-3	
Fluoranthene	ND	ug/kg	8.3	0.54	1	04/12/16 16:49	04/20/16 14:28	206-44-0	
Fluorene	ND	ug/kg	8.3	0.71	1	04/12/16 16:49	04/20/16 14:28	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.3	0.97	1	04/12/16 16:49	04/20/16 14:28	193-39-5	
Phenanthrene	ND	ug/kg	8.3	0.83	1	04/12/16 16:49	04/20/16 14:28	85-01-8	
Pyrene	ND	ug/kg	8.3	0.67	1	04/12/16 16:49	04/20/16 14:28	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	67	%	35-141		1	04/12/16 16:49	04/20/16 14:28	321-60-8	
Terphenyl-d14 (S)	82	%	64-141		1	04/12/16 16:49	04/20/16 14:28	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.8	1.6	1	04/18/16 12:00	04/18/16 16:55	71-43-2	
n-Butylbenzene	ND	ug/kg	5.8	2.9	1	04/18/16 12:00	04/18/16 16:55	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.8	2.9	1	04/19/16 12:00	04/19/16 16:11	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.8	2.8	1	04/18/16 12:00	04/18/16 16:55	98-06-6	
Ethanol	ND	ug/kg	233	66.1	1	04/18/16 12:00	04/18/16 16:55	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.8	1.2	1	04/18/16 12:00	04/18/16 16:55	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.8	2.0	1	04/18/16 12:00	04/18/16 16:55	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.8	2.5	1	04/18/16 12:00	04/18/16 16:55	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	5.8	2.8	1	04/18/16 12:00	04/18/16 16:55	1634-04-4	
Naphthalene	ND	ug/kg	5.8	1.1	1	04/19/16 12:00	04/19/16 16:11	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.8	2.0	1	04/18/16 12:00	04/18/16 16:55	103-65-1	
Toluene	ND	ug/kg	5.8	1.8	1	04/18/16 12:00	04/18/16 16:55	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.8	1.7	1	04/18/16 12:00	04/18/16 16:55	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.8	2.0	1	04/18/16 12:00	04/18/16 16:55	108-67-8	
m&p-Xylene	ND	ug/kg	11.7	2.2	1	04/18/16 12:00	04/18/16 16:55	179601-23-1	
o-Xylene	ND	ug/kg	5.8	1.2	1	04/18/16 12:00	04/18/16 16:55	95-47-6	
Surrogates									
Toluene-d8 (S)	97	%	68-135		1	04/18/16 12:00	04/18/16 16:55	2037-26-5	
Toluene-d8 (S)	100	%	68-135		1	04/19/16 12:00	04/19/16 16:11	2037-26-5	
4-Bromofluorobenzene (S)	98	%	65-146		1	04/19/16 12:00	04/19/16 16:11	460-00-4	
4-Bromofluorobenzene (S)	104	%	65-146		1	04/18/16 12:00	04/18/16 16:55	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	69-137		1	04/18/16 12:00	04/18/16 16:55	17060-07-0	
1,2-Dichloroethane-d4 (S)	104	%	69-137		1	04/19/16 12:00	04/19/16 16:11	17060-07-0	
Dibromofluoromethane (S)	106	%	70-130		1	04/18/16 12:00	04/18/16 16:55	1868-53-7	
Dibromofluoromethane (S)	104	%	70-130		1	04/19/16 12:00	04/19/16 16:11	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ103(3.0-5.0) **Lab ID: 30179203012** Collected: 04/08/16 09:00 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.4**	%	0.10	0.10	1		04/21/16 14:57		

Sample: B109(0-2.0) **Lab ID: 30179203013** Collected: 04/08/16 11:00 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.
Comments: • 8270DSJ: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	72.6	6.4	10	04/12/16 16:49	04/20/16 14:45	83-32-9	
Acenaphthylene	**1280**	ug/kg	72.6	6.2	10	04/12/16 16:49	04/20/16 14:45	208-96-8	
Anthracene	**816**	ug/kg	72.6	7.0	10	04/12/16 16:49	04/20/16 14:45	120-12-7	
Benzo(a)anthracene	**2940**	ug/kg	72.6	18.5	10	04/12/16 16:49	04/20/16 14:45	56-55-3	
Benzo(a)pyrene	**4870**	ug/kg	72.6	6.9	10	04/12/16 16:49	04/20/16 14:45	50-32-8	
Benzo(b)fluoranthene	**8450**	ug/kg	72.6	6.4	10	04/12/16 16:49	04/20/16 14:45	205-99-2	ip
Benzo(g,h,i)perylene	**2980**	ug/kg	72.6	11.2	10	04/12/16 16:49	04/20/16 14:45	191-24-2	
Benzo(k)fluoranthene	**8380**	ug/kg	72.6	6.8	10	04/12/16 16:49	04/20/16 14:45	207-08-9	ip
Chrysene	**2690**	ug/kg	72.6	4.8	10	04/12/16 16:49	04/20/16 14:45	218-01-9	
Dibenz(a,h)anthracene	**1290**	ug/kg	72.6	9.5	10	04/12/16 16:49	04/20/16 14:45	53-70-3	
Fluoranthene	**3500**	ug/kg	72.6	4.8	10	04/12/16 16:49	04/20/16 14:45	206-44-0	
Fluorene	**93.4**	ug/kg	72.6	6.3	10	04/12/16 16:49	04/20/16 14:45	86-73-7	
Indeno(1,2,3-cd)pyrene	**2990**	ug/kg	72.6	8.6	10	04/12/16 16:49	04/20/16 14:45	193-39-5	
Phenanthrene	**333**	ug/kg	72.6	7.3	10	04/12/16 16:49	04/20/16 14:45	85-01-8	
Pyrene	**4280**	ug/kg	72.6	5.9	10	04/12/16 16:49	04/20/16 14:45	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	72	%	35-141		10	04/12/16 16:49	04/20/16 14:45	321-60-8	
Terphenyl-d14 (S)	73	%	64-141		10	04/12/16 16:49	04/20/16 14:45	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.0	1.4	1	04/18/16 12:00	04/18/16 17:21	71-43-2	
n-Butylbenzene	ND	ug/kg	5.0	2.4	1	04/18/16 12:00	04/18/16 17:21	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.2	2.6	1	04/19/16 12:00	04/19/16 16:35	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.0	2.4	1	04/18/16 12:00	04/18/16 17:21	98-06-6	
Ethanol	ND	ug/kg	200	56.7	1	04/18/16 12:00	04/18/16 17:21	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.0	1.0	1	04/18/16 12:00	04/18/16 17:21	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.0	1.7	1	04/18/16 12:00	04/18/16 17:21	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.0	2.1	1	04/18/16 12:00	04/18/16 17:21	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	5.0	2.4	1	04/18/16 12:00	04/18/16 17:21	1634-04-4	
Naphthalene	ND	ug/kg	5.2	1.0	1	04/19/16 12:00	04/19/16 16:35	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.0	1.7	1	04/18/16 12:00	04/18/16 17:21	103-65-1	
Toluene	ND	ug/kg	5.0	1.6	1	04/18/16 12:00	04/18/16 17:21	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.0	1.4	1	04/18/16 12:00	04/18/16 17:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.0	1.7	1	04/18/16 12:00	04/18/16 17:21	108-67-8	
m&p-Xylene	ND	ug/kg	10	1.8	1	04/18/16 12:00	04/18/16 17:21	179601-23-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B109(0-2.0) **Lab ID: 30179203013** Collected: 04/08/16 11:00 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • 8270DSJ: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
o-Xylene	ND	ug/kg	5.0	0.99	1	04/18/16 12:00	04/18/16 17:21	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	68-135		1	04/18/16 12:00	04/18/16 17:21	2037-26-5	
Toluene-d8 (S)	98	%	68-135		1	04/19/16 12:00	04/19/16 16:35	2037-26-5	
4-Bromofluorobenzene (S)	102	%	65-146		1	04/18/16 12:00	04/18/16 17:21	460-00-4	
4-Bromofluorobenzene (S)	104	%	65-146		1	04/19/16 12:00	04/19/16 16:35	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	69-137		1	04/19/16 12:00	04/19/16 16:35	17060-07-0	
1,2-Dichloroethane-d4 (S)	107	%	69-137		1	04/18/16 12:00	04/18/16 17:21	17060-07-0	
Dibromofluoromethane (S)	112	%	70-130		1	04/19/16 12:00	04/19/16 16:35	1868-53-7	
Dibromofluoromethane (S)	98	%	70-130		1	04/18/16 12:00	04/18/16 17:21	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**10.0**	%	0.10	0.10	1		04/21/16 14:57		

Sample: B109(2.0-4.0) **Lab ID: 30179203014** Collected: 04/08/16 11:05 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.8	0.77	1	04/12/16 16:49	04/20/16 15:03	83-32-9	
Acenaphthylene	ND	ug/kg	8.8	0.75	1	04/12/16 16:49	04/20/16 15:03	208-96-8	
Anthracene	ND	ug/kg	8.8	0.85	1	04/12/16 16:49	04/20/16 15:03	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.8	2.2	1	04/12/16 16:49	04/20/16 15:03	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.8	0.84	1	04/12/16 16:49	04/20/16 15:03	50-32-8	
Benzo(b)fluoranthene	**13.4**	ug/kg	8.8	0.77	1	04/12/16 16:49	04/20/16 15:03	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.8	1.3	1	04/12/16 16:49	04/20/16 15:03	191-24-2	
Benzo(k)fluoranthene	**13.5**	ug/kg	8.8	0.82	1	04/12/16 16:49	04/20/16 15:03	207-08-9	ip
Chrysene	ND	ug/kg	8.8	0.58	1	04/12/16 16:49	04/20/16 15:03	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.8	1.2	1	04/12/16 16:49	04/20/16 15:03	53-70-3	
Fluoranthene	ND	ug/kg	8.8	0.58	1	04/12/16 16:49	04/20/16 15:03	206-44-0	
Fluorene	ND	ug/kg	8.8	0.76	1	04/12/16 16:49	04/20/16 15:03	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.8	1.0	1	04/12/16 16:49	04/20/16 15:03	193-39-5	
Phenanthrene	ND	ug/kg	8.8	0.88	1	04/12/16 16:49	04/20/16 15:03	85-01-8	
Pyrene	ND	ug/kg	8.8	0.71	1	04/12/16 16:49	04/20/16 15:03	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	61	%	35-141		1	04/12/16 16:49	04/20/16 15:03	321-60-8	
Terphenyl-d14 (S)	80	%	64-141		1	04/12/16 16:49	04/20/16 15:03	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.7	1.6	1	04/18/16 12:00	04/18/16 17:47	71-43-2	
n-Butylbenzene	ND	ug/kg	5.7	2.8	1	04/18/16 12:00	04/18/16 17:47	104-51-8	
sec-Butylbenzene	ND	ug/kg	7.4	3.7	1	04/19/16 12:00	04/19/16 12:59	135-98-8	1c

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B109(2.0-4.0) **Lab ID: 30179203014** Collected: 04/08/16 11:05 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
tert-Butylbenzene	ND	ug/kg	5.7	2.8	1	04/18/16 12:00	04/18/16 17:47	98-06-6	
Ethanol	ND	ug/kg	228	64.8	1	04/18/16 12:00	04/18/16 17:47	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.7	1.2	1	04/18/16 12:00	04/18/16 17:47	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.7	2.0	1	04/18/16 12:00	04/18/16 17:47	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.7	2.4	1	04/18/16 12:00	04/18/16 17:47	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	5.7	2.8	1	04/18/16 12:00	04/18/16 17:47	1634-04-4	
Naphthalene	ND	ug/kg	7.4	1.4	1	04/19/16 12:00	04/19/16 12:59	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.7	2.0	1	04/18/16 12:00	04/18/16 17:47	103-65-1	
Toluene	ND	ug/kg	5.7	1.8	1	04/18/16 12:00	04/18/16 17:47	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.7	1.6	1	04/18/16 12:00	04/18/16 17:47	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.7	1.9	1	04/18/16 12:00	04/18/16 17:47	108-67-8	
m&p-Xylene	ND	ug/kg	11.4	2.1	1	04/18/16 12:00	04/18/16 17:47	179601-23-1	
o-Xylene	ND	ug/kg	5.7	1.1	1	04/18/16 12:00	04/18/16 17:47	95-47-6	
Surrogates									
Toluene-d8 (S)	97	%	68-135		1	04/18/16 12:00	04/18/16 17:47	2037-26-5	
Toluene-d8 (S)	97	%	68-135		1	04/19/16 12:00	04/19/16 12:59	2037-26-5	
4-Bromofluorobenzene (S)	101	%	65-146		1	04/19/16 12:00	04/19/16 12:59	460-00-4	
4-Bromofluorobenzene (S)	103	%	65-146		1	04/18/16 12:00	04/18/16 17:47	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	69-137		1	04/19/16 12:00	04/19/16 12:59	17060-07-0	
1,2-Dichloroethane-d4 (S)	107	%	69-137		1	04/18/16 12:00	04/18/16 17:47	17060-07-0	
Dibromofluoromethane (S)	107	%	70-130		1	04/19/16 12:00	04/19/16 12:59	1868-53-7	
Dibromofluoromethane (S)	97	%	70-130		1	04/18/16 12:00	04/18/16 17:47	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.9**	%	0.10	0.10	1		04/21/16 14:58		

Sample: B109(4.0-6.0) **Lab ID: 30179203015** Collected: 04/08/16 11:10 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	9.8	0.86	1	04/12/16 16:49	04/20/16 15:21	83-32-9	
Acenaphthylene	ND	ug/kg	9.8	0.83	1	04/12/16 16:49	04/20/16 15:21	208-96-8	
Anthracene	ND	ug/kg	9.8	0.95	1	04/12/16 16:49	04/20/16 15:21	120-12-7	
Benzo(a)anthracene	ND	ug/kg	9.8	2.5	1	04/12/16 16:49	04/20/16 15:21	56-55-3	
Benzo(a)pyrene	ND	ug/kg	9.8	0.94	1	04/12/16 16:49	04/20/16 15:21	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	9.8	0.86	1	04/12/16 16:49	04/20/16 15:21	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	9.8	1.5	1	04/12/16 16:49	04/20/16 15:21	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	9.8	0.92	1	04/12/16 16:49	04/20/16 15:21	207-08-9	ip
Chrysene	ND	ug/kg	9.8	0.64	1	04/12/16 16:49	04/20/16 15:21	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	9.8	1.3	1	04/12/16 16:49	04/20/16 15:21	53-70-3	
Fluoranthene	ND	ug/kg	9.8	0.64	1	04/12/16 16:49	04/20/16 15:21	206-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B109(4.0-6.0) **Lab ID: 30179203015** Collected: 04/08/16 11:10 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Fluorene	ND	ug/kg	9.8	0.85	1	04/12/16 16:49	04/20/16 15:21	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	9.8	1.2	1	04/12/16 16:49	04/20/16 15:21	193-39-5	
Phenanthrene	ND	ug/kg	9.8	0.98	1	04/12/16 16:49	04/20/16 15:21	85-01-8	
Pyrene	ND	ug/kg	9.8	0.79	1	04/12/16 16:49	04/20/16 15:21	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	65	%	35-141		1	04/12/16 16:49	04/20/16 15:21	321-60-8	
Terphenyl-d14 (S)	73	%	64-141		1	04/12/16 16:49	04/20/16 15:21	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	6.8	1.8	1	04/18/16 12:00	04/18/16 18:13	71-43-2	
n-Butylbenzene	ND	ug/kg	6.8	3.3	1	04/18/16 12:00	04/18/16 18:13	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	6.4	3.2	1	04/19/16 12:00	04/19/16 13:23	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	6.8	3.3	1	04/18/16 12:00	04/18/16 18:13	98-06-6	1c
Ethanol	ND	ug/kg	270	76.6	1	04/18/16 12:00	04/18/16 18:13	64-17-5	1c
Ethylbenzene	ND	ug/kg	6.8	1.4	1	04/18/16 12:00	04/18/16 18:13	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	6.8	2.3	1	04/18/16 12:00	04/18/16 18:13	98-82-8	
p-Isopropyltoluene	ND	ug/kg	6.8	2.9	1	04/18/16 12:00	04/18/16 18:13	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	6.8	3.3	1	04/18/16 12:00	04/18/16 18:13	1634-04-4	
Naphthalene	ND	ug/kg	6.4	1.3	1	04/19/16 12:00	04/19/16 13:23	91-20-3	1c
n-Propylbenzene	ND	ug/kg	6.8	2.4	1	04/18/16 12:00	04/18/16 18:13	103-65-1	1c
Toluene	ND	ug/kg	6.8	2.1	1	04/18/16 12:00	04/18/16 18:13	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	6.8	1.9	1	04/18/16 12:00	04/18/16 18:13	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	6.8	2.3	1	04/18/16 12:00	04/18/16 18:13	108-67-8	
m&p-Xylene	ND	ug/kg	13.5	2.5	1	04/18/16 12:00	04/18/16 18:13	179601-23-1	
o-Xylene	ND	ug/kg	6.8	1.3	1	04/18/16 12:00	04/18/16 18:13	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	68-135		1	04/19/16 12:00	04/19/16 13:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%	65-146		1	04/19/16 12:00	04/19/16 13:23	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	69-137		1	04/19/16 12:00	04/19/16 13:23	17060-07-0	
Dibromofluoromethane (S)	106	%	70-130		1	04/19/16 12:00	04/19/16 13:23	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**32.5**	%	0.10	0.10	1		04/21/16 15:00		

Sample: B109(6.0-8.0) **Lab ID: 30179203016** Collected: 04/08/16 11:15 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.4	0.74	1	04/12/16 16:49	04/20/16 15:38	83-32-9	
Acenaphthylene	ND	ug/kg	8.4	0.72	1	04/12/16 16:49	04/20/16 15:38	208-96-8	
Anthracene	ND	ug/kg	8.4	0.82	1	04/12/16 16:49	04/20/16 15:38	120-12-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B109(6.0-8.0) **Lab ID: 30179203016** Collected: 04/08/16 11:15 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Benzo(a)anthracene	**12.1**	ug/kg	8.4	2.1	1	04/12/16 16:49	04/20/16 15:38	56-55-3	
Benzo(a)pyrene	**21.6**	ug/kg	8.4	0.80	1	04/12/16 16:49	04/20/16 15:38	50-32-8	
Benzo(b)fluoranthene	**38.5**	ug/kg	8.4	0.74	1	04/12/16 16:49	04/20/16 15:38	205-99-2	ip
Benzo(g,h,i)perylene	**14.9**	ug/kg	8.4	1.3	1	04/12/16 16:49	04/20/16 15:38	191-24-2	
Benzo(k)fluoranthene	**38.2**	ug/kg	8.4	0.79	1	04/12/16 16:49	04/20/16 15:38	207-08-9	ip
Chrysene	ND	ug/kg	8.4	0.55	1	04/12/16 16:49	04/20/16 15:38	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.4	1.1	1	04/12/16 16:49	04/20/16 15:38	53-70-3	
Fluoranthene	ND	ug/kg	8.4	0.55	1	04/12/16 16:49	04/20/16 15:38	206-44-0	
Fluorene	ND	ug/kg	8.4	0.73	1	04/12/16 16:49	04/20/16 15:38	86-73-7	
Indeno(1,2,3-cd)pyrene	**12.6**	ug/kg	8.4	0.99	1	04/12/16 16:49	04/20/16 15:38	193-39-5	
Phenanthrene	ND	ug/kg	8.4	0.84	1	04/12/16 16:49	04/20/16 15:38	85-01-8	
Pyrene	**10.7**	ug/kg	8.4	0.68	1	04/12/16 16:49	04/20/16 15:38	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	59	%	35-141		1	04/12/16 16:49	04/20/16 15:38	321-60-8	
Terphenyl-d14 (S)	79	%	64-141		1	04/12/16 16:49	04/20/16 15:38	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	6.8	1.9	1	04/18/16 12:00	04/18/16 18:39	71-43-2	
n-Butylbenzene	ND	ug/kg	6.8	3.3	1	04/18/16 12:00	04/18/16 18:39	104-51-8	
sec-Butylbenzene	ND	ug/kg	6.2	3.1	1	04/19/16 12:00	04/19/16 16:59	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	6.8	3.3	1	04/18/16 12:00	04/18/16 18:39	98-06-6	
Ethanol	ND	ug/kg	273	77.3	1	04/18/16 12:00	04/18/16 18:39	64-17-5	1c
Ethylbenzene	ND	ug/kg	6.8	1.4	1	04/18/16 12:00	04/18/16 18:39	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	6.8	2.4	1	04/18/16 12:00	04/18/16 18:39	98-82-8	
p-Isopropyltoluene	ND	ug/kg	6.8	2.9	1	04/18/16 12:00	04/18/16 18:39	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	6.8	3.3	1	04/18/16 12:00	04/18/16 18:39	1634-04-4	
Naphthalene	ND	ug/kg	6.2	1.2	1	04/19/16 12:00	04/19/16 16:59	91-20-3	1c
n-Propylbenzene	ND	ug/kg	6.8	2.4	1	04/18/16 12:00	04/18/16 18:39	103-65-1	
Toluene	ND	ug/kg	6.8	2.1	1	04/18/16 12:00	04/18/16 18:39	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	6.8	1.9	1	04/18/16 12:00	04/18/16 18:39	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	6.8	2.3	1	04/18/16 12:00	04/18/16 18:39	108-67-8	
m&p-Xylene	ND	ug/kg	13.6	2.5	1	04/18/16 12:00	04/18/16 18:39	179601-23-1	
o-Xylene	ND	ug/kg	6.8	1.3	1	04/18/16 12:00	04/18/16 18:39	95-47-6	
Surrogates									
Toluene-d8 (S)	97	%	68-135		1	04/18/16 12:00	04/18/16 18:39	2037-26-5	
Toluene-d8 (S)	97	%	68-135		1	04/19/16 12:00	04/19/16 16:59	2037-26-5	
4-Bromofluorobenzene (S)	102	%	65-146		1	04/18/16 12:00	04/18/16 18:39	460-00-4	
4-Bromofluorobenzene (S)	102	%	65-146		1	04/19/16 12:00	04/19/16 16:59	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	69-137		1	04/19/16 12:00	04/19/16 16:59	17060-07-0	
1,2-Dichloroethane-d4 (S)	102	%	69-137		1	04/18/16 12:00	04/18/16 18:39	17060-07-0	
Dibromofluoromethane (S)	90	%	70-130		1	04/19/16 12:00	04/19/16 16:59	1868-53-7	
Dibromofluoromethane (S)	95	%	70-130		1	04/18/16 12:00	04/18/16 18:39	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**21.1**	%	0.10	0.10	1		04/21/16 15:01		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B107(0-1.0) **Lab ID: 30179203017** Collected: 04/08/16 11:30 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.
Comments: • 8270DSJ: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**14.9**	ug/kg	7.9	0.69	1	04/12/16 16:49	04/20/16 15:56	83-32-9	
Acenaphthylene	**36.3**	ug/kg	7.9	0.67	1	04/12/16 16:49	04/20/16 15:56	208-96-8	
Anthracene	**151**	ug/kg	7.9	0.76	1	04/12/16 16:49	04/20/16 15:56	120-12-7	
Benzo(a)anthracene	**718**	ug/kg	7.9	2.0	1	04/12/16 16:49	04/20/16 15:56	56-55-3	
Benzo(a)pyrene	**961**	ug/kg	7.9	0.75	1	04/12/16 16:49	04/20/16 15:56	50-32-8	
Benzo(b)fluoranthene	**1810**	ug/kg	158	13.9	20	04/12/16 16:49	04/21/16 20:16	205-99-2	ip
Benzo(g,h,i)perylene	**607**	ug/kg	7.9	1.2	1	04/12/16 16:49	04/20/16 15:56	191-24-2	
Benzo(k)fluoranthene	**1400**	ug/kg	158	14.8	20	04/12/16 16:49	04/21/16 20:16	207-08-9	ip
Chrysene	**796**	ug/kg	7.9	0.52	1	04/12/16 16:49	04/20/16 15:56	218-01-9	
Dibenz(a,h)anthracene	**189**	ug/kg	7.9	1.0	1	04/12/16 16:49	04/20/16 15:56	53-70-3	
Fluoranthene	**1630**	ug/kg	158	10.3	20	04/12/16 16:49	04/21/16 20:16	206-44-0	
Fluorene	**29.1**	ug/kg	7.9	0.68	1	04/12/16 16:49	04/20/16 15:56	86-73-7	
Indeno(1,2,3-cd)pyrene	**574**	ug/kg	7.9	0.93	1	04/12/16 16:49	04/20/16 15:56	193-39-5	
Phenanthrene	**481**	ug/kg	7.9	0.79	1	04/12/16 16:49	04/20/16 15:56	85-01-8	
Pyrene	**1460**	ug/kg	7.9	0.63	1	04/12/16 16:49	04/20/16 15:56	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	69	%	35-141		1	04/12/16 16:49	04/20/16 15:56	321-60-8	
Terphenyl-d14 (S)	90	%	64-141		1	04/12/16 16:49	04/20/16 15:56	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.6	1.5	1	04/18/16 12:00	04/18/16 19:05	71-43-2	
n-Butylbenzene	ND	ug/kg	5.6	2.7	1	04/18/16 12:00	04/18/16 19:05	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.9	3.0	1	04/19/16 12:00	04/19/16 17:23	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.6	2.7	1	04/18/16 12:00	04/18/16 19:05	98-06-6	
Ethanol	ND	ug/kg	223	63.2	1	04/18/16 12:00	04/18/16 19:05	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.6	1.1	1	04/18/16 12:00	04/18/16 19:05	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.6	1.9	1	04/18/16 12:00	04/18/16 19:05	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.6	2.4	1	04/18/16 12:00	04/18/16 19:05	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	5.6	2.7	1	04/18/16 12:00	04/18/16 19:05	1634-04-4	
Naphthalene	ND	ug/kg	5.9	1.1	1	04/19/16 12:00	04/19/16 17:23	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.6	2.0	1	04/18/16 12:00	04/18/16 19:05	103-65-1	
Toluene	ND	ug/kg	5.6	1.7	1	04/18/16 12:00	04/18/16 19:05	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.6	1.6	1	04/18/16 12:00	04/18/16 19:05	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.6	1.9	1	04/18/16 12:00	04/18/16 19:05	108-67-8	
m&p-Xylene	ND	ug/kg	11.2	2.1	1	04/18/16 12:00	04/18/16 19:05	179601-23-1	
o-Xylene	ND	ug/kg	5.6	1.1	1	04/18/16 12:00	04/18/16 19:05	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	68-135		1	04/18/16 12:00	04/18/16 19:05	2037-26-5	
Toluene-d8 (S)	102	%	68-135		1	04/19/16 12:00	04/19/16 17:23	2037-26-5	
4-Bromofluorobenzene (S)	108	%	65-146		1	04/18/16 12:00	04/18/16 19:05	460-00-4	
4-Bromofluorobenzene (S)	104	%	65-146		1	04/19/16 12:00	04/19/16 17:23	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	69-137		1	04/18/16 12:00	04/18/16 19:05	17060-07-0	
1,2-Dichloroethane-d4 (S)	105	%	69-137		1	04/19/16 12:00	04/19/16 17:23	17060-07-0	
Dibromofluoromethane (S)	104	%	70-130		1	04/19/16 12:00	04/19/16 17:23	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B107(0-1.0) **Lab ID: 30179203017** Collected: 04/08/16 11:30 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.
Comments: • 8270DSJ: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Surrogates									
Dibromofluoromethane (S)	106	%	70-130		1	04/18/16 12:00	04/18/16 19:05	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**15.2**	%	0.10	0.10	1		04/22/16 15:33		

Sample: B107(1.0-3.0) **Lab ID: 30179203018** Collected: 04/08/16 11:35 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.
Comments: • 8270DSJ: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**140**	ug/kg	77.6	6.8	10	04/12/16 16:49	04/20/16 16:13	83-32-9	
Acenaphthylene	**89.9**	ug/kg	77.6	6.6	10	04/12/16 16:49	04/20/16 16:13	208-96-8	
Anthracene	**1370**	ug/kg	77.6	7.5	10	04/12/16 16:49	04/20/16 16:13	120-12-7	
Benzo(a)anthracene	**6210**	ug/kg	77.6	19.8	10	04/12/16 16:49	04/20/16 16:13	56-55-3	
Benzo(a)pyrene	**8790**	ug/kg	77.6	7.4	10	04/12/16 16:49	04/20/16 16:13	50-32-8	
Benzo(b)fluoranthene	**12500**	ug/kg	77.6	6.8	10	04/12/16 16:49	04/20/16 16:13	205-99-2	
Benzo(g,h,i)perylene	**7000**	ug/kg	77.6	11.9	10	04/12/16 16:49	04/20/16 16:13	191-24-2	
Benzo(k)fluoranthene	**5420**	ug/kg	77.6	7.3	10	04/12/16 16:49	04/20/16 16:13	207-08-9	
Chrysene	**7240**	ug/kg	77.6	5.1	10	04/12/16 16:49	04/20/16 16:13	218-01-9	
Dibenz(a,h)anthracene	**1860**	ug/kg	77.6	10.2	10	04/12/16 16:49	04/20/16 16:13	53-70-3	
Fluoranthene	**14800**	ug/kg	77.6	5.1	10	04/12/16 16:49	04/20/16 16:13	206-44-0	
Fluorene	**272**	ug/kg	77.6	6.7	10	04/12/16 16:49	04/20/16 16:13	86-73-7	
Indeno(1,2,3-cd)pyrene	**6190**	ug/kg	77.6	9.2	10	04/12/16 16:49	04/20/16 16:13	193-39-5	
Phenanthrene	**3890**	ug/kg	77.6	7.8	10	04/12/16 16:49	04/20/16 16:13	85-01-8	
Pyrene	**12800**	ug/kg	77.6	6.3	10	04/12/16 16:49	04/20/16 16:13	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	67	%	35-141		10	04/12/16 16:49	04/20/16 16:13	321-60-8	
Terphenyl-d14 (S)	72	%	64-141		10	04/12/16 16:49	04/20/16 16:13	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	6.3	1.7	1	04/18/16 12:00	04/18/16 19:31	71-43-2	
n-Butylbenzene	ND	ug/kg	6.3	3.1	1	04/18/16 12:00	04/18/16 19:31	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.9	2.5	1	04/19/16 12:00	04/19/16 13:47	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	6.3	3.0	1	04/18/16 12:00	04/18/16 19:31	98-06-6	
Ethanol	ND	ug/kg	253	71.7	1	04/18/16 12:00	04/18/16 19:31	64-17-5	1c
Ethylbenzene	ND	ug/kg	6.3	1.3	1	04/18/16 12:00	04/18/16 19:31	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	6.3	2.2	1	04/18/16 12:00	04/18/16 19:31	98-82-8	
p-Isopropyltoluene	ND	ug/kg	6.3	2.7	1	04/18/16 12:00	04/18/16 19:31	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	6.3	3.1	1	04/18/16 12:00	04/18/16 19:31	1634-04-4	
Naphthalene	ND	ug/kg	4.9	0.96	1	04/19/16 12:00	04/19/16 13:47	91-20-3	1c

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B107(1.0-3.0) **Lab ID: 30179203018** Collected: 04/08/16 11:35 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • 8270DSJ: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
n-Propylbenzene	ND	ug/kg	6.3	2.2	1	04/18/16 12:00	04/18/16 19:31	103-65-1	
Toluene	ND	ug/kg	6.3	2.0	1	04/18/16 12:00	04/18/16 19:31	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	6.3	1.8	1	04/18/16 12:00	04/18/16 19:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	6.3	2.1	1	04/18/16 12:00	04/18/16 19:31	108-67-8	
m&p-Xylene	ND	ug/kg	12.6	2.3	1	04/18/16 12:00	04/18/16 19:31	179601-23-1	
o-Xylene	ND	ug/kg	6.3	1.3	1	04/18/16 12:00	04/18/16 19:31	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	68-135		1	04/19/16 12:00	04/19/16 13:47	2037-26-5	
Toluene-d8 (S)	98	%	68-135		1	04/18/16 12:00	04/18/16 19:31	2037-26-5	
4-Bromofluorobenzene (S)	105	%	65-146		1	04/18/16 12:00	04/18/16 19:31	460-00-4	
4-Bromofluorobenzene (S)	102	%	65-146		1	04/19/16 12:00	04/19/16 13:47	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	69-137		1	04/19/16 12:00	04/19/16 13:47	17060-07-0	
1,2-Dichloroethane-d4 (S)	104	%	69-137		1	04/18/16 12:00	04/18/16 19:31	17060-07-0	
Dibromofluoromethane (S)	101	%	70-130		1	04/18/16 12:00	04/18/16 19:31	1868-53-7	
Dibromofluoromethane (S)	105	%	70-130		1	04/19/16 12:00	04/19/16 13:47	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**15.1**	%	0.10	0.10	1		04/22/16 15:34		

Sample: B107(3.0-5.0) **Lab ID: 30179203019** Collected: 04/08/16 11:40 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.2	0.72	1	04/12/16 16:49	04/20/16 16:31	83-32-9	
Acenaphthylene	**12.0**	ug/kg	8.2	0.70	1	04/12/16 16:49	04/20/16 16:31	208-96-8	
Anthracene	**75.9**	ug/kg	8.2	0.80	1	04/12/16 16:49	04/20/16 16:31	120-12-7	
Benzo(a)anthracene	**396**	ug/kg	8.2	2.1	1	04/12/16 16:49	04/20/16 16:31	56-55-3	
Benzo(a)pyrene	**652**	ug/kg	8.2	0.78	1	04/12/16 16:49	04/20/16 16:31	50-32-8	
Benzo(b)fluoranthene	**1230**	ug/kg	8.2	0.72	1	04/12/16 16:49	04/20/16 16:31	205-99-2	ip
Benzo(g,h,i)perylene	**562**	ug/kg	8.2	1.3	1	04/12/16 16:49	04/20/16 16:31	191-24-2	
Benzo(k)fluoranthene	**1220**	ug/kg	8.2	0.77	1	04/12/16 16:49	04/20/16 16:31	207-08-9	ip
Chrysene	**483**	ug/kg	8.2	0.54	1	04/12/16 16:49	04/20/16 16:31	218-01-9	
Dibenz(a,h)anthracene	**143**	ug/kg	8.2	1.1	1	04/12/16 16:49	04/20/16 16:31	53-70-3	
Fluoranthene	**840**	ug/kg	8.2	0.54	1	04/12/16 16:49	04/20/16 16:31	206-44-0	
Fluorene	**10.3**	ug/kg	8.2	0.71	1	04/12/16 16:49	04/20/16 16:31	86-73-7	
Indeno(1,2,3-cd)pyrene	**505**	ug/kg	8.2	0.97	1	04/12/16 16:49	04/20/16 16:31	193-39-5	
Phenanthrene	**171**	ug/kg	8.2	0.82	1	04/12/16 16:49	04/20/16 16:31	85-01-8	
Pyrene	**769**	ug/kg	8.2	0.66	1	04/12/16 16:49	04/20/16 16:31	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	68	%	35-141		1	04/12/16 16:49	04/20/16 16:31	321-60-8	
Terphenyl-d14 (S)	85	%	64-141		1	04/12/16 16:49	04/20/16 16:31	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B107(3.0-5.0) **Lab ID: 30179203019** Collected: 04/08/16 11:40 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.4	1.5	1	04/18/16 12:00	04/18/16 19:57	71-43-2	
n-Butylbenzene	ND	ug/kg	5.4	2.6	1	04/18/16 12:00	04/18/16 19:57	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.4	2.7	1	04/19/16 12:00	04/19/16 14:11	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.4	2.6	1	04/18/16 12:00	04/18/16 19:57	98-06-6	1c
Ethanol	ND	ug/kg	215	60.8	1	04/18/16 12:00	04/18/16 19:57	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.4	1.1	1	04/18/16 12:00	04/18/16 19:57	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.4	1.9	1	04/18/16 12:00	04/18/16 19:57	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.4	2.3	1	04/18/16 12:00	04/18/16 19:57	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.4	2.6	1	04/18/16 12:00	04/18/16 19:57	1634-04-4	
Naphthalene	ND	ug/kg	5.4	1.1	1	04/19/16 12:00	04/19/16 14:11	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.4	1.9	1	04/18/16 12:00	04/18/16 19:57	103-65-1	1c
Toluene	ND	ug/kg	5.4	1.7	1	04/18/16 12:00	04/18/16 19:57	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.4	1.5	1	04/18/16 12:00	04/18/16 19:57	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.4	1.8	1	04/18/16 12:00	04/18/16 19:57	108-67-8	
m&p-Xylene	ND	ug/kg	10.7	2.0	1	04/18/16 12:00	04/18/16 19:57	179601-23-1	
o-Xylene	ND	ug/kg	5.4	1.1	1	04/18/16 12:00	04/18/16 19:57	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	68-135		1	04/19/16 12:00	04/19/16 14:11	2037-26-5	
4-Bromofluorobenzene (S)	98	%	65-146		1	04/19/16 12:00	04/19/16 14:11	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	69-137		1	04/19/16 12:00	04/19/16 14:11	17060-07-0	
Dibromofluoromethane (S)	99	%	70-130		1	04/19/16 12:00	04/19/16 14:11	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.9**	%	0.10	0.10	1		04/22/16 15:35		

Sample: B108(0-1.0) **Lab ID: 30179203020** Collected: 04/08/16 12:30 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.2	0.63	1	04/12/16 16:49	04/20/16 16:48	83-32-9	
Acenaphthylene	ND	ug/kg	7.2	0.61	1	04/12/16 16:49	04/20/16 16:48	208-96-8	
Anthracene	**12.3**	ug/kg	7.2	0.70	1	04/12/16 16:49	04/20/16 16:48	120-12-7	
Benzo(a)anthracene	**89.6**	ug/kg	7.2	1.8	1	04/12/16 16:49	04/20/16 16:48	56-55-3	
Benzo(a)pyrene	**142**	ug/kg	7.2	0.68	1	04/12/16 16:49	04/20/16 16:48	50-32-8	
Benzo(b)fluoranthene	**301**	ug/kg	7.2	0.63	1	04/12/16 16:49	04/20/16 16:48	205-99-2	ip
Benzo(g,h,i)perylene	**94.1**	ug/kg	7.2	1.1	1	04/12/16 16:49	04/20/16 16:48	191-24-2	
Benzo(k)fluoranthene	**299**	ug/kg	7.2	0.67	1	04/12/16 16:49	04/20/16 16:48	207-08-9	ip
Chrysene	**126**	ug/kg	7.2	0.47	1	04/12/16 16:49	04/20/16 16:48	218-01-9	
Dibenz(a,h)anthracene	**26.9**	ug/kg	7.2	0.94	1	04/12/16 16:49	04/20/16 16:48	53-70-3	
Fluoranthene	**221**	ug/kg	7.2	0.47	1	04/12/16 16:49	04/20/16 16:48	206-44-0	
Fluorene	ND	ug/kg	7.2	0.62	1	04/12/16 16:49	04/20/16 16:48	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B108(0-1.0) **Lab ID: 30179203020** Collected: 04/08/16 12:30 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Indeno(1,2,3-cd)pyrene	**80.6**	ug/kg	7.2	0.85	1	04/12/16 16:49	04/20/16 16:48	193-39-5	
Phenanthrene	**43.9**	ug/kg	7.2	0.72	1	04/12/16 16:49	04/20/16 16:48	85-01-8	
Pyrene	**195**	ug/kg	7.2	0.58	1	04/12/16 16:49	04/20/16 16:48	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	69	%	35-141		1	04/12/16 16:49	04/20/16 16:48	321-60-8	
Terphenyl-d14 (S)	87	%	64-141		1	04/12/16 16:49	04/20/16 16:48	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	4.9	1.3	1	04/18/16 12:00	04/18/16 20:23	71-43-2	
n-Butylbenzene	ND	ug/kg	4.9	2.4	1	04/18/16 12:00	04/18/16 20:23	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.8	2.9	1	04/19/16 12:00	04/19/16 14:35	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	4.9	2.3	1	04/18/16 12:00	04/18/16 20:23	98-06-6	
Ethanol	ND	ug/kg	195	55.2	1	04/18/16 12:00	04/18/16 20:23	64-17-5	1c
Ethylbenzene	ND	ug/kg	4.9	0.98	1	04/18/16 12:00	04/18/16 20:23	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	4.9	1.7	1	04/18/16 12:00	04/18/16 20:23	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.9	2.1	1	04/18/16 12:00	04/18/16 20:23	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	4.9	2.4	1	04/18/16 12:00	04/18/16 20:23	1634-04-4	
Naphthalene	ND	ug/kg	5.8	1.1	1	04/19/16 12:00	04/19/16 14:35	91-20-3	1c
n-Propylbenzene	ND	ug/kg	4.9	1.7	1	04/18/16 12:00	04/18/16 20:23	103-65-1	
Toluene	ND	ug/kg	4.9	1.5	1	04/18/16 12:00	04/18/16 20:23	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	4.9	1.4	1	04/18/16 12:00	04/18/16 20:23	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.9	1.6	1	04/18/16 12:00	04/18/16 20:23	108-67-8	
m&p-Xylene	ND	ug/kg	9.7	1.8	1	04/18/16 12:00	04/18/16 20:23	179601-23-1	
o-Xylene	ND	ug/kg	4.9	0.96	1	04/18/16 12:00	04/18/16 20:23	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	68-135		1	04/18/16 12:00	04/18/16 20:23	2037-26-5	
Toluene-d8 (S)	98	%	68-135		1	04/19/16 12:00	04/19/16 14:35	2037-26-5	
4-Bromofluorobenzene (S)	106	%	65-146		1	04/18/16 12:00	04/18/16 20:23	460-00-4	
4-Bromofluorobenzene (S)	101	%	65-146		1	04/19/16 12:00	04/19/16 14:35	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	69-137		1	04/18/16 12:00	04/18/16 20:23	17060-07-0	
1,2-Dichloroethane-d4 (S)	92	%	69-137		1	04/19/16 12:00	04/19/16 14:35	17060-07-0	
Dibromofluoromethane (S)	98	%	70-130		1	04/18/16 12:00	04/18/16 20:23	1868-53-7	
Dibromofluoromethane (S)	104	%	70-130		1	04/19/16 12:00	04/19/16 14:35	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**7.7**	%	0.10	0.10	1		04/22/16 15:40		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B108(1.0-3.0) **Lab ID: 30179203021** Collected: 04/08/16 12:35 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.1	0.71	1	04/12/16 16:49	04/20/16 17:06	83-32-9	
Acenaphthylene	ND	ug/kg	8.1	0.69	1	04/12/16 16:49	04/20/16 17:06	208-96-8	
Anthracene	ND	ug/kg	8.1	0.79	1	04/12/16 16:49	04/20/16 17:06	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.1	2.1	1	04/12/16 16:49	04/20/16 17:06	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.1	0.77	1	04/12/16 16:49	04/20/16 17:06	50-32-8	
Benzo(b)fluoranthene	**9.1**	ug/kg	8.1	0.71	1	04/12/16 16:49	04/20/16 17:06	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.1	1.2	1	04/12/16 16:49	04/20/16 17:06	191-24-2	
Benzo(k)fluoranthene	**8.8**	ug/kg	8.1	0.76	1	04/12/16 16:49	04/20/16 17:06	207-08-9	ip
Chrysene	ND	ug/kg	8.1	0.53	1	04/12/16 16:49	04/20/16 17:06	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/12/16 16:49	04/20/16 17:06	53-70-3	
Fluoranthene	ND	ug/kg	8.1	0.53	1	04/12/16 16:49	04/20/16 17:06	206-44-0	
Fluorene	ND	ug/kg	8.1	0.70	1	04/12/16 16:49	04/20/16 17:06	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.1	0.96	1	04/12/16 16:49	04/20/16 17:06	193-39-5	
Phenanthrene	ND	ug/kg	8.1	0.81	1	04/12/16 16:49	04/20/16 17:06	85-01-8	
Pyrene	ND	ug/kg	8.1	0.65	1	04/12/16 16:49	04/20/16 17:06	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	69	%	35-141		1	04/12/16 16:49	04/20/16 17:06	321-60-8	
Terphenyl-d14 (S)	82	%	64-141		1	04/12/16 16:49	04/20/16 17:06	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.8	1.6	1	04/18/16 12:00	04/18/16 20:49	71-43-2	
n-Butylbenzene	ND	ug/kg	5.8	2.9	1	04/18/16 12:00	04/18/16 20:49	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.6	2.8	1	04/19/16 12:00	04/19/16 17:47	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.8	2.8	1	04/18/16 12:00	04/18/16 20:49	98-06-6	
Ethanol	ND	ug/kg	234	66.3	1	04/18/16 12:00	04/18/16 20:49	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.8	1.2	1	04/18/16 12:00	04/18/16 20:49	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.8	2.0	1	04/18/16 12:00	04/18/16 20:49	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.8	2.5	1	04/18/16 12:00	04/18/16 20:49	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	5.8	2.8	1	04/18/16 12:00	04/18/16 20:49	1634-04-4	
Naphthalene	ND	ug/kg	5.6	1.1	1	04/19/16 12:00	04/19/16 17:47	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.8	2.0	1	04/18/16 12:00	04/18/16 20:49	103-65-1	
Toluene	ND	ug/kg	5.8	1.8	1	04/18/16 12:00	04/18/16 20:49	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.8	1.7	1	04/18/16 12:00	04/18/16 20:49	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.8	2.0	1	04/18/16 12:00	04/18/16 20:49	108-67-8	
m&p-Xylene	ND	ug/kg	11.7	2.2	1	04/18/16 12:00	04/18/16 20:49	179601-23-1	
o-Xylene	ND	ug/kg	5.8	1.2	1	04/18/16 12:00	04/18/16 20:49	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	68-135		1	04/18/16 12:00	04/18/16 20:49	2037-26-5	
Toluene-d8 (S)	98	%	68-135		1	04/19/16 12:00	04/19/16 17:47	2037-26-5	
4-Bromofluorobenzene (S)	100	%	65-146		1	04/19/16 12:00	04/19/16 17:47	460-00-4	
4-Bromofluorobenzene (S)	109	%	65-146		1	04/18/16 12:00	04/18/16 20:49	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	69-137		1	04/18/16 12:00	04/18/16 20:49	17060-07-0	
1,2-Dichloroethane-d4 (S)	112	%	69-137		1	04/19/16 12:00	04/19/16 17:47	17060-07-0	
Dibromofluoromethane (S)	106	%	70-130		1	04/19/16 12:00	04/19/16 17:47	1868-53-7	
Dibromofluoromethane (S)	103	%	70-130		1	04/18/16 12:00	04/18/16 20:49	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B108(1.0-3.0) **Lab ID: 30179203021** Collected: 04/08/16 12:35 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**17.8**	%	0.10	0.10	1		04/22/16 15:41		

Sample: B108(3.0-5.0) **Lab ID: 30179203022** Collected: 04/08/16 12:40 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	9.2	0.81	1	04/13/16 16:47	04/15/16 18:21	83-32-9	
Acenaphthylene	ND	ug/kg	9.2	0.79	1	04/13/16 16:47	04/15/16 18:21	208-96-8	
Anthracene	ND	ug/kg	9.2	0.90	1	04/13/16 16:47	04/15/16 18:21	120-12-7	
Benzo(a)anthracene	**14.2**	ug/kg	9.2	2.4	1	04/13/16 16:47	04/15/16 18:21	56-55-3	
Benzo(a)pyrene	**14.3**	ug/kg	9.2	0.88	1	04/13/16 16:47	04/15/16 18:21	50-32-8	
Benzo(b)fluoranthene	**34.2**	ug/kg	9.2	0.81	1	04/13/16 16:47	04/15/16 18:21	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	9.2	1.4	1	04/13/16 16:47	04/15/16 18:21	191-24-2	
Benzo(k)fluoranthene	**33.9**	ug/kg	9.2	0.87	1	04/13/16 16:47	04/15/16 18:21	207-08-9	ip
Chrysene	**21.7**	ug/kg	9.2	0.61	1	04/13/16 16:47	04/15/16 18:21	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	9.2	1.2	1	04/13/16 16:47	04/15/16 18:21	53-70-3	
Fluoranthene	**33.3**	ug/kg	9.2	0.61	1	04/13/16 16:47	04/15/16 18:21	206-44-0	
Fluorene	ND	ug/kg	9.2	0.80	1	04/13/16 16:47	04/15/16 18:21	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	9.2	1.1	1	04/13/16 16:47	04/15/16 18:21	193-39-5	
Phenanthrene	**13.9**	ug/kg	9.2	0.92	1	04/13/16 16:47	04/15/16 18:21	85-01-8	
Pyrene	**30.1**	ug/kg	9.2	0.74	1	04/13/16 16:47	04/15/16 18:21	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%	35-141		1	04/13/16 16:47	04/15/16 18:21	321-60-8	
Terphenyl-d14 (S)	73	%	64-141		1	04/13/16 16:47	04/15/16 18:21	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.9	1.6	1	04/18/16 12:00	04/18/16 21:16	71-43-2	
n-Butylbenzene	ND	ug/kg	5.9	2.9	1	04/18/16 12:00	04/18/16 21:16	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.1	2.6	1	04/19/16 12:00	04/19/16 18:11	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.9	2.9	1	04/18/16 12:00	04/18/16 21:16	98-06-6	
Ethanol	ND	ug/kg	237	67.2	1	04/18/16 12:00	04/18/16 21:16	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.9	1.2	1	04/18/16 12:00	04/18/16 21:16	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.9	2.0	1	04/18/16 12:00	04/18/16 21:16	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.9	2.5	1	04/18/16 12:00	04/18/16 21:16	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	5.9	2.9	1	04/18/16 12:00	04/18/16 21:16	1634-04-4	
Naphthalene	ND	ug/kg	5.1	0.99	1	04/19/16 12:00	04/19/16 18:11	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.9	2.1	1	04/18/16 12:00	04/18/16 21:16	103-65-1	
Toluene	ND	ug/kg	5.9	1.8	1	04/18/16 12:00	04/18/16 21:16	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.9	1.7	1	04/18/16 12:00	04/18/16 21:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.9	2.0	1	04/18/16 12:00	04/18/16 21:16	108-67-8	
m&p-Xylene	ND	ug/kg	11.8	2.2	1	04/18/16 12:00	04/18/16 21:16	179601-23-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: B108(3.0-5.0) **Lab ID: 30179203022** Collected: 04/08/16 12:40 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
o-Xylene	ND	ug/kg	5.9	1.2	1	04/18/16 12:00	04/18/16 21:16	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	68-135		1	04/19/16 12:00	04/19/16 18:11	2037-26-5	
Toluene-d8 (S)	96	%	68-135		1	04/18/16 12:00	04/18/16 21:16	2037-26-5	
4-Bromofluorobenzene (S)	105	%	65-146		1	04/18/16 12:00	04/18/16 21:16	460-00-4	
4-Bromofluorobenzene (S)	101	%	65-146		1	04/19/16 12:00	04/19/16 18:11	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	69-137		1	04/18/16 12:00	04/18/16 21:16	17060-07-0	
1,2-Dichloroethane-d4 (S)	100	%	69-137		1	04/19/16 12:00	04/19/16 18:11	17060-07-0	
Dibromofluoromethane (S)	100	%	70-130		1	04/18/16 12:00	04/18/16 21:16	1868-53-7	
Dibromofluoromethane (S)	105	%	70-130		1	04/19/16 12:00	04/19/16 18:11	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**28.6**	%	0.10	0.10	1		04/22/16 15:41		

Sample: PZ104(0.7-2.0) **Lab ID: 30179203023** Collected: 04/07/16 10:45 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.5	0.66	1	04/13/16 16:47	04/15/16 18:38	83-32-9	
Acenaphthylene	**26.5**	ug/kg	7.5	0.64	1	04/13/16 16:47	04/15/16 18:38	208-96-8	
Anthracene	**24.8**	ug/kg	7.5	0.73	1	04/13/16 16:47	04/15/16 18:38	120-12-7	
Benzo(a)anthracene	**81.6**	ug/kg	7.5	1.9	1	04/13/16 16:47	04/15/16 18:38	56-55-3	
Benzo(a)pyrene	**149**	ug/kg	7.5	0.72	1	04/13/16 16:47	04/15/16 18:38	50-32-8	
Benzo(b)fluoranthene	**291**	ug/kg	7.5	0.66	1	04/13/16 16:47	04/15/16 18:38	205-99-2	ip
Benzo(g,h,i)perylene	**83.5**	ug/kg	7.5	1.2	1	04/13/16 16:47	04/15/16 18:38	191-24-2	
Benzo(k)fluoranthene	**288**	ug/kg	7.5	0.71	1	04/13/16 16:47	04/15/16 18:38	207-08-9	ip
Chrysene	**102**	ug/kg	7.5	0.50	1	04/13/16 16:47	04/15/16 18:38	218-01-9	
Dibenz(a,h)anthracene	**32.0**	ug/kg	7.5	0.99	1	04/13/16 16:47	04/15/16 18:38	53-70-3	
Fluoranthene	**135**	ug/kg	7.5	0.50	1	04/13/16 16:47	04/15/16 18:38	206-44-0	
Fluorene	ND	ug/kg	7.5	0.65	1	04/13/16 16:47	04/15/16 18:38	86-73-7	
Indeno(1,2,3-cd)pyrene	**80.9**	ug/kg	7.5	0.89	1	04/13/16 16:47	04/15/16 18:38	193-39-5	
Phenanthrene	**30.2**	ug/kg	7.5	0.75	1	04/13/16 16:47	04/15/16 18:38	85-01-8	
Pyrene	**136**	ug/kg	7.5	0.61	1	04/13/16 16:47	04/15/16 18:38	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	63	%	35-141		1	04/13/16 16:47	04/15/16 18:38	321-60-8	
Terphenyl-d14 (S)	87	%	64-141		1	04/13/16 16:47	04/15/16 18:38	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.2	1.4	1	04/18/16 12:00	04/18/16 21:41	71-43-2	
n-Butylbenzene	ND	ug/kg	5.2	2.6	1	04/18/16 12:00	04/18/16 21:41	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.5	2.7	1	04/19/16 12:00	04/19/16 18:35	135-98-8	1c

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179203

Sample: PZ104(0.7-2.0) **Lab ID: 30179203023** Collected: 04/07/16 10:45 Received: 04/09/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
tert-Butylbenzene	ND	ug/kg	5.2	2.5	1	04/18/16 12:00	04/18/16 21:41	98-06-6	
Ethanol	ND	ug/kg	210	59.5	1	04/18/16 12:00	04/18/16 21:41	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.2	1.1	1	04/18/16 12:00	04/18/16 21:41	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.2	1.8	1	04/18/16 12:00	04/18/16 21:41	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.2	2.2	1	04/18/16 12:00	04/18/16 21:41	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	5.2	2.5	1	04/18/16 12:00	04/18/16 21:41	1634-04-4	
Naphthalene	ND	ug/kg	5.5	1.1	1	04/19/16 12:00	04/19/16 18:35	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.2	1.8	1	04/18/16 12:00	04/18/16 21:41	103-65-1	
Toluene	ND	ug/kg	5.2	1.6	1	04/18/16 12:00	04/18/16 21:41	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.2	1.5	1	04/18/16 12:00	04/18/16 21:41	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.2	1.8	1	04/18/16 12:00	04/18/16 21:41	108-67-8	
m&p-Xylene	ND	ug/kg	10.5	1.9	1	04/18/16 12:00	04/18/16 21:41	179601-23-1	
o-Xylene	ND	ug/kg	5.2	1.0	1	04/18/16 12:00	04/18/16 21:41	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	68-135		1	04/18/16 12:00	04/18/16 21:41	2037-26-5	
Toluene-d8 (S)	98	%	68-135		1	04/19/16 12:00	04/19/16 18:35	2037-26-5	
4-Bromofluorobenzene (S)	106	%	65-146		1	04/18/16 12:00	04/18/16 21:41	460-00-4	
4-Bromofluorobenzene (S)	99	%	65-146		1	04/19/16 12:00	04/19/16 18:35	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	69-137		1	04/18/16 12:00	04/18/16 21:41	17060-07-0	
1,2-Dichloroethane-d4 (S)	109	%	69-137		1	04/19/16 12:00	04/19/16 18:35	17060-07-0	
Dibromofluoromethane (S)	107	%	70-130		1	04/19/16 12:00	04/19/16 18:35	1868-53-7	
Dibromofluoromethane (S)	96	%	70-130		1	04/18/16 12:00	04/18/16 21:41	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.1**	%	0.10	0.10	1		04/22/16 15:42		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

QC Batch: MSV/28098 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179203001, 30179203002, 30179203004, 30179203008, 30179203010, 30179203011, 30179203012, 30179203013, 30179203014, 30179203015, 30179203016, 30179203017, 30179203018, 30179203019, 30179203020, 30179203021, 30179203022, 30179203023

METHOD BLANK: 1060518 Matrix: Solid
Associated Lab Samples: 30179203001, 30179203002, 30179203004, 30179203008, 30179203010, 30179203011, 30179203012, 30179203013, 30179203014, 30179203015, 30179203016, 30179203017, 30179203018, 30179203019, 30179203020, 30179203021, 30179203022, 30179203023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	1.4	04/18/16 13:27	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.7	04/18/16 13:27	
Benzene	ug/kg	ND	5.0	1.4	04/18/16 13:27	
Ethanol	ug/kg	ND	200	56.7	04/18/16 13:27	
Ethylbenzene	ug/kg	ND	5.0	1.0	04/18/16 13:27	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.7	04/18/16 13:27	
m&p-Xylene	ug/kg	ND	10.0	1.8	04/18/16 13:27	
Methyl-tert-butyl ether	ug/kg	ND	5.0	2.4	04/18/16 13:27	
n-Butylbenzene	ug/kg	ND	5.0	2.4	04/18/16 13:27	
n-Propylbenzene	ug/kg	ND	5.0	1.8	04/18/16 13:27	
o-Xylene	ug/kg	ND	5.0	0.99	04/18/16 13:27	
p-Isopropyltoluene	ug/kg	ND	5.0	2.1	04/18/16 13:27	
tert-Butylbenzene	ug/kg	ND	5.0	2.4	04/18/16 13:27	
Toluene	ug/kg	ND	5.0	1.6	04/18/16 13:27	
1,2-Dichloroethane-d4 (S)	%	99	69-137		04/18/16 13:27	
4-Bromofluorobenzene (S)	%	103	65-146		04/18/16 13:27	
Dibromofluoromethane (S)	%	101	70-130		04/18/16 13:27	
Toluene-d8 (S)	%	100	68-135		04/18/16 13:27	

LABORATORY CONTROL SAMPLE: 1060519

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	16.3	81	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	16.4	82	74-129	
Benzene	ug/kg	20	18.3	92	71-137	
Ethanol	ug/kg	200	131J	65	23-168	
Ethylbenzene	ug/kg	20	17.9	90	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	16.8	84	78-133	
m&p-Xylene	ug/kg	40	35.5	89	77-129	
Methyl-tert-butyl ether	ug/kg	20	18.5	93	77-141	
n-Butylbenzene	ug/kg	20	14.8	74	74-140	
n-Propylbenzene	ug/kg	20	17.3	87	70-140	
o-Xylene	ug/kg	20	18.0	90	80-125	
p-Isopropyltoluene	ug/kg	20	15.3	76	74-136	
tert-Butylbenzene	ug/kg	20	18.3	91	77-129	
Toluene	ug/kg	20	17.5	87	72-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

LABORATORY CONTROL SAMPLE: 1060519

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			102	69-137	
4-Bromofluorobenzene (S)	%			107	65-146	
Dibromofluoromethane (S)	%			99	70-130	
Toluene-d8 (S)	%			107	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

QC Batch: MSV/28120 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179203001, 30179203002, 30179203004, 30179203008, 30179203010, 30179203011, 30179203012, 30179203013, 30179203014, 30179203015, 30179203016, 30179203017, 30179203018, 30179203019, 30179203020, 30179203021, 30179203022, 30179203023

METHOD BLANK: 1061011 Matrix: Solid
Associated Lab Samples: 30179203001, 30179203002, 30179203004, 30179203008, 30179203010, 30179203011, 30179203012, 30179203013, 30179203014, 30179203015, 30179203016, 30179203017, 30179203018, 30179203019, 30179203020, 30179203021, 30179203022, 30179203023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Naphthalene	ug/kg	ND	5.0	0.97	04/19/16 10:56	
sec-Butylbenzene	ug/kg	ND	5.0	2.5	04/19/16 10:56	
1,2-Dichloroethane-d4 (S)	%	105	69-137		04/19/16 10:56	
4-Bromofluorobenzene (S)	%	102	65-146		04/19/16 10:56	
Dibromofluoromethane (S)	%	106	70-130		04/19/16 10:56	
Toluene-d8 (S)	%	100	68-135		04/19/16 10:56	

LABORATORY CONTROL SAMPLE: 1061012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	20	18.6	93	81-126	
sec-Butylbenzene	ug/kg	20	19.5	97	81-132	
1,2-Dichloroethane-d4 (S)	%			102	69-137	
4-Bromofluorobenzene (S)	%			103	65-146	
Dibromofluoromethane (S)	%			103	70-130	
Toluene-d8 (S)	%			98	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

QC Batch: MSV/28133
QC Batch Method: EPA 5035A
Analysis Method: EPA 8260C
Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179203003

METHOD BLANK: 1061629
Matrix: Solid
Associated Lab Samples: 30179203003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	1.4	04/20/16 11:26	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.7	04/20/16 11:26	
Benzene	ug/kg	ND	5.0	1.4	04/20/16 11:26	
Ethanol	ug/kg	ND	200	56.7	04/20/16 11:26	
Ethylbenzene	ug/kg	ND	5.0	1.0	04/20/16 11:26	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.7	04/20/16 11:26	
m&p-Xylene	ug/kg	ND	10.0	1.8	04/20/16 11:26	
Methyl-tert-butyl ether	ug/kg	ND	5.0	2.4	04/20/16 11:26	
n-Butylbenzene	ug/kg	ND	5.0	2.4	04/20/16 11:26	
n-Propylbenzene	ug/kg	ND	5.0	1.8	04/20/16 11:26	
Naphthalene	ug/kg	ND	5.0	0.97	04/20/16 11:26	
o-Xylene	ug/kg	ND	5.0	0.99	04/20/16 11:26	
p-Isopropyltoluene	ug/kg	ND	5.0	2.1	04/20/16 11:26	
sec-Butylbenzene	ug/kg	ND	5.0	2.5	04/20/16 11:26	
tert-Butylbenzene	ug/kg	ND	5.0	2.4	04/20/16 11:26	
Toluene	ug/kg	ND	5.0	1.6	04/20/16 11:26	
1,2-Dichloroethane-d4 (S)	%	103	69-137		04/20/16 11:26	
4-Bromofluorobenzene (S)	%	100	65-146		04/20/16 11:26	
Dibromofluoromethane (S)	%	109	70-130		04/20/16 11:26	
Toluene-d8 (S)	%	99	68-135		04/20/16 11:26	

LABORATORY CONTROL SAMPLE: 1061630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	18.9	94	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	18.6	93	74-129	
Benzene	ug/kg	20	20.3	102	71-137	
Ethanol	ug/kg	200	92.4J	46	23-168	
Ethylbenzene	ug/kg	20	18.4	92	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	18.9	94	78-133	
m&p-Xylene	ug/kg	40	38.1	95	77-129	
Methyl-tert-butyl ether	ug/kg	20	20.6	103	77-141	
n-Butylbenzene	ug/kg	20	19.1	96	74-140	
n-Propylbenzene	ug/kg	20	18.8	94	70-140	
Naphthalene	ug/kg	20	18.1	90	81-126	
o-Xylene	ug/kg	20	18.7	94	80-125	
p-Isopropyltoluene	ug/kg	20	19.3	96	74-136	
sec-Butylbenzene	ug/kg	20	18.9	95	81-132	
tert-Butylbenzene	ug/kg	20	19.0	95	77-129	
Toluene	ug/kg	20	18.7	94	72-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

LABORATORY CONTROL SAMPLE: 1061630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			95	69-137	
4-Bromofluorobenzene (S)	%			100	65-146	
Dibromofluoromethane (S)	%			101	70-130	
Toluene-d8 (S)	%			95	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

QC Batch: MSV/28134 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179203005, 30179203006, 30179203007

METHOD BLANK: 1061632 Matrix: Solid
Associated Lab Samples: 30179203005, 30179203006, 30179203007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	250	71.5	04/20/16 11:00	
1,3,5-Trimethylbenzene	ug/kg	ND	250	84.0	04/20/16 11:00	
Benzene	ug/kg	ND	250	68.0	04/20/16 11:00	
Ethanol	ug/kg	ND	10000	2840	04/20/16 11:00	
Ethylbenzene	ug/kg	ND	250	50.5	04/20/16 11:00	
Isopropylbenzene (Cumene)	ug/kg	ND	250	86.5	04/20/16 11:00	
m&p-Xylene	ug/kg	ND	500	92.5	04/20/16 11:00	
Methyl-tert-butyl ether	ug/kg	ND	250	122	04/20/16 11:00	
n-Butylbenzene	ug/kg	ND	250	122	04/20/16 11:00	
n-Propylbenzene	ug/kg	ND	250	87.5	04/20/16 11:00	
Naphthalene	ug/kg	ND	250	48.5	04/20/16 11:00	
o-Xylene	ug/kg	ND	250	49.5	04/20/16 11:00	
p-Isopropyltoluene	ug/kg	ND	250	106	04/20/16 11:00	
sec-Butylbenzene	ug/kg	ND	250	126	04/20/16 11:00	
tert-Butylbenzene	ug/kg	ND	250	120	04/20/16 11:00	
Toluene	ug/kg	ND	250	78.0	04/20/16 11:00	
1,2-Dichloroethane-d4 (S)	%	102	69-137		04/20/16 11:00	
4-Bromofluorobenzene (S)	%	105	65-146		04/20/16 11:00	
Dibromofluoromethane (S)	%	113	70-130		04/20/16 11:00	
Toluene-d8 (S)	%	97	68-135		04/20/16 11:00	

LABORATORY CONTROL SAMPLE: 1061633

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	18.9	94	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	18.6	93	74-129	
Benzene	ug/kg	20	20.3	102	71-137	
Ethanol	ug/kg	200	92.4J	46	23-168	
Ethylbenzene	ug/kg	20	18.4	92	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	18.9	94	78-133	
m&p-Xylene	ug/kg	40	38.1	95	77-129	
Methyl-tert-butyl ether	ug/kg	20	20.6	103	77-141	
n-Butylbenzene	ug/kg	20	19.1	96	74-140	
n-Propylbenzene	ug/kg	20	18.8	94	70-140	
Naphthalene	ug/kg	20	18.1	90	81-126	
o-Xylene	ug/kg	20	18.7	94	80-125	
p-Isopropyltoluene	ug/kg	20	19.3	96	74-136	
sec-Butylbenzene	ug/kg	20	18.9	95	81-132	
tert-Butylbenzene	ug/kg	20	19.0	95	77-129	
Toluene	ug/kg	20	18.7	94	72-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

LABORATORY CONTROL SAMPLE: 1061633

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			95	69-137	
4-Bromofluorobenzene (S)	%			100	65-146	
Dibromofluoromethane (S)	%			101	70-130	
Toluene-d8 (S)	%			95	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

QC Batch: MSV/28161 Analysis Method: EPA 8260C
QC Batch Method: EPA 8260C Analysis Description: 8260C MSV
Associated Lab Samples: 30179203009

METHOD BLANK: 1062367 Matrix: Water
Associated Lab Samples: 30179203009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.12	04/21/16 13:49	M5
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.12	04/21/16 13:49	M5
Benzene	ug/L	ND	1.0	0.16	04/21/16 13:49	M5
Ethanol	ug/L	ND	200	26.1	04/21/16 13:49	M5
Ethylbenzene	ug/L	ND	1.0	0.23	04/21/16 13:49	M5
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.14	04/21/16 13:49	M5
m&p-Xylene	ug/L	ND	2.0	0.32	04/21/16 13:49	M5
Methyl-tert-butyl ether	ug/L	ND	1.0	0.17	04/21/16 13:49	M5
n-Butylbenzene	ug/L	ND	1.0	0.15	04/21/16 13:49	M5
n-Propylbenzene	ug/L	ND	1.0	0.15	04/21/16 13:49	M5
Naphthalene	ug/L	ND	2.0	0.19	04/21/16 13:49	M5
o-Xylene	ug/L	ND	1.0	0.22	04/21/16 13:49	M5
p-Isopropyltoluene	ug/L	ND	1.0	0.22	04/21/16 13:49	M5
sec-Butylbenzene	ug/L	ND	1.0	0.21	04/21/16 13:49	M5
tert-Butylbenzene	ug/L	ND	1.0	0.19	04/21/16 13:49	M5
Toluene	ug/L	ND	1.0	0.13	04/21/16 13:49	M5
1,2-Dichloroethane-d4 (S)	%	119	77-126		04/21/16 13:49	M5
4-Bromofluorobenzene (S)	%	99	81-119		04/21/16 13:49	M5
Dibromofluoromethane (S)	%	111	70-130		04/21/16 13:49	M5
Toluene-d8 (S)	%	102	84-115		04/21/16 13:49	M5

LABORATORY CONTROL SAMPLE: 1062368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	16.8	84	75-128	M5
1,3,5-Trimethylbenzene	ug/L	20	16.8	84	74-125	M5
Benzene	ug/L	20	18.0	90	69-115	M5
Ethanol	ug/L	200	323	162	10-175	M5
Ethylbenzene	ug/L	20	18.2	91	71-116	M5
Isopropylbenzene (Cumene)	ug/L	20	17.2	86	79-121	M5
m&p-Xylene	ug/L	40	36.7	92	74-118	M5
Methyl-tert-butyl ether	ug/L	20	18.5	93	83-140	M5
n-Butylbenzene	ug/L	20	17.1	86	64-128	M5
n-Propylbenzene	ug/L	20	17.2	86	70-123	M5
Naphthalene	ug/L	20	17.6	88	64-140	M5
o-Xylene	ug/L	20	18.6	93	71-119	M5
p-Isopropyltoluene	ug/L	20	18.1	90	68-129	M5
sec-Butylbenzene	ug/L	20	17.6	88	70-126	M5
tert-Butylbenzene	ug/L	20	18.0	90	72-123	M5
Toluene	ug/L	20	17.8	89	70-115	M5

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

LABORATORY CONTROL SAMPLE: 1062368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			114	77-126	M5
4-Bromofluorobenzene (S)	%			103	81-119	M5
Dibromofluoromethane (S)	%			110	70-130	M5
Toluene-d8 (S)	%			96	84-115	M5

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

QC Batch: OEXT/28036 Analysis Method: EPA 8270D by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270D/3546 MSSV PAH by SIM
Associated Lab Samples: 30179203001, 30179203002, 30179203003, 30179203004, 30179203005, 30179203006, 30179203007, 30179203008, 30179203010, 30179203011, 30179203012, 30179203013, 30179203014, 30179203015, 30179203016, 30179203017, 30179203018, 30179203019, 30179203020, 30179203021

METHOD BLANK: 1057174 Matrix: Solid
Associated Lab Samples: 30179203001, 30179203002, 30179203003, 30179203004, 30179203005, 30179203006, 30179203007, 30179203008, 30179203010, 30179203011, 30179203012, 30179203013, 30179203014, 30179203015, 30179203016, 30179203017, 30179203018, 30179203019, 30179203020, 30179203021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	6.7	0.59	04/19/16 16:55	
Acenaphthylene	ug/kg	ND	6.7	0.57	04/19/16 16:55	
Anthracene	ug/kg	ND	6.7	0.65	04/19/16 16:55	
Benzo(a)anthracene	ug/kg	ND	6.7	1.7	04/19/16 16:55	
Benzo(a)pyrene	ug/kg	ND	6.7	0.64	04/19/16 16:55	
Benzo(b)fluoranthene	ug/kg	ND	6.7	0.59	04/19/16 16:55	
Benzo(g,h,i)perylene	ug/kg	ND	6.7	1.0	04/19/16 16:55	
Benzo(k)fluoranthene	ug/kg	ND	6.7	0.63	04/19/16 16:55	
Chrysene	ug/kg	ND	6.7	0.44	04/19/16 16:55	
Dibenz(a,h)anthracene	ug/kg	ND	6.7	0.88	04/19/16 16:55	
Fluoranthene	ug/kg	ND	6.7	0.44	04/19/16 16:55	
Fluorene	ug/kg	ND	6.7	0.58	04/19/16 16:55	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	6.7	0.79	04/19/16 16:55	
Phenanthrene	ug/kg	ND	6.7	0.67	04/19/16 16:55	
Pyrene	ug/kg	ND	6.7	0.54	04/19/16 16:55	
2-Fluorobiphenyl (S)	%	74	35-141		04/19/16 16:55	
Terphenyl-d14 (S)	%	102	64-141		04/19/16 16:55	

LABORATORY CONTROL SAMPLE: 1057175

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	133	118	88	43-113	
Acenaphthylene	ug/kg	133	103	78	41-114	
Anthracene	ug/kg	133	122	92	59-115	
Benzo(a)anthracene	ug/kg	133	136	102	62-122	
Benzo(a)pyrene	ug/kg	133	122	92	56-113	
Benzo(b)fluoranthene	ug/kg	133	110	83	43-138	
Benzo(g,h,i)perylene	ug/kg	133	109	82	47-143	
Benzo(k)fluoranthene	ug/kg	133	106	80	52-138	
Chrysene	ug/kg	133	129	97	64-119	
Dibenz(a,h)anthracene	ug/kg	133	130	98	59-133	
Fluoranthene	ug/kg	133	130	97	64-122	
Fluorene	ug/kg	133	116	87	46-114	
Indeno(1,2,3-cd)pyrene	ug/kg	133	120	90	59-132	
Phenanthrene	ug/kg	133	129	97	42-122	
Pyrene	ug/kg	133	134	101	64-117	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

LABORATORY CONTROL SAMPLE: 1057175

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%			74	35-141	
Terphenyl-d14 (S)	%			98	64-141	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1057176 1057177

Parameter	Units	30179203001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	ND	143	141	116	130	77	89	43-113	12	20	
Acenaphthylene	ug/kg	10.2	143	141	133	127	86	83	41-114	5	20	
Anthracene	ug/kg	43.4	143	141	163	166	83	87	59-115	2	20	
Benzo(a)anthracene	ug/kg	275	143	141	276	376	0	72	62-122	31	20	M1,R1
Benzo(a)pyrene	ug/kg	453	143	141	296	427	-110	-19	56-113	36	20	M1,R1
Benzo(b)fluoranthene	ug/kg	799	143	141	365	518	-304	-200	43-138	35	20	M1,R1
Benzo(g,h,i)perylene	ug/kg	381	143	141	288	394	-66	9	47-143	31	20	M1,R1
Benzo(k)fluoranthene	ug/kg	792	143	141	253	339	-377	-323	52-138	29	20	M1,R1
Chrysene	ug/kg	323	143	141	311	439	-9	83	64-119	34	20	M1,R1
Dibenz(a,h)anthracene	ug/kg	105	143	141	199	231	66	90	59-133	15	20	
Fluoranthene	ug/kg	331	143	141	376	508	31	126	64-122	30	20	M1,R1
Fluorene	ug/kg	10.6	143	141	136	143	88	95	46-114	5	20	
Indeno(1,2,3-cd)pyrene	ug/kg	318	143	141	270	360	-34	30	59-132	29	20	M1,R1
Phenanthrene	ug/kg	87.4	143	141	206	233	83	104	42-122	12	20	
Pyrene	ug/kg	333	143	141	371	506	27	123	64-117	31	20	M1,R1
2-Fluorobiphenyl (S)	%						60	66	35-141			
Terphenyl-d14 (S)	%						93	92	64-141			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

QC Batch: OEXT/28055
QC Batch Method: EPA 3546
Analysis Method: EPA 8270D by SIM
Analysis Description: 8270D/3546 MSSV PAH by SIM
Associated Lab Samples: 30179203022, 30179203023

METHOD BLANK: 1057948
Matrix: Solid
Associated Lab Samples: 30179203022, 30179203023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	6.7	0.59	04/14/16 16:52	
Acenaphthylene	ug/kg	ND	6.7	0.57	04/14/16 16:52	
Anthracene	ug/kg	ND	6.7	0.65	04/14/16 16:52	
Benzo(a)anthracene	ug/kg	ND	6.7	1.7	04/14/16 16:52	
Benzo(a)pyrene	ug/kg	ND	6.7	0.64	04/14/16 16:52	
Benzo(b)fluoranthene	ug/kg	ND	6.7	0.59	04/14/16 16:52	
Benzo(g,h,i)perylene	ug/kg	ND	6.7	1.0	04/14/16 16:52	
Benzo(k)fluoranthene	ug/kg	ND	6.7	0.63	04/14/16 16:52	
Chrysene	ug/kg	ND	6.7	0.44	04/14/16 16:52	
Dibenz(a,h)anthracene	ug/kg	ND	6.7	0.88	04/14/16 16:52	
Fluoranthene	ug/kg	ND	6.7	0.44	04/14/16 16:52	
Fluorene	ug/kg	ND	6.7	0.58	04/14/16 16:52	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	6.7	0.79	04/14/16 16:52	
Phenanthrene	ug/kg	ND	6.7	0.67	04/14/16 16:52	
Pyrene	ug/kg	ND	6.7	0.54	04/14/16 16:52	
2-Fluorobiphenyl (S)	%	59	35-141		04/14/16 16:52	
Terphenyl-d14 (S)	%	88	64-141		04/14/16 16:52	

LABORATORY CONTROL SAMPLE: 1057949

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	133	110	82	43-113	
Acenaphthylene	ug/kg	133	110	82	41-114	
Anthracene	ug/kg	133	125	94	59-115	
Benzo(a)anthracene	ug/kg	133	141	106	62-122	
Benzo(a)pyrene	ug/kg	133	127	95	56-113	
Benzo(b)fluoranthene	ug/kg	133	122	91	43-138	
Benzo(g,h,i)perylene	ug/kg	133	126	94	47-143	
Benzo(k)fluoranthene	ug/kg	133	131	98	52-138	
Chrysene	ug/kg	133	148	111	64-119	
Dibenz(a,h)anthracene	ug/kg	133	137	102	59-133	
Fluoranthene	ug/kg	133	133	99	64-122	
Fluorene	ug/kg	133	110	82	46-114	
Indeno(1,2,3-cd)pyrene	ug/kg	133	130	98	59-132	
Phenanthrene	ug/kg	133	115	87	42-122	
Pyrene	ug/kg	133	139	104	64-117	
2-Fluorobiphenyl (S)	%			60	35-141	
Terphenyl-d14 (S)	%			91	64-141	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1057950 1057951

Parameter	Units	30179033001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	28.2	144	142	159	139	91	78	43-113	13	20	
Acenaphthylene	ug/kg	ND	144	142	119	101	81	69	41-114	16	20	
Anthracene	ug/kg	170	144	142	357	348	130	126	59-115	2	20	M1
Benzo(a)anthracene	ug/kg	612	144	142	871	832	180	155	62-122	5	20	M1
Benzo(a)pyrene	ug/kg	502	144	142	759	638	179	95	56-113	17	20	M1
Benzo(b)fluoranthene	ug/kg	1010	144	142	955	1000	-36	-3	43-138	5	20	M1
Benzo(g,h,i)perylene	ug/kg	173	144	142	331	201	110	19	47-143	49	20	M1,R1
Benzo(k)fluoranthene	ug/kg	1000	144	142	523	531	-333	-330	52-138	2	20	M1
Chrysene	ug/kg	639	144	142	909	839	188	141	64-119	8	20	M1
Dibenz(a,h)anthracene	ug/kg	102	144	142	254	155	105	37	59-133	48	20	M1,R1
Fluoranthene	ug/kg	1180	144	142	3750	2500	1780	925	64-122	40	20	M6,R1
Fluorene	ug/kg	49.8	144	142	196	171	102	85	46-114	13	20	
Indeno(1,2,3-cd)pyrene	ug/kg	174	144	142	339	195	115	15	59-132	54	20	M1,R1
Phenanthrene	ug/kg	451	144	142	750	830	208	267	42-122	10	20	M1
Pyrene	ug/kg	995	144	142	1420	1250	294	182	64-117	12	20	M1
2-Fluorobiphenyl (S)	%						61	49	35-141			
Terphenyl-d14 (S)	%						86	73	64-141			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

QC Batch: PMST/6086 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30179203001, 30179203002, 30179203003, 30179203004, 30179203005, 30179203006, 30179203007, 30179203008, 30179203010, 30179203011, 30179203012, 30179203013, 30179203014, 30179203015, 30179203016

SAMPLE DUPLICATE: 1062512

Parameter	Units	30179203001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.5	9.2	20	20	

SAMPLE DUPLICATE: 1062513

Parameter	Units	30179203002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.4	12.1	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179203

QC Batch: PMST/6087 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30179203017, 30179203018, 30179203019, 30179203020, 30179203021, 30179203022, 30179203023

SAMPLE DUPLICATE: 1063161

Parameter	Units	30179203017 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.2	15.3	0	20	

SAMPLE DUPLICATE: 1063162

Parameter	Units	30179203018 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.1	16.9	11	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Lysander, NY
Pace Project No.: 30179203

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: MSV/28098
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28120
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28133
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28134
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28161
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Lysander, NY
Pace Project No.: 30179203

ANALYTE QUALIFIERS

ip	Benzo(b)fluoranthene and benzo(k)fluoranthene were separated in the check standard but did not meet the resolution criteria in SW846 Method 8270D. Whereas sample results included are reported as individual isomers, the lab and the customer must recognize them as an isomeric pair.

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lysander, NY
Pace Project No.: 30179203

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30179203001	**PZ105(0-0.9)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203002	**PZ105(0.9-2.1)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203003	**PZ105(2.1-4.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203004	**PZ105(4.0-6.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203005	**PZ105(6.0-8.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203006	**PZ104(2.0-4.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203007	**PZ104(4.0-6.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203008	**PZ104(6.0-8.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203010	**PZ103(0-1.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203011	**PZ103(1.0-3.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203012	**PZ103(3.0-5.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203013	**B109(0-2.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203014	**B109(2.0-4.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203015	**B109(4.0-6.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203016	**B109(6.0-8.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203017	**B107(0-1.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203018	**B107(1.0-3.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203019	**B107(3.0-5.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203020	**B108(0-1.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203021	**B108(1.0-3.0)**	EPA 3546	OEXT/28036	EPA 8270D by SIM	MSSV/9245
30179203022	**B108(3.0-5.0)**	EPA 3546	OEXT/28055	EPA 8270D by SIM	MSSV/9240
30179203023	**PZ104(0.7-2.0)**	EPA 3546	OEXT/28055	EPA 8270D by SIM	MSSV/9240
30179203001	**PZ105(0-0.9)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203001	**PZ105(0-0.9)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203002	**PZ105(0.9-2.1)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203002	**PZ105(0.9-2.1)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203003	**PZ105(2.1-4.0)**	EPA 5035A	MSV/28133	EPA 8260C	MSV/28147
30179203004	**PZ105(4.0-6.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203004	**PZ105(4.0-6.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203005	**PZ105(6.0-8.0)**	EPA 5035A	MSV/28134	EPA 8260C	MSV/28146
30179203006	**PZ104(2.0-4.0)**	EPA 5035A	MSV/28134	EPA 8260C	MSV/28146
30179203007	**PZ104(4.0-6.0)**	EPA 5035A	MSV/28134	EPA 8260C	MSV/28146
30179203008	**PZ104(6.0-8.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203008	**PZ104(6.0-8.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203010	**PZ103(0-1.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203010	**PZ103(0-1.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203011	**PZ103(1.0-3.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203011	**PZ103(1.0-3.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203012	**PZ103(3.0-5.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203012	**PZ103(3.0-5.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lysander, NY
Pace Project No.: 30179203

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30179203013	**B109(0-2.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203013	**B109(0-2.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203014	**B109(2.0-4.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203014	**B109(2.0-4.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203015	**B109(4.0-6.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203015	**B109(4.0-6.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203016	**B109(6.0-8.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203016	**B109(6.0-8.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203017	**B107(0-1.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203017	**B107(0-1.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203018	**B107(1.0-3.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203018	**B107(1.0-3.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203019	**B107(3.0-5.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203019	**B107(3.0-5.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203020	**B108(0-1.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203020	**B108(0-1.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203021	**B108(1.0-3.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203021	**B108(1.0-3.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203022	**B108(3.0-5.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203022	**B108(3.0-5.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203023	**PZ104(0.7-2.0)**	EPA 5035A	MSV/28098	EPA 8260C	MSV/28104
30179203023	**PZ104(0.7-2.0)**	EPA 5035A	MSV/28120	EPA 8260C	MSV/28123
30179203009	**Trip Blank**	EPA 8260C	MSV/28161		
30179203001	**PZ105(0-0.9)**	ASTM D2974-87	PMST/6086		
30179203002	**PZ105(0.9-2.1)**	ASTM D2974-87	PMST/6086		
30179203003	**PZ105(2.1-4.0)**	ASTM D2974-87	PMST/6086		
30179203004	**PZ105(4.0-6.0)**	ASTM D2974-87	PMST/6086		
30179203005	**PZ105(6.0-8.0)**	ASTM D2974-87	PMST/6086		
30179203006	**PZ104(2.0-4.0)**	ASTM D2974-87	PMST/6086		
30179203007	**PZ104(4.0-6.0)**	ASTM D2974-87	PMST/6086		
30179203008	**PZ104(6.0-8.0)**	ASTM D2974-87	PMST/6086		
30179203010	**PZ103(0-1.0)**	ASTM D2974-87	PMST/6086		
30179203011	**PZ103(1.0-3.0)**	ASTM D2974-87	PMST/6086		
30179203012	**PZ103(3.0-5.0)**	ASTM D2974-87	PMST/6086		
30179203013	**B109(0-2.0)**	ASTM D2974-87	PMST/6086		
30179203014	**B109(2.0-4.0)**	ASTM D2974-87	PMST/6086		
30179203015	**B109(4.0-6.0)**	ASTM D2974-87	PMST/6086		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lysander, NY
Pace Project No.: 30179203

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30179203016	**B109(6.0-8.0)**	ASTM D2974-87	PMST/6086		
30179203017	**B107(0-1.0)**	ASTM D2974-87	PMST/6087		
30179203018	**B107(1.0-3.0)**	ASTM D2974-87	PMST/6087		
30179203019	**B107(3.0-5.0)**	ASTM D2974-87	PMST/6087		
30179203020	**B108(0-1.0)**	ASTM D2974-87	PMST/6087		
30179203021	**B108(1.0-3.0)**	ASTM D2974-87	PMST/6087		
30179203022	**B108(3.0-5.0)**	ASTM D2974-87	PMST/6087		
30179203023	**PZ104(0.7-2.0)**	ASTM D2974-87	PMST/6087		

bp rm

Laboratory Manageme

WO#:30179203

Record 30179203 Page 1 of 3

BP Site Node Path: _____

BP Facility No: _____

30179203

mm/dd/yy): _____ Rush TAT: Yes ___ No X

er Number: _____

Lab Name: Pace Analytical Serices	Facility Address: 7430 Hillside Rd,	Consultant/Contractor: Arcadis
Lab Address: 1638 Roseytown Rd, Greensburg, PA 15601	City, State, ZIP Code: Lysand	Consultant/Contractor Project No:
Lab PM: Tina Sayer	Lead Regulatory Agency: NYS	Address: B0090004.0002.00001
Lab Phone: 317-228-3127	California Global ID No.:	Consultant/Contractor PM: Vin Maresco
Lab Shipping A Yes	Enfos Proposal No:	Phone: 315-671-9256 Email: vin.maresco@arcadis.com
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor ___

BP Project Manager (PM): John A. Frankenthal

BP PM Phone: 312.809.4117

BP PM Email: John.Frankenthal@bp.com

Report Type & QC Level: Standard ___ Full Data Package ___

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Water / Liquid	Air / Vapor	Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: CP-51 listed vols for via 8260	MTBE	Ethanal	CP-51 listed semi-vols for via 8270							Comments
	PZ105(0-0.9)	4/7/16	0800	X				2	2					X	X	X	X							001 001
	PZ105(0.9-2.1)	4/7/16	0805	X				2	2					X	X	X	X							002 002
	PZ105(2.1-4.0)	4/7/16	0810	X					2					X	X	X	X							003 003
	PZ105(4.0-6.0)	4/7/16	0815	X					2					X	X	X	X							004 004
	PZ105(6.0-8.0)	4/7/16	0820	X					2					X	X	X	X							005 005
	PZ104(0.7-2.0)	4/7/16	1045	X					2					X	X	X	X							006 023
	PZ104(2.0-4.0	4/7/16	1105	X					2					X	X	X	X							007 006
	PZ104(4.0-6.0)	4/7/16	1150	X					2					X	X	X	X							008 007
	PZ104(6.0-8.0)	4/7/16	1300	X					2					X	X	X	X							009 008
	TRIP BLANK	4/7/16	—		X							2		X	X	X	X							010 009

Sampler's Name: Ethan Ulm	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: ARCADIS	Ethan Ulm / ARCADIS	4/8/16	1400	PACE	4/8/16	14:00
Shipment Method: courier pick up Ship Date:	PACE	4/8/16	17:00		4/9/16	1000
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Page 33 of 56

Laboratory Management Program LaMP Chain of Custody Record

30179203

Page 2 of 3

BP Site Node Path: _____ Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X

BP Facility No: _____ Lab Work Order Number: _____

Lab Name: Pace Analytical Serices	Facility Address: 7430 Hillside Rd,	Consultant/Contractor: Arcadis
Lab Address: 1638 Roseytown Rd, Greensburg, PA 15601	City, State, ZIP Code: Lysand	Consultant/Contractor Project No:
Lab PM: Tina Sayer	Lead Regulatory Agency: NYS	Address: B0090004.0002.00001
Lab Phone: 317-228-3127	California Global ID No.:	Consultant/Contractor PM: Vin Maresco
Lab Shipping A Yes	Enfos Proposal No:	Phone: 315-671-9256 Email: vin.maresco@arcadis.com
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor ___
BP Project Manager (PM): John A. Frankenthal		
BP PM Phone: 312.809.4117		
BP PM Email: John.Frankenthal@bp.com		

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Water / Liquid	Air / Vapor	Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: CP-51 listed vols for via 8260	MTBE	Ethanol	CP-51 listed semi-vols for via 8270	Report Type & QC Level: Comments
	PZ103(0-1.0)	4/8/16	0825	X					2					X	X	X	X	011 / 010
	PZ103(1.0-3.0)	4/8/16	0840	X					2					X	X	X	X	012 / 011
	PZ103(3.0-5.0)	4/8/16	0900	X					2					X	X	X	X	013 / 012
	B109(0-2.0)	4/8/16	1100	X					2					X	X	X	X	014 / 013
	B109(2.0-4.0)	4/8/16	1105	X					2					X	X	X	X	015 / 014
	B109(4.0-6.0)	4/8/16	1110	X					2					X	X	X	X	016 / 015
	B109(6.0-8.0)	4/8/16	1115	X					2					X	X	X	X	017 / 016
	B107(0-1.0)	4/8/16	1130	X					2					X	X	X	X	018 / 017
	B107(1.0-3.0)	4/8/16	1135	X					2					X	X	X	X	019 / 018
	B107(3.0-5.0)	4/8/16	1140	X					2					X	X	X	X	020 / 019

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Ethan Ulm						
Sampler's Company: ARCADIS	[signature] / ARCADIS	4/8/16	1400	[signature] PACE	4/8/16	14:00
Shipment Method: courier pick up Ship Date:	[signature] PACE	4/8/16	1730	[signature]	4-9-16	1000
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP Remediation Management COC - Effective Date: starting August 16, 2011.

BP LaMP COC Rev. 8, 24 June 2012

bp rm Laboratory Management Program LaMP Chain of Custody Record 30179203

BP Site Node Path: _____ Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X

BP Facility No: _____ Lab Work Order Number: _____

Lab Name: Pace Analytical Serices	Facility Address: 7430 Hillside Rd,	Consultant/Contractor: Arcadis
Lab Address: 1638 Roseytown Rd, Greensburg, PA 15601	City, State, ZIP Code: Lysand	Consultant/Contractor Project No:
Lab PM: Tina Sayer	Lead Regulatory Agency: NYS	Address: B0090004.0002.00001
Lab Phone: 317-228-3127	California Global ID No.:	Consultant/Contractor PM: Vin Maresco
Lab Shipping A Yes	Enfos Proposal No:	Phone: 315-671-9256 Email: vin.maresco@arcadis.com
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor ___

BP Project Manager (PM): John A. Frankenthal

BP PM Phone: 312.809.4117

BP PM Email: John.Frankenthal@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Water / Liquid	Air / Vapor	Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: CP-51 listed vols for via 8260	MTBE	Ethanal	CP-51 listed semi-vols for via 8270	Report Type & QC Level: Standard ___ Full Data Package ___
	B108(0-1.0)	4/8/16	1230	X					2					X	X	X	X	021 020
	B108(1.0-3.0)	4/8/16	1235	X					2					X	X	X	X	022 021
	B108(3.0-5.0)	4/8/16	1240	X					2					X	X	X	X	023 022

Comments
Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: Ethan Ulm	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: ARCADIS	ARCADIS	4/8/16	1400	PACE	4/8/16	14:00
Shipment Method: courier pick up Ship Date:	PACE	4/8/16	17:00		4/8/16	1708
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No	Temp Blank: Yes / No	Cooler Temp on Receipt: _____ °F/C	Trip Blank: Yes / No	MS/MSD Sample Submitted: Yes / No

BP Remediation Management COC - Effective Date: starting August 16, 2011.

BP LaMP COC Rev. 8, 24 June 2012

Sample Condition Upon Receipt

30179203

Pace Analytical

Client Name: Arcadis

Project # _____

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 782804451428

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals Intact: ☐ yes ☐ no Biological Tissue Is Frozen: Yes No

Packing Material: Bubble Wrap ✓ Bubble Bags ✓ None ___ Other _____

Thermometer Used 6 Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temp.: Observed Temp.: 2.7 °C Correction Factor: +0.0 °C Final Temp: 2.7 °C

Temp should be above freezing to 6°C 1.8

Comments: 1.8

Date and Initials of person examining contents: ARM 4/11/16

Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☑Yes	☐No	☐N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SL, WT				
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes	☐No		Initial when completed: ARM — Lot # of added preservative:
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15. ARM 4/11/16
Trip Blank Present:	☑Yes	☐No	☐N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if purchased): _____				

Field Data Required? Y / N

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Rachel A Christner Date: 4/12/16

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 27, 2016

Vin Maresco
Arcadis
6723 Towpath Road
Syracuse, NY 13214

RE: Project: Lysander, NY
Pace Project No.: 30179497

Dear Vin Maresco:
Enclosed are the analytical results for sample(s) received by the laboratory on April 13, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rachel D Christner

Rachel Christner
rachel.christner@pacelabs.com
Project Manager

Enclosures

cc: Mr. Edward Mason, Arcadis

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Lysander, NY
Pace Project No.: 30179497

Pennsylvania Certification IDs

Georgia Certification #: C040
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Pace Analytical Services, Inc.
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SAMPLE SUMMARY

Project: Lysander, NY
Pace Project No.: 30179497

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30179497001	**PZ104 (8.0-10.0)**	Solid	04/11/16 09:25	04/13/16 09:20
30179497002	**PZ104 (10.0-12.0)**	Solid	04/11/16 09:35	04/13/16 09:20
30179497003	**PZ104 (12.0-14.0)**	Solid	04/11/16 09:40	04/13/16 09:20
30179497004	**PZ104 (14.0-16.0)**	Solid	04/11/16 09:55	04/13/16 09:20
30179497005	**PZ104 (16.0-18.0)**	Solid	04/11/16 10:05	04/13/16 09:20
30179497006	**PZ104 (18.0-20.0)**	Solid	04/11/16 10:15	04/13/16 09:20
30179497007	**PZ104 (20.0-22.0)**	Solid	04/11/16 10:30	04/13/16 09:20
30179497008	**PZ104 (22.0-24.0)**	Solid	04/11/16 10:40	04/13/16 09:20
30179497009	**PZ104 (24.0-26.0)**	Solid	04/11/16 10:50	04/13/16 09:20
30179497010	**PZ104 (26.0-26.7)**	Solid	04/11/16 11:15	04/13/16 09:20
30179497011	**TRIP BLANK**	Water	04/11/16 11:15	04/13/16 09:20
30179497012	**PZ105 (8.0-10.0)**	Solid	04/12/16 09:00	04/13/16 09:20
30179497013	**PZ105 (10.0-12.0)**	Solid	04/12/16 09:20	04/13/16 09:20
30179497014	**PZ105 (12.0-14.0)**	Solid	04/12/16 09:40	04/13/16 09:20
30179497015	**PZ105 (14.0-16.0)**	Solid	04/12/16 10:00	04/13/16 09:20

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SAMPLE ANALYTE COUNT

Project: Lysander, NY
Pace Project No.: 30179497

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30179497001	**PZ104 (8.0-10.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497002	**PZ104 (10.0-12.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497003	**PZ104 (12.0-14.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497004	**PZ104 (14.0-16.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497005	**PZ104 (16.0-18.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497006	**PZ104 (18.0-20.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497007	**PZ104 (20.0-22.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497008	**PZ104 (22.0-24.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497009	**PZ104 (24.0-26.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497010	**PZ104 (26.0-26.7)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497011	**TRIP BLANK**	EPA 8260C	LEL	20	PASI-PA
30179497012	**PZ105 (8.0-10.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497013	**PZ105 (10.0-12.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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SAMPLE ANALYTE COUNT

Project: Lysander, NY
Pace Project No.: 30179497

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30179497014	**PZ105 (12.0-14.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179497015	**PZ105 (14.0-16.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA

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ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ104 (8.0-10.0) **Lab ID: 30179497001** Collected: 04/11/16 09:25 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**87.0**	ug/kg	8.1	0.71	1	04/14/16 16:45	04/20/16 16:41	83-32-9	M1,R1
Acenaphthylene	**42.5**	ug/kg	8.1	0.69	1	04/14/16 16:45	04/20/16 16:41	208-96-8	R1
Anthracene	**71.1**	ug/kg	8.1	0.79	1	04/14/16 16:45	04/20/16 16:41	120-12-7	
Benzo(a)anthracene	**36.1**	ug/kg	8.1	2.1	1	04/14/16 16:45	04/20/16 16:41	56-55-3	R1
Benzo(a)pyrene	**22.7**	ug/kg	8.1	0.77	1	04/14/16 16:45	04/20/16 16:41	50-32-8	
Benzo(b)fluoranthene	**57.6**	ug/kg	8.1	0.71	1	04/14/16 16:45	04/20/16 16:41	205-99-2	ip
Benzo(g,h,i)perylene	**10.8**	ug/kg	8.1	1.2	1	04/14/16 16:45	04/20/16 16:41	191-24-2	
Benzo(k)fluoranthene	**38.7**	ug/kg	8.1	0.76	1	04/14/16 16:45	04/20/16 16:41	207-08-9	ip
Chrysene	**31.9**	ug/kg	8.1	0.53	1	04/14/16 16:45	04/20/16 16:41	218-01-9	R1
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/14/16 16:45	04/20/16 16:41	53-70-3	
Fluoranthene	**94.8**	ug/kg	8.1	0.53	1	04/14/16 16:45	04/20/16 16:41	206-44-0	R1
Fluorene	**96.4**	ug/kg	8.1	0.70	1	04/14/16 16:45	04/20/16 16:41	86-73-7	M1,R1
Indeno(1,2,3-cd)pyrene	**8.9**	ug/kg	8.1	0.96	1	04/14/16 16:45	04/20/16 16:41	193-39-5	
Phenanthrene	**258**	ug/kg	8.1	0.81	1	04/14/16 16:45	04/20/16 16:41	85-01-8	M1
Pyrene	**142**	ug/kg	8.1	0.65	1	04/14/16 16:45	04/20/16 16:41	129-00-0	R1
Surrogates									
2-Fluorobiphenyl (S)	78	%	35-141		1	04/14/16 16:45	04/20/16 16:41	321-60-8	
Terphenyl-d14 (S)	72	%	64-141		1	04/14/16 16:45	04/20/16 16:41	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	332	90.3	50	04/15/16 12:00	04/15/16 17:44	71-43-2	1c
n-Butylbenzene	**435**	ug/kg	332	163	50	04/15/16 12:00	04/15/16 17:44	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	332	167	50	04/15/16 12:00	04/15/16 17:44	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	332	160	50	04/15/16 12:00	04/15/16 17:44	98-06-6	1c
Ethanol	ND	ug/kg	13300	3760	50	04/15/16 12:00	04/15/16 17:44	64-17-5	1c
Ethylbenzene	ND	ug/kg	332	67.0	50	04/15/16 12:00	04/15/16 17:44	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	332	115	50	04/15/16 12:00	04/15/16 17:44	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	332	141	50	04/15/16 12:00	04/15/16 17:44	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	332	161	50	04/15/16 12:00	04/15/16 17:44	1634-04-4	1c
Naphthalene	ND	ug/kg	332	64.4	50	04/15/16 12:00	04/15/16 17:44	91-20-3	1c
n-Propylbenzene	ND	ug/kg	332	116	50	04/15/16 12:00	04/15/16 17:44	103-65-1	1c
Toluene	ND	ug/kg	332	104	50	04/15/16 12:00	04/15/16 17:44	108-88-3	1c
1,2,4-Trimethylbenzene	**578**	ug/kg	332	94.9	50	04/15/16 12:00	04/15/16 17:44	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	332	112	50	04/15/16 12:00	04/15/16 17:44	108-67-8	1c
m&p-Xylene	ND	ug/kg	664	123	50	04/15/16 12:00	04/15/16 17:44	179601-23-1	1c
o-Xylene	ND	ug/kg	332	65.7	50	04/15/16 12:00	04/15/16 17:44	95-47-6	1c
Surrogates									
Toluene-d8 (S)	102	%	68-135		50	04/15/16 12:00	04/15/16 17:44	2037-26-5	
4-Bromofluorobenzene (S)	79	%	65-146		50	04/15/16 12:00	04/15/16 17:44	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	69-137		50	04/15/16 12:00	04/15/16 17:44	17060-07-0	
Dibromofluoromethane (S)	92	%	70-130		50	04/15/16 12:00	04/15/16 17:44	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**17.8**	%	0.10	0.10	1		04/24/16 14:48		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ104 (10.0-12.0) **Lab ID: 30179497002** Collected: 04/11/16 09:35 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**81.6**	ug/kg	8.6	0.76	1	04/14/16 16:45	04/20/16 17:35	83-32-9	
Acenaphthylene	**20.9**	ug/kg	8.6	0.73	1	04/14/16 16:45	04/20/16 17:35	208-96-8	
Anthracene	**65.2**	ug/kg	8.6	0.83	1	04/14/16 16:45	04/20/16 17:35	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.6	2.2	1	04/14/16 16:45	04/20/16 17:35	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.6	0.82	1	04/14/16 16:45	04/20/16 17:35	50-32-8	
Benzo(b)fluoranthene	**9.9**	ug/kg	8.6	0.76	1	04/14/16 16:45	04/20/16 17:35	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.6	1.3	1	04/14/16 16:45	04/20/16 17:35	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.6	0.81	1	04/14/16 16:45	04/20/16 17:35	207-08-9	ip
Chrysene	**12.5**	ug/kg	8.6	0.56	1	04/14/16 16:45	04/20/16 17:35	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.6	1.1	1	04/14/16 16:45	04/20/16 17:35	53-70-3	
Fluoranthene	**28.4**	ug/kg	8.6	0.56	1	04/14/16 16:45	04/20/16 17:35	206-44-0	
Fluorene	**71.8**	ug/kg	8.6	0.74	1	04/14/16 16:45	04/20/16 17:35	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.6	1.0	1	04/14/16 16:45	04/20/16 17:35	193-39-5	
Phenanthrene	**349**	ug/kg	8.6	0.86	1	04/14/16 16:45	04/20/16 17:35	85-01-8	
Pyrene	**70.3**	ug/kg	8.6	0.69	1	04/14/16 16:45	04/20/16 17:35	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	63	%	35-141		1	04/14/16 16:45	04/20/16 17:35	321-60-8	
Terphenyl-d14 (S)	86	%	64-141		1	04/14/16 16:45	04/20/16 17:35	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	6.4	1.7	1	04/15/16 12:00	04/15/16 13:44	71-43-2	1c
n-Butylbenzene	**395**	ug/kg	6.4	3.1	1	04/15/16 12:00	04/15/16 13:44	104-51-8	1c
sec-Butylbenzene	**232**	ug/kg	6.4	3.2	1	04/15/16 12:00	04/15/16 13:44	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	6.4	3.1	1	04/15/16 12:00	04/15/16 13:44	98-06-6	1c
Ethanol	ND	ug/kg	257	72.8	1	04/15/16 12:00	04/15/16 13:44	64-17-5	1c
Ethylbenzene	**101**	ug/kg	6.4	1.3	1	04/15/16 12:00	04/15/16 13:44	100-41-4	1c
Isopropylbenzene (Cumene)	**327**	ug/kg	6.4	2.2	1	04/15/16 12:00	04/15/16 13:44	98-82-8	1c
p-Isopropyltoluene	**191**	ug/kg	6.4	2.7	1	04/15/16 12:00	04/15/16 13:44	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	6.4	3.1	1	04/15/16 12:00	04/15/16 13:44	1634-04-4	1c
Naphthalene	**168**	ug/kg	6.4	1.2	1	04/15/16 12:00	04/15/16 13:44	91-20-3	1c
n-Propylbenzene	**1190**	ug/kg	6.4	2.2	1	04/15/16 12:00	04/15/16 13:44	103-65-1	2c,E
Toluene	ND	ug/kg	6.4	2.0	1	04/15/16 12:00	04/15/16 13:44	108-88-3	1c
1,2,4-Trimethylbenzene	**1160**	ug/kg	322	92.0	50	04/20/16 10:47	04/20/16 15:23	95-63-6	1c
1,3,5-Trimethylbenzene	**1500**	ug/kg	6.4	2.2	1	04/15/16 12:00	04/15/16 13:44	108-67-8	2c,E
m&p-Xylene	**59.6**	ug/kg	12.8	2.4	1	04/15/16 12:00	04/15/16 13:44	179601-23-1	1c
o-Xylene	**22.5**	ug/kg	6.4	1.3	1	04/15/16 12:00	04/15/16 13:44	95-47-6	1c
Surrogates									
Toluene-d8 (S)	124	%	68-135		1	04/15/16 12:00	04/15/16 13:44	2037-26-5	
4-Bromofluorobenzene (S)	133	%	65-146		1	04/15/16 12:00	04/15/16 13:44	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	69-137		1	04/15/16 12:00	04/15/16 13:44	17060-07-0	
Dibromofluoromethane (S)	52	%	70-130		1	04/15/16 12:00	04/15/16 13:44	1868-53-7	S0
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**22.2**	%	0.10	0.10	1		04/24/16 14:50		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ104 (12.0-14.0) **Lab ID: 30179497003** Collected: 04/11/16 09:40 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**35.6**	ug/kg	7.9	0.70	1	04/14/16 16:45	04/20/16 17:53	83-32-9	
Acenaphthylene	**9.9**	ug/kg	7.9	0.67	1	04/14/16 16:45	04/20/16 17:53	208-96-8	
Anthracene	**17.3**	ug/kg	7.9	0.77	1	04/14/16 16:45	04/20/16 17:53	120-12-7	
Benzo(a)anthracene	**8.1**	ug/kg	7.9	2.0	1	04/14/16 16:45	04/20/16 17:53	56-55-3	
Benzo(a)pyrene	ND	ug/kg	7.9	0.75	1	04/14/16 16:45	04/20/16 17:53	50-32-8	
Benzo(b)fluoranthene	**8.9**	ug/kg	7.9	0.70	1	04/14/16 16:45	04/20/16 17:53	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	7.9	1.2	1	04/14/16 16:45	04/20/16 17:53	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	7.9	0.74	1	04/14/16 16:45	04/20/16 17:53	207-08-9	ip
Chrysene	ND	ug/kg	7.9	0.52	1	04/14/16 16:45	04/20/16 17:53	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	7.9	1.0	1	04/14/16 16:45	04/20/16 17:53	53-70-3	
Fluoranthene	**15.5**	ug/kg	7.9	0.52	1	04/14/16 16:45	04/20/16 17:53	206-44-0	
Fluorene	**56.2**	ug/kg	7.9	0.68	1	04/14/16 16:45	04/20/16 17:53	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	7.9	0.93	1	04/14/16 16:45	04/20/16 17:53	193-39-5	
Phenanthrene	**130**	ug/kg	7.9	0.79	1	04/14/16 16:45	04/20/16 17:53	85-01-8	
Pyrene	**30.8**	ug/kg	7.9	0.64	1	04/14/16 16:45	04/20/16 17:53	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%	35-141		1	04/14/16 16:45	04/20/16 17:53	321-60-8	
Terphenyl-d14 (S)	80	%	64-141		1	04/14/16 16:45	04/20/16 17:53	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	319	86.7	50	04/15/16 12:00	04/15/16 18:10	71-43-2	1c
n-Butylbenzene	**844**	ug/kg	319	156	50	04/15/16 12:00	04/15/16 18:10	104-51-8	1c
sec-Butylbenzene	**498**	ug/kg	319	160	50	04/15/16 12:00	04/15/16 18:10	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	319	154	50	04/15/16 12:00	04/15/16 18:10	98-06-6	1c
Ethanol	ND	ug/kg	12800	3610	50	04/15/16 12:00	04/15/16 18:10	64-17-5	1c
Ethylbenzene	ND	ug/kg	319	64.4	50	04/15/16 12:00	04/15/16 18:10	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	319	110	50	04/15/16 12:00	04/15/16 18:10	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	319	135	50	04/15/16 12:00	04/15/16 18:10	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	319	155	50	04/15/16 12:00	04/15/16 18:10	1634-04-4	1c
Naphthalene	ND	ug/kg	319	61.8	50	04/15/16 12:00	04/15/16 18:10	91-20-3	1c
n-Propylbenzene	**709**	ug/kg	319	112	50	04/15/16 12:00	04/15/16 18:10	103-65-1	1c
Toluene	ND	ug/kg	319	99.5	50	04/15/16 12:00	04/15/16 18:10	108-88-3	1c
1,2,4-Trimethylbenzene	**439**	ug/kg	319	91.2	50	04/15/16 12:00	04/15/16 18:10	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	319	107	50	04/15/16 12:00	04/15/16 18:10	108-67-8	1c
m&p-Xylene	ND	ug/kg	638	118	50	04/15/16 12:00	04/15/16 18:10	179601-23-1	1c
o-Xylene	ND	ug/kg	319	63.1	50	04/15/16 12:00	04/15/16 18:10	95-47-6	1c
Surrogates									
Toluene-d8 (S)	107	%	68-135		50	04/15/16 12:00	04/15/16 18:10	2037-26-5	
4-Bromofluorobenzene (S)	97	%	65-146		50	04/15/16 12:00	04/15/16 18:10	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	69-137		50	04/15/16 12:00	04/15/16 18:10	17060-07-0	
Dibromofluoromethane (S)	79	%	70-130		50	04/15/16 12:00	04/15/16 18:10	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.2**	%	0.10	0.10	1		04/24/16 14:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ104 (14.0-16.0) **Lab ID: 30179497004** Collected: 04/11/16 09:55 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.0	0.70	1	04/14/16 16:45	04/20/16 18:10	83-32-9	
Acenaphthylene	ND	ug/kg	8.0	0.68	1	04/14/16 16:45	04/20/16 18:10	208-96-8	
Anthracene	ND	ug/kg	8.0	0.78	1	04/14/16 16:45	04/20/16 18:10	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.0	2.0	1	04/14/16 16:45	04/20/16 18:10	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.0	0.76	1	04/14/16 16:45	04/20/16 18:10	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.0	0.70	1	04/14/16 16:45	04/20/16 18:10	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.0	1.2	1	04/14/16 16:45	04/20/16 18:10	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.0	0.75	1	04/14/16 16:45	04/20/16 18:10	207-08-9	
Chrysene	ND	ug/kg	8.0	0.53	1	04/14/16 16:45	04/20/16 18:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.0	1.1	1	04/14/16 16:45	04/20/16 18:10	53-70-3	
Fluoranthene	ND	ug/kg	8.0	0.53	1	04/14/16 16:45	04/20/16 18:10	206-44-0	
Fluorene	ND	ug/kg	8.0	0.69	1	04/14/16 16:45	04/20/16 18:10	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.0	0.94	1	04/14/16 16:45	04/20/16 18:10	193-39-5	
Phenanthrene	**17.5**	ug/kg	8.0	0.80	1	04/14/16 16:45	04/20/16 18:10	85-01-8	
Pyrene	ND	ug/kg	8.0	0.64	1	04/14/16 16:45	04/20/16 18:10	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	50	%	35-141		1	04/14/16 16:45	04/20/16 18:10	321-60-8	
Terphenyl-d14 (S)	69	%	64-141		1	04/14/16 16:45	04/20/16 18:10	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.2	1.4	1	04/20/16 10:45	04/20/16 13:13	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.2	2.6	1	04/20/16 10:45	04/20/16 13:13	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.2	2.6	1	04/20/16 10:45	04/20/16 13:13	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.2	2.5	1	04/20/16 10:45	04/20/16 13:13	98-06-6	1c
Ethanol	ND	ug/kg	209	59.2	1	04/20/16 10:45	04/20/16 13:13	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.2	1.1	1	04/20/16 10:45	04/20/16 13:13	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.2	1.8	1	04/20/16 10:45	04/20/16 13:13	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.2	2.2	1	04/20/16 10:45	04/20/16 13:13	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.2	2.5	1	04/20/16 10:45	04/20/16 13:13	1634-04-4	1c
Naphthalene	ND	ug/kg	5.2	1.0	1	04/20/16 10:45	04/20/16 13:13	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.2	1.8	1	04/20/16 10:45	04/20/16 13:13	103-65-1	1c
Toluene	ND	ug/kg	5.2	1.6	1	04/20/16 10:45	04/20/16 13:13	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.2	1.5	1	04/20/16 10:45	04/20/16 13:13	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.2	1.8	1	04/20/16 10:45	04/20/16 13:13	108-67-8	1c
m&p-Xylene	ND	ug/kg	10.4	1.9	1	04/20/16 10:45	04/20/16 13:13	179601-23-1	1c
o-Xylene	ND	ug/kg	5.2	1.0	1	04/20/16 10:45	04/20/16 13:13	95-47-6	1c
Surrogates									
Toluene-d8 (S)	98	%	68-135		1	04/20/16 10:45	04/20/16 13:13	2037-26-5	
4-Bromofluorobenzene (S)	104	%	65-146		1	04/20/16 10:45	04/20/16 13:13	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	69-137		1	04/20/16 10:45	04/20/16 13:13	17060-07-0	
Dibromofluoromethane (S)	102	%	70-130		1	04/20/16 10:45	04/20/16 13:13	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.9**	%	0.10	0.10	1		04/24/16 14:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ104 (16.0-18.0) **Lab ID: 30179497005** Collected: 04/11/16 10:05 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.5	0.75	1	04/14/16 16:45	04/20/16 18:28	83-32-9	
Acenaphthylene	ND	ug/kg	8.5	0.73	1	04/14/16 16:45	04/20/16 18:28	208-96-8	
Anthracene	ND	ug/kg	8.5	0.83	1	04/14/16 16:45	04/20/16 18:28	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.5	2.2	1	04/14/16 16:45	04/20/16 18:28	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.5	0.82	1	04/14/16 16:45	04/20/16 18:28	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.5	0.75	1	04/14/16 16:45	04/20/16 18:28	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.5	1.3	1	04/14/16 16:45	04/20/16 18:28	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.5	0.80	1	04/14/16 16:45	04/20/16 18:28	207-08-9	ip
Chrysene	ND	ug/kg	8.5	0.56	1	04/14/16 16:45	04/20/16 18:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.5	1.1	1	04/14/16 16:45	04/20/16 18:28	53-70-3	
Fluoranthene	ND	ug/kg	8.5	0.56	1	04/14/16 16:45	04/20/16 18:28	206-44-0	
Fluorene	ND	ug/kg	8.5	0.74	1	04/14/16 16:45	04/20/16 18:28	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.5	1.0	1	04/14/16 16:45	04/20/16 18:28	193-39-5	
Phenanthrene	**18.9**	ug/kg	8.5	0.85	1	04/14/16 16:45	04/20/16 18:28	85-01-8	
Pyrene	ND	ug/kg	8.5	0.69	1	04/14/16 16:45	04/20/16 18:28	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	64	%	35-141		1	04/14/16 16:45	04/20/16 18:28	321-60-8	
Terphenyl-d14 (S)	83	%	64-141		1	04/14/16 16:45	04/20/16 18:28	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	331	90.1	50	04/20/16 10:47	04/20/16 15:49	71-43-2	1c
n-Butylbenzene	ND	ug/kg	331	162	50	04/20/16 10:47	04/20/16 15:49	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	331	166	50	04/20/16 10:47	04/20/16 15:49	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	331	160	50	04/20/16 10:47	04/20/16 15:49	98-06-6	1c
Ethanol	ND	ug/kg	13300	3760	50	04/20/16 10:47	04/20/16 15:49	64-17-5	1c
Ethylbenzene	ND	ug/kg	331	66.9	50	04/20/16 10:47	04/20/16 15:49	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	331	115	50	04/20/16 10:47	04/20/16 15:49	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	331	141	50	04/20/16 10:47	04/20/16 15:49	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	331	161	50	04/20/16 10:47	04/20/16 15:49	1634-04-4	1c
Naphthalene	ND	ug/kg	331	64.3	50	04/20/16 10:47	04/20/16 15:49	91-20-3	1c
n-Propylbenzene	ND	ug/kg	331	116	50	04/20/16 10:47	04/20/16 15:49	103-65-1	1c
Toluene	ND	ug/kg	331	103	50	04/20/16 10:47	04/20/16 15:49	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	331	94.8	50	04/20/16 10:47	04/20/16 15:49	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	331	111	50	04/20/16 10:47	04/20/16 15:49	108-67-8	1c
m&p-Xylene	ND	ug/kg	663	123	50	04/20/16 10:47	04/20/16 15:49	179601-23-1	1c
o-Xylene	ND	ug/kg	331	65.6	50	04/20/16 10:47	04/20/16 15:49	95-47-6	1c
Surrogates									
Toluene-d8 (S)	96	%	68-135		50	04/20/16 10:47	04/20/16 15:49	2037-26-5	
4-Bromofluorobenzene (S)	100	%	65-146		50	04/20/16 10:47	04/20/16 15:49	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	69-137		50	04/20/16 10:47	04/20/16 15:49	17060-07-0	
Dibromofluoromethane (S)	105	%	70-130		50	04/20/16 10:47	04/20/16 15:49	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**22.9**	%	0.10	0.10	1		04/24/16 14:52		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ104 (18.0-20.0) **Lab ID: 30179497006** Collected: 04/11/16 10:15 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.8	0.69	1	04/14/16 16:45	04/20/16 18:46	83-32-9	
Acenaphthylene	ND	ug/kg	7.8	0.67	1	04/14/16 16:45	04/20/16 18:46	208-96-8	
Anthracene	ND	ug/kg	7.8	0.76	1	04/14/16 16:45	04/20/16 18:46	120-12-7	
Benzo(a)anthracene	ND	ug/kg	7.8	2.0	1	04/14/16 16:45	04/20/16 18:46	56-55-3	
Benzo(a)pyrene	ND	ug/kg	7.8	0.75	1	04/14/16 16:45	04/20/16 18:46	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	7.8	0.69	1	04/14/16 16:45	04/20/16 18:46	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	7.8	1.2	1	04/14/16 16:45	04/20/16 18:46	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	7.8	0.74	1	04/14/16 16:45	04/20/16 18:46	207-08-9	
Chrysene	ND	ug/kg	7.8	0.51	1	04/14/16 16:45	04/20/16 18:46	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	7.8	1.0	1	04/14/16 16:45	04/20/16 18:46	53-70-3	
Fluoranthene	ND	ug/kg	7.8	0.51	1	04/14/16 16:45	04/20/16 18:46	206-44-0	
Fluorene	ND	ug/kg	7.8	0.68	1	04/14/16 16:45	04/20/16 18:46	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	7.8	0.92	1	04/14/16 16:45	04/20/16 18:46	193-39-5	
Phenanthrene	**13.9**	ug/kg	7.8	0.78	1	04/14/16 16:45	04/20/16 18:46	85-01-8	
Pyrene	ND	ug/kg	7.8	0.63	1	04/14/16 16:45	04/20/16 18:46	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%	35-141		1	04/14/16 16:45	04/20/16 18:46	321-60-8	
Terphenyl-d14 (S)	85	%	64-141		1	04/14/16 16:45	04/20/16 18:46	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	268	72.9	50	04/20/16 10:47	04/20/16 16:15	71-43-2	1c
n-Butylbenzene	ND	ug/kg	268	131	50	04/20/16 10:47	04/20/16 16:15	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	268	135	50	04/20/16 10:47	04/20/16 16:15	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	268	129	50	04/20/16 10:47	04/20/16 16:15	98-06-6	1c
Ethanol	ND	ug/kg	10700	3040	50	04/20/16 10:47	04/20/16 16:15	64-17-5	1c
Ethylbenzene	ND	ug/kg	268	54.2	50	04/20/16 10:47	04/20/16 16:15	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	268	92.8	50	04/20/16 10:47	04/20/16 16:15	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	268	114	50	04/20/16 10:47	04/20/16 16:15	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	268	130	50	04/20/16 10:47	04/20/16 16:15	1634-04-4	1c
Naphthalene	ND	ug/kg	268	52.0	50	04/20/16 10:47	04/20/16 16:15	91-20-3	1c
n-Propylbenzene	ND	ug/kg	268	93.9	50	04/20/16 10:47	04/20/16 16:15	103-65-1	1c
Toluene	ND	ug/kg	268	83.7	50	04/20/16 10:47	04/20/16 16:15	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	268	76.7	50	04/20/16 10:47	04/20/16 16:15	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	268	90.1	50	04/20/16 10:47	04/20/16 16:15	108-67-8	1c
m&p-Xylene	ND	ug/kg	536	99.2	50	04/20/16 10:47	04/20/16 16:15	179601-23-1	1c
o-Xylene	ND	ug/kg	268	53.1	50	04/20/16 10:47	04/20/16 16:15	95-47-6	1c
Surrogates									
Toluene-d8 (S)	97	%	68-135		50	04/20/16 10:47	04/20/16 16:15	2037-26-5	
4-Bromofluorobenzene (S)	102	%	65-146		50	04/20/16 10:47	04/20/16 16:15	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	69-137		50	04/20/16 10:47	04/20/16 16:15	17060-07-0	
Dibromofluoromethane (S)	106	%	70-130		50	04/20/16 10:47	04/20/16 16:15	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.2**	%	0.10	0.10	1		04/24/16 14:54		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ104 (20.0-22.0) **Lab ID: 30179497007** Collected: 04/11/16 10:30 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.3	0.73	1	04/14/16 16:45	04/20/16 19:04	83-32-9	
Acenaphthylene	ND	ug/kg	8.3	0.70	1	04/14/16 16:45	04/20/16 19:04	208-96-8	
Anthracene	ND	ug/kg	8.3	0.80	1	04/14/16 16:45	04/20/16 19:04	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.3	2.1	1	04/14/16 16:45	04/20/16 19:04	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.3	0.79	1	04/14/16 16:45	04/20/16 19:04	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.3	0.73	1	04/14/16 16:45	04/20/16 19:04	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.3	1.3	1	04/14/16 16:45	04/20/16 19:04	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.3	0.78	1	04/14/16 16:45	04/20/16 19:04	207-08-9	
Chrysene	ND	ug/kg	8.3	0.54	1	04/14/16 16:45	04/20/16 19:04	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.3	1.1	1	04/14/16 16:45	04/20/16 19:04	53-70-3	
Fluoranthene	ND	ug/kg	8.3	0.54	1	04/14/16 16:45	04/20/16 19:04	206-44-0	
Fluorene	ND	ug/kg	8.3	0.72	1	04/14/16 16:45	04/20/16 19:04	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.3	0.97	1	04/14/16 16:45	04/20/16 19:04	193-39-5	
Phenanthrene	**12.2**	ug/kg	8.3	0.83	1	04/14/16 16:45	04/20/16 19:04	85-01-8	
Pyrene	ND	ug/kg	8.3	0.67	1	04/14/16 16:45	04/20/16 19:04	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	68	%	35-141		1	04/14/16 16:45	04/20/16 19:04	321-60-8	
Terphenyl-d14 (S)	92	%	64-141		1	04/14/16 16:45	04/20/16 19:04	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.3	1.5	1	04/15/16 12:00	04/15/16 15:00	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/15/16 12:00	04/15/16 15:00	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.3	2.7	1	04/15/16 12:00	04/15/16 15:00	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/15/16 12:00	04/15/16 15:00	98-06-6	1c
Ethanol	ND	ug/kg	213	60.5	1	04/15/16 12:00	04/15/16 15:00	64-17-5	1c
Ethylbenzene	**40.0**	ug/kg	5.3	1.1	1	04/15/16 12:00	04/15/16 15:00	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.3	1.8	1	04/15/16 12:00	04/15/16 15:00	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.3	2.3	1	04/15/16 12:00	04/15/16 15:00	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.3	2.6	1	04/15/16 12:00	04/15/16 15:00	1634-04-4	1c
Naphthalene	**41.4**	ug/kg	5.3	1.0	1	04/15/16 12:00	04/15/16 15:00	91-20-3	1c
n-Propylbenzene	**14.0**	ug/kg	5.3	1.9	1	04/15/16 12:00	04/15/16 15:00	103-65-1	1c
Toluene	**29.1**	ug/kg	5.3	1.7	1	04/15/16 12:00	04/15/16 15:00	108-88-3	1c
1,2,4-Trimethylbenzene	**10.5**	ug/kg	5.3	1.5	1	04/15/16 12:00	04/15/16 15:00	95-63-6	1c
1,3,5-Trimethylbenzene	**20.0**	ug/kg	5.3	1.8	1	04/15/16 12:00	04/15/16 15:00	108-67-8	1c
m&p-Xylene	**70.6**	ug/kg	10.7	2.0	1	04/15/16 12:00	04/15/16 15:00	179601-23-1	1c
o-Xylene	**45.7**	ug/kg	5.3	1.1	1	04/15/16 12:00	04/15/16 15:00	95-47-6	1c
Surrogates									
Toluene-d8 (S)	99	%	68-135		1	04/15/16 12:00	04/15/16 15:00	2037-26-5	
4-Bromofluorobenzene (S)	102	%	65-146		1	04/15/16 12:00	04/15/16 15:00	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	69-137		1	04/15/16 12:00	04/15/16 15:00	17060-07-0	
Dibromofluoromethane (S)	94	%	70-130		1	04/15/16 12:00	04/15/16 15:00	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.2**	%	0.10	0.10	1		04/24/16 14:55		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ104 (22.0-24.0) **Lab ID: 30179497008** Collected: 04/11/16 10:40 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.1	0.71	1	04/14/16 16:45	04/20/16 19:21	83-32-9	
Acenaphthylene	ND	ug/kg	8.1	0.69	1	04/14/16 16:45	04/20/16 19:21	208-96-8	
Anthracene	ND	ug/kg	8.1	0.78	1	04/14/16 16:45	04/20/16 19:21	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.1	2.1	1	04/14/16 16:45	04/20/16 19:21	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.1	0.77	1	04/14/16 16:45	04/20/16 19:21	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.1	0.71	1	04/14/16 16:45	04/20/16 19:21	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.1	1.2	1	04/14/16 16:45	04/20/16 19:21	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.1	0.76	1	04/14/16 16:45	04/20/16 19:21	207-08-9	
Chrysene	ND	ug/kg	8.1	0.53	1	04/14/16 16:45	04/20/16 19:21	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/14/16 16:45	04/20/16 19:21	53-70-3	
Fluoranthene	ND	ug/kg	8.1	0.53	1	04/14/16 16:45	04/20/16 19:21	206-44-0	
Fluorene	ND	ug/kg	8.1	0.70	1	04/14/16 16:45	04/20/16 19:21	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.1	0.95	1	04/14/16 16:45	04/20/16 19:21	193-39-5	
Phenanthrene	**9.2**	ug/kg	8.1	0.81	1	04/14/16 16:45	04/20/16 19:21	85-01-8	
Pyrene	ND	ug/kg	8.1	0.65	1	04/14/16 16:45	04/20/16 19:21	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	62	%	35-141		1	04/14/16 16:45	04/20/16 19:21	321-60-8	
Terphenyl-d14 (S)	87	%	64-141		1	04/14/16 16:45	04/20/16 19:21	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.3	1.4	1	04/20/16 10:45	04/20/16 13:39	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/20/16 10:45	04/20/16 13:39	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/20/16 10:45	04/20/16 13:39	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.3	2.5	1	04/20/16 10:45	04/20/16 13:39	98-06-6	1c
Ethanol	ND	ug/kg	211	59.7	1	04/20/16 10:45	04/20/16 13:39	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.3	1.1	1	04/20/16 10:45	04/20/16 13:39	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.3	1.8	1	04/20/16 10:45	04/20/16 13:39	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.3	2.2	1	04/20/16 10:45	04/20/16 13:39	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.3	2.6	1	04/20/16 10:45	04/20/16 13:39	1634-04-4	1c
Naphthalene	ND	ug/kg	5.3	1.0	1	04/20/16 10:45	04/20/16 13:39	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.3	1.8	1	04/20/16 10:45	04/20/16 13:39	103-65-1	1c
Toluene	ND	ug/kg	5.3	1.6	1	04/20/16 10:45	04/20/16 13:39	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.3	1.5	1	04/20/16 10:45	04/20/16 13:39	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.3	1.8	1	04/20/16 10:45	04/20/16 13:39	108-67-8	1c
m&p-Xylene	ND	ug/kg	10.5	1.9	1	04/20/16 10:45	04/20/16 13:39	179601-23-1	1c
o-Xylene	ND	ug/kg	5.3	1.0	1	04/20/16 10:45	04/20/16 13:39	95-47-6	1c
Surrogates									
Toluene-d8 (S)	94	%	68-135		1	04/20/16 10:45	04/20/16 13:39	2037-26-5	
4-Bromofluorobenzene (S)	103	%	65-146		1	04/20/16 10:45	04/20/16 13:39	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	69-137		1	04/20/16 10:45	04/20/16 13:39	17060-07-0	
Dibromofluoromethane (S)	104	%	70-130		1	04/20/16 10:45	04/20/16 13:39	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**18.1**	%	0.10	0.10	1		04/24/16 14:55		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ104 (24.0-26.0) **Lab ID: 30179497009** Collected: 04/11/16 10:50 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.8	0.68	1	04/14/16 16:45	04/20/16 19:39	83-32-9	
Acenaphthylene	ND	ug/kg	7.8	0.66	1	04/14/16 16:45	04/20/16 19:39	208-96-8	
Anthracene	ND	ug/kg	7.8	0.75	1	04/14/16 16:45	04/20/16 19:39	120-12-7	
Benzo(a)anthracene	ND	ug/kg	7.8	2.0	1	04/14/16 16:45	04/20/16 19:39	56-55-3	
Benzo(a)pyrene	ND	ug/kg	7.8	0.74	1	04/14/16 16:45	04/20/16 19:39	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	7.8	0.68	1	04/14/16 16:45	04/20/16 19:39	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	7.8	1.2	1	04/14/16 16:45	04/20/16 19:39	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	7.8	0.73	1	04/14/16 16:45	04/20/16 19:39	207-08-9	
Chrysene	ND	ug/kg	7.8	0.51	1	04/14/16 16:45	04/20/16 19:39	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	7.8	1.0	1	04/14/16 16:45	04/20/16 19:39	53-70-3	
Fluoranthene	ND	ug/kg	7.8	0.51	1	04/14/16 16:45	04/20/16 19:39	206-44-0	
Fluorene	ND	ug/kg	7.8	0.67	1	04/14/16 16:45	04/20/16 19:39	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	7.8	0.92	1	04/14/16 16:45	04/20/16 19:39	193-39-5	
Phenanthrene	**8.0**	ug/kg	7.8	0.78	1	04/14/16 16:45	04/20/16 19:39	85-01-8	
Pyrene	ND	ug/kg	7.8	0.63	1	04/14/16 16:45	04/20/16 19:39	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	63	%	35-141		1	04/14/16 16:45	04/20/16 19:39	321-60-8	
Terphenyl-d14 (S)	89	%	64-141		1	04/14/16 16:45	04/20/16 19:39	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**30.3**	ug/kg	4.8	1.3	1	04/15/16 12:00	04/15/16 15:39	71-43-2	1c
n-Butylbenzene	ND	ug/kg	4.8	2.3	1	04/15/16 12:00	04/15/16 15:39	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	4.8	2.4	1	04/15/16 12:00	04/15/16 15:39	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	4.8	2.3	1	04/15/16 12:00	04/15/16 15:39	98-06-6	1c
Ethanol	ND	ug/kg	191	54.2	1	04/15/16 12:00	04/15/16 15:39	64-17-5	1c
Ethylbenzene	**23.3**	ug/kg	4.8	0.97	1	04/15/16 12:00	04/15/16 15:39	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	4.8	1.7	1	04/15/16 12:00	04/15/16 15:39	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	4.8	2.0	1	04/15/16 12:00	04/15/16 15:39	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	4.8	2.3	1	04/15/16 12:00	04/15/16 15:39	1634-04-4	1c
Naphthalene	**18.0**	ug/kg	4.8	0.93	1	04/15/16 12:00	04/15/16 15:39	91-20-3	1c
n-Propylbenzene	**9.5**	ug/kg	4.8	1.7	1	04/15/16 12:00	04/15/16 15:39	103-65-1	1c
Toluene	**10.5**	ug/kg	4.8	1.5	1	04/15/16 12:00	04/15/16 15:39	108-88-3	1c
1,2,4-Trimethylbenzene	**28.7**	ug/kg	4.8	1.4	1	04/15/16 12:00	04/15/16 15:39	95-63-6	1c
1,3,5-Trimethylbenzene	**6.6**	ug/kg	4.8	1.6	1	04/15/16 12:00	04/15/16 15:39	108-67-8	1c
m&p-Xylene	**46.4**	ug/kg	9.6	1.8	1	04/15/16 12:00	04/15/16 15:39	179601-23-1	1c
o-Xylene	**17.0**	ug/kg	4.8	0.95	1	04/15/16 12:00	04/15/16 15:39	95-47-6	1c
Surrogates									
Toluene-d8 (S)	104	%	68-135		1	04/15/16 12:00	04/15/16 15:39	2037-26-5	
4-Bromofluorobenzene (S)	102	%	65-146		1	04/15/16 12:00	04/15/16 15:39	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	69-137		1	04/15/16 12:00	04/15/16 15:39	17060-07-0	
Dibromofluoromethane (S)	88	%	70-130		1	04/15/16 12:00	04/15/16 15:39	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**14.4**	%	0.10	0.10	1		04/24/16 14:55		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ104 (26.0-26.7) **Lab ID: 30179497010** Collected: 04/11/16 11:15 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.0	0.71	1	04/14/16 16:45	04/20/16 19:57	83-32-9	
Acenaphthylene	ND	ug/kg	8.0	0.68	1	04/14/16 16:45	04/20/16 19:57	208-96-8	
Anthracene	ND	ug/kg	8.0	0.78	1	04/14/16 16:45	04/20/16 19:57	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.0	2.0	1	04/14/16 16:45	04/20/16 19:57	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.0	0.77	1	04/14/16 16:45	04/20/16 19:57	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.0	0.71	1	04/14/16 16:45	04/20/16 19:57	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.0	1.2	1	04/14/16 16:45	04/20/16 19:57	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.0	0.75	1	04/14/16 16:45	04/20/16 19:57	207-08-9	
Chrysene	ND	ug/kg	8.0	0.53	1	04/14/16 16:45	04/20/16 19:57	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.0	1.1	1	04/14/16 16:45	04/20/16 19:57	53-70-3	
Fluoranthene	ND	ug/kg	8.0	0.53	1	04/14/16 16:45	04/20/16 19:57	206-44-0	
Fluorene	ND	ug/kg	8.0	0.69	1	04/14/16 16:45	04/20/16 19:57	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.0	0.95	1	04/14/16 16:45	04/20/16 19:57	193-39-5	
Phenanthrene	ND	ug/kg	8.0	0.80	1	04/14/16 16:45	04/20/16 19:57	85-01-8	
Pyrene	ND	ug/kg	8.0	0.65	1	04/14/16 16:45	04/20/16 19:57	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%	35-141		1	04/14/16 16:45	04/20/16 19:57	321-60-8	
Terphenyl-d14 (S)	80	%	64-141		1	04/14/16 16:45	04/20/16 19:57	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.5	1.5	1	04/15/16 12:00	04/15/16 16:02	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.5	2.7	1	04/15/16 12:00	04/15/16 16:02	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.5	2.7	1	04/15/16 12:00	04/15/16 16:02	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.5	2.6	1	04/15/16 12:00	04/15/16 16:02	98-06-6	1c
Ethanol	ND	ug/kg	218	61.8	1	04/15/16 12:00	04/15/16 16:02	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.5	1.1	1	04/15/16 12:00	04/15/16 16:02	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.5	1.9	1	04/15/16 12:00	04/15/16 16:02	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.5	2.3	1	04/15/16 12:00	04/15/16 16:02	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.5	2.6	1	04/15/16 12:00	04/15/16 16:02	1634-04-4	1c
Naphthalene	**13.8**	ug/kg	5.5	1.1	1	04/15/16 12:00	04/15/16 16:02	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.5	1.9	1	04/15/16 12:00	04/15/16 16:02	103-65-1	1c
Toluene	ND	ug/kg	5.5	1.7	1	04/15/16 12:00	04/15/16 16:02	108-88-3	1c
1,2,4-Trimethylbenzene	**8.8**	ug/kg	5.5	1.6	1	04/15/16 12:00	04/15/16 16:02	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.5	1.8	1	04/15/16 12:00	04/15/16 16:02	108-67-8	1c
m&p-Xylene	ND	ug/kg	10.9	2.0	1	04/15/16 12:00	04/15/16 16:02	179601-23-1	1c
o-Xylene	ND	ug/kg	5.5	1.1	1	04/15/16 12:00	04/15/16 16:02	95-47-6	1c
Surrogates									
Toluene-d8 (S)	99	%	68-135		1	04/15/16 12:00	04/15/16 16:02	2037-26-5	
4-Bromofluorobenzene (S)	103	%	65-146		1	04/15/16 12:00	04/15/16 16:02	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	69-137		1	04/15/16 12:00	04/15/16 16:02	17060-07-0	
Dibromofluoromethane (S)	98	%	70-130		1	04/15/16 12:00	04/15/16 16:02	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.9**	%	0.10	0.10	1		04/24/16 14:56		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: TRIP BLANK **Lab ID: 30179497011** Collected: 04/11/16 11:15 Received: 04/13/16 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV	Analytical Method: EPA 8260C								
Benzene	ND	ug/L	1.0	0.16	1		04/21/16 14:39	71-43-2	M5
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/21/16 14:39	104-51-8	M5
sec-Butylbenzene	ND	ug/L	1.0	0.21	1		04/21/16 14:39	135-98-8	M5
tert-Butylbenzene	ND	ug/L	1.0	0.19	1		04/21/16 14:39	98-06-6	M5
Ethanol	ND	ug/L	200	26.1	1		04/21/16 14:39	64-17-5	M5
Ethylbenzene	ND	ug/L	1.0	0.23	1		04/21/16 14:39	100-41-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.14	1		04/21/16 14:39	98-82-8	M5
p-Isopropyltoluene	ND	ug/L	1.0	0.22	1		04/21/16 14:39	99-87-6	M5
Methyl-tert-butyl ether	ND	ug/L	1.0	0.17	1		04/21/16 14:39	1634-04-4	M5
Naphthalene	ND	ug/L	2.0	0.19	1		04/21/16 14:39	91-20-3	M5
n-Propylbenzene	ND	ug/L	1.0	0.15	1		04/21/16 14:39	103-65-1	M5
Toluene	ND	ug/L	1.0	0.13	1		04/21/16 14:39	108-88-3	M5
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.12	1		04/21/16 14:39	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.12	1		04/21/16 14:39	108-67-8	M5
m&p-Xylene	ND	ug/L	2.0	0.32	1		04/21/16 14:39	179601-23-1	M5
o-Xylene	ND	ug/L	1.0	0.22	1		04/21/16 14:39	95-47-6	M5
Surrogates									
4-Bromofluorobenzene (S)	102	%	81-119		1		04/21/16 14:39	460-00-4	M5
1,2-Dichloroethane-d4 (S)	118	%	77-126		1		04/21/16 14:39	17060-07-0	M5
Toluene-d8 (S)	98	%	84-115		1		04/21/16 14:39	2037-26-5	M5
Dibromofluoromethane (S)	106	%	70-130		1		04/21/16 14:39	1868-53-7	M5

Sample: PZ105 (8.0-10.0) **Lab ID: 30179497012** Collected: 04/12/16 09:00 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**340**	ug/kg	8.8	0.77	1	04/14/16 16:45	04/20/16 20:15	83-32-9	
Acenaphthylene	**142**	ug/kg	8.8	0.75	1	04/14/16 16:45	04/20/16 20:15	208-96-8	
Anthracene	**45.6**	ug/kg	8.8	0.85	1	04/14/16 16:45	04/20/16 20:15	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.8	2.2	1	04/14/16 16:45	04/20/16 20:15	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.8	0.84	1	04/14/16 16:45	04/20/16 20:15	50-32-8	
Benzo(b)fluoranthene	**8.8**	ug/kg	8.8	0.77	1	04/14/16 16:45	04/20/16 20:15	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.8	1.3	1	04/14/16 16:45	04/20/16 20:15	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.8	0.83	1	04/14/16 16:45	04/20/16 20:15	207-08-9	ip
Chrysene	ND	ug/kg	8.8	0.58	1	04/14/16 16:45	04/20/16 20:15	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.8	1.2	1	04/14/16 16:45	04/20/16 20:15	53-70-3	
Fluoranthene	**19.3**	ug/kg	8.8	0.58	1	04/14/16 16:45	04/20/16 20:15	206-44-0	
Fluorene	**422**	ug/kg	8.8	0.76	1	04/14/16 16:45	04/20/16 20:15	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.8	1.0	1	04/14/16 16:45	04/20/16 20:15	193-39-5	
Phenanthrene	**316**	ug/kg	8.8	0.88	1	04/14/16 16:45	04/20/16 20:15	85-01-8	
Pyrene	**35.0**	ug/kg	8.8	0.71	1	04/14/16 16:45	04/20/16 20:15	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	110	%	35-141		1	04/14/16 16:45	04/20/16 20:15	321-60-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ105 (8.0-10.0) **Lab ID: 30179497012** Collected: 04/12/16 09:00 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Surrogates									
Terphenyl-d14 (S)	98	%	64-141		1	04/14/16 16:45	04/20/16 20:15	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	347	94.5	50	04/15/16 12:00	04/15/16 18:36	71-43-2	1c
n-Butylbenzene	**1160**	ug/kg	347	170	50	04/15/16 12:00	04/15/16 18:36	104-51-8	1c
sec-Butylbenzene	**707**	ug/kg	347	174	50	04/15/16 12:00	04/15/16 18:36	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	347	167	50	04/15/16 12:00	04/15/16 18:36	98-06-6	1c
Ethanol	ND	ug/kg	13900	3940	50	04/15/16 12:00	04/15/16 18:36	64-17-5	1c
Ethylbenzene	ND	ug/kg	347	70.2	50	04/15/16 12:00	04/15/16 18:36	100-41-4	1c
Isopropylbenzene (Cumene)	**812**	ug/kg	347	120	50	04/15/16 12:00	04/15/16 18:36	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	347	147	50	04/15/16 12:00	04/15/16 18:36	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	347	169	50	04/15/16 12:00	04/15/16 18:36	1634-04-4	1c
Naphthalene	ND	ug/kg	347	67.4	50	04/15/16 12:00	04/15/16 18:36	91-20-3	1c
n-Propylbenzene	**2770**	ug/kg	347	122	50	04/15/16 12:00	04/15/16 18:36	103-65-1	1c
Toluene	ND	ug/kg	347	108	50	04/15/16 12:00	04/15/16 18:36	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	347	99.3	50	04/15/16 12:00	04/15/16 18:36	95-63-6	1c
1,3,5-Trimethylbenzene	**394**	ug/kg	347	117	50	04/15/16 12:00	04/15/16 18:36	108-67-8	1c
m&p-Xylene	ND	ug/kg	695	129	50	04/15/16 12:00	04/15/16 18:36	179601-23-1	1c
o-Xylene	ND	ug/kg	347	68.8	50	04/15/16 12:00	04/15/16 18:36	95-47-6	1c
Surrogates									
Toluene-d8 (S)	105	%	68-135		50	04/15/16 12:00	04/15/16 18:36	2037-26-5	
4-Bromofluorobenzene (S)	95	%	65-146		50	04/15/16 12:00	04/15/16 18:36	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	69-137		50	04/15/16 12:00	04/15/16 18:36	17060-07-0	
Dibromofluoromethane (S)	80	%	70-130		50	04/15/16 12:00	04/15/16 18:36	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**23.9**	%	0.10	0.10	1		04/24/16 14:56		

Sample: PZ105 (10.0-12.0) **Lab ID: 30179497013** Collected: 04/12/16 09:20 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**42.4**	ug/kg	9.1	0.80	1	04/14/16 16:45	04/20/16 20:32	83-32-9	
Acenaphthylene	**14.9**	ug/kg	9.1	0.77	1	04/14/16 16:45	04/20/16 20:32	208-96-8	
Anthracene	**13.0**	ug/kg	9.1	0.88	1	04/14/16 16:45	04/20/16 20:32	120-12-7	
Benzo(a)anthracene	ND	ug/kg	9.1	2.3	1	04/14/16 16:45	04/20/16 20:32	56-55-3	
Benzo(a)pyrene	ND	ug/kg	9.1	0.87	1	04/14/16 16:45	04/20/16 20:32	50-32-8	
Benzo(b)fluoranthene	**13.7**	ug/kg	9.1	0.80	1	04/14/16 16:45	04/20/16 20:32	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	9.1	1.4	1	04/14/16 16:45	04/20/16 20:32	191-24-2	
Benzo(k)fluoranthene	**9.2**	ug/kg	9.1	0.86	1	04/14/16 16:45	04/20/16 20:32	207-08-9	ip

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ105 (10.0-12.0) **Lab ID: 30179497013** Collected: 04/12/16 09:20 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Chrysene	ND	ug/kg	9.1	0.60	1	04/14/16 16:45	04/20/16 20:32	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	9.1	1.2	1	04/14/16 16:45	04/20/16 20:32	53-70-3	
Fluoranthene	**13.4**	ug/kg	9.1	0.60	1	04/14/16 16:45	04/20/16 20:32	206-44-0	
Fluorene	**66.9**	ug/kg	9.1	0.79	1	04/14/16 16:45	04/20/16 20:32	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	9.1	1.1	1	04/14/16 16:45	04/20/16 20:32	193-39-5	
Phenanthrene	**66.2**	ug/kg	9.1	0.91	1	04/14/16 16:45	04/20/16 20:32	85-01-8	
Pyrene	**12.4**	ug/kg	9.1	0.73	1	04/14/16 16:45	04/20/16 20:32	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%	35-141		1	04/14/16 16:45	04/20/16 20:32	321-60-8	
Terphenyl-d14 (S)	88	%	64-141		1	04/14/16 16:45	04/20/16 20:32	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	7.0	1.9	1	04/15/16 12:00	04/15/16 16:27	71-43-2	1c
n-Butylbenzene	**173**	ug/kg	7.0	3.4	1	04/15/16 12:00	04/15/16 16:27	104-51-8	1c
sec-Butylbenzene	**150**	ug/kg	7.0	3.5	1	04/15/16 12:00	04/15/16 16:27	135-98-8	1c
tert-Butylbenzene	**48.6**	ug/kg	7.0	3.4	1	04/15/16 12:00	04/15/16 16:27	98-06-6	1c
Ethanol	ND	ug/kg	281	79.6	1	04/15/16 12:00	04/15/16 16:27	64-17-5	1c
Ethylbenzene	**13.5**	ug/kg	7.0	1.4	1	04/15/16 12:00	04/15/16 16:27	100-41-4	1c
Isopropylbenzene (Cumene)	**221**	ug/kg	7.0	2.4	1	04/15/16 12:00	04/15/16 16:27	98-82-8	1c
p-Isopropyltoluene	**62.3**	ug/kg	7.0	3.0	1	04/15/16 12:00	04/15/16 16:27	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	7.0	3.4	1	04/15/16 12:00	04/15/16 16:27	1634-04-4	1c
Naphthalene	ND	ug/kg	7.0	1.4	1	04/15/16 12:00	04/15/16 16:27	91-20-3	1c
n-Propylbenzene	**486**	ug/kg	7.0	2.5	1	04/15/16 12:00	04/15/16 16:27	103-65-1	1c
Toluene	ND	ug/kg	7.0	2.2	1	04/15/16 12:00	04/15/16 16:27	108-88-3	1c
1,2,4-Trimethylbenzene	**257**	ug/kg	7.0	2.0	1	04/15/16 12:00	04/15/16 16:27	95-63-6	1c
1,3,5-Trimethylbenzene	**101**	ug/kg	7.0	2.4	1	04/15/16 12:00	04/15/16 16:27	108-67-8	1c
m&p-Xylene	ND	ug/kg	14.0	2.6	1	04/15/16 12:00	04/15/16 16:27	179601-23-1	1c
o-Xylene	ND	ug/kg	7.0	1.4	1	04/15/16 12:00	04/15/16 16:27	95-47-6	1c
Surrogates									
Toluene-d8 (S)	163	%	68-135		1	04/15/16 12:00	04/15/16 16:27	2037-26-5	S0
4-Bromofluorobenzene (S)	80	%	65-146		1	04/15/16 12:00	04/15/16 16:27	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	69-137		1	04/15/16 12:00	04/15/16 16:27	17060-07-0	
Dibromofluoromethane (S)	73	%	70-130		1	04/15/16 12:00	04/15/16 16:27	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**27.9**	%	0.10	0.10	1		04/24/16 14:57		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ105 (12.0-14.0) **Lab ID: 30179497014** Collected: 04/12/16 09:40 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**204**	ug/kg	8.0	0.71	1	04/14/16 16:45	04/20/16 20:50	83-32-9	
Acenaphthylene	**49.7**	ug/kg	8.0	0.68	1	04/14/16 16:45	04/20/16 20:50	208-96-8	
Anthracene	**53.7**	ug/kg	8.0	0.78	1	04/14/16 16:45	04/20/16 20:50	120-12-7	
Benzo(a)anthracene	**10.7**	ug/kg	8.0	2.0	1	04/14/16 16:45	04/20/16 20:50	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.0	0.77	1	04/14/16 16:45	04/20/16 20:50	50-32-8	
Benzo(b)fluoranthene	**17.3**	ug/kg	8.0	0.71	1	04/14/16 16:45	04/20/16 20:50	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.0	1.2	1	04/14/16 16:45	04/20/16 20:50	191-24-2	
Benzo(k)fluoranthene	**11.9**	ug/kg	8.0	0.75	1	04/14/16 16:45	04/20/16 20:50	207-08-9	ip
Chrysene	**11.2**	ug/kg	8.0	0.53	1	04/14/16 16:45	04/20/16 20:50	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.0	1.1	1	04/14/16 16:45	04/20/16 20:50	53-70-3	
Fluoranthene	**24.1**	ug/kg	8.0	0.53	1	04/14/16 16:45	04/20/16 20:50	206-44-0	
Fluorene	**312**	ug/kg	8.0	0.69	1	04/14/16 16:45	04/20/16 20:50	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.0	0.95	1	04/14/16 16:45	04/20/16 20:50	193-39-5	
Phenanthrene	**325**	ug/kg	8.0	0.80	1	04/14/16 16:45	04/20/16 20:50	85-01-8	
Pyrene	**49.7**	ug/kg	8.0	0.65	1	04/14/16 16:45	04/20/16 20:50	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	98	%	35-141		1	04/14/16 16:45	04/20/16 20:50	321-60-8	
Terphenyl-d14 (S)	94	%	64-141		1	04/14/16 16:45	04/20/16 20:50	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	305	82.9	50	04/20/16 10:47	04/20/16 16:41	71-43-2	1c
n-Butylbenzene	ND	ug/kg	305	149	50	04/20/16 10:47	04/20/16 16:41	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	305	153	50	04/20/16 10:47	04/20/16 16:41	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	305	147	50	04/20/16 10:47	04/20/16 16:41	98-06-6	1c
Ethanol	ND	ug/kg	12200	3450	50	04/20/16 10:47	04/20/16 16:41	64-17-5	1c
Ethylbenzene	ND	ug/kg	305	61.5	50	04/20/16 10:47	04/20/16 16:41	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	305	105	50	04/20/16 10:47	04/20/16 16:41	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	305	129	50	04/20/16 10:47	04/20/16 16:41	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	305	148	50	04/20/16 10:47	04/20/16 16:41	1634-04-4	1c
Naphthalene	ND	ug/kg	305	59.1	50	04/20/16 10:47	04/20/16 16:41	91-20-3	1c
n-Propylbenzene	ND	ug/kg	305	107	50	04/20/16 10:47	04/20/16 16:41	103-65-1	1c
Toluene	ND	ug/kg	305	95.0	50	04/20/16 10:47	04/20/16 16:41	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	305	87.1	50	04/20/16 10:47	04/20/16 16:41	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	305	102	50	04/20/16 10:47	04/20/16 16:41	108-67-8	1c
m&p-Xylene	ND	ug/kg	609	113	50	04/20/16 10:47	04/20/16 16:41	179601-23-1	1c
o-Xylene	ND	ug/kg	305	60.3	50	04/20/16 10:47	04/20/16 16:41	95-47-6	1c
Surrogates									
Toluene-d8 (S)	99	%	68-135		50	04/20/16 10:47	04/20/16 16:41	2037-26-5	
4-Bromofluorobenzene (S)	97	%	65-146		50	04/20/16 10:47	04/20/16 16:41	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	69-137		50	04/20/16 10:47	04/20/16 16:41	17060-07-0	
Dibromofluoromethane (S)	110	%	70-130		50	04/20/16 10:47	04/20/16 16:41	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.6**	%	0.10	0.10	1		04/24/16 14:57		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179497

Sample: PZ105 (14.0-16.0) **Lab ID: 30179497015** Collected: 04/12/16 10:00 Received: 04/13/16 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.8	0.78	1	04/14/16 16:45	04/20/16 21:08	83-32-9	
Acenaphthylene	ND	ug/kg	8.8	0.75	1	04/14/16 16:45	04/20/16 21:08	208-96-8	
Anthracene	ND	ug/kg	8.8	0.86	1	04/14/16 16:45	04/20/16 21:08	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.8	2.3	1	04/14/16 16:45	04/20/16 21:08	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.8	0.84	1	04/14/16 16:45	04/20/16 21:08	50-32-8	
Benzo(b)fluoranthene	**9.5**	ug/kg	8.8	0.78	1	04/14/16 16:45	04/20/16 21:08	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.8	1.4	1	04/14/16 16:45	04/20/16 21:08	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.8	0.83	1	04/14/16 16:45	04/20/16 21:08	207-08-9	ip
Chrysene	ND	ug/kg	8.8	0.58	1	04/14/16 16:45	04/20/16 21:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.8	1.2	1	04/14/16 16:45	04/20/16 21:08	53-70-3	
Fluoranthene	**10.4**	ug/kg	8.8	0.58	1	04/14/16 16:45	04/20/16 21:08	206-44-0	
Fluorene	**14.8**	ug/kg	8.8	0.76	1	04/14/16 16:45	04/20/16 21:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.8	1.0	1	04/14/16 16:45	04/20/16 21:08	193-39-5	
Phenanthrene	**15.7**	ug/kg	8.8	0.88	1	04/14/16 16:45	04/20/16 21:08	85-01-8	
Pyrene	**10.7**	ug/kg	8.8	0.71	1	04/14/16 16:45	04/20/16 21:08	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	65	%	35-141		1	04/14/16 16:45	04/20/16 21:08	321-60-8	
Terphenyl-d14 (S)	86	%	64-141		1	04/14/16 16:45	04/20/16 21:08	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	320	87.0	50	04/20/16 10:47	04/20/16 17:07	71-43-2	1c
n-Butylbenzene	ND	ug/kg	320	157	50	04/20/16 10:47	04/20/16 17:07	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	320	161	50	04/20/16 10:47	04/20/16 17:07	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	320	154	50	04/20/16 10:47	04/20/16 17:07	98-06-6	1c
Ethanol	ND	ug/kg	12800	3630	50	04/20/16 10:47	04/20/16 17:07	64-17-5	1c
Ethylbenzene	ND	ug/kg	320	64.6	50	04/20/16 10:47	04/20/16 17:07	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	320	111	50	04/20/16 10:47	04/20/16 17:07	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	320	136	50	04/20/16 10:47	04/20/16 17:07	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	320	155	50	04/20/16 10:47	04/20/16 17:07	1634-04-4	1c
Naphthalene	ND	ug/kg	320	62.0	50	04/20/16 10:47	04/20/16 17:07	91-20-3	1c
n-Propylbenzene	ND	ug/kg	320	112	50	04/20/16 10:47	04/20/16 17:07	103-65-1	1c
Toluene	ND	ug/kg	320	99.8	50	04/20/16 10:47	04/20/16 17:07	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	320	91.4	50	04/20/16 10:47	04/20/16 17:07	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	320	107	50	04/20/16 10:47	04/20/16 17:07	108-67-8	1c
m&p-Xylene	ND	ug/kg	639	118	50	04/20/16 10:47	04/20/16 17:07	179601-23-1	1c
o-Xylene	ND	ug/kg	320	63.3	50	04/20/16 10:47	04/20/16 17:07	95-47-6	1c
Surrogates									
Toluene-d8 (S)	99	%	68-135		50	04/20/16 10:47	04/20/16 17:07	2037-26-5	
4-Bromofluorobenzene (S)	99	%	65-146		50	04/20/16 10:47	04/20/16 17:07	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	69-137		50	04/20/16 10:47	04/20/16 17:07	17060-07-0	
Dibromofluoromethane (S)	107	%	70-130		50	04/20/16 10:47	04/20/16 17:07	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.4**	%	0.10	0.10	1		04/24/16 14:58		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

QC Batch: MSV/28072 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179497002, 30179497007, 30179497009, 30179497010, 30179497013

METHOD BLANK: 1059594 Matrix: Solid
Associated Lab Samples: 30179497002, 30179497007, 30179497009, 30179497010, 30179497013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	1.4	04/15/16 12:24	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.7	04/15/16 12:24	
Benzene	ug/kg	ND	5.0	1.4	04/15/16 12:24	
Ethanol	ug/kg	ND	200	56.7	04/15/16 12:24	
Ethylbenzene	ug/kg	ND	5.0	1.0	04/15/16 12:24	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.7	04/15/16 12:24	
m&p-Xylene	ug/kg	ND	10.0	1.8	04/15/16 12:24	
Methyl-tert-butyl ether	ug/kg	ND	5.0	2.4	04/15/16 12:24	
n-Butylbenzene	ug/kg	ND	5.0	2.4	04/15/16 12:24	
n-Propylbenzene	ug/kg	ND	5.0	1.8	04/15/16 12:24	
Naphthalene	ug/kg	ND	5.0	0.97	04/15/16 12:24	
o-Xylene	ug/kg	ND	5.0	0.99	04/15/16 12:24	
p-Isopropyltoluene	ug/kg	ND	5.0	2.1	04/15/16 12:24	
sec-Butylbenzene	ug/kg	ND	5.0	2.5	04/15/16 12:24	
tert-Butylbenzene	ug/kg	ND	5.0	2.4	04/15/16 12:24	
Toluene	ug/kg	ND	5.0	1.6	04/15/16 12:24	
1,2-Dichloroethane-d4 (S)	%	103	69-137		04/15/16 12:24	
4-Bromofluorobenzene (S)	%	99	65-146		04/15/16 12:24	
Dibromofluoromethane (S)	%	93	70-130		04/15/16 12:24	
Toluene-d8 (S)	%	99	68-135		04/15/16 12:24	

LABORATORY CONTROL SAMPLE: 1059595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	19.5	98	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	19.6	98	74-129	
Benzene	ug/kg	20	19.0	95	71-137	
Ethanol	ug/kg	200	191J	95	23-168	
Ethylbenzene	ug/kg	20	18.9	94	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	19.0	95	78-133	
m&p-Xylene	ug/kg	40	37.8	95	77-129	
Methyl-tert-butyl ether	ug/kg	20	16.2	81	77-141	
n-Butylbenzene	ug/kg	20	18.6	93	74-140	
n-Propylbenzene	ug/kg	20	21.0	105	70-140	
Naphthalene	ug/kg	20	17.5	88	81-126	
o-Xylene	ug/kg	20	18.9	95	80-125	
p-Isopropyltoluene	ug/kg	20	19.0	95	74-136	
sec-Butylbenzene	ug/kg	20	18.5	92	81-132	
tert-Butylbenzene	ug/kg	20	19.3	97	77-129	
Toluene	ug/kg	20	19.4	97	72-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

LABORATORY CONTROL SAMPLE: 1059595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			96	69-137	
4-Bromofluorobenzene (S)	%			101	65-146	
Dibromofluoromethane (S)	%			95	70-130	
Toluene-d8 (S)	%			103	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

QC Batch: MSV/28073 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179497001, 30179497003, 30179497012

METHOD BLANK: 1059596 Matrix: Solid
Associated Lab Samples: 30179497001, 30179497003, 30179497012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	250	71.5	04/15/16 11:58	
1,3,5-Trimethylbenzene	ug/kg	ND	250	84.0	04/15/16 11:58	
Benzene	ug/kg	ND	250	68.0	04/15/16 11:58	
Ethanol	ug/kg	ND	10000	2840	04/15/16 11:58	
Ethylbenzene	ug/kg	ND	250	50.5	04/15/16 11:58	
Isopropylbenzene (Cumene)	ug/kg	ND	250	86.5	04/15/16 11:58	
m&p-Xylene	ug/kg	ND	500	92.5	04/15/16 11:58	
Methyl-tert-butyl ether	ug/kg	ND	250	122	04/15/16 11:58	
n-Butylbenzene	ug/kg	ND	250	122	04/15/16 11:58	
n-Propylbenzene	ug/kg	ND	250	87.5	04/15/16 11:58	
Naphthalene	ug/kg	ND	250	48.5	04/15/16 11:58	
o-Xylene	ug/kg	ND	250	49.5	04/15/16 11:58	
p-Isopropyltoluene	ug/kg	ND	250	106	04/15/16 11:58	
sec-Butylbenzene	ug/kg	ND	250	126	04/15/16 11:58	
tert-Butylbenzene	ug/kg	ND	250	120	04/15/16 11:58	
Toluene	ug/kg	ND	250	78.0	04/15/16 11:58	
1,2-Dichloroethane-d4 (S)	%	100	69-137		04/15/16 11:58	
4-Bromofluorobenzene (S)	%	100	65-146		04/15/16 11:58	
Dibromofluoromethane (S)	%	83	70-130		04/15/16 11:58	
Toluene-d8 (S)	%	100	68-135		04/15/16 11:58	

LABORATORY CONTROL SAMPLE: 1059597

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	19.5	98	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	19.6	98	74-129	
Benzene	ug/kg	20	19.0	95	71-137	
Ethanol	ug/kg	200	191J	95	23-168	
Ethylbenzene	ug/kg	20	18.9	94	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	19.0	95	78-133	
m&p-Xylene	ug/kg	40	37.8	95	77-129	
Methyl-tert-butyl ether	ug/kg	20	16.2	81	77-141	
n-Butylbenzene	ug/kg	20	18.6	93	74-140	
n-Propylbenzene	ug/kg	20	21.0	105	70-140	
Naphthalene	ug/kg	20	17.5	88	81-126	
o-Xylene	ug/kg	20	18.9	95	80-125	
p-Isopropyltoluene	ug/kg	20	19.0	95	74-136	
sec-Butylbenzene	ug/kg	20	18.5	92	81-132	
tert-Butylbenzene	ug/kg	20	19.3	97	77-129	
Toluene	ug/kg	20	19.4	97	72-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

LABORATORY CONTROL SAMPLE: 1059597

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			96	69-137	
4-Bromofluorobenzene (S)	%			101	65-146	
Dibromofluoromethane (S)	%			95	70-130	
Toluene-d8 (S)	%			103	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

QC Batch: MSV/28133 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179497004, 30179497008

METHOD BLANK: 1061629 Matrix: Solid
Associated Lab Samples: 30179497004, 30179497008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	1.4	04/20/16 11:26	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.7	04/20/16 11:26	
Benzene	ug/kg	ND	5.0	1.4	04/20/16 11:26	
Ethanol	ug/kg	ND	200	56.7	04/20/16 11:26	
Ethylbenzene	ug/kg	ND	5.0	1.0	04/20/16 11:26	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.7	04/20/16 11:26	
m&p-Xylene	ug/kg	ND	10.0	1.8	04/20/16 11:26	
Methyl-tert-butyl ether	ug/kg	ND	5.0	2.4	04/20/16 11:26	
n-Butylbenzene	ug/kg	ND	5.0	2.4	04/20/16 11:26	
n-Propylbenzene	ug/kg	ND	5.0	1.8	04/20/16 11:26	
Naphthalene	ug/kg	ND	5.0	0.97	04/20/16 11:26	
o-Xylene	ug/kg	ND	5.0	0.99	04/20/16 11:26	
p-Isopropyltoluene	ug/kg	ND	5.0	2.1	04/20/16 11:26	
sec-Butylbenzene	ug/kg	ND	5.0	2.5	04/20/16 11:26	
tert-Butylbenzene	ug/kg	ND	5.0	2.4	04/20/16 11:26	
Toluene	ug/kg	ND	5.0	1.6	04/20/16 11:26	
1,2-Dichloroethane-d4 (S)	%	103	69-137		04/20/16 11:26	
4-Bromofluorobenzene (S)	%	100	65-146		04/20/16 11:26	
Dibromofluoromethane (S)	%	109	70-130		04/20/16 11:26	
Toluene-d8 (S)	%	99	68-135		04/20/16 11:26	

LABORATORY CONTROL SAMPLE: 1061630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	18.9	94	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	18.6	93	74-129	
Benzene	ug/kg	20	20.3	102	71-137	
Ethanol	ug/kg	200	92.4J	46	23-168	
Ethylbenzene	ug/kg	20	18.4	92	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	18.9	94	78-133	
m&p-Xylene	ug/kg	40	38.1	95	77-129	
Methyl-tert-butyl ether	ug/kg	20	20.6	103	77-141	
n-Butylbenzene	ug/kg	20	19.1	96	74-140	
n-Propylbenzene	ug/kg	20	18.8	94	70-140	
Naphthalene	ug/kg	20	18.1	90	81-126	
o-Xylene	ug/kg	20	18.7	94	80-125	
p-Isopropyltoluene	ug/kg	20	19.3	96	74-136	
sec-Butylbenzene	ug/kg	20	18.9	95	81-132	
tert-Butylbenzene	ug/kg	20	19.0	95	77-129	
Toluene	ug/kg	20	18.7	94	72-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

LABORATORY CONTROL SAMPLE: 1061630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			95	69-137	
4-Bromofluorobenzene (S)	%			100	65-146	
Dibromofluoromethane (S)	%			101	70-130	
Toluene-d8 (S)	%			95	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

QC Batch: MSV/28134 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179497002, 30179497005, 30179497006, 30179497014, 30179497015

METHOD BLANK: 1061632 Matrix: Solid
Associated Lab Samples: 30179497002, 30179497005, 30179497006, 30179497014, 30179497015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	250	71.5	04/20/16 11:00	
1,3,5-Trimethylbenzene	ug/kg	ND	250	84.0	04/20/16 11:00	
Benzene	ug/kg	ND	250	68.0	04/20/16 11:00	
Ethanol	ug/kg	ND	10000	2840	04/20/16 11:00	
Ethylbenzene	ug/kg	ND	250	50.5	04/20/16 11:00	
Isopropylbenzene (Cumene)	ug/kg	ND	250	86.5	04/20/16 11:00	
m&p-Xylene	ug/kg	ND	500	92.5	04/20/16 11:00	
Methyl-tert-butyl ether	ug/kg	ND	250	122	04/20/16 11:00	
n-Butylbenzene	ug/kg	ND	250	122	04/20/16 11:00	
n-Propylbenzene	ug/kg	ND	250	87.5	04/20/16 11:00	
Naphthalene	ug/kg	ND	250	48.5	04/20/16 11:00	
o-Xylene	ug/kg	ND	250	49.5	04/20/16 11:00	
p-Isopropyltoluene	ug/kg	ND	250	106	04/20/16 11:00	
sec-Butylbenzene	ug/kg	ND	250	126	04/20/16 11:00	
tert-Butylbenzene	ug/kg	ND	250	120	04/20/16 11:00	
Toluene	ug/kg	ND	250	78.0	04/20/16 11:00	
1,2-Dichloroethane-d4 (S)	%	102	69-137		04/20/16 11:00	
4-Bromofluorobenzene (S)	%	105	65-146		04/20/16 11:00	
Dibromofluoromethane (S)	%	113	70-130		04/20/16 11:00	
Toluene-d8 (S)	%	97	68-135		04/20/16 11:00	

LABORATORY CONTROL SAMPLE: 1061633

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	18.9	94	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	18.6	93	74-129	
Benzene	ug/kg	20	20.3	102	71-137	
Ethanol	ug/kg	200	92.4J	46	23-168	
Ethylbenzene	ug/kg	20	18.4	92	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	18.9	94	78-133	
m&p-Xylene	ug/kg	40	38.1	95	77-129	
Methyl-tert-butyl ether	ug/kg	20	20.6	103	77-141	
n-Butylbenzene	ug/kg	20	19.1	96	74-140	
n-Propylbenzene	ug/kg	20	18.8	94	70-140	
Naphthalene	ug/kg	20	18.1	90	81-126	
o-Xylene	ug/kg	20	18.7	94	80-125	
p-Isopropyltoluene	ug/kg	20	19.3	96	74-136	
sec-Butylbenzene	ug/kg	20	18.9	95	81-132	
tert-Butylbenzene	ug/kg	20	19.0	95	77-129	
Toluene	ug/kg	20	18.7	94	72-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

LABORATORY CONTROL SAMPLE: 1061633

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			95	69-137	
4-Bromofluorobenzene (S)	%			100	65-146	
Dibromofluoromethane (S)	%			101	70-130	
Toluene-d8 (S)	%			95	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

QC Batch: MSV/28161
QC Batch Method: EPA 8260C
Analysis Method: EPA 8260C
Analysis Description: 8260C MSV
Associated Lab Samples: 30179497011

METHOD BLANK: 1062367
Matrix: Water
Associated Lab Samples: 30179497011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.12	04/21/16 13:49	M5
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.12	04/21/16 13:49	M5
Benzene	ug/L	ND	1.0	0.16	04/21/16 13:49	M5
Ethanol	ug/L	ND	200	26.1	04/21/16 13:49	M5
Ethylbenzene	ug/L	ND	1.0	0.23	04/21/16 13:49	M5
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.14	04/21/16 13:49	M5
m&p-Xylene	ug/L	ND	2.0	0.32	04/21/16 13:49	M5
Methyl-tert-butyl ether	ug/L	ND	1.0	0.17	04/21/16 13:49	M5
n-Butylbenzene	ug/L	ND	1.0	0.15	04/21/16 13:49	M5
n-Propylbenzene	ug/L	ND	1.0	0.15	04/21/16 13:49	M5
Naphthalene	ug/L	ND	2.0	0.19	04/21/16 13:49	M5
o-Xylene	ug/L	ND	1.0	0.22	04/21/16 13:49	M5
p-Isopropyltoluene	ug/L	ND	1.0	0.22	04/21/16 13:49	M5
sec-Butylbenzene	ug/L	ND	1.0	0.21	04/21/16 13:49	M5
tert-Butylbenzene	ug/L	ND	1.0	0.19	04/21/16 13:49	M5
Toluene	ug/L	ND	1.0	0.13	04/21/16 13:49	M5
1,2-Dichloroethane-d4 (S)	%	119	77-126		04/21/16 13:49	M5
4-Bromofluorobenzene (S)	%	99	81-119		04/21/16 13:49	M5
Dibromofluoromethane (S)	%	111	70-130		04/21/16 13:49	M5
Toluene-d8 (S)	%	102	84-115		04/21/16 13:49	M5

LABORATORY CONTROL SAMPLE: 1062368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	16.8	84	75-128	M5
1,3,5-Trimethylbenzene	ug/L	20	16.8	84	74-125	M5
Benzene	ug/L	20	18.0	90	69-115	M5
Ethanol	ug/L	200	323	162	10-175	M5
Ethylbenzene	ug/L	20	18.2	91	71-116	M5
Isopropylbenzene (Cumene)	ug/L	20	17.2	86	79-121	M5
m&p-Xylene	ug/L	40	36.7	92	74-118	M5
Methyl-tert-butyl ether	ug/L	20	18.5	93	83-140	M5
n-Butylbenzene	ug/L	20	17.1	86	64-128	M5
n-Propylbenzene	ug/L	20	17.2	86	70-123	M5
Naphthalene	ug/L	20	17.6	88	64-140	M5
o-Xylene	ug/L	20	18.6	93	71-119	M5
p-Isopropyltoluene	ug/L	20	18.1	90	68-129	M5
sec-Butylbenzene	ug/L	20	17.6	88	70-126	M5
tert-Butylbenzene	ug/L	20	18.0	90	72-123	M5
Toluene	ug/L	20	17.8	89	70-115	M5

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

LABORATORY CONTROL SAMPLE: 1062368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			114	77-126	M5
4-Bromofluorobenzene (S)	%			103	81-119	M5
Dibromofluoromethane (S)	%			110	70-130	M5
Toluene-d8 (S)	%			96	84-115	M5

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

QC Batch: OEXT/28083 Analysis Method: EPA 8270D by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270D/3546 MSSV PAH by SIM
Associated Lab Samples: 30179497001, 30179497002, 30179497003, 30179497004, 30179497005, 30179497006, 30179497007, 30179497008, 30179497009, 30179497010, 30179497012, 30179497013, 30179497014, 30179497015

METHOD BLANK: 1058790 Matrix: Solid
Associated Lab Samples: 30179497001, 30179497002, 30179497003, 30179497004, 30179497005, 30179497006, 30179497007, 30179497008, 30179497009, 30179497010, 30179497012, 30179497013, 30179497014, 30179497015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	6.7	0.59	04/18/16 12:41	
Acenaphthylene	ug/kg	ND	6.7	0.57	04/18/16 12:41	
Anthracene	ug/kg	ND	6.7	0.65	04/18/16 12:41	
Benzo(a)anthracene	ug/kg	ND	6.7	1.7	04/18/16 12:41	
Benzo(a)pyrene	ug/kg	ND	6.7	0.64	04/18/16 12:41	
Benzo(b)fluoranthene	ug/kg	ND	6.7	0.59	04/18/16 12:41	
Benzo(g,h,i)perylene	ug/kg	ND	6.7	1.0	04/18/16 12:41	
Benzo(k)fluoranthene	ug/kg	ND	6.7	0.63	04/18/16 12:41	
Chrysene	ug/kg	ND	6.7	0.44	04/18/16 12:41	
Dibenz(a,h)anthracene	ug/kg	ND	6.7	0.88	04/18/16 12:41	
Fluoranthene	ug/kg	ND	6.7	0.44	04/18/16 12:41	
Fluorene	ug/kg	ND	6.7	0.58	04/18/16 12:41	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	6.7	0.79	04/18/16 12:41	
Phenanthrene	ug/kg	ND	6.7	0.67	04/18/16 12:41	
Pyrene	ug/kg	ND	6.7	0.54	04/18/16 12:41	
2-Fluorobiphenyl (S)	%	69	35-141		04/18/16 12:41	
Terphenyl-d14 (S)	%	102	64-141		04/18/16 12:41	

LABORATORY CONTROL SAMPLE: 1058791

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	133	107	80	43-113	
Acenaphthylene	ug/kg	133	96.3	72	41-114	
Anthracene	ug/kg	133	124	93	59-115	
Benzo(a)anthracene	ug/kg	133	132	99	62-122	
Benzo(a)pyrene	ug/kg	133	125	94	56-113	
Benzo(b)fluoranthene	ug/kg	133	116	87	43-138	
Benzo(g,h,i)perylene	ug/kg	133	110	82	47-143	
Benzo(k)fluoranthene	ug/kg	133	111	83	52-138	
Chrysene	ug/kg	133	130	98	64-119	
Dibenz(a,h)anthracene	ug/kg	133	128	96	59-133	
Fluoranthene	ug/kg	133	132	99	64-122	
Fluorene	ug/kg	133	107	80	46-114	
Indeno(1,2,3-cd)pyrene	ug/kg	133	118	88	59-132	
Phenanthrene	ug/kg	133	117	88	42-122	
Pyrene	ug/kg	133	132	99	64-117	
2-Fluorobiphenyl (S)	%			69	35-141	
Terphenyl-d14 (S)	%			98	64-141	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1058792 1058793

Parameter	Units	30179497001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	87.0	161	159	365	216	173	81	43-113	51	20	M1,R1
Acenaphthylene	ug/kg	42.5	161	159	180	116	86	46	41-114	43	20	R1
Anthracene	ug/kg	71.1	161	159	214	232	89	101	59-115	8	20	
Benzo(a)anthracene	ug/kg	36.1	161	159	209	158	108	76	62-122	28	20	R1
Benzo(a)pyrene	ug/kg	22.7	161	159	154	169	82	92	56-113	9	20	
Benzo(b)fluoranthene	ug/kg	57.6	161	159	156	168	62	69	43-138	7	20	
Benzo(g,h,i)perylene	ug/kg	10.8	161	159	102	116	57	66	47-143	13	20	
Benzo(k)fluoranthene	ug/kg	38.7	161	159	130	142	57	64	52-138	8	20	
Chrysene	ug/kg	31.9	161	159	186	138	96	66	64-119	30	20	R1
Dibenz(a,h)anthracene	ug/kg	ND	161	159	117	140	71	86	59-133	18	20	
Fluoranthene	ug/kg	94.8	161	159	256	208	101	71	64-122	21	20	R1
Fluorene	ug/kg	96.4	161	159	372	237	172	88	46-114	44	20	M1,R1
Indeno(1,2,3-cd)pyrene	ug/kg	8.9	161	159	116	137	67	80	59-132	17	20	
Phenanthrene	ug/kg	258	161	159	556	455	186	124	42-122	20	20	M1
Pyrene	ug/kg	142	161	159	324	247	114	66	64-117	27	20	R1
2-Fluorobiphenyl (S)	%						88	57	35-141			
Terphenyl-d14 (S)	%						85	84	64-141			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179497

QC Batch: PMST/6091 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30179497001, 30179497002, 30179497003, 30179497004, 30179497005, 30179497006, 30179497007, 30179497008, 30179497009, 30179497010, 30179497012, 30179497013, 30179497014, 30179497015

SAMPLE DUPLICATE: 1064071

Parameter	Units	30179497001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.8	18.6	4	20	

SAMPLE DUPLICATE: 1064072

Parameter	Units	30179497002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	22.2	21.1	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Lysander, NY
Pace Project No.: 30179497

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: MSV/28072

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28073

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28133

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28134

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28161

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
2c	The result from the medium level analysis did not match the neat analysis. Sample heterogeneity is suspected.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
R1	RPD value was outside control limits.

Pace Analytical Services, Inc.
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(724)850-5600

QUALIFIERS

Project: Lysander, NY
Pace Project No.: 30179497

ANALYTE QUALIFIERS

S0	Surrogate recovery outside laboratory control limits.
ip	Benzo(b)fluoranthene and benzo(k)fluoranthene were separated in the check standard but did not meet the resolution criteria in SW846 Method 8270D. Whereas sample results included are reported as individual isomers, the lab and the customer must recognize them as an isomeric pair.

Pace Analytical Services, Inc.
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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lysander, NY
Pace Project No.: 30179497

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30179497001	**PZ104 (8.0-10.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497002	**PZ104 (10.0-12.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497003	**PZ104 (12.0-14.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497004	**PZ104 (14.0-16.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497005	**PZ104 (16.0-18.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497006	**PZ104 (18.0-20.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497007	**PZ104 (20.0-22.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497008	**PZ104 (22.0-24.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497009	**PZ104 (24.0-26.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497010	**PZ104 (26.0-26.7)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497012	**PZ105 (8.0-10.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497013	**PZ105 (10.0-12.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497014	**PZ105 (12.0-14.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497015	**PZ105 (14.0-16.0)**	EPA 3546	OEXT/28083	EPA 8270D by SIM	MSSV/9257
30179497001	**PZ104 (8.0-10.0)**	EPA 5035A	MSV/28073	EPA 8260C	MSV/28089
30179497002	**PZ104 (10.0-12.0)**	EPA 5035A	MSV/28072	EPA 8260C	MSV/28088
30179497002	**PZ104 (10.0-12.0)**	EPA 5035A	MSV/28134	EPA 8260C	MSV/28146
30179497003	**PZ104 (12.0-14.0)**	EPA 5035A	MSV/28073	EPA 8260C	MSV/28089
30179497004	**PZ104 (14.0-16.0)**	EPA 5035A	MSV/28133	EPA 8260C	MSV/28147
30179497005	**PZ104 (16.0-18.0)**	EPA 5035A	MSV/28134	EPA 8260C	MSV/28146
30179497006	**PZ104 (18.0-20.0)**	EPA 5035A	MSV/28134	EPA 8260C	MSV/28146
30179497007	**PZ104 (20.0-22.0)**	EPA 5035A	MSV/28072	EPA 8260C	MSV/28088
30179497008	**PZ104 (22.0-24.0)**	EPA 5035A	MSV/28133	EPA 8260C	MSV/28147
30179497009	**PZ104 (24.0-26.0)**	EPA 5035A	MSV/28072	EPA 8260C	MSV/28088
30179497010	**PZ104 (26.0-26.7)**	EPA 5035A	MSV/28072	EPA 8260C	MSV/28088
30179497012	**PZ105 (8.0-10.0)**	EPA 5035A	MSV/28073	EPA 8260C	MSV/28089
30179497013	**PZ105 (10.0-12.0)**	EPA 5035A	MSV/28072	EPA 8260C	MSV/28088
30179497014	**PZ105 (12.0-14.0)**	EPA 5035A	MSV/28134	EPA 8260C	MSV/28146
30179497015	**PZ105 (14.0-16.0)**	EPA 5035A	MSV/28134	EPA 8260C	MSV/28146
30179497011	**TRIP BLANK**	EPA 8260C	MSV/28161		
30179497001	**PZ104 (8.0-10.0)**	ASTM D2974-87	PMST/6091		
30179497002	**PZ104 (10.0-12.0)**	ASTM D2974-87	PMST/6091		
30179497003	**PZ104 (12.0-14.0)**	ASTM D2974-87	PMST/6091		
30179497004	**PZ104 (14.0-16.0)**	ASTM D2974-87	PMST/6091		
30179497005	**PZ104 (16.0-18.0)**	ASTM D2974-87	PMST/6091		
30179497006	**PZ104 (18.0-20.0)**	ASTM D2974-87	PMST/6091		
30179497007	**PZ104 (20.0-22.0)**	ASTM D2974-87	PMST/6091		
30179497008	**PZ104 (22.0-24.0)**	ASTM D2974-87	PMST/6091		
30179497009	**PZ104 (24.0-26.0)**	ASTM D2974-87	PMST/6091		
30179497010	**PZ104 (26.0-26.7)**	ASTM D2974-87	PMST/6091		
30179497012	**PZ105 (8.0-10.0)**	ASTM D2974-87	PMST/6091		
30179497013	**PZ105 (10.0-12.0)**	ASTM D2974-87	PMST/6091		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lysander, NY
Pace Project No.: 30179497

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30179497014	**PZ105 (12.0-14.0)**	ASTM D2974-87	PMST/6091		
30179497015	**PZ105 (14.0-16.0)**	ASTM D2974-87	PMST/6091		

bp rm

Laboratory Management Program LaMP Chain of Custody Record 30179497

Page 1 of 2

BP Site Node Path: _____ Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X

BP Facility No: _____ Lab Work Order Number: _____

Lab Name: Pace Analytical Serices	Facility Address: 7430 Hillside Rd,	Consultant/Contractor: Arcadis
Lab Address: 1638 Roseytown Rd, Greensburg, PA 15601	City, State, ZIP Code: Lysand	Consultant/Contractor Project No:
Lab PM: Tina Sayer	Lead Regulatory Agency: NYS	Address: B0090004.0002.00001
Lab Phone: 317-228-3127	California Global ID No.:	Consultant/Contractor PM: Vin Maresco
Lab Shipping A Yes	Enfos Proposal No:	Phone: 315-671-9256 Email: vin.maresco@arcadis.com
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor ___

BP Project Manager (PM): John A. Frankenthal

BP PM Phone: 312.809.4117

BP PM Email: John.Frankenthal@bp.com

Report Type & QC Level: Standard ___ Full Data Package ___

WO#:30179497

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Water / Liquid	Air / Vapor	Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: CP-51 listed vols for via 8260	MTBE	Ethanol	CP-51 listed semi-vols for via 8270	
	PZ104 (8.0 - 10.0)	4/11/16	0925	X					2					X	X	X	X	001
	PZ104 (10.0 - 12.0)		0935	X					2									002
	PZ104 (12.0 - 14.0)		0940	X					2									003
	PZ104 (14.0 - 16.0)		0955	X					2									004
	PZ104 (16.0 - 18.0)		1005	X					2									005
	PZ104 (18.0 - 20.0)		1015	X					2									006
	PZ104 (20.0 - 22.0)		1030	X					2									007
	PZ104 (22.0 - 24.0)		1040	X					2									008
	PZ104 (24.0 - 26.0)		1050	X					2									009
	PZ104 (26.0 - 26.7)	↓	1115	X					2					↓	↓	↓	↓	010

Sampler's Name: Ethan Ulm	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: ARCADIS	Ethan Ulm / ARCADIS	4/11/16	1600	Phil Flm / Pace	4/12/16	1600
Shipment Method: courier pick up Ship Date:	Phil Flm / Pace	4/12/16	1700	Ashley Lovell / Pace	4/13/16	0920
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

bp rm

Laboratory Management Program LaMP Chain of Custody Record

30179497

~~30179497~~ Page 2 of 2

RCE 4/13/16

BP Site Node Path: _____ Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X

BP Facility No: _____ Lab Work Order Number: _____

Lab Name: Pace Analytical Serices	Facility Address: 7430 Hillside Rd,	Consultant/Contractor: Arcadis
Lab Address: 1638 Roseytown Rd, Greensburg, PA 15601	City, State, ZIP Code: Lysand	Consultant/Contractor Project No:
Lab PM: Tina Sayer	Lead Regulatory Agency: NYS	Address: B0090004.0002.00001
Lab Phone: 317-228-3127	California Global ID No.:	Consultant/Contractor PM: Vin Maresco
Lab Shipping A Yes	Enfos Proposal No:	Phone: 315-671-9256 Email: vin.maresco@arcadis.com
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor ___

BP Project Manager (PM): John A. Frankenthal

BP PM Phone: 312.809.4117

BP PM Email: John.Frankenthal@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: CP-51 listed vols for via 8260	MTBE	Ethanol	CP-51 listed semi-vols for via 8270	Report Type & QC Level: Comments
	TRIP BLANK	4/11/16	—		X							2		X	X	X	X	011
	PZ105 (8.0-10.0)	4/12/16	0900	X					2					X	X	X	X	012
	PZ105 (10.0-12.0)	4/12/16	0920	X					2					X	X	X	X	013
	PZ105 (12.0-14.0)	4/12/16	0940	X					2					X	X	X	X	014
	PZ105 (14.0-16.0)	4/12/16	1000	X					2					X	X	X	X	015

Report Type & QC Level: Standard ___ Full Data Package ___

Comments: Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Ethan Ulm						
Sampler's Company: ARCADIS	[signature] / ARCADIS	4/12/16	1600	[signature] / ARCADIS	4/12/16	1600
Shipment Method: Courier pick up Ship Date:	Phil Flu / Pace	4/12/16	1700	[signature] / Pace	4/13/16	0920
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Sample Condition Upon Receipt

30179497

Pace Analytical

Client Name: Buckeye Arcadis Project #

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 776091314460

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☐ yes ☐ no Biological Tissue Is Frozen: Yes No

Packing Material: Bubble Wrap ___ Bubble Bags 1 None ___ Other

Thermometer Used 6 Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temp.: Observed Temp.: 3.6 °C Correction Factor: 0.0 °C Final Temp: 3.6 °C

Date and initials of person examining contents: AMB 04/13/16

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SL/WT		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	Initial when completed AMB Lot # of added preservative
exceptions: (VOA), coliform, TOC, O&G, Phenols	☑Yes ☐No	
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☑Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Date: 4/14/16

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 29, 2016

Vin Maresco
Arcadis
6723 Towpath Road
Syracuse, NY 13214

RE: Project: Lysander, NY
Pace Project No.: 30179921

Dear Vin Maresco:
Enclosed are the analytical results for sample(s) received by the laboratory on April 15, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rachel D Christner

Rachel Christner
rachel.christner@pacelabs.com
Project Manager

Enclosures

cc: Mr. Edward Mason, Arcadis

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Lysander, NY
Pace Project No.: 30179921

Pennsylvania Certification IDs

Georgia Certification #: C040
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Lysander, NY
Pace Project No.: 30179921

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30179921001	**PZ106(4.0-6.0)**	Solid	04/13/16 09:35	04/15/16 09:30
30179921002	**PZ106(6.0-8.0)**	Solid	04/13/16 09:45	04/15/16 09:30
30179921003	**PZ106(8.0-10.0)**	Solid	04/13/16 09:55	04/15/16 09:30
30179921004	**PZ106(10.0-12.0)**	Solid	04/13/16 10:00	04/15/16 09:30
30179921005	**TRIP BLANK**	Water	04/13/16 00:00	04/15/16 09:30
30179921006	**PZ103(6.0-8.0)**	Solid	04/13/16 14:10	04/15/16 09:30
30179921007	**PZ103(8.0-10.0)**	Solid	04/13/16 14:15	04/15/16 09:30
30179921008	**PZ103(10.0-12.0)**	Solid	04/13/16 14:20	04/15/16 09:30
30179921009	**PZ103(12.0-14.0)**	Solid	04/13/16 14:30	04/15/16 09:30
30179921010	**PZ103(14.0-16.0)**	Solid	04/13/16 14:40	04/15/16 09:30
30179921011	**PZ103(16.0-18.0)**	Solid	04/13/16 14:45	04/15/16 09:30
30179921012	**PZ103(18.0-20.0)**	Solid	04/13/16 15:00	04/15/16 09:30
30179921013	**PZ103(20.0-22.0)**	Solid	04/13/16 15:05	04/15/16 09:30
30179921014	**PZ103(22.0-24.0)**	Solid	04/13/16 15:15	04/15/16 09:30
30179921015	**PZ102(6.0-8.0)**	Solid	04/14/16 11:40	04/15/16 09:30
30179921016	**PZ102(8.0-10.0)**	Solid	04/14/16 11:50	04/15/16 09:30
30179921017	**PZ102(10.0-12.0)**	Solid	04/14/16 13:00	04/15/16 09:30
30179921018	**PZ102(12.0-14.0)**	Solid	04/14/16 13:10	04/15/16 09:30
30179921019	**PZ102(14.0-16.0)**	Solid	04/14/16 13:30	04/15/16 09:30
30179921020	**PZ102(16.0-18.0)**	Solid	04/14/16 13:40	04/15/16 09:30
30179921021	**PZ102(18.0-20.0)**	Solid	04/14/16 13:50	04/15/16 09:30
30179921022	**PZ102(20.0-22.0)**	Solid	04/14/16 14:00	04/15/16 09:30
30179921023	**PZ102(22.0-24.0)**	Solid	04/14/16 14:15	04/15/16 09:30
30179921024	**PZ102(4.0-6.0)**	Solid	04/14/16 11:30	04/15/16 09:30

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Lysander, NY
Pace Project No.: 30179921

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30179921001	**PZ106(4.0-6.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921002	**PZ106(6.0-8.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921003	**PZ106(8.0-10.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921004	**PZ106(10.0-12.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921005	**TRIP BLANK**	EPA 8260C	LEL	20	PASI-PA
30179921006	**PZ103(6.0-8.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921007	**PZ103(8.0-10.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921008	**PZ103(10.0-12.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921009	**PZ103(12.0-14.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921010	**PZ103(14.0-16.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921011	**PZ103(16.0-18.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921012	**PZ103(18.0-20.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921013	**PZ103(20.0-22.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Lysander, NY
Pace Project No.: 30179921

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30179921014	**PZ103(22.0-24.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921015	**PZ102(6.0-8.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921016	**PZ102(8.0-10.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921017	**PZ102(10.0-12.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921018	**PZ102(12.0-14.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921019	**PZ102(14.0-16.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	19	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921020	**PZ102(16.0-18.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921021	**PZ102(18.0-20.0)**	EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921022	**PZ102(20.0-22.0)**	EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921023	**PZ102(22.0-24.0)**	EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30179921024	**PZ102(4.0-6.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ106(4.0-6.0) **Lab ID: 30179921001** Collected: 04/13/16 09:35 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.1	0.71	1	04/19/16 17:30	04/20/16 17:58	83-32-9	
Acenaphthylene	ND	ug/kg	8.1	0.69	1	04/19/16 17:30	04/20/16 17:58	208-96-8	
Anthracene	ND	ug/kg	8.1	0.78	1	04/19/16 17:30	04/20/16 17:58	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.1	2.1	1	04/19/16 17:30	04/20/16 17:58	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.1	0.77	1	04/19/16 17:30	04/20/16 17:58	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.1	0.71	1	04/19/16 17:30	04/20/16 17:58	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.1	1.2	1	04/19/16 17:30	04/20/16 17:58	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.1	0.76	1	04/19/16 17:30	04/20/16 17:58	207-08-9	
Chrysene	ND	ug/kg	8.1	0.53	1	04/19/16 17:30	04/20/16 17:58	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/19/16 17:30	04/20/16 17:58	53-70-3	
Fluoranthene	ND	ug/kg	8.1	0.53	1	04/19/16 17:30	04/20/16 17:58	206-44-0	
Fluorene	ND	ug/kg	8.1	0.70	1	04/19/16 17:30	04/20/16 17:58	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.1	0.95	1	04/19/16 17:30	04/20/16 17:58	193-39-5	
Phenanthrene	ND	ug/kg	8.1	0.81	1	04/19/16 17:30	04/20/16 17:58	85-01-8	
Pyrene	ND	ug/kg	8.1	0.65	1	04/19/16 17:30	04/20/16 17:58	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	56	%	35-141		1	04/19/16 17:30	04/20/16 17:58	321-60-8	
Terphenyl-d14 (S)	79	%	64-141		1	04/19/16 17:30	04/20/16 17:58	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.3	1.4	1	04/21/16 09:51	04/21/16 10:33	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/21/16 09:51	04/21/16 10:33	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/21/16 09:51	04/21/16 10:33	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.3	2.5	1	04/21/16 09:51	04/21/16 10:33	98-06-6	1c
Ethanol	ND	ug/kg	210	59.6	1	04/21/16 09:51	04/21/16 10:33	64-17-5	1c,CL
Ethylbenzene	ND	ug/kg	5.3	1.1	1	04/21/16 09:51	04/21/16 10:33	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.3	1.8	1	04/21/16 09:51	04/21/16 10:33	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.3	2.2	1	04/21/16 09:51	04/21/16 10:33	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.3	2.6	1	04/21/16 09:51	04/21/16 10:33	1634-04-4	1c
Naphthalene	ND	ug/kg	5.3	1.0	1	04/21/16 09:51	04/21/16 10:33	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.3	1.8	1	04/21/16 09:51	04/21/16 10:33	103-65-1	1c
Toluene	ND	ug/kg	5.3	1.6	1	04/21/16 09:51	04/21/16 10:33	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.3	1.5	1	04/21/16 09:51	04/21/16 10:33	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.3	1.8	1	04/21/16 09:51	04/21/16 10:33	108-67-8	1c
m&p-Xylene	ND	ug/kg	10.5	1.9	1	04/21/16 09:51	04/21/16 10:33	179601-23-1	1c
o-Xylene	ND	ug/kg	5.3	1.0	1	04/21/16 09:51	04/21/16 10:33	95-47-6	1c
Surrogates									
Toluene-d8 (S)	96	%	68-135		1	04/21/16 09:51	04/21/16 10:33	2037-26-5	
4-Bromofluorobenzene (S)	105	%	65-146		1	04/21/16 09:51	04/21/16 10:33	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	69-137		1	04/21/16 09:51	04/21/16 10:33	17060-07-0	
Dibromofluoromethane (S)	98	%	70-130		1	04/21/16 09:51	04/21/16 10:33	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**17.8**	%	0.10	0.10	1		04/27/16 14:39		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ106(6.0-8.0) **Lab ID: 30179921002** Collected: 04/13/16 09:45 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.2	0.72	1	04/19/16 17:30	04/20/16 18:51	83-32-9	
Acenaphthylene	ND	ug/kg	8.2	0.69	1	04/19/16 17:30	04/20/16 18:51	208-96-8	
Anthracene	ND	ug/kg	8.2	0.79	1	04/19/16 17:30	04/20/16 18:51	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.2	2.1	1	04/19/16 17:30	04/20/16 18:51	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.2	0.78	1	04/19/16 17:30	04/20/16 18:51	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.2	0.72	1	04/19/16 17:30	04/20/16 18:51	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.2	1.3	1	04/19/16 17:30	04/20/16 18:51	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.2	0.77	1	04/19/16 17:30	04/20/16 18:51	207-08-9	
Chrysene	ND	ug/kg	8.2	0.54	1	04/19/16 17:30	04/20/16 18:51	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.2	1.1	1	04/19/16 17:30	04/20/16 18:51	53-70-3	
Fluoranthene	ND	ug/kg	8.2	0.54	1	04/19/16 17:30	04/20/16 18:51	206-44-0	
Fluorene	ND	ug/kg	8.2	0.71	1	04/19/16 17:30	04/20/16 18:51	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.2	0.96	1	04/19/16 17:30	04/20/16 18:51	193-39-5	
Phenanthrene	ND	ug/kg	8.2	0.82	1	04/19/16 17:30	04/20/16 18:51	85-01-8	
Pyrene	ND	ug/kg	8.2	0.66	1	04/19/16 17:30	04/20/16 18:51	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	51	%	35-141		1	04/19/16 17:30	04/20/16 18:51	321-60-8	
Terphenyl-d14 (S)	68	%	64-141		1	04/19/16 17:30	04/20/16 18:51	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.5	1.5	1	04/21/16 09:51	04/21/16 10:57	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.5	2.7	1	04/21/16 09:51	04/21/16 10:57	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.5	2.8	1	04/21/16 09:51	04/21/16 10:57	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.5	2.7	1	04/21/16 09:51	04/21/16 10:57	98-06-6	1c
Ethanol	ND	ug/kg	221	62.7	1	04/21/16 09:51	04/21/16 10:57	64-17-5	1c,CL
Ethylbenzene	ND	ug/kg	5.5	1.1	1	04/21/16 09:51	04/21/16 10:57	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.5	1.9	1	04/21/16 09:51	04/21/16 10:57	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.5	2.3	1	04/21/16 09:51	04/21/16 10:57	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.5	2.7	1	04/21/16 09:51	04/21/16 10:57	1634-04-4	1c
Naphthalene	ND	ug/kg	5.5	1.1	1	04/21/16 09:51	04/21/16 10:57	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.5	1.9	1	04/21/16 09:51	04/21/16 10:57	103-65-1	1c
Toluene	ND	ug/kg	5.5	1.7	1	04/21/16 09:51	04/21/16 10:57	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.5	1.6	1	04/21/16 09:51	04/21/16 10:57	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.5	1.9	1	04/21/16 09:51	04/21/16 10:57	108-67-8	1c
m&p-Xylene	ND	ug/kg	11.1	2.0	1	04/21/16 09:51	04/21/16 10:57	179601-23-1	1c
o-Xylene	ND	ug/kg	5.5	1.1	1	04/21/16 09:51	04/21/16 10:57	95-47-6	1c
Surrogates									
Toluene-d8 (S)	98	%	68-135		1	04/21/16 09:51	04/21/16 10:57	2037-26-5	
4-Bromofluorobenzene (S)	99	%	65-146		1	04/21/16 09:51	04/21/16 10:57	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	69-137		1	04/21/16 09:51	04/21/16 10:57	17060-07-0	
Dibromofluoromethane (S)	110	%	70-130		1	04/21/16 09:51	04/21/16 10:57	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.3**	%	0.10	0.10	1		04/27/16 14:39		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ106(8.0-10.0) **Lab ID: 30179921003** Collected: 04/13/16 09:55 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.0	0.70	1	04/19/16 17:30	04/20/16 19:08	83-32-9	
Acenaphthylene	ND	ug/kg	8.0	0.68	1	04/19/16 17:30	04/20/16 19:08	208-96-8	
Anthracene	ND	ug/kg	8.0	0.78	1	04/19/16 17:30	04/20/16 19:08	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.0	2.0	1	04/19/16 17:30	04/20/16 19:08	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.0	0.76	1	04/19/16 17:30	04/20/16 19:08	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.0	0.70	1	04/19/16 17:30	04/20/16 19:08	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.0	1.2	1	04/19/16 17:30	04/20/16 19:08	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.0	0.75	1	04/19/16 17:30	04/20/16 19:08	207-08-9	
Chrysene	ND	ug/kg	8.0	0.53	1	04/19/16 17:30	04/20/16 19:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.0	1.1	1	04/19/16 17:30	04/20/16 19:08	53-70-3	
Fluoranthene	ND	ug/kg	8.0	0.53	1	04/19/16 17:30	04/20/16 19:08	206-44-0	
Fluorene	ND	ug/kg	8.0	0.69	1	04/19/16 17:30	04/20/16 19:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.0	0.94	1	04/19/16 17:30	04/20/16 19:08	193-39-5	
Phenanthrene	ND	ug/kg	8.0	0.80	1	04/19/16 17:30	04/20/16 19:08	85-01-8	
Pyrene	ND	ug/kg	8.0	0.64	1	04/19/16 17:30	04/20/16 19:08	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	61	%	35-141		1	04/19/16 17:30	04/20/16 19:08	321-60-8	
Terphenyl-d14 (S)	76	%	64-141		1	04/19/16 17:30	04/20/16 19:08	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.5	1.5	1	04/21/16 09:51	04/21/16 11:21	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.5	2.7	1	04/21/16 09:51	04/21/16 11:21	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.5	2.7	1	04/21/16 09:51	04/21/16 11:21	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.5	2.6	1	04/21/16 09:51	04/21/16 11:21	98-06-6	1c
Ethanol	ND	ug/kg	219	62.0	1	04/21/16 09:51	04/21/16 11:21	64-17-5	1c,CL
Ethylbenzene	ND	ug/kg	5.5	1.1	1	04/21/16 09:51	04/21/16 11:21	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.5	1.9	1	04/21/16 09:51	04/21/16 11:21	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.5	2.3	1	04/21/16 09:51	04/21/16 11:21	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.5	2.7	1	04/21/16 09:51	04/21/16 11:21	1634-04-4	1c
Naphthalene	ND	ug/kg	5.5	1.1	1	04/21/16 09:51	04/21/16 11:21	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.5	1.9	1	04/21/16 09:51	04/21/16 11:21	103-65-1	1c
Toluene	ND	ug/kg	5.5	1.7	1	04/21/16 09:51	04/21/16 11:21	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.5	1.6	1	04/21/16 09:51	04/21/16 11:21	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.5	1.8	1	04/21/16 09:51	04/21/16 11:21	108-67-8	1c
m&p-Xylene	ND	ug/kg	10.9	2.0	1	04/21/16 09:51	04/21/16 11:21	179601-23-1	1c
o-Xylene	ND	ug/kg	5.5	1.1	1	04/21/16 09:51	04/21/16 11:21	95-47-6	1c
Surrogates									
Toluene-d8 (S)	99	%	68-135		1	04/21/16 09:51	04/21/16 11:21	2037-26-5	
4-Bromofluorobenzene (S)	99	%	65-146		1	04/21/16 09:51	04/21/16 11:21	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	69-137		1	04/21/16 09:51	04/21/16 11:21	17060-07-0	
Dibromofluoromethane (S)	112	%	70-130		1	04/21/16 09:51	04/21/16 11:21	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**18.2**	%	0.10	0.10	1		04/27/16 14:39		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ106(10.0-12.0) **Lab ID: 30179921004** Collected: 04/13/16 10:00 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.1	0.71	1	04/19/16 17:30	04/20/16 19:26	83-32-9	
Acenaphthylene	ND	ug/kg	8.1	0.69	1	04/19/16 17:30	04/20/16 19:26	208-96-8	
Anthracene	ND	ug/kg	8.1	0.79	1	04/19/16 17:30	04/20/16 19:26	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.1	2.1	1	04/19/16 17:30	04/20/16 19:26	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.1	0.77	1	04/19/16 17:30	04/20/16 19:26	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.1	0.71	1	04/19/16 17:30	04/20/16 19:26	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.1	1.2	1	04/19/16 17:30	04/20/16 19:26	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.1	0.76	1	04/19/16 17:30	04/20/16 19:26	207-08-9	
Chrysene	ND	ug/kg	8.1	0.53	1	04/19/16 17:30	04/20/16 19:26	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/19/16 17:30	04/20/16 19:26	53-70-3	
Fluoranthene	ND	ug/kg	8.1	0.53	1	04/19/16 17:30	04/20/16 19:26	206-44-0	
Fluorene	ND	ug/kg	8.1	0.70	1	04/19/16 17:30	04/20/16 19:26	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.1	0.96	1	04/19/16 17:30	04/20/16 19:26	193-39-5	
Phenanthrene	ND	ug/kg	8.1	0.81	1	04/19/16 17:30	04/20/16 19:26	85-01-8	
Pyrene	ND	ug/kg	8.1	0.65	1	04/19/16 17:30	04/20/16 19:26	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	65	%	35-141		1	04/19/16 17:30	04/20/16 19:26	321-60-8	
Terphenyl-d14 (S)	70	%	64-141		1	04/19/16 17:30	04/20/16 19:26	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.3	1.4	1	04/21/16 09:51	04/21/16 11:45	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/21/16 09:51	04/21/16 11:45	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/21/16 09:51	04/21/16 11:45	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.3	2.5	1	04/21/16 09:51	04/21/16 11:45	98-06-6	1c
Ethanol	ND	ug/kg	210	59.6	1	04/21/16 09:51	04/21/16 11:45	64-17-5	1c,CL
Ethylbenzene	ND	ug/kg	5.3	1.1	1	04/21/16 09:51	04/21/16 11:45	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.3	1.8	1	04/21/16 09:51	04/21/16 11:45	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.3	2.2	1	04/21/16 09:51	04/21/16 11:45	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.3	2.6	1	04/21/16 09:51	04/21/16 11:45	1634-04-4	1c
Naphthalene	ND	ug/kg	5.3	1.0	1	04/21/16 09:51	04/21/16 11:45	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.3	1.8	1	04/21/16 09:51	04/21/16 11:45	103-65-1	1c
Toluene	ND	ug/kg	5.3	1.6	1	04/21/16 09:51	04/21/16 11:45	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.3	1.5	1	04/21/16 09:51	04/21/16 11:45	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.3	1.8	1	04/21/16 09:51	04/21/16 11:45	108-67-8	1c
m&p-Xylene	ND	ug/kg	10.5	1.9	1	04/21/16 09:51	04/21/16 11:45	179601-23-1	1c
o-Xylene	ND	ug/kg	5.3	1.0	1	04/21/16 09:51	04/21/16 11:45	95-47-6	1c
Surrogates									
Toluene-d8 (S)	96	%	68-135		1	04/21/16 09:51	04/21/16 11:45	2037-26-5	
4-Bromofluorobenzene (S)	102	%	65-146		1	04/21/16 09:51	04/21/16 11:45	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	69-137		1	04/21/16 09:51	04/21/16 11:45	17060-07-0	
Dibromofluoromethane (S)	103	%	70-130		1	04/21/16 09:51	04/21/16 11:45	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**18.0**	%	0.10	0.10	1		04/27/16 14:40		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: TRIP BLANK **Lab ID: 30179921005** Collected: 04/13/16 00:00 Received: 04/15/16 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV	Analytical Method: EPA 8260C								
Benzene	ND	ug/L	1.0	0.16	1		04/21/16 15:05	71-43-2	M5
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/21/16 15:05	104-51-8	M5
sec-Butylbenzene	ND	ug/L	1.0	0.21	1		04/21/16 15:05	135-98-8	M5
tert-Butylbenzene	ND	ug/L	1.0	0.19	1		04/21/16 15:05	98-06-6	M5
Ethanol	ND	ug/L	200	26.1	1		04/21/16 15:05	64-17-5	M5
Ethylbenzene	ND	ug/L	1.0	0.23	1		04/21/16 15:05	100-41-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.14	1		04/21/16 15:05	98-82-8	M5
p-Isopropyltoluene	ND	ug/L	1.0	0.22	1		04/21/16 15:05	99-87-6	M5
Methyl-tert-butyl ether	ND	ug/L	1.0	0.17	1		04/21/16 15:05	1634-04-4	M5
Naphthalene	ND	ug/L	2.0	0.19	1		04/21/16 15:05	91-20-3	M5
n-Propylbenzene	ND	ug/L	1.0	0.15	1		04/21/16 15:05	103-65-1	M5
Toluene	ND	ug/L	1.0	0.13	1		04/21/16 15:05	108-88-3	M5
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.12	1		04/21/16 15:05	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.12	1		04/21/16 15:05	108-67-8	M5
m&p-Xylene	ND	ug/L	2.0	0.32	1		04/21/16 15:05	179601-23-1	M5
o-Xylene	ND	ug/L	1.0	0.22	1		04/21/16 15:05	95-47-6	M5
Surrogates									
4-Bromofluorobenzene (S)	106	%	81-119		1		04/21/16 15:05	460-00-4	M5
1,2-Dichloroethane-d4 (S)	117	%	77-126		1		04/21/16 15:05	17060-07-0	M5
Toluene-d8 (S)	100	%	84-115		1		04/21/16 15:05	2037-26-5	M5
Dibromofluoromethane (S)	107	%	70-130		1		04/21/16 15:05	1868-53-7	M5

Sample: PZ103(6.0-8.0) **Lab ID: 30179921006** Collected: 04/13/16 14:10 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.1	0.71	1	04/19/16 17:30	04/20/16 19:43	83-32-9	
Acenaphthylene	ND	ug/kg	8.1	0.69	1	04/19/16 17:30	04/20/16 19:43	208-96-8	
Anthracene	ND	ug/kg	8.1	0.78	1	04/19/16 17:30	04/20/16 19:43	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.1	2.1	1	04/19/16 17:30	04/20/16 19:43	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.1	0.77	1	04/19/16 17:30	04/20/16 19:43	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.1	0.71	1	04/19/16 17:30	04/20/16 19:43	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.1	1.2	1	04/19/16 17:30	04/20/16 19:43	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.1	0.76	1	04/19/16 17:30	04/20/16 19:43	207-08-9	
Chrysene	ND	ug/kg	8.1	0.53	1	04/19/16 17:30	04/20/16 19:43	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/19/16 17:30	04/20/16 19:43	53-70-3	
Fluoranthene	ND	ug/kg	8.1	0.53	1	04/19/16 17:30	04/20/16 19:43	206-44-0	
Fluorene	ND	ug/kg	8.1	0.70	1	04/19/16 17:30	04/20/16 19:43	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.1	0.95	1	04/19/16 17:30	04/20/16 19:43	193-39-5	
Phenanthrene	ND	ug/kg	8.1	0.81	1	04/19/16 17:30	04/20/16 19:43	85-01-8	
Pyrene	ND	ug/kg	8.1	0.65	1	04/19/16 17:30	04/20/16 19:43	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	48	%	35-141		1	04/19/16 17:30	04/20/16 19:43	321-60-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ103(6.0-8.0) **Lab ID: 30179921006** Collected: 04/13/16 14:10 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Surrogates									
Terphenyl-d14 (S)	54	%	64-141		1	04/19/16 17:30	04/20/16 19:43	1718-51-0	3c,S0
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	262	71.3	50	04/21/16 09:47	04/21/16 15:45	71-43-2	1c
n-Butylbenzene	ND	ug/kg	262	128	50	04/21/16 09:47	04/21/16 15:45	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	262	132	50	04/21/16 09:47	04/21/16 15:45	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	262	126	50	04/21/16 09:47	04/21/16 15:45	98-06-6	1c
Ethanol	ND	ug/kg	10500	2970	50	04/21/16 09:47	04/21/16 15:45	64-17-5	1c,CL
Ethylbenzene	ND	ug/kg	262	52.9	50	04/21/16 09:47	04/21/16 15:45	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	262	90.6	50	04/21/16 09:47	04/21/16 15:45	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	262	111	50	04/21/16 09:47	04/21/16 15:45	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	262	127	50	04/21/16 09:47	04/21/16 15:45	1634-04-4	1c
Naphthalene	**871**	ug/kg	262	50.8	50	04/21/16 09:47	04/21/16 15:45	91-20-3	1c
n-Propylbenzene	ND	ug/kg	262	91.7	50	04/21/16 09:47	04/21/16 15:45	103-65-1	1c
Toluene	**535**	ug/kg	262	81.7	50	04/21/16 09:47	04/21/16 15:45	108-88-3	1c
1,2,4-Trimethylbenzene	**327**	ug/kg	262	74.9	50	04/21/16 09:47	04/21/16 15:45	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	262	88.0	50	04/21/16 09:47	04/21/16 15:45	108-67-8	1c
m&p-Xylene	**643**	ug/kg	524	96.9	50	04/21/16 09:47	04/21/16 15:45	179601-23-1	1c
o-Xylene	ND	ug/kg	262	51.9	50	04/21/16 09:47	04/21/16 15:45	95-47-6	1c
Surrogates									
Toluene-d8 (S)	93	%	68-135		50	04/21/16 09:47	04/21/16 15:45	2037-26-5	
4-Bromofluorobenzene (S)	94	%	65-146		50	04/21/16 09:47	04/21/16 15:45	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	69-137		50	04/21/16 09:47	04/21/16 15:45	17060-07-0	
Dibromofluoromethane (S)	94	%	70-130		50	04/21/16 09:47	04/21/16 15:45	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.3**	%	0.10	0.10	1		04/27/16 14:41		

Sample: PZ103(8.0-10.0) **Lab ID: 30179921007** Collected: 04/13/16 14:15 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**27.1**	ug/kg	8.3	0.73	1	04/19/16 17:30	04/20/16 20:01	83-32-9	
Acenaphthylene	**14.1**	ug/kg	8.3	0.70	1	04/19/16 17:30	04/20/16 20:01	208-96-8	
Anthracene	**19.8**	ug/kg	8.3	0.80	1	04/19/16 17:30	04/20/16 20:01	120-12-7	
Benzo(a)anthracene	**18.2**	ug/kg	8.3	2.1	1	04/19/16 17:30	04/20/16 20:01	56-55-3	
Benzo(a)pyrene	**16.3**	ug/kg	8.3	0.79	1	04/19/16 17:30	04/20/16 20:01	50-32-8	
Benzo(b)fluoranthene	**35.2**	ug/kg	8.3	0.73	1	04/19/16 17:30	04/20/16 20:01	205-99-2	ip
Benzo(g,h,i)perylene	**8.7**	ug/kg	8.3	1.3	1	04/19/16 17:30	04/20/16 20:01	191-24-2	
Benzo(k)fluoranthene	**34.9**	ug/kg	8.3	0.78	1	04/19/16 17:30	04/20/16 20:01	207-08-9	ip

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ103(8.0-10.0) **Lab ID: 30179921007** Collected: 04/13/16 14:15 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Chrysene	**14.8**	ug/kg	8.3	0.54	1	04/19/16 17:30	04/20/16 20:01	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.3	1.1	1	04/19/16 17:30	04/20/16 20:01	53-70-3	
Fluoranthene	**16.9**	ug/kg	8.3	0.54	1	04/19/16 17:30	04/20/16 20:01	206-44-0	
Fluorene	**28.7**	ug/kg	8.3	0.72	1	04/19/16 17:30	04/20/16 20:01	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.3	0.97	1	04/19/16 17:30	04/20/16 20:01	193-39-5	
Phenanthrene	**15.5**	ug/kg	8.3	0.83	1	04/19/16 17:30	04/20/16 20:01	85-01-8	
Pyrene	**55.3**	ug/kg	8.3	0.67	1	04/19/16 17:30	04/20/16 20:01	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	105	%	35-141		1	04/19/16 17:30	04/20/16 20:01	321-60-8	
Terphenyl-d14 (S)	77	%	64-141		1	04/19/16 17:30	04/20/16 20:01	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	255	69.5	50	04/21/16 09:47	04/21/16 16:09	71-43-2	1c
n-Butylbenzene	ND	ug/kg	255	125	50	04/21/16 09:47	04/21/16 16:09	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	255	128	50	04/21/16 09:47	04/21/16 16:09	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	255	123	50	04/21/16 09:47	04/21/16 16:09	98-06-6	1c
Ethanol	ND	ug/kg	10200	2900	50	04/21/16 09:47	04/21/16 16:09	64-17-5	1c,CL
Ethylbenzene	ND	ug/kg	255	51.6	50	04/21/16 09:47	04/21/16 16:09	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	255	88.4	50	04/21/16 09:47	04/21/16 16:09	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	255	108	50	04/21/16 09:47	04/21/16 16:09	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	255	124	50	04/21/16 09:47	04/21/16 16:09	1634-04-4	1c
Naphthalene	**394**	ug/kg	255	49.5	50	04/21/16 09:47	04/21/16 16:09	91-20-3	1c
n-Propylbenzene	ND	ug/kg	255	89.4	50	04/21/16 09:47	04/21/16 16:09	103-65-1	1c
Toluene	**594**	ug/kg	255	79.7	50	04/21/16 09:47	04/21/16 16:09	108-88-3	1c
1,2,4-Trimethylbenzene	**1640**	ug/kg	255	73.0	50	04/21/16 09:47	04/21/16 16:09	95-63-6	1c
1,3,5-Trimethylbenzene	**947**	ug/kg	255	85.8	50	04/21/16 09:47	04/21/16 16:09	108-67-8	1c
m&p-Xylene	**2150**	ug/kg	511	94.5	50	04/21/16 09:47	04/21/16 16:09	179601-23-1	1c
o-Xylene	**472**	ug/kg	255	50.6	50	04/21/16 09:47	04/21/16 16:09	95-47-6	1c
Surrogates									
Toluene-d8 (S)	88	%	68-135		50	04/21/16 09:47	04/21/16 16:09	2037-26-5	
4-Bromofluorobenzene (S)	94	%	65-146		50	04/21/16 09:47	04/21/16 16:09	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	69-137		50	04/21/16 09:47	04/21/16 16:09	17060-07-0	
Dibromofluoromethane (S)	97	%	70-130		50	04/21/16 09:47	04/21/16 16:09	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.9**	%	0.10	0.10	1		04/27/16 14:48		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ103(10.0-12.0) **Lab ID: 30179921008** Collected: 04/13/16 14:20 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**145**	ug/kg	8.1	0.71	1	04/19/16 17:30	04/20/16 20:18	83-32-9	
Acenaphthylene	**14.2**	ug/kg	8.1	0.69	1	04/19/16 17:30	04/20/16 20:18	208-96-8	
Anthracene	**53.7**	ug/kg	8.1	0.78	1	04/19/16 17:30	04/20/16 20:18	120-12-7	
Benzo(a)anthracene	**20.0**	ug/kg	8.1	2.1	1	04/19/16 17:30	04/20/16 20:18	56-55-3	
Benzo(a)pyrene	**8.3**	ug/kg	8.1	0.77	1	04/19/16 17:30	04/20/16 20:18	50-32-8	
Benzo(b)fluoranthene	**17.0**	ug/kg	8.1	0.71	1	04/19/16 17:30	04/20/16 20:18	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.1	1.2	1	04/19/16 17:30	04/20/16 20:18	191-24-2	
Benzo(k)fluoranthene	**16.9**	ug/kg	8.1	0.76	1	04/19/16 17:30	04/20/16 20:18	207-08-9	ip
Chrysene	**18.9**	ug/kg	8.1	0.53	1	04/19/16 17:30	04/20/16 20:18	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/19/16 17:30	04/20/16 20:18	53-70-3	
Fluoranthene	**48.1**	ug/kg	8.1	0.53	1	04/19/16 17:30	04/20/16 20:18	206-44-0	
Fluorene	**235**	ug/kg	8.1	0.70	1	04/19/16 17:30	04/20/16 20:18	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.1	0.95	1	04/19/16 17:30	04/20/16 20:18	193-39-5	
Phenanthrene	**205**	ug/kg	8.1	0.81	1	04/19/16 17:30	04/20/16 20:18	85-01-8	
Pyrene	**70.7**	ug/kg	8.1	0.65	1	04/19/16 17:30	04/20/16 20:18	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	65	%	35-141		1	04/19/16 17:30	04/20/16 20:18	321-60-8	
Terphenyl-d14 (S)	52	%	64-141		1	04/19/16 17:30	04/20/16 20:18	1718-51-0	3c,S0
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**4680**	ug/kg	368	100	50	04/21/16 09:47	04/21/16 17:21	71-43-2	1c
n-Butylbenzene	**13800**	ug/kg	368	180	50	04/21/16 09:47	04/21/16 17:21	104-51-8	1c
sec-Butylbenzene	**4400**	ug/kg	368	185	50	04/21/16 09:47	04/21/16 17:21	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	368	177	50	04/21/16 09:47	04/21/16 17:21	98-06-6	1c
Ethanol	ND	ug/kg	14700	4180	50	04/21/16 09:47	04/21/16 17:21	64-17-5	1c,CL
Ethylbenzene	**34300**	ug/kg	3680	744	500	04/21/16 09:47	04/26/16 15:16	100-41-4	1c
Isopropylbenzene (Cumene)	**5640**	ug/kg	368	127	50	04/21/16 09:47	04/21/16 17:21	98-82-8	1c
p-Isopropyltoluene	**14100**	ug/kg	368	156	50	04/21/16 09:47	04/21/16 17:21	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	368	179	50	04/21/16 09:47	04/21/16 17:21	1634-04-4	1c
Naphthalene	**49800**	ug/kg	3680	714	500	04/21/16 09:47	04/26/16 15:16	91-20-3	1c
n-Propylbenzene	**18400**	ug/kg	368	129	50	04/21/16 09:47	04/21/16 17:21	103-65-1	1c
Toluene	**149000**	ug/kg	3680	1150	500	04/21/16 09:47	04/26/16 15:16	108-88-3	1c
1,2,4-Trimethylbenzene	**228000**	ug/kg	3680	1050	500	04/21/16 09:47	04/26/16 15:16	95-63-6	1c
1,3,5-Trimethylbenzene	**80800**	ug/kg	3680	1240	500	04/21/16 09:47	04/26/16 15:16	108-67-8	1c
m&p-Xylene	**308000**	ug/kg	7360	1360	500	04/21/16 09:47	04/26/16 15:16	179601-23-1	1c
o-Xylene	**120000**	ug/kg	3680	729	500	04/21/16 09:47	04/26/16 15:16	95-47-6	1c
Surrogates									
Toluene-d8 (S)	99	%	68-135		50	04/21/16 09:47	04/21/16 17:21	2037-26-5	
4-Bromofluorobenzene (S)	105	%	65-146		50	04/21/16 09:47	04/21/16 17:21	460-00-4	
1,2-Dichloroethane-d4 (S)	50	%	69-137		50	04/21/16 09:47	04/21/16 17:21	17060-07-0	S0
Dibromofluoromethane (S)	41	%	70-130		50	04/21/16 09:47	04/21/16 17:21	1868-53-7	S0
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**18.0**	%	0.10	0.10	1		04/27/16 14:48		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ103(12.0-14.0) **Lab ID: 30179921009** Collected: 04/13/16 14:30 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**89.3**	ug/kg	8.4	0.74	1	04/19/16 17:30	04/20/16 20:35	83-32-9	
Acenaphthylene	ND	ug/kg	8.4	0.71	1	04/19/16 17:30	04/20/16 20:35	208-96-8	
Anthracene	**37.0**	ug/kg	8.4	0.81	1	04/19/16 17:30	04/20/16 20:35	120-12-7	
Benzo(a)anthracene	**12.0**	ug/kg	8.4	2.1	1	04/19/16 17:30	04/20/16 20:35	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.4	0.80	1	04/19/16 17:30	04/20/16 20:35	50-32-8	
Benzo(b)fluoranthene	**10.6**	ug/kg	8.4	0.74	1	04/19/16 17:30	04/20/16 20:35	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.4	1.3	1	04/19/16 17:30	04/20/16 20:35	191-24-2	
Benzo(k)fluoranthene	**10.6**	ug/kg	8.4	0.79	1	04/19/16 17:30	04/20/16 20:35	207-08-9	ip
Chrysene	**11.0**	ug/kg	8.4	0.55	1	04/19/16 17:30	04/20/16 20:35	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.4	1.1	1	04/19/16 17:30	04/20/16 20:35	53-70-3	
Fluoranthene	**28.9**	ug/kg	8.4	0.55	1	04/19/16 17:30	04/20/16 20:35	206-44-0	
Fluorene	**172**	ug/kg	8.4	0.73	1	04/19/16 17:30	04/20/16 20:35	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.4	0.99	1	04/19/16 17:30	04/20/16 20:35	193-39-5	
Phenanthrene	**134**	ug/kg	8.4	0.84	1	04/19/16 17:30	04/20/16 20:35	85-01-8	
Pyrene	**43.5**	ug/kg	8.4	0.68	1	04/19/16 17:30	04/20/16 20:35	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	85	%	35-141		1	04/19/16 17:30	04/20/16 20:35	321-60-8	
Terphenyl-d14 (S)	75	%	64-141		1	04/19/16 17:30	04/20/16 20:35	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**3360**	ug/kg	265	71.9	50	04/21/16 09:47	04/21/16 16:33	71-43-2	1c
n-Butylbenzene	**5590**	ug/kg	265	130	50	04/21/16 09:47	04/21/16 16:33	104-51-8	1c
sec-Butylbenzene	**1750**	ug/kg	265	133	50	04/21/16 09:47	04/21/16 16:33	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	265	127	50	04/21/16 09:47	04/21/16 16:33	98-06-6	1c
Ethanol	ND	ug/kg	10600	3000	50	04/21/16 09:47	04/21/16 16:33	64-17-5	1c,CL
Ethylbenzene	**33800**	ug/kg	2650	534	500	04/21/16 09:47	04/26/16 14:51	100-41-4	1c
Isopropylbenzene (Cumene)	**3640**	ug/kg	265	91.5	50	04/21/16 09:47	04/21/16 16:33	98-82-8	1c
p-Isopropyltoluene	**4640**	ug/kg	265	112	50	04/21/16 09:47	04/21/16 16:33	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	265	129	50	04/21/16 09:47	04/21/16 16:33	1634-04-4	1c
Naphthalene	**15900**	ug/kg	265	51.3	50	04/21/16 09:47	04/21/16 16:33	91-20-3	1c
n-Propylbenzene	**12700**	ug/kg	265	92.6	50	04/21/16 09:47	04/21/16 16:33	103-65-1	1c
Toluene	**58300**	ug/kg	2650	825	500	04/21/16 09:47	04/26/16 14:51	108-88-3	1c
1,2,4-Trimethylbenzene	**108000**	ug/kg	2650	757	500	04/21/16 09:47	04/26/16 14:51	95-63-6	1c
1,3,5-Trimethylbenzene	**35300**	ug/kg	2650	889	500	04/21/16 09:47	04/26/16 14:51	108-67-8	1c
m&p-Xylene	**151000**	ug/kg	5290	979	500	04/21/16 09:47	04/26/16 14:51	179601-23-1	1c
o-Xylene	**53700**	ug/kg	2650	524	500	04/21/16 09:47	04/26/16 14:51	95-47-6	1c
Surrogates									
Toluene-d8 (S)	67	%	68-135		50	04/21/16 09:47	04/21/16 16:33	2037-26-5	S0
4-Bromofluorobenzene (S)	92	%	65-146		50	04/21/16 09:47	04/21/16 16:33	460-00-4	
1,2-Dichloroethane-d4 (S)	159	%	69-137		50	04/21/16 09:47	04/21/16 16:33	17060-07-0	S0
Dibromofluoromethane (S)	56	%	70-130		50	04/21/16 09:47	04/21/16 16:33	1868-53-7	S0
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.3**	%	0.10	0.10	1		04/27/16 14:50		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ103(14.0-16.0) **Lab ID: 30179921010** Collected: 04/13/16 14:40 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.8	0.78	1	04/19/16 17:30	04/20/16 20:53	83-32-9	
Acenaphthylene	ND	ug/kg	8.8	0.75	1	04/19/16 17:30	04/20/16 20:53	208-96-8	
Anthracene	ND	ug/kg	8.8	0.86	1	04/19/16 17:30	04/20/16 20:53	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.8	2.3	1	04/19/16 17:30	04/20/16 20:53	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.8	0.84	1	04/19/16 17:30	04/20/16 20:53	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.8	0.78	1	04/19/16 17:30	04/20/16 20:53	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.8	1.4	1	04/19/16 17:30	04/20/16 20:53	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.8	0.83	1	04/19/16 17:30	04/20/16 20:53	207-08-9	
Chrysene	ND	ug/kg	8.8	0.58	1	04/19/16 17:30	04/20/16 20:53	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.8	1.2	1	04/19/16 17:30	04/20/16 20:53	53-70-3	
Fluoranthene	ND	ug/kg	8.8	0.58	1	04/19/16 17:30	04/20/16 20:53	206-44-0	
Fluorene	ND	ug/kg	8.8	0.76	1	04/19/16 17:30	04/20/16 20:53	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.8	1.0	1	04/19/16 17:30	04/20/16 20:53	193-39-5	
Phenanthrene	ND	ug/kg	8.8	0.88	1	04/19/16 17:30	04/20/16 20:53	85-01-8	
Pyrene	ND	ug/kg	8.8	0.71	1	04/19/16 17:30	04/20/16 20:53	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	52	%	35-141		1	04/19/16 17:30	04/20/16 20:53	321-60-8	
Terphenyl-d14 (S)	72	%	64-141		1	04/19/16 17:30	04/20/16 20:53	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	274	74.6	50	04/21/16 09:47	04/21/16 16:57	71-43-2	1c
n-Butylbenzene	**745**	ug/kg	274	134	50	04/21/16 09:47	04/21/16 16:57	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	274	138	50	04/21/16 09:47	04/21/16 16:57	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	274	132	50	04/21/16 09:47	04/21/16 16:57	98-06-6	1c
Ethanol	ND	ug/kg	11000	3110	50	04/21/16 09:47	04/21/16 16:57	64-17-5	1c,CL
Ethylbenzene	**2190**	ug/kg	274	55.4	50	04/21/16 09:47	04/21/16 16:57	100-41-4	1c
Isopropylbenzene (Cumene)	**441**	ug/kg	274	94.9	50	04/21/16 09:47	04/21/16 16:57	98-82-8	1c
p-Isopropyltoluene	**700**	ug/kg	274	116	50	04/21/16 09:47	04/21/16 16:57	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	274	133	50	04/21/16 09:47	04/21/16 16:57	1634-04-4	1c
Naphthalene	**2300**	ug/kg	274	53.2	50	04/21/16 09:47	04/21/16 16:57	91-20-3	1c
n-Propylbenzene	**1590**	ug/kg	274	96.0	50	04/21/16 09:47	04/21/16 16:57	103-65-1	1c
Toluene	**943**	ug/kg	274	85.6	50	04/21/16 09:47	04/21/16 16:57	108-88-3	1c
1,2,4-Trimethylbenzene	**11500**	ug/kg	274	78.5	50	04/21/16 09:47	04/21/16 16:57	95-63-6	1c
1,3,5-Trimethylbenzene	**3820**	ug/kg	274	92.2	50	04/21/16 09:47	04/21/16 16:57	108-67-8	1c
m&p-Xylene	**9880**	ug/kg	549	102	50	04/21/16 09:47	04/21/16 16:57	179601-23-1	1c
o-Xylene	**1690**	ug/kg	274	54.3	50	04/21/16 09:47	04/21/16 16:57	95-47-6	1c
Surrogates									
Toluene-d8 (S)	91	%	68-135		50	04/21/16 09:47	04/21/16 16:57	2037-26-5	
4-Bromofluorobenzene (S)	99	%	65-146		50	04/21/16 09:47	04/21/16 16:57	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	69-137		50	04/21/16 09:47	04/21/16 16:57	17060-07-0	
Dibromofluoromethane (S)	83	%	70-130		50	04/21/16 09:47	04/21/16 16:57	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.1**	%	0.10	0.10	1		04/27/16 14:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ103(16.0-18.0) **Lab ID: 30179921011** Collected: 04/13/16 14:45 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.9	0.70	1	04/19/16 17:30	04/20/16 21:10	83-32-9	
Acenaphthylene	ND	ug/kg	7.9	0.67	1	04/19/16 17:30	04/20/16 21:10	208-96-8	
Anthracene	ND	ug/kg	7.9	0.77	1	04/19/16 17:30	04/20/16 21:10	120-12-7	
Benzo(a)anthracene	ND	ug/kg	7.9	2.0	1	04/19/16 17:30	04/20/16 21:10	56-55-3	
Benzo(a)pyrene	ND	ug/kg	7.9	0.76	1	04/19/16 17:30	04/20/16 21:10	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	7.9	0.70	1	04/19/16 17:30	04/20/16 21:10	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	7.9	1.2	1	04/19/16 17:30	04/20/16 21:10	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	7.9	0.75	1	04/19/16 17:30	04/20/16 21:10	207-08-9	ip
Chrysene	ND	ug/kg	7.9	0.52	1	04/19/16 17:30	04/20/16 21:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	7.9	1.0	1	04/19/16 17:30	04/20/16 21:10	53-70-3	
Fluoranthene	ND	ug/kg	7.9	0.52	1	04/19/16 17:30	04/20/16 21:10	206-44-0	
Fluorene	ND	ug/kg	7.9	0.69	1	04/19/16 17:30	04/20/16 21:10	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	7.9	0.94	1	04/19/16 17:30	04/20/16 21:10	193-39-5	
Phenanthrene	**10.0**	ug/kg	7.9	0.79	1	04/19/16 17:30	04/20/16 21:10	85-01-8	
Pyrene	ND	ug/kg	7.9	0.64	1	04/19/16 17:30	04/20/16 21:10	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	56	%	35-141		1	04/19/16 17:30	04/20/16 21:10	321-60-8	
Terphenyl-d14 (S)	71	%	64-141		1	04/19/16 17:30	04/20/16 21:10	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**29.3**	ug/kg	5.2	1.4	1	04/21/16 09:51	04/21/16 12:09	71-43-2	1c
n-Butylbenzene	**31.8**	ug/kg	5.2	2.5	1	04/21/16 09:51	04/21/16 12:09	104-51-8	1c
sec-Butylbenzene	**13.1**	ug/kg	5.2	2.6	1	04/21/16 09:51	04/21/16 12:09	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.2	2.5	1	04/21/16 09:51	04/21/16 12:09	98-06-6	1c
Ethanol	ND	ug/kg	207	58.6	1	04/21/16 09:51	04/21/16 12:09	64-17-5	1c,CL
Ethylbenzene	**102**	ug/kg	5.2	1.0	1	04/21/16 09:51	04/21/16 12:09	100-41-4	1c
Isopropylbenzene (Cumene)	**23.8**	ug/kg	5.2	1.8	1	04/21/16 09:51	04/21/16 12:09	98-82-8	1c
p-Isopropyltoluene	**14.0**	ug/kg	5.2	2.2	1	04/21/16 09:51	04/21/16 12:09	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.2	2.5	1	04/21/16 09:51	04/21/16 12:09	1634-04-4	1c
Naphthalene	**118**	ug/kg	5.2	1.0	1	04/21/16 09:51	04/21/16 12:09	91-20-3	1c
n-Propylbenzene	**81.9**	ug/kg	5.2	1.8	1	04/21/16 09:51	04/21/16 12:09	103-65-1	1c
Toluene	**84.2**	ug/kg	5.2	1.6	1	04/21/16 09:51	04/21/16 12:09	108-88-3	1c
1,2,4-Trimethylbenzene	**4840**	ug/kg	244	69.8	50	04/26/16 11:46	04/26/16 20:50	95-63-6	1c
1,3,5-Trimethylbenzene	**249**	ug/kg	5.2	1.7	1	04/21/16 09:51	04/21/16 12:09	108-67-8	1c
m&p-Xylene	**443**	ug/kg	10.3	1.9	1	04/21/16 09:51	04/21/16 12:09	179601-23-1	1c
o-Xylene	**74.4**	ug/kg	5.2	1.0	1	04/21/16 09:51	04/21/16 12:09	95-47-6	1c
Surrogates									
Toluene-d8 (S)	80	%	68-135		1	04/21/16 09:51	04/21/16 12:09	2037-26-5	
4-Bromofluorobenzene (S)	92	%	65-146		1	04/21/16 09:51	04/21/16 12:09	460-00-4	
1,2-Dichloroethane-d4 (S)	137	%	69-137		1	04/21/16 09:51	04/21/16 12:09	17060-07-0	
Dibromofluoromethane (S)	78	%	70-130		1	04/21/16 09:51	04/21/16 12:09	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.9**	%	0.10	0.10	1		04/27/16 14:52		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ103(18.0-20.0) **Lab ID: 30179921012** Collected: 04/13/16 15:00 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.5	0.75	1	04/19/16 17:30	04/20/16 21:28	83-32-9	
Acenaphthylene	ND	ug/kg	8.5	0.73	1	04/19/16 17:30	04/20/16 21:28	208-96-8	
Anthracene	ND	ug/kg	8.5	0.83	1	04/19/16 17:30	04/20/16 21:28	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.5	2.2	1	04/19/16 17:30	04/20/16 21:28	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.5	0.81	1	04/19/16 17:30	04/20/16 21:28	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.5	0.75	1	04/19/16 17:30	04/20/16 21:28	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.5	1.3	1	04/19/16 17:30	04/20/16 21:28	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.5	0.80	1	04/19/16 17:30	04/20/16 21:28	207-08-9	
Chrysene	ND	ug/kg	8.5	0.56	1	04/19/16 17:30	04/20/16 21:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.5	1.1	1	04/19/16 17:30	04/20/16 21:28	53-70-3	
Fluoranthene	ND	ug/kg	8.5	0.56	1	04/19/16 17:30	04/20/16 21:28	206-44-0	
Fluorene	ND	ug/kg	8.5	0.74	1	04/19/16 17:30	04/20/16 21:28	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.5	1.0	1	04/19/16 17:30	04/20/16 21:28	193-39-5	
Phenanthrene	ND	ug/kg	8.5	0.85	1	04/19/16 17:30	04/20/16 21:28	85-01-8	
Pyrene	ND	ug/kg	8.5	0.69	1	04/19/16 17:30	04/20/16 21:28	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	47	%	35-141		1	04/19/16 17:30	04/20/16 21:28	321-60-8	
Terphenyl-d14 (S)	66	%	64-141		1	04/19/16 17:30	04/20/16 21:28	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**96.8**	ug/kg	5.6	1.5	1	04/21/16 09:51	04/21/16 12:33	71-43-2	1c
n-Butylbenzene	**13.4**	ug/kg	5.6	2.7	1	04/21/16 09:51	04/21/16 12:33	104-51-8	1c
sec-Butylbenzene	**6.5**	ug/kg	5.6	2.8	1	04/21/16 09:51	04/21/16 12:33	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.6	2.7	1	04/21/16 09:51	04/21/16 12:33	98-06-6	1c
Ethanol	ND	ug/kg	224	63.5	1	04/21/16 09:51	04/21/16 12:33	64-17-5	1c,CL
Ethylbenzene	**145**	ug/kg	5.6	1.1	1	04/21/16 09:51	04/21/16 12:33	100-41-4	1c
Isopropylbenzene (Cumene)	**15.7**	ug/kg	5.6	1.9	1	04/21/16 09:51	04/21/16 12:33	98-82-8	1c
p-Isopropyltoluene	**23.0**	ug/kg	5.6	2.4	1	04/21/16 09:51	04/21/16 12:33	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.6	2.7	1	04/21/16 09:51	04/21/16 12:33	1634-04-4	1c
Naphthalene	**141**	ug/kg	5.6	1.1	1	04/21/16 09:51	04/21/16 12:33	91-20-3	1c
n-Propylbenzene	**47.8**	ug/kg	5.6	2.0	1	04/21/16 09:51	04/21/16 12:33	103-65-1	1c
Toluene	**223**	ug/kg	5.6	1.7	1	04/21/16 09:51	04/21/16 12:33	108-88-3	1c
1,2,4-Trimethylbenzene	**1330**	ug/kg	305	87.3	50	04/26/16 11:46	04/26/16 16:33	95-63-6	1c
1,3,5-Trimethylbenzene	**172**	ug/kg	5.6	1.9	1	04/21/16 09:51	04/21/16 12:33	108-67-8	1c
m&p-Xylene	**591**	ug/kg	11.2	2.1	1	04/21/16 09:51	04/21/16 12:33	179601-23-1	1c
o-Xylene	**128**	ug/kg	5.6	1.1	1	04/21/16 09:51	04/21/16 12:33	95-47-6	1c
Surrogates									
Toluene-d8 (S)	88	%	68-135		1	04/21/16 09:51	04/21/16 12:33	2037-26-5	
4-Bromofluorobenzene (S)	95	%	65-146		1	04/21/16 09:51	04/21/16 12:33	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	69-137		1	04/21/16 09:51	04/21/16 12:33	17060-07-0	
Dibromofluoromethane (S)	85	%	70-130		1	04/21/16 09:51	04/21/16 12:33	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**22.9**	%	0.10	0.10	1		04/27/16 14:52		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ103(20.0-22.0) **Lab ID: 30179921013** Collected: 04/13/16 15:05 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.0	0.71	1	04/19/16 17:30	04/20/16 21:45	83-32-9	
Acenaphthylene	ND	ug/kg	8.0	0.68	1	04/19/16 17:30	04/20/16 21:45	208-96-8	
Anthracene	ND	ug/kg	8.0	0.78	1	04/19/16 17:30	04/20/16 21:45	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.0	2.1	1	04/19/16 17:30	04/20/16 21:45	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.0	0.77	1	04/19/16 17:30	04/20/16 21:45	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.0	0.71	1	04/19/16 17:30	04/20/16 21:45	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.0	1.2	1	04/19/16 17:30	04/20/16 21:45	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.0	0.76	1	04/19/16 17:30	04/20/16 21:45	207-08-9	
Chrysene	ND	ug/kg	8.0	0.53	1	04/19/16 17:30	04/20/16 21:45	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.0	1.1	1	04/19/16 17:30	04/20/16 21:45	53-70-3	
Fluoranthene	ND	ug/kg	8.0	0.53	1	04/19/16 17:30	04/20/16 21:45	206-44-0	
Fluorene	ND	ug/kg	8.0	0.70	1	04/19/16 17:30	04/20/16 21:45	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.0	0.95	1	04/19/16 17:30	04/20/16 21:45	193-39-5	
Phenanthrene	ND	ug/kg	8.0	0.80	1	04/19/16 17:30	04/20/16 21:45	85-01-8	
Pyrene	ND	ug/kg	8.0	0.65	1	04/19/16 17:30	04/20/16 21:45	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%	35-141		1	04/19/16 17:30	04/20/16 21:45	321-60-8	
Terphenyl-d14 (S)	67	%	64-141		1	04/19/16 17:30	04/20/16 21:45	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**624**	ug/kg	271	73.8	50	04/26/16 11:46	04/26/16 16:59	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.0	2.4	1	04/21/16 09:51	04/21/16 12:57	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.0	2.5	1	04/21/16 09:51	04/21/16 12:57	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.0	2.4	1	04/21/16 09:51	04/21/16 12:57	98-06-6	1c
Ethanol	ND	ug/kg	200	56.6	1	04/21/16 09:51	04/21/16 12:57	64-17-5	1c,CL
Ethylbenzene	**86.7**	ug/kg	5.0	1.0	1	04/21/16 09:51	04/21/16 12:57	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.0	1.7	1	04/21/16 09:51	04/21/16 12:57	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.0	2.1	1	04/21/16 09:51	04/21/16 12:57	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.0	2.4	1	04/21/16 09:51	04/21/16 12:57	1634-04-4	1c
Naphthalene	**75.3**	ug/kg	5.0	0.97	1	04/21/16 09:51	04/21/16 12:57	91-20-3	1c
n-Propylbenzene	**9.7**	ug/kg	5.0	1.7	1	04/21/16 09:51	04/21/16 12:57	103-65-1	1c
Toluene	**118**	ug/kg	5.0	1.6	1	04/21/16 09:51	04/21/16 12:57	108-88-3	1c
1,2,4-Trimethylbenzene	**102**	ug/kg	5.0	1.4	1	04/21/16 09:51	04/21/16 12:57	95-63-6	1c
1,3,5-Trimethylbenzene	**30.1**	ug/kg	5.0	1.7	1	04/21/16 09:51	04/21/16 12:57	108-67-8	1c
m&p-Xylene	**135**	ug/kg	10	1.8	1	04/21/16 09:51	04/21/16 12:57	179601-23-1	1c
o-Xylene	**140**	ug/kg	5.0	0.99	1	04/21/16 09:51	04/21/16 12:57	95-47-6	1c
Surrogates									
Toluene-d8 (S)	99	%	68-135		1	04/21/16 09:51	04/21/16 12:57	2037-26-5	
4-Bromofluorobenzene (S)	100	%	65-146		1	04/21/16 09:51	04/21/16 12:57	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	69-137		1	04/21/16 09:51	04/21/16 12:57	17060-07-0	
Dibromofluoromethane (S)	102	%	70-130		1	04/21/16 09:51	04/21/16 12:57	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.8**	%	0.10	0.10	1		04/27/16 15:00		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ103(22.0-24.0) **Lab ID: 30179921014** Collected: 04/13/16 15:15 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.3	0.73	1	04/19/16 17:30	04/20/16 22:03	83-32-9	
Acenaphthylene	ND	ug/kg	8.3	0.71	1	04/19/16 17:30	04/20/16 22:03	208-96-8	
Anthracene	ND	ug/kg	8.3	0.81	1	04/19/16 17:30	04/20/16 22:03	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.3	2.1	1	04/19/16 17:30	04/20/16 22:03	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.3	0.79	1	04/19/16 17:30	04/20/16 22:03	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.3	0.73	1	04/19/16 17:30	04/20/16 22:03	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.3	1.3	1	04/19/16 17:30	04/20/16 22:03	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.3	0.78	1	04/19/16 17:30	04/20/16 22:03	207-08-9	
Chrysene	ND	ug/kg	8.3	0.55	1	04/19/16 17:30	04/20/16 22:03	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.3	1.1	1	04/19/16 17:30	04/20/16 22:03	53-70-3	
Fluoranthene	ND	ug/kg	8.3	0.55	1	04/19/16 17:30	04/20/16 22:03	206-44-0	
Fluorene	ND	ug/kg	8.3	0.72	1	04/19/16 17:30	04/20/16 22:03	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.3	0.98	1	04/19/16 17:30	04/20/16 22:03	193-39-5	
Phenanthrene	ND	ug/kg	8.3	0.83	1	04/19/16 17:30	04/20/16 22:03	85-01-8	
Pyrene	ND	ug/kg	8.3	0.67	1	04/19/16 17:30	04/20/16 22:03	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	44	%	35-141		1	04/19/16 17:30	04/20/16 22:03	321-60-8	
Terphenyl-d14 (S)	65	%	64-141		1	04/19/16 17:30	04/20/16 22:03	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**1230**	ug/kg	256	69.5	50	04/26/16 11:46	04/26/16 17:25	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.1	2.5	1	04/21/16 09:51	04/21/16 13:21	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.1	2.5	1	04/21/16 09:51	04/21/16 13:21	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.1	2.4	1	04/21/16 09:51	04/21/16 13:21	98-06-6	1c
Ethanol	ND	ug/kg	202	57.3	1	04/21/16 09:51	04/21/16 13:21	64-17-5	1c,CL
Ethylbenzene	**87.6**	ug/kg	5.1	1.0	1	04/21/16 09:51	04/21/16 13:21	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.1	1.7	1	04/21/16 09:51	04/21/16 13:21	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.1	2.1	1	04/21/16 09:51	04/21/16 13:21	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.1	2.5	1	04/21/16 09:51	04/21/16 13:21	1634-04-4	1c
Naphthalene	**71.3**	ug/kg	5.1	0.98	1	04/21/16 09:51	04/21/16 13:21	91-20-3	1c
n-Propylbenzene	**9.6**	ug/kg	5.1	1.8	1	04/21/16 09:51	04/21/16 13:21	103-65-1	1c
Toluene	**173**	ug/kg	5.1	1.6	1	04/21/16 09:51	04/21/16 13:21	108-88-3	1c
1,2,4-Trimethylbenzene	**107**	ug/kg	5.1	1.4	1	04/21/16 09:51	04/21/16 13:21	95-63-6	1c
1,3,5-Trimethylbenzene	**30.1**	ug/kg	5.1	1.7	1	04/21/16 09:51	04/21/16 13:21	108-67-8	1c
m&p-Xylene	**218**	ug/kg	10.1	1.9	1	04/21/16 09:51	04/21/16 13:21	179601-23-1	1c
o-Xylene	**146**	ug/kg	5.1	1.0	1	04/21/16 09:51	04/21/16 13:21	95-47-6	1c
Surrogates									
Toluene-d8 (S)	95	%	68-135		1	04/21/16 09:51	04/21/16 13:21	2037-26-5	
4-Bromofluorobenzene (S)	98	%	65-146		1	04/21/16 09:51	04/21/16 13:21	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	69-137		1	04/21/16 09:51	04/21/16 13:21	17060-07-0	
Dibromofluoromethane (S)	102	%	70-130		1	04/21/16 09:51	04/21/16 13:21	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**21.5**	%	0.10	0.10	1		04/27/16 15:01		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ102(6.0-8.0) **Lab ID: 30179921015** Collected: 04/14/16 11:40 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.1	0.72	1	04/19/16 17:30	04/21/16 18:14	83-32-9	
Acenaphthylene	ND	ug/kg	8.1	0.69	1	04/19/16 17:30	04/21/16 18:14	208-96-8	
Anthracene	ND	ug/kg	8.1	0.79	1	04/19/16 17:30	04/21/16 18:14	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.1	2.1	1	04/19/16 17:30	04/21/16 18:14	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.1	0.78	1	04/19/16 17:30	04/21/16 18:14	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.1	0.72	1	04/19/16 17:30	04/21/16 18:14	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.1	1.3	1	04/19/16 17:30	04/21/16 18:14	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.1	0.76	1	04/19/16 17:30	04/21/16 18:14	207-08-9	
Chrysene	ND	ug/kg	8.1	0.53	1	04/19/16 17:30	04/21/16 18:14	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/19/16 17:30	04/21/16 18:14	53-70-3	
Fluoranthene	ND	ug/kg	8.1	0.53	1	04/19/16 17:30	04/21/16 18:14	206-44-0	
Fluorene	ND	ug/kg	8.1	0.70	1	04/19/16 17:30	04/21/16 18:14	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.1	0.96	1	04/19/16 17:30	04/21/16 18:14	193-39-5	
Phenanthrene	ND	ug/kg	8.1	0.81	1	04/19/16 17:30	04/21/16 18:14	85-01-8	
Pyrene	ND	ug/kg	8.1	0.66	1	04/19/16 17:30	04/21/16 18:14	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	56	%	35-141		1	04/19/16 17:30	04/21/16 18:14	321-60-8	
Terphenyl-d14 (S)	76	%	64-141		1	04/19/16 17:30	04/21/16 18:14	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.4	1.5	1	04/21/16 09:51	04/21/16 13:45	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.4	2.6	1	04/21/16 09:51	04/21/16 13:45	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.4	2.7	1	04/21/16 09:51	04/21/16 13:45	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.4	2.6	1	04/21/16 09:51	04/21/16 13:45	98-06-6	1c
Ethanol	ND	ug/kg	215	61.0	1	04/21/16 09:51	04/21/16 13:45	64-17-5	1c,CL
Ethylbenzene	ND	ug/kg	5.4	1.1	1	04/21/16 09:51	04/21/16 13:45	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.4	1.9	1	04/21/16 09:51	04/21/16 13:45	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.4	2.3	1	04/21/16 09:51	04/21/16 13:45	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.4	2.6	1	04/21/16 09:51	04/21/16 13:45	1634-04-4	1c
Naphthalene	ND	ug/kg	5.4	1.0	1	04/21/16 09:51	04/21/16 13:45	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.4	1.9	1	04/21/16 09:51	04/21/16 13:45	103-65-1	1c
Toluene	ND	ug/kg	5.4	1.7	1	04/21/16 09:51	04/21/16 13:45	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.4	1.5	1	04/21/16 09:51	04/21/16 13:45	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.4	1.8	1	04/21/16 09:51	04/21/16 13:45	108-67-8	1c
m&p-Xylene	ND	ug/kg	10.8	2.0	1	04/21/16 09:51	04/21/16 13:45	179601-23-1	1c
o-Xylene	ND	ug/kg	5.4	1.1	1	04/21/16 09:51	04/21/16 13:45	95-47-6	1c
Surrogates									
Toluene-d8 (S)	93	%	68-135		1	04/21/16 09:51	04/21/16 13:45	2037-26-5	
4-Bromofluorobenzene (S)	100	%	65-146		1	04/21/16 09:51	04/21/16 13:45	460-00-4	
1,2-Dichloroethane-d4 (S)	86	%	69-137		1	04/21/16 09:51	04/21/16 13:45	17060-07-0	
Dibromofluoromethane (S)	104	%	70-130		1	04/21/16 09:51	04/21/16 13:45	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.3**	%	0.10	0.10	1		04/27/16 15:01		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ102(8.0-10.0) **Lab ID: 30179921016** Collected: 04/14/16 11:50 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**14.5**	ug/kg	7.9	0.69	1	04/28/16 16:36	04/29/16 11:47	83-32-9	
Acenaphthylene	ND	ug/kg	7.9	0.67	1	04/28/16 16:36	04/29/16 11:47	208-96-8	
Anthracene	ND	ug/kg	7.9	0.76	1	04/28/16 16:36	04/29/16 11:47	120-12-7	
Benzo(a)anthracene	ND	ug/kg	7.9	2.0	1	04/28/16 16:36	04/29/16 11:47	56-55-3	
Benzo(a)pyrene	ND	ug/kg	7.9	0.75	1	04/28/16 16:36	04/29/16 11:47	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	7.9	0.69	1	04/28/16 16:36	04/29/16 11:47	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	7.9	1.2	1	04/28/16 16:36	04/29/16 11:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	7.9	0.74	1	04/28/16 16:36	04/29/16 11:47	207-08-9	ip
Chrysene	ND	ug/kg	7.9	0.52	1	04/28/16 16:36	04/29/16 11:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	7.9	1.0	1	04/28/16 16:36	04/29/16 11:47	53-70-3	
Fluoranthene	ND	ug/kg	7.9	0.52	1	04/28/16 16:36	04/29/16 11:47	206-44-0	
Fluorene	**9.2**	ug/kg	7.9	0.68	1	04/28/16 16:36	04/29/16 11:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	7.9	0.93	1	04/28/16 16:36	04/29/16 11:47	193-39-5	
Phenanthrene	**9.0**	ug/kg	7.9	0.79	1	04/28/16 16:36	04/29/16 11:47	85-01-8	
Pyrene	**14.2**	ug/kg	7.9	0.63	1	04/28/16 16:36	04/29/16 11:47	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	73	%	35-141		1	04/28/16 16:36	04/29/16 11:47	321-60-8	
Terphenyl-d14 (S)	85	%	64-141		1	04/28/16 16:36	04/29/16 11:47	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	6.5	1.8	1	04/21/16 09:51	04/21/16 14:09	71-43-2	1c
n-Butylbenzene	**50.5**	ug/kg	6.5	3.2	1	04/21/16 09:51	04/21/16 14:09	104-51-8	1c
sec-Butylbenzene	**23.9**	ug/kg	6.5	3.2	1	04/21/16 09:51	04/21/16 14:09	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	6.5	3.1	1	04/21/16 09:51	04/21/16 14:09	98-06-6	1c
Ethanol	ND	ug/kg	259	73.3	1	04/21/16 09:51	04/21/16 14:09	64-17-5	1c,CL
Ethylbenzene	**157**	ug/kg	6.5	1.3	1	04/21/16 09:51	04/21/16 14:09	100-41-4	1c
Isopropylbenzene (Cumene)	**27.0**	ug/kg	6.5	2.2	1	04/21/16 09:51	04/21/16 14:09	98-82-8	1c
p-Isopropyltoluene	**112**	ug/kg	6.5	2.7	1	04/21/16 09:51	04/21/16 14:09	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	6.5	3.1	1	04/21/16 09:51	04/21/16 14:09	1634-04-4	1c
Naphthalene	**118**	ug/kg	6.5	1.3	1	04/21/16 09:51	04/21/16 14:09	91-20-3	1c
n-Propylbenzene	**63.3**	ug/kg	6.5	2.3	1	04/21/16 09:51	04/21/16 14:09	103-65-1	1c
Toluene	**109**	ug/kg	6.5	2.0	1	04/21/16 09:51	04/21/16 14:09	108-88-3	1c
1,2,4-Trimethylbenzene	**1470**	ug/kg	6.5	1.8	1	04/21/16 09:51	04/21/16 14:09	95-63-6	E
1,3,5-Trimethylbenzene	**797**	ug/kg	6.5	2.2	1	04/21/16 09:51	04/21/16 14:09	108-67-8	2c,E
m&p-Xylene	**1500**	ug/kg	12.9	2.4	1	04/21/16 09:51	04/21/16 14:09	179601-23-1	2c,E
o-Xylene	**733**	ug/kg	6.5	1.3	1	04/21/16 09:51	04/21/16 14:09	95-47-6	2c,E
Surrogates									
Toluene-d8 (S)	93	%	68-135		1	04/21/16 09:51	04/21/16 14:09	2037-26-5	
4-Bromofluorobenzene (S)	82	%	65-146		1	04/21/16 09:51	04/21/16 14:09	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	69-137		1	04/21/16 09:51	04/21/16 14:09	17060-07-0	
Dibromofluoromethane (S)	104	%	70-130		1	04/21/16 09:51	04/21/16 14:09	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**15.2**	%	0.10	0.10	1		04/27/16 15:02		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ102(10.0-12.0) **Lab ID: 30179921017** Collected: 04/14/16 13:00 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**171**	ug/kg	8.5	0.75	1	04/19/16 17:30	04/21/16 18:49	83-32-9	
Acenaphthylene	**170**	ug/kg	8.5	0.73	1	04/19/16 17:30	04/21/16 18:49	208-96-8	
Anthracene	**56.6**	ug/kg	8.5	0.83	1	04/19/16 17:30	04/21/16 18:49	120-12-7	
Benzo(a)anthracene	**21.5**	ug/kg	8.5	2.2	1	04/19/16 17:30	04/21/16 18:49	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.5	0.81	1	04/19/16 17:30	04/21/16 18:49	50-32-8	
Benzo(b)fluoranthene	**17.7**	ug/kg	8.5	0.75	1	04/19/16 17:30	04/21/16 18:49	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.5	1.3	1	04/19/16 17:30	04/21/16 18:49	191-24-2	
Benzo(k)fluoranthene	**11.8**	ug/kg	8.5	0.80	1	04/19/16 17:30	04/21/16 18:49	207-08-9	ip
Chrysene	**16.5**	ug/kg	8.5	0.56	1	04/19/16 17:30	04/21/16 18:49	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.5	1.1	1	04/19/16 17:30	04/21/16 18:49	53-70-3	
Fluoranthene	**55.9**	ug/kg	8.5	0.56	1	04/19/16 17:30	04/21/16 18:49	206-44-0	
Fluorene	**238**	ug/kg	8.5	0.74	1	04/19/16 17:30	04/21/16 18:49	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.5	1.0	1	04/19/16 17:30	04/21/16 18:49	193-39-5	
Phenanthrene	**209**	ug/kg	8.5	0.85	1	04/19/16 17:30	04/21/16 18:49	85-01-8	
Pyrene	**61.9**	ug/kg	8.5	0.69	1	04/19/16 17:30	04/21/16 18:49	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	76	%	35-141		1	04/19/16 17:30	04/21/16 18:49	321-60-8	
Terphenyl-d14 (S)	67	%	64-141		1	04/19/16 17:30	04/21/16 18:49	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**2210**	ug/kg	320	87.1	50	04/21/16 09:47	04/21/16 17:44	71-43-2	1c
n-Butylbenzene	**17400**	ug/kg	320	157	50	04/21/16 09:47	04/21/16 17:44	104-51-8	1c
sec-Butylbenzene	**5390**	ug/kg	320	161	50	04/21/16 09:47	04/21/16 17:44	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	3200	1540	500	04/21/16 09:47	04/26/16 15:42	98-06-6	1c
Ethanol	ND	ug/kg	12800	3630	50	04/21/16 09:47	04/21/16 17:44	64-17-5	1c,CL
Ethylbenzene	**83400**	ug/kg	3200	647	500	04/21/16 09:47	04/26/16 15:42	100-41-4	1c
Isopropylbenzene (Cumene)	**11400**	ug/kg	320	111	50	04/21/16 09:47	04/21/16 17:44	98-82-8	1c
p-Isopropyltoluene	**14800**	ug/kg	320	136	50	04/21/16 09:47	04/21/16 17:44	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	320	156	50	04/21/16 09:47	04/21/16 17:44	1634-04-4	1c
Naphthalene	**71900**	ug/kg	3200	621	500	04/21/16 09:47	04/26/16 15:42	91-20-3	1c
n-Propylbenzene	**47700**	ug/kg	3200	1120	500	04/21/16 09:47	04/26/16 15:42	103-65-1	1c
Toluene	**193000**	ug/kg	3200	999	500	04/21/16 09:47	04/26/16 15:42	108-88-3	1c
1,2,4-Trimethylbenzene	**326000**	ug/kg	32000	9160	5000	04/21/16 09:47	04/27/16 12:24	95-63-6	1c
1,3,5-Trimethylbenzene	**128000**	ug/kg	3200	1080	500	04/21/16 09:47	04/26/16 15:42	108-67-8	1c
m&p-Xylene	**385000**	ug/kg	6400	1180	500	04/21/16 09:47	04/26/16 15:42	179601-23-1	1c
o-Xylene	**164000**	ug/kg	3200	634	500	04/21/16 09:47	04/26/16 15:42	95-47-6	1c
Surrogates									
Toluene-d8 (S)	68	%	68-135		50	04/21/16 09:47	04/21/16 17:44	2037-26-5	
4-Bromofluorobenzene (S)	104	%	65-146		50	04/21/16 09:47	04/21/16 17:44	460-00-4	
1,2-Dichloroethane-d4 (S)	62	%	69-137		50	04/21/16 09:47	04/21/16 17:44	17060-07-0	S0
Dibromofluoromethane (S)	45	%	70-130		50	04/21/16 09:47	04/21/16 17:44	1868-53-7	S0
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**22.1**	%	0.10	0.10	1		04/27/16 15:03		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ102(12.0-14.0) **Lab ID: 30179921018** Collected: 04/14/16 13:10 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**127**	ug/kg	8.1	0.72	1	04/19/16 17:30	04/21/16 19:07	83-32-9	
Acenaphthylene	**85.1**	ug/kg	8.1	0.69	1	04/19/16 17:30	04/21/16 19:07	208-96-8	
Anthracene	**41.1**	ug/kg	8.1	0.79	1	04/19/16 17:30	04/21/16 19:07	120-12-7	
Benzo(a)anthracene	**15.7**	ug/kg	8.1	2.1	1	04/19/16 17:30	04/21/16 19:07	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.1	0.78	1	04/19/16 17:30	04/21/16 19:07	50-32-8	
Benzo(b)fluoranthene	**11.5**	ug/kg	8.1	0.72	1	04/19/16 17:30	04/21/16 19:07	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.1	1.3	1	04/19/16 17:30	04/21/16 19:07	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.1	0.77	1	04/19/16 17:30	04/21/16 19:07	207-08-9	ip
Chrysene	**11.3**	ug/kg	8.1	0.53	1	04/19/16 17:30	04/21/16 19:07	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/19/16 17:30	04/21/16 19:07	53-70-3	
Fluoranthene	**39.6**	ug/kg	8.1	0.53	1	04/19/16 17:30	04/21/16 19:07	206-44-0	
Fluorene	**149**	ug/kg	8.1	0.70	1	04/19/16 17:30	04/21/16 19:07	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.1	0.96	1	04/19/16 17:30	04/21/16 19:07	193-39-5	
Phenanthrene	**158**	ug/kg	8.1	0.81	1	04/19/16 17:30	04/21/16 19:07	85-01-8	
Pyrene	**44.2**	ug/kg	8.1	0.66	1	04/19/16 17:30	04/21/16 19:07	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	93	%	35-141		1	04/19/16 17:30	04/21/16 19:07	321-60-8	
Terphenyl-d14 (S)	80	%	64-141		1	04/19/16 17:30	04/21/16 19:07	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**12900**	ug/kg	2930	797	500	04/21/16 09:47	04/21/16 18:08	71-43-2	1c
n-Butylbenzene	**14100**	ug/kg	2930	1440	500	04/21/16 09:47	04/21/16 18:08	104-51-8	1c
sec-Butylbenzene	**4160**	ug/kg	2930	1470	500	04/21/16 09:47	04/21/16 18:08	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	2930	1410	500	04/21/16 09:47	04/21/16 18:08	98-06-6	1c
Ethanol	ND	ug/kg	117000	33200	500	04/21/16 09:47	04/21/16 18:08	64-17-5	1c,CL
Ethylbenzene	**97700**	ug/kg	2930	592	500	04/21/16 09:47	04/21/16 18:08	100-41-4	1c
Isopropylbenzene (Cumene)	**10000**	ug/kg	2930	1010	500	04/21/16 09:47	04/21/16 18:08	98-82-8	1c
p-Isopropyltoluene	**10800**	ug/kg	2930	1240	500	04/21/16 09:47	04/21/16 18:08	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	2930	1420	500	04/21/16 09:47	04/21/16 18:08	1634-04-4	1c
Naphthalene	**57800**	ug/kg	2930	568	500	04/21/16 09:47	04/21/16 18:08	91-20-3	1c
n-Propylbenzene	**34400**	ug/kg	2930	1030	500	04/21/16 09:47	04/21/16 18:08	103-65-1	1c
Toluene	**318000**	ug/kg	29300	9140	5000	04/21/16 09:47	04/26/16 16:08	108-88-3	1c
1,2,4-Trimethylbenzene	**231000**	ug/kg	2930	838	500	04/21/16 09:47	04/21/16 18:08	95-63-6	1c
1,3,5-Trimethylbenzene	**72900**	ug/kg	2930	984	500	04/21/16 09:47	04/21/16 18:08	108-67-8	1c
m&p-Xylene	**444000**	ug/kg	5860	1080	500	04/21/16 09:47	04/21/16 18:08	179601-23-1	1c
o-Xylene	**159000**	ug/kg	2930	580	500	04/21/16 09:47	04/21/16 18:08	95-47-6	1c
Surrogates									
Toluene-d8 (S)	90	%	68-135		500	04/21/16 09:47	04/21/16 18:08	2037-26-5	
4-Bromofluorobenzene (S)	99	%	65-146		500	04/21/16 09:47	04/21/16 18:08	460-00-4	
1,2-Dichloroethane-d4 (S)	122	%	69-137		500	04/21/16 09:47	04/21/16 18:08	17060-07-0	
Dibromofluoromethane (S)	83	%	70-130		500	04/21/16 09:47	04/21/16 18:08	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.6**	%	0.10	0.10	1		04/27/16 15:04		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ102(14.0-16.0) **Lab ID: 30179921019** Collected: 04/14/16 13:30 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**9.9**	ug/kg	8.5	0.75	1	04/19/16 17:30	04/21/16 19:24	83-32-9	
Acenaphthylene	ND	ug/kg	8.5	0.73	1	04/19/16 17:30	04/21/16 19:24	208-96-8	
Anthracene	ND	ug/kg	8.5	0.83	1	04/19/16 17:30	04/21/16 19:24	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.5	2.2	1	04/19/16 17:30	04/21/16 19:24	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.5	0.82	1	04/19/16 17:30	04/21/16 19:24	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.5	0.75	1	04/19/16 17:30	04/21/16 19:24	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.5	1.3	1	04/19/16 17:30	04/21/16 19:24	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.5	0.80	1	04/19/16 17:30	04/21/16 19:24	207-08-9	
Chrysene	ND	ug/kg	8.5	0.56	1	04/19/16 17:30	04/21/16 19:24	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.5	1.1	1	04/19/16 17:30	04/21/16 19:24	53-70-3	
Fluoranthene	ND	ug/kg	8.5	0.56	1	04/19/16 17:30	04/21/16 19:24	206-44-0	
Fluorene	ND	ug/kg	8.5	0.74	1	04/19/16 17:30	04/21/16 19:24	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.5	1.0	1	04/19/16 17:30	04/21/16 19:24	193-39-5	
Phenanthrene	**10.4**	ug/kg	8.5	0.85	1	04/19/16 17:30	04/21/16 19:24	85-01-8	
Pyrene	ND	ug/kg	8.5	0.69	1	04/19/16 17:30	04/21/16 19:24	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	69	%	35-141		1	04/19/16 17:30	04/21/16 19:24	321-60-8	
Terphenyl-d14 (S)	89	%	64-141		1	04/19/16 17:30	04/21/16 19:24	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**3390**	ug/kg	315	85.8	50	04/26/16 11:46	04/26/16 18:16	71-43-2	1c
n-Butylbenzene	ND	ug/kg	315	155	50	04/26/16 11:46	04/26/16 18:16	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	315	158	50	04/26/16 11:46	04/26/16 18:16	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	315	152	50	04/26/16 11:46	04/26/16 18:16	98-06-6	1c
Ethylbenzene	**2410**	ug/kg	315	63.7	50	04/26/16 11:46	04/26/16 18:16	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	315	109	50	04/26/16 11:46	04/26/16 18:16	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	315	134	50	04/26/16 11:46	04/26/16 18:16	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	315	153	50	04/26/16 11:46	04/26/16 18:16	1634-04-4	1c
Naphthalene	**1180**	ug/kg	315	61.2	50	04/26/16 11:46	04/26/16 18:16	91-20-3	1c
n-Propylbenzene	**764**	ug/kg	315	110	50	04/26/16 11:46	04/26/16 18:16	103-65-1	1c
Toluene	**11400**	ug/kg	315	98.4	50	04/26/16 11:46	04/26/16 18:16	108-88-3	1c
1,2,4-Trimethylbenzene	**4740**	ug/kg	315	90.2	50	04/26/16 11:46	04/26/16 18:16	95-63-6	1c
1,3,5-Trimethylbenzene	**1470**	ug/kg	315	106	50	04/26/16 11:46	04/26/16 18:16	108-67-8	1c
m&p-Xylene	**9700**	ug/kg	631	117	50	04/26/16 11:46	04/26/16 18:16	179601-23-1	1c
o-Xylene	**3710**	ug/kg	315	62.5	50	04/26/16 11:46	04/26/16 18:16	95-47-6	1c
Surrogates									
Toluene-d8 (S)	106	%	68-135		50	04/26/16 11:46	04/26/16 18:16	2037-26-5	
4-Bromofluorobenzene (S)	99	%	65-146		50	04/26/16 11:46	04/26/16 18:16	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	69-137		50	04/26/16 11:46	04/26/16 18:16	17060-07-0	
Dibromofluoromethane (S)	79	%	70-130		50	04/26/16 11:46	04/26/16 18:16	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**23.9**	%	0.10	0.10	1		04/27/16 15:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ102(16.0-18.0) **Lab ID: 30179921020** Collected: 04/14/16 13:40 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.9	0.70	1	04/19/16 17:30	04/21/16 19:42	83-32-9	
Acenaphthylene	ND	ug/kg	7.9	0.68	1	04/19/16 17:30	04/21/16 19:42	208-96-8	
Anthracene	ND	ug/kg	7.9	0.77	1	04/19/16 17:30	04/21/16 19:42	120-12-7	
Benzo(a)anthracene	ND	ug/kg	7.9	2.0	1	04/19/16 17:30	04/21/16 19:42	56-55-3	
Benzo(a)pyrene	ND	ug/kg	7.9	0.76	1	04/19/16 17:30	04/21/16 19:42	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	7.9	0.70	1	04/19/16 17:30	04/21/16 19:42	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	7.9	1.2	1	04/19/16 17:30	04/21/16 19:42	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	7.9	0.75	1	04/19/16 17:30	04/21/16 19:42	207-08-9	
Chrysene	ND	ug/kg	7.9	0.52	1	04/19/16 17:30	04/21/16 19:42	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	7.9	1.0	1	04/19/16 17:30	04/21/16 19:42	53-70-3	
Fluoranthene	ND	ug/kg	7.9	0.52	1	04/19/16 17:30	04/21/16 19:42	206-44-0	
Fluorene	ND	ug/kg	7.9	0.69	1	04/19/16 17:30	04/21/16 19:42	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	7.9	0.94	1	04/19/16 17:30	04/21/16 19:42	193-39-5	
Phenanthrene	ND	ug/kg	7.9	0.79	1	04/19/16 17:30	04/21/16 19:42	85-01-8	
Pyrene	ND	ug/kg	7.9	0.64	1	04/19/16 17:30	04/21/16 19:42	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%	35-141		1	04/19/16 17:30	04/21/16 19:42	321-60-8	
Terphenyl-d14 (S)	78	%	64-141		1	04/19/16 17:30	04/21/16 19:42	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**1650**	ug/kg	262	71.3	50	04/26/16 11:46	04/26/16 18:42	71-43-2	1c
n-Butylbenzene	ND	ug/kg	262	128	50	04/26/16 11:46	04/26/16 18:42	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	262	132	50	04/26/16 11:46	04/26/16 18:42	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	262	126	50	04/26/16 11:46	04/26/16 18:42	98-06-6	1c
Ethanol	ND	ug/kg	10500	2970	50	04/26/16 11:46	04/26/16 18:42	64-17-5	1c
Ethylbenzene	**667**	ug/kg	262	53.0	50	04/26/16 11:46	04/26/16 18:42	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	262	90.7	50	04/26/16 11:46	04/26/16 18:42	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	262	111	50	04/26/16 11:46	04/26/16 18:42	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	262	127	50	04/26/16 11:46	04/26/16 18:42	1634-04-4	1c
Naphthalene	**425**	ug/kg	262	50.9	50	04/26/16 11:46	04/26/16 18:42	91-20-3	1c
n-Propylbenzene	ND	ug/kg	262	91.8	50	04/26/16 11:46	04/26/16 18:42	103-65-1	1c
Toluene	**4030**	ug/kg	262	81.8	50	04/26/16 11:46	04/26/16 18:42	108-88-3	1c
1,2,4-Trimethylbenzene	**1200**	ug/kg	262	75.0	50	04/26/16 11:46	04/26/16 18:42	95-63-6	1c
1,3,5-Trimethylbenzene	**363**	ug/kg	262	88.1	50	04/26/16 11:46	04/26/16 18:42	108-67-8	1c
m&p-Xylene	**2740**	ug/kg	524	97.0	50	04/26/16 11:46	04/26/16 18:42	179601-23-1	1c
o-Xylene	**1100**	ug/kg	262	51.9	50	04/26/16 11:46	04/26/16 18:42	95-47-6	1c
Surrogates									
Toluene-d8 (S)	103	%	68-135		50	04/26/16 11:46	04/26/16 18:42	2037-26-5	
4-Bromofluorobenzene (S)	98	%	65-146		50	04/26/16 11:46	04/26/16 18:42	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	69-137		50	04/26/16 11:46	04/26/16 18:42	17060-07-0	
Dibromofluoromethane (S)	82	%	70-130		50	04/26/16 11:46	04/26/16 18:42	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.8**	%	0.10	0.10	1		04/27/16 15:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ102(18.0-20.0) **Lab ID: 30179921021** Collected: 04/14/16 13:50 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**2440**	ug/kg	279	75.9	50	04/26/16 11:46	04/26/16 19:08	71-43-2	1c
n-Butylbenzene	ND	ug/kg	279	137	50	04/26/16 11:46	04/26/16 19:08	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	279	140	50	04/26/16 11:46	04/26/16 19:08	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	279	135	50	04/26/16 11:46	04/26/16 19:08	98-06-6	1c
Ethanol	ND	ug/kg	11200	3170	50	04/26/16 11:46	04/26/16 19:08	64-17-5	1c
Ethylbenzene	**564**	ug/kg	279	56.4	50	04/26/16 11:46	04/26/16 19:08	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	279	96.6	50	04/26/16 11:46	04/26/16 19:08	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	279	118	50	04/26/16 11:46	04/26/16 19:08	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	279	136	50	04/26/16 11:46	04/26/16 19:08	1634-04-4	1c
Naphthalene	**306**	ug/kg	279	54.2	50	04/26/16 11:46	04/26/16 19:08	91-20-3	1c
n-Propylbenzene	ND	ug/kg	279	97.7	50	04/26/16 11:46	04/26/16 19:08	103-65-1	1c
Toluene	**3050**	ug/kg	279	87.1	50	04/26/16 11:46	04/26/16 19:08	108-88-3	1c
1,2,4-Trimethylbenzene	**840**	ug/kg	279	79.9	50	04/26/16 11:46	04/26/16 19:08	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	279	93.8	50	04/26/16 11:46	04/26/16 19:08	108-67-8	1c
m&p-Xylene	**2360**	ug/kg	558	103	50	04/26/16 11:46	04/26/16 19:08	179601-23-1	1c
o-Xylene	**970**	ug/kg	279	55.3	50	04/26/16 11:46	04/26/16 19:08	95-47-6	1c
Surrogates									
Toluene-d8 (S)	102	%	68-135		50	04/26/16 11:46	04/26/16 19:08	2037-26-5	
4-Bromofluorobenzene (S)	99	%	65-146		50	04/26/16 11:46	04/26/16 19:08	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	69-137		50	04/26/16 11:46	04/26/16 19:08	17060-07-0	
Dibromofluoromethane (S)	81	%	70-130		50	04/26/16 11:46	04/26/16 19:08	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**13.2**	%	0.10	0.10	1		04/27/16 15:06		

Sample: PZ102(20.0-22.0) **Lab ID: 30179921022** Collected: 04/14/16 14:00 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**1960**	ug/kg	266	72.4	50	04/26/16 11:46	04/26/16 19:33	71-43-2	1c
n-Butylbenzene	ND	ug/kg	266	130	50	04/26/16 11:46	04/26/16 19:33	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	266	134	50	04/26/16 11:46	04/26/16 19:33	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	266	128	50	04/26/16 11:46	04/26/16 19:33	98-06-6	1c
Ethanol	ND	ug/kg	10600	3020	50	04/26/16 11:46	04/26/16 19:33	64-17-5	1c
Ethylbenzene	**269**	ug/kg	266	53.8	50	04/26/16 11:46	04/26/16 19:33	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	266	92.1	50	04/26/16 11:46	04/26/16 19:33	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	266	113	50	04/26/16 11:46	04/26/16 19:33	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	266	129	50	04/26/16 11:46	04/26/16 19:33	1634-04-4	1c
Naphthalene	ND	ug/kg	266	51.6	50	04/26/16 11:46	04/26/16 19:33	91-20-3	1c
n-Propylbenzene	ND	ug/kg	266	93.1	50	04/26/16 11:46	04/26/16 19:33	103-65-1	1c
Toluene	**690**	ug/kg	266	83.0	50	04/26/16 11:46	04/26/16 19:33	108-88-3	1c

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ102(20.0-22.0) **Lab ID: 30179921022** Collected: 04/14/16 14:00 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
1,2,4-Trimethylbenzene	ND	ug/kg	266	76.1	50	04/26/16 11:46	04/26/16 19:33	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	266	89.4	50	04/26/16 11:46	04/26/16 19:33	108-67-8	1c
m&p-Xylene	**1060**	ug/kg	532	98.5	50	04/26/16 11:46	04/26/16 19:33	179601-23-1	1c
o-Xylene	**411**	ug/kg	266	52.7	50	04/26/16 11:46	04/26/16 19:33	95-47-6	1c
Surrogates									
Toluene-d8 (S)	100	%	68-135		50	04/26/16 11:46	04/26/16 19:33	2037-26-5	
4-Bromofluorobenzene (S)	99	%	65-146		50	04/26/16 11:46	04/26/16 19:33	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	69-137		50	04/26/16 11:46	04/26/16 19:33	17060-07-0	
Dibromofluoromethane (S)	82	%	70-130		50	04/26/16 11:46	04/26/16 19:33	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**17.9**	%	0.10	0.10	1		04/27/16 15:07		

Sample: PZ102(22.0-24.0) **Lab ID: 30179921023** Collected: 04/14/16 14:15 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**597**	ug/kg	226	61.5	50	04/26/16 11:46	04/26/16 19:59	71-43-2	1c
n-Butylbenzene	ND	ug/kg	226	111	50	04/26/16 11:46	04/26/16 19:59	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	226	114	50	04/26/16 11:46	04/26/16 19:59	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	226	109	50	04/26/16 11:46	04/26/16 19:59	98-06-6	1c
Ethanol	ND	ug/kg	9050	2570	50	04/26/16 11:46	04/26/16 19:59	64-17-5	1c
Ethylbenzene	ND	ug/kg	226	45.7	50	04/26/16 11:46	04/26/16 19:59	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	226	78.3	50	04/26/16 11:46	04/26/16 19:59	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	226	95.9	50	04/26/16 11:46	04/26/16 19:59	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	226	110	50	04/26/16 11:46	04/26/16 19:59	1634-04-4	1c
Naphthalene	ND	ug/kg	226	43.9	50	04/26/16 11:46	04/26/16 19:59	91-20-3	1c
n-Propylbenzene	ND	ug/kg	226	79.2	50	04/26/16 11:46	04/26/16 19:59	103-65-1	1c
Toluene	**341**	ug/kg	226	70.6	50	04/26/16 11:46	04/26/16 19:59	108-88-3	1c
1,2,4-Trimethylbenzene	**266**	ug/kg	226	64.7	50	04/26/16 11:46	04/26/16 19:59	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	226	76.0	50	04/26/16 11:46	04/26/16 19:59	108-67-8	1c
m&p-Xylene	**564**	ug/kg	452	83.7	50	04/26/16 11:46	04/26/16 19:59	179601-23-1	1c
o-Xylene	ND	ug/kg	226	44.8	50	04/26/16 11:46	04/26/16 19:59	95-47-6	1c
Surrogates									
Toluene-d8 (S)	102	%	68-135		50	04/26/16 11:46	04/26/16 19:59	2037-26-5	
4-Bromofluorobenzene (S)	101	%	65-146		50	04/26/16 11:46	04/26/16 19:59	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	69-137		50	04/26/16 11:46	04/26/16 19:59	17060-07-0	
Dibromofluoromethane (S)	96	%	70-130		50	04/26/16 11:46	04/26/16 19:59	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**15.0**	%	0.10	0.10	1		04/27/16 15:07		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30179921

Sample: PZ102(4.0-6.0) **Lab ID: 30179921024** Collected: 04/14/16 11:30 Received: 04/15/16 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.2	0.72	1	04/19/16 17:30	04/21/16 19:59	83-32-9	
Acenaphthylene	ND	ug/kg	8.2	0.70	1	04/19/16 17:30	04/21/16 19:59	208-96-8	
Anthracene	ND	ug/kg	8.2	0.79	1	04/19/16 17:30	04/21/16 19:59	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.2	2.1	1	04/19/16 17:30	04/21/16 19:59	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.2	0.78	1	04/19/16 17:30	04/21/16 19:59	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.2	0.72	1	04/19/16 17:30	04/21/16 19:59	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.2	1.3	1	04/19/16 17:30	04/21/16 19:59	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.2	0.77	1	04/19/16 17:30	04/21/16 19:59	207-08-9	ip
Chrysene	ND	ug/kg	8.2	0.54	1	04/19/16 17:30	04/21/16 19:59	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.2	1.1	1	04/19/16 17:30	04/21/16 19:59	53-70-3	
Fluoranthene	ND	ug/kg	8.2	0.54	1	04/19/16 17:30	04/21/16 19:59	206-44-0	
Fluorene	ND	ug/kg	8.2	0.71	1	04/19/16 17:30	04/21/16 19:59	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.2	0.96	1	04/19/16 17:30	04/21/16 19:59	193-39-5	
Phenanthrene	ND	ug/kg	8.2	0.82	1	04/19/16 17:30	04/21/16 19:59	85-01-8	
Pyrene	ND	ug/kg	8.2	0.66	1	04/19/16 17:30	04/21/16 19:59	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	56	%	35-141		1	04/19/16 17:30	04/21/16 19:59	321-60-8	
Terphenyl-d14 (S)	76	%	64-141		1	04/19/16 17:30	04/21/16 19:59	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.6	1.5	1	04/27/16 11:40	04/27/16 12:37	71-43-2	
n-Butylbenzene	ND	ug/kg	5.6	2.7	1	04/27/16 11:40	04/27/16 12:37	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.6	2.8	1	04/27/16 11:40	04/27/16 12:37	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.6	2.7	1	04/27/16 11:40	04/27/16 12:37	98-06-6	
Ethanol	ND	ug/kg	222	63.0	1	04/27/16 11:40	04/27/16 12:37	64-17-5	
Ethylbenzene	ND	ug/kg	5.6	1.1	1	04/27/16 11:40	04/27/16 12:37	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.6	1.9	1	04/27/16 11:40	04/27/16 12:37	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.6	2.4	1	04/27/16 11:40	04/27/16 12:37	99-87-6	
Methyl-tert-butyl ether	ND	ug/kg	5.6	2.7	1	04/27/16 11:40	04/27/16 12:37	1634-04-4	
Naphthalene	ND	ug/kg	5.6	1.1	1	04/27/16 11:40	04/27/16 12:37	91-20-3	
n-Propylbenzene	ND	ug/kg	5.6	1.9	1	04/27/16 11:40	04/27/16 12:37	103-65-1	
Toluene	ND	ug/kg	5.6	1.7	1	04/27/16 11:40	04/27/16 12:37	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.6	1.6	1	04/27/16 11:40	04/27/16 12:37	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.6	1.9	1	04/27/16 11:40	04/27/16 12:37	108-67-8	
m&p-Xylene	ND	ug/kg	11.1	2.1	1	04/27/16 11:40	04/27/16 12:37	179601-23-1	
o-Xylene	ND	ug/kg	5.6	1.1	1	04/27/16 11:40	04/27/16 12:37	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	68-135		1	04/27/16 11:40	04/27/16 12:37	2037-26-5	
4-Bromofluorobenzene (S)	95	%	65-146		1	04/27/16 11:40	04/27/16 12:37	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	69-137		1	04/27/16 11:40	04/27/16 12:37	17060-07-0	
Dibromofluoromethane (S)	94	%	70-130		1	04/27/16 11:40	04/27/16 12:37	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.1**	%	0.10	0.10	1		04/27/16 15:09		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

QC Batch: MSV/28151 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179921006, 30179921007, 30179921008, 30179921009, 30179921010, 30179921017, 30179921018

METHOD BLANK: 1062155 Matrix: Solid
Associated Lab Samples: 30179921006, 30179921007, 30179921008, 30179921009, 30179921010, 30179921017, 30179921018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	250	71.5	04/21/16 09:12	
1,3,5-Trimethylbenzene	ug/kg	ND	250	84.0	04/21/16 09:12	
Benzene	ug/kg	ND	250	68.0	04/21/16 09:12	
Ethanol	ug/kg	ND	10000	2840	04/21/16 09:12	
Ethylbenzene	ug/kg	ND	250	50.5	04/21/16 09:12	
Isopropylbenzene (Cumene)	ug/kg	ND	250	86.5	04/21/16 09:12	
m&p-Xylene	ug/kg	ND	500	92.5	04/21/16 09:12	
Methyl-tert-butyl ether	ug/kg	ND	250	122	04/21/16 09:12	
n-Butylbenzene	ug/kg	ND	250	122	04/21/16 09:12	
n-Propylbenzene	ug/kg	ND	250	87.5	04/21/16 09:12	
Naphthalene	ug/kg	ND	250	48.5	04/21/16 09:12	
o-Xylene	ug/kg	ND	250	49.5	04/21/16 09:12	
p-Isopropyltoluene	ug/kg	ND	250	106	04/21/16 09:12	
sec-Butylbenzene	ug/kg	ND	250	126	04/21/16 09:12	
tert-Butylbenzene	ug/kg	ND	250	120	04/21/16 09:12	
Toluene	ug/kg	ND	250	78.0	04/21/16 09:12	
1,2-Dichloroethane-d4 (S)	%	102	69-137		04/21/16 09:12	
4-Bromofluorobenzene (S)	%	102	65-146		04/21/16 09:12	
Dibromofluoromethane (S)	%	108	70-130		04/21/16 09:12	
Toluene-d8 (S)	%	97	68-135		04/21/16 09:12	

LABORATORY CONTROL SAMPLE: 1062156

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	20.0	100	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	19.5	98	74-129	
Benzene	ug/kg	20	21.0	105	71-137	
Ethanol	ug/kg	200	106J	53	23-168	
Ethylbenzene	ug/kg	20	19.9	100	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	19.3	96	78-133	
m&p-Xylene	ug/kg	40	39.0	98	77-129	
Methyl-tert-butyl ether	ug/kg	20	21.9	110	77-141	
n-Butylbenzene	ug/kg	20	20.2	101	74-140	
n-Propylbenzene	ug/kg	20	19.5	98	70-140	
Naphthalene	ug/kg	20	17.9	90	81-126	
o-Xylene	ug/kg	20	19.1	95	80-125	
p-Isopropyltoluene	ug/kg	20	20.2	101	74-136	
sec-Butylbenzene	ug/kg	20	19.6	98	81-132	
tert-Butylbenzene	ug/kg	20	19.0	95	77-129	
Toluene	ug/kg	20	19.1	95	72-127	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

LABORATORY CONTROL SAMPLE: 1062156

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			100	69-137	
4-Bromofluorobenzene (S)	%			100	65-146	
Dibromofluoromethane (S)	%			109	70-130	
Toluene-d8 (S)	%			96	68-135	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

QC Batch: MSV/28152 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179921001, 30179921002, 30179921003, 30179921004, 30179921011, 30179921012, 30179921013, 30179921014, 30179921015, 30179921016

METHOD BLANK: 1062158 Matrix: Solid
Associated Lab Samples: 30179921001, 30179921002, 30179921003, 30179921004, 30179921011, 30179921012, 30179921013, 30179921014, 30179921015, 30179921016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	1.4	04/21/16 09:38	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.7	04/21/16 09:38	
Benzene	ug/kg	ND	5.0	1.4	04/21/16 09:38	
Ethanol	ug/kg	ND	200	56.7	04/21/16 09:38	
Ethylbenzene	ug/kg	ND	5.0	1.0	04/21/16 09:38	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.7	04/21/16 09:38	
m&p-Xylene	ug/kg	ND	10.0	1.8	04/21/16 09:38	
Methyl-tert-butyl ether	ug/kg	ND	5.0	2.4	04/21/16 09:38	
n-Butylbenzene	ug/kg	ND	5.0	2.4	04/21/16 09:38	
n-Propylbenzene	ug/kg	ND	5.0	1.8	04/21/16 09:38	
Naphthalene	ug/kg	ND	5.0	0.97	04/21/16 09:38	
o-Xylene	ug/kg	ND	5.0	0.99	04/21/16 09:38	
p-Isopropyltoluene	ug/kg	ND	5.0	2.1	04/21/16 09:38	
sec-Butylbenzene	ug/kg	ND	5.0	2.5	04/21/16 09:38	
tert-Butylbenzene	ug/kg	ND	5.0	2.4	04/21/16 09:38	
Toluene	ug/kg	ND	5.0	1.6	04/21/16 09:38	
1,2-Dichloroethane-d4 (S)	%	97	69-137		04/21/16 09:38	
4-Bromofluorobenzene (S)	%	100	65-146		04/21/16 09:38	
Dibromofluoromethane (S)	%	111	70-130		04/21/16 09:38	
Toluene-d8 (S)	%	94	68-135		04/21/16 09:38	

LABORATORY CONTROL SAMPLE: 1062159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	20.0	100	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	19.5	98	74-129	
Benzene	ug/kg	20	21.0	105	71-137	
Ethanol	ug/kg	200	106J	53	23-168	CL
Ethylbenzene	ug/kg	20	19.9	100	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	19.3	96	78-133	
m&p-Xylene	ug/kg	40	39.0	98	77-129	
Methyl-tert-butyl ether	ug/kg	20	21.9	110	77-141	
n-Butylbenzene	ug/kg	20	20.2	101	74-140	
n-Propylbenzene	ug/kg	20	19.5	98	70-140	
Naphthalene	ug/kg	20	17.9	90	81-126	
o-Xylene	ug/kg	20	19.1	95	80-125	
p-Isopropyltoluene	ug/kg	20	20.2	101	74-136	
sec-Butylbenzene	ug/kg	20	19.6	98	81-132	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

LABORATORY CONTROL SAMPLE: 1062159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/kg	20	19.0	95	77-129	
Toluene	ug/kg	20	19.1	95	72-127	
1,2-Dichloroethane-d4 (S)	%			100	69-137	
4-Bromofluorobenzene (S)	%			100	65-146	
Dibromofluoromethane (S)	%			109	70-130	
Toluene-d8 (S)	%			96	68-135	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

QC Batch: MSV/28201 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179921011, 30179921012, 30179921013, 30179921014, 30179921019, 30179921020, 30179921021, 30179921022, 30179921023

METHOD BLANK: 1064899 Matrix: Solid
Associated Lab Samples: 30179921011, 30179921012, 30179921013, 30179921014, 30179921019, 30179921020, 30179921021, 30179921022, 30179921023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	250	71.5	04/26/16 10:31	
1,3,5-Trimethylbenzene	ug/kg	ND	250	84.0	04/26/16 10:31	
Benzene	ug/kg	ND	250	68.0	04/26/16 10:31	
Ethanol	ug/kg	ND	10000	2840	04/26/16 10:31	
Ethylbenzene	ug/kg	ND	250	50.5	04/26/16 10:31	
Isopropylbenzene (Cumene)	ug/kg	ND	250	86.5	04/26/16 10:31	
m&p-Xylene	ug/kg	ND	500	92.5	04/26/16 10:31	
Methyl-tert-butyl ether	ug/kg	ND	250	122	04/26/16 10:31	
n-Butylbenzene	ug/kg	ND	250	122	04/26/16 10:31	
n-Propylbenzene	ug/kg	ND	250	87.5	04/26/16 10:31	
Naphthalene	ug/kg	ND	250	48.5	04/26/16 10:31	
o-Xylene	ug/kg	ND	250	49.5	04/26/16 10:31	
p-Isopropyltoluene	ug/kg	ND	250	106	04/26/16 10:31	
sec-Butylbenzene	ug/kg	ND	250	126	04/26/16 10:31	
tert-Butylbenzene	ug/kg	ND	250	120	04/26/16 10:31	
Toluene	ug/kg	ND	250	78.0	04/26/16 10:31	
1,2-Dichloroethane-d4 (S)	%	107	69-137		04/26/16 10:31	
4-Bromofluorobenzene (S)	%	96	65-146		04/26/16 10:31	
Dibromofluoromethane (S)	%	91	70-130		04/26/16 10:31	
Toluene-d8 (S)	%	101	68-135		04/26/16 10:31	

LABORATORY CONTROL SAMPLE: 1064900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	21.1	106	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	21.2	106	74-129	
Benzene	ug/kg	20	21.6	108	71-137	
Ethanol	ug/kg	200	163J	82	23-168	
Ethylbenzene	ug/kg	20	20.9	105	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	20.3	102	78-133	
m&p-Xylene	ug/kg	40	42.2	105	77-129	
Methyl-tert-butyl ether	ug/kg	20	19.0	95	77-141	
n-Butylbenzene	ug/kg	20	21.0	105	74-140	
n-Propylbenzene	ug/kg	20	23.4	117	70-140	
Naphthalene	ug/kg	20	19.3	97	81-126	
o-Xylene	ug/kg	20	20.9	104	80-125	
p-Isopropyltoluene	ug/kg	20	20.9	105	74-136	
sec-Butylbenzene	ug/kg	20	20.2	101	81-132	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

LABORATORY CONTROL SAMPLE: 1064900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/kg	20	20.5	102	77-129	
Toluene	ug/kg	20	21.4	107	72-127	
1,2-Dichloroethane-d4 (S)	%			104	69-137	
4-Bromofluorobenzene (S)	%			99	65-146	
Dibromofluoromethane (S)	%			100	70-130	
Toluene-d8 (S)	%			103	68-135	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

QC Batch: MSV/28226
QC Batch Method: EPA 5035A
Analysis Method: EPA 8260C
Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30179921024

METHOD BLANK: 1065613
Matrix: Solid
Associated Lab Samples: 30179921024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	1.4	04/27/16 11:58	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.7	04/27/16 11:58	
Benzene	ug/kg	ND	5.0	1.4	04/27/16 11:58	
Ethanol	ug/kg	ND	200	56.7	04/27/16 11:58	
Ethylbenzene	ug/kg	ND	5.0	1.0	04/27/16 11:58	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.7	04/27/16 11:58	
m&p-Xylene	ug/kg	ND	10.0	1.8	04/27/16 11:58	
Methyl-tert-butyl ether	ug/kg	ND	5.0	2.4	04/27/16 11:58	
n-Butylbenzene	ug/kg	ND	5.0	2.4	04/27/16 11:58	
n-Propylbenzene	ug/kg	ND	5.0	1.8	04/27/16 11:58	
Naphthalene	ug/kg	ND	5.0	0.97	04/27/16 11:58	
o-Xylene	ug/kg	ND	5.0	0.99	04/27/16 11:58	
p-Isopropyltoluene	ug/kg	ND	5.0	2.1	04/27/16 11:58	
sec-Butylbenzene	ug/kg	ND	5.0	2.5	04/27/16 11:58	
tert-Butylbenzene	ug/kg	ND	5.0	2.4	04/27/16 11:58	
Toluene	ug/kg	ND	5.0	1.6	04/27/16 11:58	
1,2-Dichloroethane-d4 (S)	%	109	69-137		04/27/16 11:58	
4-Bromofluorobenzene (S)	%	94	65-146		04/27/16 11:58	
Dibromofluoromethane (S)	%	94	70-130		04/27/16 11:58	
Toluene-d8 (S)	%	98	68-135		04/27/16 11:58	

LABORATORY CONTROL SAMPLE: 1065614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	18.5	93	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	18.2	91	74-129	
Benzene	ug/kg	20	18.7	94	71-137	
Ethanol	ug/kg	200	193J	97	23-168	
Ethylbenzene	ug/kg	20	18.1	90	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	17.9	90	78-133	
m&p-Xylene	ug/kg	40	36.3	91	77-129	
Methyl-tert-butyl ether	ug/kg	20	18.9	94	77-141	
n-Butylbenzene	ug/kg	20	18.7	94	74-140	
n-Propylbenzene	ug/kg	20	18.6	93	70-140	
Naphthalene	ug/kg	20	19.1	96	81-126	
o-Xylene	ug/kg	20	18.4	92	80-125	
p-Isopropyltoluene	ug/kg	20	18.4	92	74-136	
sec-Butylbenzene	ug/kg	20	18.5	92	81-132	
tert-Butylbenzene	ug/kg	20	18.0	90	77-129	
Toluene	ug/kg	20	17.9	89	72-127	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

LABORATORY CONTROL SAMPLE: 1065614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			107	69-137	
4-Bromofluorobenzene (S)	%			95	65-146	
Dibromofluoromethane (S)	%			105	70-130	
Toluene-d8 (S)	%			99	68-135	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

QC Batch: MSV/28161
QC Batch Method: EPA 8260C
Analysis Method: EPA 8260C
Analysis Description: 8260C MSV
Associated Lab Samples: 30179921005

METHOD BLANK: 1062367
Matrix: Water
Associated Lab Samples: 30179921005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.12	04/21/16 13:49	M5
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.12	04/21/16 13:49	M5
Benzene	ug/L	ND	1.0	0.16	04/21/16 13:49	M5
Ethanol	ug/L	ND	200	26.1	04/21/16 13:49	M5
Ethylbenzene	ug/L	ND	1.0	0.23	04/21/16 13:49	M5
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.14	04/21/16 13:49	M5
m&p-Xylene	ug/L	ND	2.0	0.32	04/21/16 13:49	M5
Methyl-tert-butyl ether	ug/L	ND	1.0	0.17	04/21/16 13:49	M5
n-Butylbenzene	ug/L	ND	1.0	0.15	04/21/16 13:49	M5
n-Propylbenzene	ug/L	ND	1.0	0.15	04/21/16 13:49	M5
Naphthalene	ug/L	ND	2.0	0.19	04/21/16 13:49	M5
o-Xylene	ug/L	ND	1.0	0.22	04/21/16 13:49	M5
p-Isopropyltoluene	ug/L	ND	1.0	0.22	04/21/16 13:49	M5
sec-Butylbenzene	ug/L	ND	1.0	0.21	04/21/16 13:49	M5
tert-Butylbenzene	ug/L	ND	1.0	0.19	04/21/16 13:49	M5
Toluene	ug/L	ND	1.0	0.13	04/21/16 13:49	M5
1,2-Dichloroethane-d4 (S)	%	119	77-126		04/21/16 13:49	M5
4-Bromofluorobenzene (S)	%	99	81-119		04/21/16 13:49	M5
Dibromofluoromethane (S)	%	111	70-130		04/21/16 13:49	M5
Toluene-d8 (S)	%	102	84-115		04/21/16 13:49	M5

LABORATORY CONTROL SAMPLE: 1062368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	16.8	84	75-128	M5
1,3,5-Trimethylbenzene	ug/L	20	16.8	84	74-125	M5
Benzene	ug/L	20	18.0	90	69-115	M5
Ethanol	ug/L	200	323	162	10-175	M5
Ethylbenzene	ug/L	20	18.2	91	71-116	M5
Isopropylbenzene (Cumene)	ug/L	20	17.2	86	79-121	M5
m&p-Xylene	ug/L	40	36.7	92	74-118	M5
Methyl-tert-butyl ether	ug/L	20	18.5	93	83-140	M5
n-Butylbenzene	ug/L	20	17.1	86	64-128	M5
n-Propylbenzene	ug/L	20	17.2	86	70-123	M5
Naphthalene	ug/L	20	17.6	88	64-140	M5
o-Xylene	ug/L	20	18.6	93	71-119	M5
p-Isopropyltoluene	ug/L	20	18.1	90	68-129	M5
sec-Butylbenzene	ug/L	20	17.6	88	70-126	M5
tert-Butylbenzene	ug/L	20	18.0	90	72-123	M5
Toluene	ug/L	20	17.8	89	70-115	M5

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

LABORATORY CONTROL SAMPLE: 1062368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			114	77-126	M5
4-Bromofluorobenzene (S)	%			103	81-119	M5
Dibromofluoromethane (S)	%			110	70-130	M5
Toluene-d8 (S)	%			96	84-115	M5

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

QC Batch: OEXT/28131 Analysis Method: EPA 8270D by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270D/3546 MSSV PAH by SIM
Associated Lab Samples: 30179921001, 30179921002, 30179921003, 30179921004, 30179921006, 30179921007, 30179921008, 30179921009, 30179921010, 30179921011, 30179921012, 30179921013, 30179921014, 30179921015, 30179921017, 30179921018, 30179921019, 30179921020, 30179921024

METHOD BLANK: 1061208 Matrix: Solid
Associated Lab Samples: 30179921001, 30179921002, 30179921003, 30179921004, 30179921006, 30179921007, 30179921008, 30179921009, 30179921010, 30179921011, 30179921012, 30179921013, 30179921014, 30179921015, 30179921017, 30179921018, 30179921019, 30179921020, 30179921024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	6.7	0.59	04/20/16 17:23	
Acenaphthylene	ug/kg	ND	6.7	0.57	04/20/16 17:23	
Anthracene	ug/kg	ND	6.7	0.65	04/20/16 17:23	
Benzo(a)anthracene	ug/kg	ND	6.7	1.7	04/20/16 17:23	
Benzo(a)pyrene	ug/kg	ND	6.7	0.64	04/20/16 17:23	
Benzo(b)fluoranthene	ug/kg	ND	6.7	0.59	04/20/16 17:23	
Benzo(g,h,i)perylene	ug/kg	ND	6.7	1.0	04/20/16 17:23	
Benzo(k)fluoranthene	ug/kg	ND	6.7	0.63	04/20/16 17:23	
Chrysene	ug/kg	ND	6.7	0.44	04/20/16 17:23	
Dibenz(a,h)anthracene	ug/kg	ND	6.7	0.88	04/20/16 17:23	
Fluoranthene	ug/kg	ND	6.7	0.44	04/20/16 17:23	
Fluorene	ug/kg	ND	6.7	0.58	04/20/16 17:23	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	6.7	0.79	04/20/16 17:23	
Phenanthrene	ug/kg	ND	6.7	0.67	04/20/16 17:23	
Pyrene	ug/kg	ND	6.7	0.54	04/20/16 17:23	
2-Fluorobiphenyl (S)	%	55	35-141		04/20/16 17:23	
Terphenyl-d14 (S)	%	75	64-141		04/20/16 17:23	

LABORATORY CONTROL SAMPLE: 1061209

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	133	105	78	43-113	
Acenaphthylene	ug/kg	133	104	78	41-114	
Anthracene	ug/kg	133	110	82	59-115	
Benzo(a)anthracene	ug/kg	133	100	75	62-122	
Benzo(a)pyrene	ug/kg	133	130	98	56-113	
Benzo(b)fluoranthene	ug/kg	133	121	91	43-138	
Benzo(g,h,i)perylene	ug/kg	133	116	87	47-143	
Benzo(k)fluoranthene	ug/kg	133	141	106	52-138	
Chrysene	ug/kg	133	116	87	64-119	
Dibenz(a,h)anthracene	ug/kg	133	131	98	59-133	
Fluoranthene	ug/kg	133	112	84	64-122	
Fluorene	ug/kg	133	105	79	46-114	
Indeno(1,2,3-cd)pyrene	ug/kg	133	123	92	59-132	
Phenanthrene	ug/kg	133	86.7	65	42-122	
Pyrene	ug/kg	133	119	89	64-117	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

LABORATORY CONTROL SAMPLE: 1061209

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%			58	35-141	
Terphenyl-d14 (S)	%			74	64-141	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1061210 1061211

Parameter	Units	30179921001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	ND	158	162	120	117	76	72	43-113	3	20	
Acenaphthylene	ug/kg	ND	158	162	121	121	77	75	41-114	1	20	
Anthracene	ug/kg	ND	158	162	133	125	84	77	59-115	7	20	
Benzo(a)anthracene	ug/kg	ND	158	162	146	139	92	86	62-122	5	20	
Benzo(a)pyrene	ug/kg	ND	158	162	148	140	94	87	56-113	6	20	
Benzo(b)fluoranthene	ug/kg	ND	158	162	127	122	80	75	43-138	4	20	
Benzo(g,h,i)perylene	ug/kg	ND	158	162	124	107	78	65	47-143	15	20	
Benzo(k)fluoranthene	ug/kg	ND	158	162	165	157	104	97	52-138	5	20	
Chrysene	ug/kg	ND	158	162	161	155	102	96	64-119	4	20	
Dibenz(a,h)anthracene	ug/kg	ND	158	162	140	127	88	79	59-133	9	20	
Fluoranthene	ug/kg	ND	158	162	139	135	88	84	64-122	3	20	
Fluorene	ug/kg	ND	158	162	121	123	77	76	46-114	2	20	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	158	162	131	117	83	72	59-132	11	20	
Phenanthrene	ug/kg	ND	158	162	109	107	69	67	42-122	1	20	
Pyrene	ug/kg	ND	158	162	149	144	94	89	64-117	3	20	
2-Fluorobiphenyl (S)	%						57	56	35-141			
Terphenyl-d14 (S)	%						77	74	64-141			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

QC Batch: OEXT/28253
QC Batch Method: EPA 3546
Analysis Method: EPA 8270D by SIM
Analysis Description: 8270D/3546 MSSV PAH by SIM
Associated Lab Samples: 30179921016

METHOD BLANK: 1066125
Matrix: Solid
Associated Lab Samples: 30179921016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	6.7	0.59	04/29/16 10:37	
Acenaphthylene	ug/kg	ND	6.7	0.57	04/29/16 10:37	
Anthracene	ug/kg	ND	6.7	0.65	04/29/16 10:37	
Benzo(a)anthracene	ug/kg	ND	6.7	1.7	04/29/16 10:37	
Benzo(a)pyrene	ug/kg	ND	6.7	0.64	04/29/16 10:37	
Benzo(b)fluoranthene	ug/kg	ND	6.7	0.59	04/29/16 10:37	
Benzo(g,h,i)perylene	ug/kg	ND	6.7	1.0	04/29/16 10:37	
Benzo(k)fluoranthene	ug/kg	ND	6.7	0.63	04/29/16 10:37	
Chrysene	ug/kg	ND	6.7	0.44	04/29/16 10:37	
Dibenz(a,h)anthracene	ug/kg	ND	6.7	0.88	04/29/16 10:37	
Fluoranthene	ug/kg	ND	6.7	0.44	04/29/16 10:37	
Fluorene	ug/kg	ND	6.7	0.58	04/29/16 10:37	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	6.7	0.79	04/29/16 10:37	
Phenanthrene	ug/kg	ND	6.7	0.67	04/29/16 10:37	
Pyrene	ug/kg	ND	6.7	0.54	04/29/16 10:37	
2-Fluorobiphenyl (S)	%	62	35-141		04/29/16 10:37	
Terphenyl-d14 (S)	%	89	64-141		04/29/16 10:37	

LABORATORY CONTROL SAMPLE: 1066126

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	133	94.4	71	43-113	
Acenaphthylene	ug/kg	133	97.6	73	41-114	
Anthracene	ug/kg	133	105	79	59-115	
Benzo(a)anthracene	ug/kg	133	129	96	62-122	
Benzo(a)pyrene	ug/kg	133	138	103	56-113	
Benzo(b)fluoranthene	ug/kg	133	129	97	43-138	
Benzo(g,h,i)perylene	ug/kg	133	130	97	47-143	
Benzo(k)fluoranthene	ug/kg	133	139	104	52-138	
Chrysene	ug/kg	133	141	106	64-119	
Dibenz(a,h)anthracene	ug/kg	133	126	94	59-133	
Fluoranthene	ug/kg	133	119	89	64-122	
Fluorene	ug/kg	133	96.0	72	46-114	
Indeno(1,2,3-cd)pyrene	ug/kg	133	127	95	59-132	
Phenanthrene	ug/kg	133	97.8	73	42-122	
Pyrene	ug/kg	133	122	92	64-117	
2-Fluorobiphenyl (S)	%			57	35-141	
Terphenyl-d14 (S)	%			86	64-141	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

QC Batch: PMST/6097 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30179921001, 30179921002, 30179921003, 30179921004, 30179921006, 30179921007, 30179921008

SAMPLE DUPLICATE: 1065786

Parameter	Units	30178499001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	3.1	2.6	18	20	

SAMPLE DUPLICATE: 1065787

Parameter	Units	30178499002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	3.8	3.5	9	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30179921

QC Batch: PMST/6098 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30179921009, 30179921010, 30179921011, 30179921012, 30179921013, 30179921014, 30179921015, 30179921016, 30179921017, 30179921018, 30179921019, 30179921020, 30179921021, 30179921022, 30179921023, 30179921024

SAMPLE DUPLICATE: 1065788

Parameter	Units	30179921009 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	20.3	19.9	2	20	

SAMPLE DUPLICATE: 1065789

Parameter	Units	30179921010 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	24.1	25.1	4	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Lysander, NY
Pace Project No.: 30179921

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: MSV/28151

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28152

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28161

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28201

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
2c	The sample was analyzed at dilution which did not confirm the original analysis. Matrix heterogeneity is suspected.
3c	The sample was reextracted beyond the method recommended holding time due to low terphenyl recovery. Recovery of terphenyl was within limits in the reextracted sample, and results for target analytes were similar to those for the original in hold sample extract. Results are reported from the original in hold sample extract analysis.
CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Lysander, NY
Pace Project No.: 30179921

ANALYTE QUALIFIERS

S0	Surrogate recovery outside laboratory control limits.
ip	Benzo(b)fluoranthene and benzo(k)fluoranthene were separated in the check standard but did not meet the resolution criteria in SW846 Method 8270D. Whereas sample results included are reported as individual isomers, the lab and the customer must recognize them as an isomeric pair.

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lysander, NY
Pace Project No.: 30179921

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30179921001	**PZ106(4.0-6.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921002	**PZ106(6.0-8.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921003	**PZ106(8.0-10.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921004	**PZ106(10.0-12.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921006	**PZ103(6.0-8.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921007	**PZ103(8.0-10.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921008	**PZ103(10.0-12.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921009	**PZ103(12.0-14.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921010	**PZ103(14.0-16.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921011	**PZ103(16.0-18.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921012	**PZ103(18.0-20.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921013	**PZ103(20.0-22.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921014	**PZ103(22.0-24.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921015	**PZ102(6.0-8.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921016	**PZ102(8.0-10.0)**	EPA 3546	OEXT/28253	EPA 8270D by SIM	MSSV/9330
30179921017	**PZ102(10.0-12.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921018	**PZ102(12.0-14.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921019	**PZ102(14.0-16.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921020	**PZ102(16.0-18.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921024	**PZ102(4.0-6.0)**	EPA 3546	OEXT/28131	EPA 8270D by SIM	MSSV/9282
30179921001	**PZ106(4.0-6.0)**	EPA 5035A	MSV/28152	EPA 8260C	MSV/28163
30179921002	**PZ106(6.0-8.0)**	EPA 5035A	MSV/28152	EPA 8260C	MSV/28163
30179921003	**PZ106(8.0-10.0)**	EPA 5035A	MSV/28152	EPA 8260C	MSV/28163
30179921004	**PZ106(10.0-12.0)**	EPA 5035A	MSV/28152	EPA 8260C	MSV/28163
30179921006	**PZ103(6.0-8.0)**	EPA 5035A	MSV/28151	EPA 8260C	MSV/28164
30179921007	**PZ103(8.0-10.0)**	EPA 5035A	MSV/28151	EPA 8260C	MSV/28164
30179921008	**PZ103(10.0-12.0)**	EPA 5035A	MSV/28151	EPA 8260C	MSV/28164
30179921009	**PZ103(12.0-14.0)**	EPA 5035A	MSV/28151	EPA 8260C	MSV/28164
30179921010	**PZ103(14.0-16.0)**	EPA 5035A	MSV/28151	EPA 8260C	MSV/28164
30179921011	**PZ103(16.0-18.0)**	EPA 5035A	MSV/28152	EPA 8260C	MSV/28163
30179921011	**PZ103(16.0-18.0)**	EPA 5035A	MSV/28201	EPA 8260C	MSV/28204
30179921012	**PZ103(18.0-20.0)**	EPA 5035A	MSV/28152	EPA 8260C	MSV/28163
30179921012	**PZ103(18.0-20.0)**	EPA 5035A	MSV/28201	EPA 8260C	MSV/28204
30179921013	**PZ103(20.0-22.0)**	EPA 5035A	MSV/28152	EPA 8260C	MSV/28163
30179921013	**PZ103(20.0-22.0)**	EPA 5035A	MSV/28201	EPA 8260C	MSV/28204
30179921014	**PZ103(22.0-24.0)**	EPA 5035A	MSV/28152	EPA 8260C	MSV/28163
30179921014	**PZ103(22.0-24.0)**	EPA 5035A	MSV/28201	EPA 8260C	MSV/28204
30179921015	**PZ102(6.0-8.0)**	EPA 5035A	MSV/28152	EPA 8260C	MSV/28163
30179921016	**PZ102(8.0-10.0)**	EPA 5035A	MSV/28152	EPA 8260C	MSV/28163
30179921017	**PZ102(10.0-12.0)**	EPA 5035A	MSV/28151	EPA 8260C	MSV/28164
30179921018	**PZ102(12.0-14.0)**	EPA 5035A	MSV/28151	EPA 8260C	MSV/28164

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lysander, NY
Pace Project No.: 30179921

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30179921019	**PZ102(14.0-16.0)**	EPA 5035A	MSV/28201	EPA 8260C	MSV/28204
30179921020	**PZ102(16.0-18.0)**	EPA 5035A	MSV/28201	EPA 8260C	MSV/28204
30179921021	**PZ102(18.0-20.0)**	EPA 5035A	MSV/28201	EPA 8260C	MSV/28204
30179921022	**PZ102(20.0-22.0)**	EPA 5035A	MSV/28201	EPA 8260C	MSV/28204
30179921023	**PZ102(22.0-24.0)**	EPA 5035A	MSV/28201	EPA 8260C	MSV/28204
30179921024	**PZ102(4.0-6.0)**	EPA 5035A	MSV/28226	EPA 8260C	MSV/28236
30179921005	**TRIP BLANK**	EPA 8260C	MSV/28161		
30179921001	**PZ106(4.0-6.0)**	ASTM D2974-87	PMST/6097		
30179921002	**PZ106(6.0-8.0)**	ASTM D2974-87	PMST/6097		
30179921003	**PZ106(8.0-10.0)**	ASTM D2974-87	PMST/6097		
30179921004	**PZ106(10.0-12.0)**	ASTM D2974-87	PMST/6097		
30179921006	**PZ103(6.0-8.0)**	ASTM D2974-87	PMST/6097		
30179921007	**PZ103(8.0-10.0)**	ASTM D2974-87	PMST/6097		
30179921008	**PZ103(10.0-12.0)**	ASTM D2974-87	PMST/6097		
30179921009	**PZ103(12.0-14.0)**	ASTM D2974-87	PMST/6098		
30179921010	**PZ103(14.0-16.0)**	ASTM D2974-87	PMST/6098		
30179921011	**PZ103(16.0-18.0)**	ASTM D2974-87	PMST/6098		
30179921012	**PZ103(18.0-20.0)**	ASTM D2974-87	PMST/6098		
30179921013	**PZ103(20.0-22.0)**	ASTM D2974-87	PMST/6098		
30179921014	**PZ103(22.0-24.0)**	ASTM D2974-87	PMST/6098		
30179921015	**PZ102(6.0-8.0)**	ASTM D2974-87	PMST/6098		
30179921016	**PZ102(8.0-10.0)**	ASTM D2974-87	PMST/6098		
30179921017	**PZ102(10.0-12.0)**	ASTM D2974-87	PMST/6098		
30179921018	**PZ102(12.0-14.0)**	ASTM D2974-87	PMST/6098		
30179921019	**PZ102(14.0-16.0)**	ASTM D2974-87	PMST/6098		
30179921020	**PZ102(16.0-18.0)**	ASTM D2974-87	PMST/6098		
30179921021	**PZ102(18.0-20.0)**	ASTM D2974-87	PMST/6098		
30179921022	**PZ102(20.0-22.0)**	ASTM D2974-87	PMST/6098		
30179921023	**PZ102(22.0-24.0)**	ASTM D2974-87	PMST/6098		
30179921024	**PZ102(4.0-6.0)**	ASTM D2974-87	PMST/6098		

bp rm

Laboratory Management Program LaMP Ch

WO#: 30179921

Page 1 of 3

BP Site Node Path:

BP Facility No:

Rush TAT: Yes ___ No X

Lab Name: Pace Analytical Serices	Facility Address: 7430 Hillside Rd,		
Lab Address: 1638 Roseytown Rd, Greensburg, PA 15601	City, State, ZIP Code: Lysand	Consultant/Contractor Project No:	
Lab PM: Tina Sayer	Lead Regulatory Agency: NYS	Address: B0090004.0002.00001	
Lab Phone: 317-228-3127	California Global ID No.:	Consultant/Contractor PM: Vin Maresco	
Lab Shipping A Yes	Enfos Proposal No:	Phone: 315-671-9256	Email: vin.maresco@arcadis.com
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To:	and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___	Contractor ___
BP Project Manager (PM): John A. Frankenthal			
BP PM Phone: 312.809.4117			
BP PM Email: John.Frankenthal@bp.com			

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Water / Liquid	Air / Vapor	Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: CP-51 listed vols for via 8260	MTBE	Ethanol	CP-51 listed semi-vols for via 8270	Report Type & QC Level
	PZ106 (4.0-6.0)	4/13/16	0935	X					2					X	X	X	X	001
	PZ106 (6.0-8.0)	4/13/16	0945	X					2					X	X	X	X	002
	PZ106 (8.0-10.0)	4/13/16	0955	X					2					X	X	X	X	003
	PZ106 (10.0-12.0)	4/13/16	1000	X					2					X	X	X	X	004
	TRIP BLANK	4/13/16	—		X				2			2		X	X	X	X	005
	PZ103 (6.0-8.0)	↓	1410	X					2					↓	↓	↓	↓	006
	PZ103 (8.0-10.0)		1415	X					2									007
	PZ103 (10.0-12.0)		1420	X					2									008
	PZ103 (12.0-14.0)		1430	X					2									009
	PZ103 (14.0-16.0)	↓	1440	X					2									010

Standard ___

Full Data Package ___

30179921

Comments

Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: Ethan Ulm	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: ARCADIS	Ethan Ulm / ARCADIS	4/14/16	1600	PACE	4/14/16	16:00
Shipment Method: courier pick up Ship Date:	PACE	4/14/16	17:00	Kathmark Mahoney PACE	4/15/16	0930
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: ___ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP Remediation Management COC - Effective Date: starting August 16, 2011.

BP LaMP COC Rev. 8, 24 June 2012

Laboratory Management Program LaMP Chain of Custody Record

BP Site Node Path: _____ Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X

BP Facility No: _____ Lab Work Order Number: _____

Lab Name: Pace Analytical Serices	Facility Address: 7430 Hillside Rd,	Consultant/Contractor: Arcadis
Lab Address: 1638 Roseytown Rd, Greensburg, PA 15601	City, State, ZIP Code: Lysand	Consultant/Contractor Project No:
Lab PM: Tina Sayer	Lead Regulatory Agency: NYS	Address: B0090004.0002.00001
Lab Phone: 317-228-3127	California Global ID No.:	Consultant/Contractor PM: Vin Maresco
Lab Shipping A Yes	Enfos Proposal No:	Phone: 315-671-9256 Email: vin.maresco@arcadis.com
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor ___

BP Project Manager (PM): John A. Frankenthal

BP PM Phone: 312.809.4117

BP PM Email: John.Frankenthal@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: CP-51 listed vols for via 8260	MTBE	Ethanal	CP-51 listed semi-vols for via 8270	Report Type & QC Level
	PZ103 (16.0-18.0)	4/13/16	1445	X					2					X	X	X	X	011
	PZ103 (18.0-20.0)	↓	1500	X					2					X	X	X	X	012
	PZ103 (20.0-22.0)		1505	X					2					X	X	X	X	013
	PZ103 (22.0-24.0)	↓	1515	X					2					X	X	X	X	014
	PZ102 (4.0-6.0)	4/14/16	1130	X					2					X	X	X	X	BM 015 024
	PZ102 (6.0-8.0)		1140	X					2					X	X	X	X	4-15-16 016 015
	PZ102 (8.0-10.0)		1150	X					2					X	X	X	X	017 016
	PZ102 (10.0-12.0)		1300	X					2					X	X	X	X	018 017
	PZ102 (12.0-14.0)		1310	X					2					X	X	X	X	019 018
	PZ102 (14.0-16.0)	↓	1330											X	X		X	020 019

Standard ___

Full Data Package ___

30179921

Comments

Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: Ethan Ulm	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: ARCADIS	[signature] / ARCADIS	4/14/16	1600	[signature] PACE	4/14/16	16:00
Shipment Method: courier pick up Ship Date:	[signature] PACE	4/14/16	17:30	[signature] Paa	4/15/16	0930
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: · Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP Remediation Management COC - Effective Date: starting August 16, 2011.

Laboratory Management Program LaMP Chain of Custody Record

BP Site Node Path: _____ Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X

BP Facility No: _____ Lab Work Order Number: _____

Lab Name: Pace Analytical Serices	Facility Address: 7430 Hillside Rd,	Consultant/Contractor: Arcadis
Lab Address: 1638 Roseytown Rd, Greensburg, PA 15601	City, State, ZIP Code: Lysand	Consultant/Contractor Project No:
Lab PM: Tina Sayer	Lead Regulatory Agency: NYS	Address: B0090004.0002.00001
Lab Phone: 317-228-3127	California Global ID No.:	Consultant/Contractor PM: Vin Maresco
Lab Shipping A Yes	Enfos Proposal No:	Phone: 315-671-9256 Email: vin.maresco@arcadis.com
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor ___

BP Project Manager (PM): John A. Frankenthal

BP PM Phone: 312.809.4117

BP PM Email: John.Frankenthal@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: CP-51 listed vols for via 8260	MTBE	Ethanol	CP-51 listed semi-vols for via 8270	Report Type & QC Level
	PZ102 (16.0-18.0)	4/14/16	1340	X					2					X	X	X	X	BM 001 020
	PZ102 (18.0-20.0)	↓	1350	X					2					X	X	X		4-15-16 002 021
	PZ102 (20.0-22.0)		1400	X					2					X	X	X		003 022
	PZ102 (22.0-24.0)		1415	X					2					X	X	X		004 023

Standard ___

Full Data Package ___

30179921

Comments

Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: Ethan Ulm	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: ARCADIS	[signature] ARCADIS	4/14/16	1600	[signature] PACE	4/14/16	16:00
Shipment Method: courier pick up Ship Date:	[signature] PACE	4/14/16	17:00	[signature] Pace	4/15/16	0930
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP Remediation Management COC - Effective Date: starting August 16, 2011.

BP LaMP COC Rev. 8, 24 June 2012

Sample Condition Upon Receipt

Pace Analytical

Client Name: Buckeye

Project # 30179921

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 770127174902

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals Intact: ☐ yes ☐ no Biological Tissue is Frozen: Yes No

Packing Material: Bubble Wrap ✓ Bubble Bags ____ None ____ Other _____

Thermometer Used 10 Type of Ice: (Wet) Blue None ☐ Samples on Ice, cooling process has begun

Cooler Temp.: Observed Temp.: 1.1 °C Correction Factor: 0.0 °C Final Temp: 1.1 °C

Date and Initials of person examining contents: JRM 4/15/10

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A 1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A 2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A 3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A 4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A 5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A 6.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A 7.
Sufficient Volume:	☑Yes	☐No	☐N/A 8.
Correct Containers Used:	☑Yes	☐No	☐N/A 9.
-Pace Containers Used:	☑Yes	☐No	☐N/A
Containers Intact:	☑Yes	☐No	☐N/A 10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A 11.
Sample Labels match COC:	☑Yes	☐No	☐N/A 12.
-Includes date/time/ID/Analysis Matrix: WW SL			
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A 13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes	☑No	Initial when completed: JRM Lot # of added preservative:
Samples checked for dechlorination:	☐Yes	☐No	☑N/A 14.
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A 15.
Trip Blank Present:	☑Yes	☐No	☐N/A 16.
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] Date: 4/18/10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 03, 2016

Vin Maresco
Arcadis
6723 Towpath Road
Syracuse, NY 13214

RE: Project: Lysander, NY
Pace Project No.: 30180277

Dear Vin Maresco:
Enclosed are the analytical results for sample(s) received by the laboratory on April 19, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rachel D Christner

Rachel Christner
rachel.christner@pacelabs.com
Project Manager

Enclosures

cc: Mr. Edward Mason, Arcadis

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Lysander, NY
Pace Project No.: 30180277

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Georgia Certification #: C040
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Lysander, NY
Pace Project No.: 30180277

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30180277001	**TRIP BLANK**	Water	04/18/16 00:00	04/19/16 09:50
30180277002	**PZ101 (4.0-6.0)**	Solid	04/18/16 08:30	04/19/16 09:50
30180277003	**PZ101 (6.0-8.0)**	Solid	04/18/16 08:35	04/19/16 09:50
30180277004	**PZ101 (8.0-10.0)**	Solid	04/18/16 08:50	04/19/16 09:50
30180277005	**PZ101 (10.0-12.0)**	Solid	04/18/16 08:55	04/19/16 09:50
30180277006	**PZ101 (12.0-14.0)**	Solid	04/18/16 09:20	04/19/16 09:50
30180277007	**PZ101 (14.0-16.0)**	Solid	04/18/16 09:25	04/19/16 09:50
30180277008	**PZ101 (16.0-18.0)**	Solid	04/18/16 09:55	04/19/16 09:50
30180277009	**PZ101 (20.0-22.0)**	Solid	04/18/16 10:30	04/19/16 09:50

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Lysander, NY
Pace Project No.: 30180277

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30180277001	**TRIP BLANK**	EPA 8260C	LEL	20	PASI-PA
30180277002	**PZ101 (4.0-6.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30180277003	**PZ101 (6.0-8.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30180277004	**PZ101 (8.0-10.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30180277005	**PZ101 (10.0-12.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30180277006	**PZ101 (12.0-14.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30180277007	**PZ101 (14.0-16.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30180277008	**PZ101 (16.0-18.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
30180277009	**PZ101 (20.0-22.0)**	EPA 8270D by SIM	TMK	17	PASI-PA
		EPA 8260C	JEW	20	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30180277

Sample: TRIP BLANK **Lab ID: 30180277001** Collected: 04/18/16 00:00 Received: 04/19/16 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV	Analytical Method: EPA 8260C								
Benzene	ND	ug/L	1.0	0.16	1		04/21/16 15:30	71-43-2	M5
n-Butylbenzene	ND	ug/L	1.0	0.15	1		04/21/16 15:30	104-51-8	M5
sec-Butylbenzene	ND	ug/L	1.0	0.21	1		04/21/16 15:30	135-98-8	M5
tert-Butylbenzene	ND	ug/L	1.0	0.19	1		04/21/16 15:30	98-06-6	M5
Ethanol	ND	ug/L	200	26.1	1		04/21/16 15:30	64-17-5	M5
Ethylbenzene	ND	ug/L	1.0	0.23	1		04/21/16 15:30	100-41-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.14	1		04/21/16 15:30	98-82-8	M5
p-Isopropyltoluene	ND	ug/L	1.0	0.22	1		04/21/16 15:30	99-87-6	M5
Methyl-tert-butyl ether	ND	ug/L	1.0	0.17	1		04/21/16 15:30	1634-04-4	M5
Naphthalene	ND	ug/L	2.0	0.19	1		04/21/16 15:30	91-20-3	M5
n-Propylbenzene	ND	ug/L	1.0	0.15	1		04/21/16 15:30	103-65-1	M5
Toluene	ND	ug/L	1.0	0.13	1		04/21/16 15:30	108-88-3	M5
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.12	1		04/21/16 15:30	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.12	1		04/21/16 15:30	108-67-8	M5
m&p-Xylene	ND	ug/L	2.0	0.32	1		04/21/16 15:30	179601-23-1	M5
o-Xylene	ND	ug/L	1.0	0.22	1		04/21/16 15:30	95-47-6	M5
Surrogates									
4-Bromofluorobenzene (S)	106	%	81-119		1		04/21/16 15:30	460-00-4	M5
1,2-Dichloroethane-d4 (S)	116	%	77-126		1		04/21/16 15:30	17060-07-0	M5
Toluene-d8 (S)	98	%	84-115		1		04/21/16 15:30	2037-26-5	M5
Dibromofluoromethane (S)	113	%	70-130		1		04/21/16 15:30	1868-53-7	M5

Sample: PZ101 (4.0-6.0) **Lab ID: 30180277002** Collected: 04/18/16 08:30 Received: 04/19/16 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.1	0.71	1	04/22/16 14:45	04/26/16 12:21	83-32-9	
Acenaphthylene	ND	ug/kg	8.1	0.69	1	04/22/16 14:45	04/26/16 12:21	208-96-8	
Anthracene	ND	ug/kg	8.1	0.79	1	04/22/16 14:45	04/26/16 12:21	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.1	2.1	1	04/22/16 14:45	04/26/16 12:21	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.1	0.77	1	04/22/16 14:45	04/26/16 12:21	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.1	0.71	1	04/22/16 14:45	04/26/16 12:21	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.1	1.2	1	04/22/16 14:45	04/26/16 12:21	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.1	0.76	1	04/22/16 14:45	04/26/16 12:21	207-08-9	ip
Chrysene	ND	ug/kg	8.1	0.53	1	04/22/16 14:45	04/26/16 12:21	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.1	1.1	1	04/22/16 14:45	04/26/16 12:21	53-70-3	
Fluoranthene	ND	ug/kg	8.1	0.53	1	04/22/16 14:45	04/26/16 12:21	206-44-0	
Fluorene	ND	ug/kg	8.1	0.70	1	04/22/16 14:45	04/26/16 12:21	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.1	0.95	1	04/22/16 14:45	04/26/16 12:21	193-39-5	
Phenanthrene	ND	ug/kg	8.1	0.81	1	04/22/16 14:45	04/26/16 12:21	85-01-8	
Pyrene	ND	ug/kg	8.1	0.65	1	04/22/16 14:45	04/26/16 12:21	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	53	%	35-141		1	04/22/16 14:45	04/26/16 12:21	321-60-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30180277

Sample: PZ101 (4.0-6.0) **Lab ID: 30180277002** Collected: 04/18/16 08:30 Received: 04/19/16 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Surrogates									
Terphenyl-d14 (S)	73	%	64-141		1	04/22/16 14:45	04/26/16 12:21	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.3	1.4	1	04/26/16 12:00	04/26/16 15:28	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/26/16 12:00	04/26/16 15:28	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.3	2.7	1	04/26/16 12:00	04/26/16 15:28	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.3	2.6	1	04/26/16 12:00	04/26/16 15:28	98-06-6	1c
Ethanol	ND	ug/kg	213	60.4	1	04/26/16 12:00	04/26/16 15:28	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.3	1.1	1	04/26/16 12:00	04/26/16 15:28	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.3	1.8	1	04/26/16 12:00	04/26/16 15:28	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.3	2.3	1	04/26/16 12:00	04/26/16 15:28	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.3	2.6	1	04/26/16 12:00	04/26/16 15:28	1634-04-4	1c
Naphthalene	ND	ug/kg	5.3	1.0	1	04/26/16 12:00	04/26/16 15:28	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.3	1.9	1	04/26/16 12:00	04/26/16 15:28	103-65-1	1c
Toluene	ND	ug/kg	5.3	1.7	1	04/26/16 12:00	04/26/16 15:28	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.3	1.5	1	04/26/16 12:00	04/26/16 15:28	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.3	1.8	1	04/26/16 12:00	04/26/16 15:28	108-67-8	1c
m&p-Xylene	ND	ug/kg	10.7	2.0	1	04/26/16 12:00	04/26/16 15:28	179601-23-1	1c
o-Xylene	ND	ug/kg	5.3	1.1	1	04/26/16 12:00	04/26/16 15:28	95-47-6	1c
Surrogates									
Toluene-d8 (S)	106	%	68-135		1	04/26/16 12:00	04/26/16 15:28	2037-26-5	
4-Bromofluorobenzene (S)	104	%	65-146		1	04/26/16 12:00	04/26/16 15:28	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	69-137		1	04/26/16 12:00	04/26/16 15:28	17060-07-0	
Dibromofluoromethane (S)	89	%	70-130		1	04/26/16 12:00	04/26/16 15:28	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**17.2**	%	0.10	0.10	1		04/29/16 15:30		

Sample: PZ101 (6.0-8.0) **Lab ID: 30180277003** Collected: 04/18/16 08:35 Received: 04/19/16 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.7	0.68	1	04/22/16 14:45	04/26/16 12:38	83-32-9	
Acenaphthylene	ND	ug/kg	7.7	0.66	1	04/22/16 14:45	04/26/16 12:38	208-96-8	
Anthracene	ND	ug/kg	7.7	0.75	1	04/22/16 14:45	04/26/16 12:38	120-12-7	
Benzo(a)anthracene	ND	ug/kg	7.7	2.0	1	04/22/16 14:45	04/26/16 12:38	56-55-3	
Benzo(a)pyrene	ND	ug/kg	7.7	0.74	1	04/22/16 14:45	04/26/16 12:38	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	7.7	0.68	1	04/22/16 14:45	04/26/16 12:38	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	7.7	1.2	1	04/22/16 14:45	04/26/16 12:38	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	7.7	0.73	1	04/22/16 14:45	04/26/16 12:38	207-08-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30180277

Sample: PZ101 (6.0-8.0) **Lab ID: 30180277003** Collected: 04/18/16 08:35 Received: 04/19/16 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Chrysene	ND	ug/kg	7.7	0.51	1	04/22/16 14:45	04/26/16 12:38	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	7.7	1.0	1	04/22/16 14:45	04/26/16 12:38	53-70-3	
Fluoranthene	ND	ug/kg	7.7	0.51	1	04/22/16 14:45	04/26/16 12:38	206-44-0	
Fluorene	ND	ug/kg	7.7	0.67	1	04/22/16 14:45	04/26/16 12:38	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	7.7	0.91	1	04/22/16 14:45	04/26/16 12:38	193-39-5	
Phenanthrene	ND	ug/kg	7.7	0.77	1	04/22/16 14:45	04/26/16 12:38	85-01-8	
Pyrene	ND	ug/kg	7.7	0.62	1	04/22/16 14:45	04/26/16 12:38	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	46	%	35-141		1	04/22/16 14:45	04/26/16 12:38	321-60-8	
Terphenyl-d14 (S)	66	%	64-141		1	04/22/16 14:45	04/26/16 12:38	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.7	1.6	1	04/26/16 12:00	04/26/16 15:54	71-43-2	1c
n-Butylbenzene	ND	ug/kg	5.7	2.8	1	04/26/16 12:00	04/26/16 15:54	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	5.7	2.9	1	04/26/16 12:00	04/26/16 15:54	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.7	2.8	1	04/26/16 12:00	04/26/16 15:54	98-06-6	1c
Ethanol	ND	ug/kg	229	65.1	1	04/26/16 12:00	04/26/16 15:54	64-17-5	1c
Ethylbenzene	ND	ug/kg	5.7	1.2	1	04/26/16 12:00	04/26/16 15:54	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.7	2.0	1	04/26/16 12:00	04/26/16 15:54	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.7	2.4	1	04/26/16 12:00	04/26/16 15:54	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.7	2.8	1	04/26/16 12:00	04/26/16 15:54	1634-04-4	1c
Naphthalene	ND	ug/kg	5.7	1.1	1	04/26/16 12:00	04/26/16 15:54	91-20-3	1c
n-Propylbenzene	ND	ug/kg	5.7	2.0	1	04/26/16 12:00	04/26/16 15:54	103-65-1	1c
Toluene	ND	ug/kg	5.7	1.8	1	04/26/16 12:00	04/26/16 15:54	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.7	1.6	1	04/26/16 12:00	04/26/16 15:54	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.7	1.9	1	04/26/16 12:00	04/26/16 15:54	108-67-8	1c
m&p-Xylene	ND	ug/kg	11.5	2.1	1	04/26/16 12:00	04/26/16 15:54	179601-23-1	1c
o-Xylene	ND	ug/kg	5.7	1.1	1	04/26/16 12:00	04/26/16 15:54	95-47-6	1c
Surrogates									
Toluene-d8 (S)	107	%	68-135		1	04/26/16 12:00	04/26/16 15:54	2037-26-5	
4-Bromofluorobenzene (S)	103	%	65-146		1	04/26/16 12:00	04/26/16 15:54	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	69-137		1	04/26/16 12:00	04/26/16 15:54	17060-07-0	
Dibromofluoromethane (S)	94	%	70-130		1	04/26/16 12:00	04/26/16 15:54	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**14.1**	%	0.10	0.10	1		04/29/16 15:31		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30180277

Sample: PZ101 (8.0-10.0) **Lab ID: 30180277004** Collected: 04/18/16 08:50 Received: 04/19/16 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	7.5	0.66	1	04/28/16 16:36	04/29/16 12:40	83-32-9	
Acenaphthylene	ND	ug/kg	7.5	0.64	1	04/28/16 16:36	04/29/16 12:40	208-96-8	
Anthracene	ND	ug/kg	7.5	0.73	1	04/28/16 16:36	04/29/16 12:40	120-12-7	
Benzo(a)anthracene	ND	ug/kg	7.5	1.9	1	04/28/16 16:36	04/29/16 12:40	56-55-3	
Benzo(a)pyrene	ND	ug/kg	7.5	0.72	1	04/28/16 16:36	04/29/16 12:40	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	7.5	0.66	1	04/28/16 16:36	04/29/16 12:40	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	7.5	1.2	1	04/28/16 16:36	04/29/16 12:40	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	7.5	0.71	1	04/28/16 16:36	04/29/16 12:40	207-08-9	ip
Chrysene	ND	ug/kg	7.5	0.50	1	04/28/16 16:36	04/29/16 12:40	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	7.5	0.99	1	04/28/16 16:36	04/29/16 12:40	53-70-3	
Fluoranthene	ND	ug/kg	7.5	0.50	1	04/28/16 16:36	04/29/16 12:40	206-44-0	
Fluorene	ND	ug/kg	7.5	0.65	1	04/28/16 16:36	04/29/16 12:40	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	7.5	0.89	1	04/28/16 16:36	04/29/16 12:40	193-39-5	
Phenanthrene	ND	ug/kg	7.5	0.75	1	04/28/16 16:36	04/29/16 12:40	85-01-8	
Pyrene	ND	ug/kg	7.5	0.61	1	04/28/16 16:36	04/29/16 12:40	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	52	%	35-141		1	04/28/16 16:36	04/29/16 12:40	321-60-8	
Terphenyl-d14 (S)	76	%	64-141		1	04/28/16 16:36	04/29/16 12:40	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	310	84.2	50	04/26/16 12:00	04/26/16 17:13	71-43-2	1c
n-Butylbenzene	ND	ug/kg	310	152	50	04/26/16 12:00	04/26/16 17:13	104-51-8	1c
sec-Butylbenzene	ND	ug/kg	310	155	50	04/26/16 12:00	04/26/16 17:13	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	310	149	50	04/26/16 12:00	04/26/16 17:13	98-06-6	1c
Ethanol	ND	ug/kg	12400	3510	50	04/26/16 12:00	04/26/16 17:13	64-17-5	1c
Ethylbenzene	**310**	ug/kg	310	62.5	50	04/26/16 12:00	04/26/16 17:13	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	310	107	50	04/26/16 12:00	04/26/16 17:13	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	310	131	50	04/26/16 12:00	04/26/16 17:13	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	310	150	50	04/26/16 12:00	04/26/16 17:13	1634-04-4	1c
Naphthalene	ND	ug/kg	310	60.1	50	04/26/16 12:00	04/26/16 17:13	91-20-3	1c
n-Propylbenzene	**412**	ug/kg	310	108	50	04/26/16 12:00	04/26/16 17:13	103-65-1	1c
Toluene	ND	ug/kg	310	96.6	50	04/26/16 12:00	04/26/16 17:13	108-88-3	1c
1,2,4-Trimethylbenzene	**2090**	ug/kg	310	88.5	50	04/26/16 12:00	04/26/16 17:13	95-63-6	1c
1,3,5-Trimethylbenzene	**966**	ug/kg	310	104	50	04/26/16 12:00	04/26/16 17:13	108-67-8	1c
m&p-Xylene	**1350**	ug/kg	619	115	50	04/26/16 12:00	04/26/16 17:13	179601-23-1	1c
o-Xylene	**612**	ug/kg	310	61.3	50	04/26/16 12:00	04/26/16 17:13	95-47-6	1c
Surrogates									
Toluene-d8 (S)	101	%	68-135		50	04/26/16 12:00	04/26/16 17:13	2037-26-5	
4-Bromofluorobenzene (S)	104	%	65-146		50	04/26/16 12:00	04/26/16 17:13	460-00-4	
1,2-Dichloroethane-d4 (S)	75	%	69-137		50	04/26/16 12:00	04/26/16 17:13	17060-07-0	
Dibromofluoromethane (S)	102	%	70-130		50	04/26/16 12:00	04/26/16 17:13	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.4**	%	0.10	0.10	1		04/29/16 15:31		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30180277

Sample: PZ101 (10.0-12.0) **Lab ID: 30180277005** Collected: 04/18/16 08:55 Received: 04/19/16 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**40.5**	ug/kg	7.8	0.69	1	04/22/16 14:45	04/26/16 13:13	83-32-9	
Acenaphthylene	**8.9**	ug/kg	7.8	0.67	1	04/22/16 14:45	04/26/16 13:13	208-96-8	
Anthracene	**24.8**	ug/kg	7.8	0.76	1	04/22/16 14:45	04/26/16 13:13	120-12-7	
Benzo(a)anthracene	**12.9**	ug/kg	7.8	2.0	1	04/22/16 14:45	04/26/16 13:13	56-55-3	
Benzo(a)pyrene	ND	ug/kg	7.8	0.75	1	04/22/16 14:45	04/26/16 13:13	50-32-8	
Benzo(b)fluoranthene	**12.0**	ug/kg	7.8	0.69	1	04/22/16 14:45	04/26/16 13:13	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	7.8	1.2	1	04/22/16 14:45	04/26/16 13:13	191-24-2	
Benzo(k)fluoranthene	**9.8**	ug/kg	7.8	0.74	1	04/22/16 14:45	04/26/16 13:13	207-08-9	ip
Chrysene	**8.5**	ug/kg	7.8	0.52	1	04/22/16 14:45	04/26/16 13:13	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	7.8	1.0	1	04/22/16 14:45	04/26/16 13:13	53-70-3	
Fluoranthene	**25.1**	ug/kg	7.8	0.52	1	04/22/16 14:45	04/26/16 13:13	206-44-0	
Fluorene	**53.1**	ug/kg	7.8	0.68	1	04/22/16 14:45	04/26/16 13:13	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	7.8	0.93	1	04/22/16 14:45	04/26/16 13:13	193-39-5	
Phenanthrene	**32.1**	ug/kg	7.8	0.78	1	04/22/16 14:45	04/26/16 13:13	85-01-8	
Pyrene	**44.1**	ug/kg	7.8	0.63	1	04/22/16 14:45	04/26/16 13:13	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	95	%	35-141		1	04/22/16 14:45	04/26/16 13:13	321-60-8	
Terphenyl-d14 (S)	74	%	64-141		1	04/22/16 14:45	04/26/16 13:13	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	281	76.4	50	04/26/16 12:00	04/26/16 17:39	71-43-2	1c
n-Butylbenzene	**12200**	ug/kg	281	138	50	04/26/16 12:00	04/26/16 17:39	104-51-8	1c
sec-Butylbenzene	**3510**	ug/kg	281	141	50	04/26/16 12:00	04/26/16 17:39	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	281	135	50	04/26/16 12:00	04/26/16 17:39	98-06-6	1c
Ethanol	ND	ug/kg	11200	3190	50	04/26/16 12:00	04/26/16 17:39	64-17-5	1c
Ethylbenzene	**35600**	ug/kg	2810	568	500	04/26/16 12:00	04/27/16 13:15	100-41-4	1c
Isopropylbenzene (Cumene)	**6670**	ug/kg	281	97.2	50	04/26/16 12:00	04/26/16 17:39	98-82-8	1c
p-Isopropyltoluene	**3260**	ug/kg	281	119	50	04/26/16 12:00	04/26/16 17:39	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	281	137	50	04/26/16 12:00	04/26/16 17:39	1634-04-4	1c
Naphthalene	**6700**	ug/kg	281	54.5	50	04/26/16 12:00	04/26/16 17:39	91-20-3	1c
n-Propylbenzene	**28500**	ug/kg	2810	984	500	04/26/16 12:00	04/27/16 13:15	103-65-1	1c
Toluene	**19900**	ug/kg	281	87.7	50	04/26/16 12:00	04/26/16 17:39	108-88-3	1c
1,2,4-Trimethylbenzene	**128000**	ug/kg	2810	804	500	04/26/16 12:00	04/27/16 13:15	95-63-6	1c
1,3,5-Trimethylbenzene	**60700**	ug/kg	2810	944	500	04/26/16 12:00	04/27/16 13:15	108-67-8	1c
m&p-Xylene	**134000**	ug/kg	5620	1040	500	04/26/16 12:00	04/27/16 13:15	179601-23-1	1c
o-Xylene	**54900**	ug/kg	2810	556	500	04/26/16 12:00	04/27/16 13:15	95-47-6	1c
Surrogates									
Toluene-d8 (S)	87	%	68-135		50	04/26/16 12:00	04/26/16 17:39	2037-26-5	
4-Bromofluorobenzene (S)	101	%	65-146		50	04/26/16 12:00	04/26/16 17:39	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	69-137		50	04/26/16 12:00	04/26/16 17:39	17060-07-0	
Dibromofluoromethane (S)	72	%	70-130		50	04/26/16 12:00	04/26/16 17:39	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**14.8**	%	0.10	0.10	1		04/29/16 15:31		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30180277

Sample: PZ101 (12.0-14.0) **Lab ID: 30180277006** Collected: 04/18/16 09:20 Received: 04/19/16 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**53.1**	ug/kg	8.2	0.72	1	04/22/16 14:45	04/26/16 13:31	83-32-9	
Acenaphthylene	ND	ug/kg	8.2	0.69	1	04/22/16 14:45	04/26/16 13:31	208-96-8	
Anthracene	**38.3**	ug/kg	8.2	0.79	1	04/22/16 14:45	04/26/16 13:31	120-12-7	
Benzo(a)anthracene	**8.3**	ug/kg	8.2	2.1	1	04/22/16 14:45	04/26/16 13:31	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.2	0.78	1	04/22/16 14:45	04/26/16 13:31	50-32-8	
Benzo(b)fluoranthene	**9.0**	ug/kg	8.2	0.72	1	04/22/16 14:45	04/26/16 13:31	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.2	1.3	1	04/22/16 14:45	04/26/16 13:31	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.2	0.77	1	04/22/16 14:45	04/26/16 13:31	207-08-9	ip
Chrysene	ND	ug/kg	8.2	0.54	1	04/22/16 14:45	04/26/16 13:31	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.2	1.1	1	04/22/16 14:45	04/26/16 13:31	53-70-3	
Fluoranthene	**22.6**	ug/kg	8.2	0.54	1	04/22/16 14:45	04/26/16 13:31	206-44-0	
Fluorene	**79.7**	ug/kg	8.2	0.71	1	04/22/16 14:45	04/26/16 13:31	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.2	0.96	1	04/22/16 14:45	04/26/16 13:31	193-39-5	
Phenanthrene	**98.0**	ug/kg	8.2	0.82	1	04/22/16 14:45	04/26/16 13:31	85-01-8	
Pyrene	**29.9**	ug/kg	8.2	0.66	1	04/22/16 14:45	04/26/16 13:31	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	67	%	35-141		1	04/22/16 14:45	04/26/16 13:31	321-60-8	
Terphenyl-d14 (S)	93	%	64-141		1	04/22/16 14:45	04/26/16 13:31	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**5570**	ug/kg	2650	722	500	04/26/16 12:00	04/26/16 18:32	71-43-2	1c
n-Butylbenzene	**16400**	ug/kg	2650	1300	500	04/26/16 12:00	04/26/16 18:32	104-51-8	1c
sec-Butylbenzene	**4320**	ug/kg	2650	1330	500	04/26/16 12:00	04/26/16 18:32	135-98-8	1c
tert-Butylbenzene	**37700**	ug/kg	2650	1280	500	04/26/16 12:00	04/26/16 18:32	98-06-6	1c
Ethanol	ND	ug/kg	106000	30100	500	04/26/16 12:00	04/26/16 18:32	64-17-5	1c
Ethylbenzene	**89300**	ug/kg	2650	536	500	04/26/16 12:00	04/26/16 18:32	100-41-4	1c
Isopropylbenzene (Cumene)	**10800**	ug/kg	2650	918	500	04/26/16 12:00	04/26/16 18:32	98-82-8	1c
p-Isopropyltoluene	**3050**	ug/kg	2650	1130	500	04/26/16 12:00	04/26/16 18:32	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	2650	1290	500	04/26/16 12:00	04/26/16 18:32	1634-04-4	1c
Naphthalene	**53600**	ug/kg	2650	515	500	04/26/16 12:00	04/26/16 18:32	91-20-3	1c
n-Propylbenzene	**40100**	ug/kg	2650	929	500	04/26/16 12:00	04/26/16 18:32	103-65-1	1c
Toluene	**211000**	ug/kg	26500	8280	5000	04/26/16 12:00	04/26/16 18:58	108-88-3	1c
1,2,4-Trimethylbenzene	**199000**	ug/kg	26500	7590	5000	04/26/16 12:00	04/26/16 18:58	95-63-6	1c
1,3,5-Trimethylbenzene	**84300**	ug/kg	2650	892	500	04/26/16 12:00	04/26/16 18:32	108-67-8	1c
m&p-Xylene	**383000**	ug/kg	5310	982	500	04/26/16 12:00	04/26/16 18:32	179601-23-1	1c
o-Xylene	**140000**	ug/kg	2650	525	500	04/26/16 12:00	04/26/16 18:32	95-47-6	1c
Surrogates									
Toluene-d8 (S)	95	%	68-135		500	04/26/16 12:00	04/26/16 18:32	2037-26-5	
4-Bromofluorobenzene (S)	108	%	65-146		500	04/26/16 12:00	04/26/16 18:32	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	69-137		500	04/26/16 12:00	04/26/16 18:32	17060-07-0	
Dibromofluoromethane (S)	78	%	70-130		500	04/26/16 12:00	04/26/16 18:32	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**18.6**	%	0.10	0.10	1		04/29/16 15:32		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30180277

Sample: PZ101 (14.0-16.0) **Lab ID: 30180277007** Collected: 04/18/16 09:25 Received: 04/19/16 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**34.9**	ug/kg	8.6	0.76	1	04/22/16 14:45	04/26/16 13:48	83-32-9	
Acenaphthylene	ND	ug/kg	8.6	0.73	1	04/22/16 14:45	04/26/16 13:48	208-96-8	
Anthracene	**13.1**	ug/kg	8.6	0.83	1	04/22/16 14:45	04/26/16 13:48	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.6	2.2	1	04/22/16 14:45	04/26/16 13:48	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.6	0.82	1	04/22/16 14:45	04/26/16 13:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.6	0.76	1	04/22/16 14:45	04/26/16 13:48	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.6	1.3	1	04/22/16 14:45	04/26/16 13:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.6	0.81	1	04/22/16 14:45	04/26/16 13:48	207-08-9	ip
Chrysene	ND	ug/kg	8.6	0.56	1	04/22/16 14:45	04/26/16 13:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.6	1.1	1	04/22/16 14:45	04/26/16 13:48	53-70-3	
Fluoranthene	ND	ug/kg	8.6	0.56	1	04/22/16 14:45	04/26/16 13:48	206-44-0	
Fluorene	**33.0**	ug/kg	8.6	0.74	1	04/22/16 14:45	04/26/16 13:48	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.6	1.0	1	04/22/16 14:45	04/26/16 13:48	193-39-5	
Phenanthrene	**37.4**	ug/kg	8.6	0.86	1	04/22/16 14:45	04/26/16 13:48	85-01-8	
Pyrene	**11.3**	ug/kg	8.6	0.69	1	04/22/16 14:45	04/26/16 13:48	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	61	%	35-141		1	04/22/16 14:45	04/26/16 13:48	321-60-8	
Terphenyl-d14 (S)	80	%	64-141		1	04/22/16 14:45	04/26/16 13:48	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**453**	ug/kg	249	67.7	50	04/26/16 12:00	04/26/16 18:05	71-43-2	1c
n-Butylbenzene	**1700**	ug/kg	249	122	50	04/26/16 12:00	04/26/16 18:05	104-51-8	1c
sec-Butylbenzene	**421**	ug/kg	249	125	50	04/26/16 12:00	04/26/16 18:05	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	249	120	50	04/26/16 12:00	04/26/16 18:05	98-06-6	1c
Ethanol	ND	ug/kg	9950	2820	50	04/26/16 12:00	04/26/16 18:05	64-17-5	1c
Ethylbenzene	**10600**	ug/kg	249	50.3	50	04/26/16 12:00	04/26/16 18:05	100-41-4	1c
Isopropylbenzene (Cumene)	**1110**	ug/kg	249	86.1	50	04/26/16 12:00	04/26/16 18:05	98-82-8	1c
p-Isopropyltoluene	**323**	ug/kg	249	106	50	04/26/16 12:00	04/26/16 18:05	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	249	121	50	04/26/16 12:00	04/26/16 18:05	1634-04-4	1c
Naphthalene	**6480**	ug/kg	249	48.3	50	04/26/16 12:00	04/26/16 18:05	91-20-3	1c
n-Propylbenzene	**4220**	ug/kg	249	87.1	50	04/26/16 12:00	04/26/16 18:05	103-65-1	1c
Toluene	**37000**	ug/kg	2490	776	500	04/26/16 12:00	04/27/16 13:41	108-88-3	1c
1,2,4-Trimethylbenzene	**31100**	ug/kg	2490	712	500	04/26/16 12:00	04/27/16 13:41	95-63-6	1c
1,3,5-Trimethylbenzene	**8870**	ug/kg	249	83.6	50	04/26/16 12:00	04/26/16 18:05	108-67-8	1c
m&p-Xylene	**53600**	ug/kg	4980	921	500	04/26/16 12:00	04/27/16 13:41	179601-23-1	1c
o-Xylene	**16400**	ug/kg	249	49.3	50	04/26/16 12:00	04/26/16 18:05	95-47-6	1c
Surrogates									
Toluene-d8 (S)	98	%	68-135		50	04/26/16 12:00	04/26/16 18:05	2037-26-5	
4-Bromofluorobenzene (S)	103	%	65-146		50	04/26/16 12:00	04/26/16 18:05	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	69-137		50	04/26/16 12:00	04/26/16 18:05	17060-07-0	
Dibromofluoromethane (S)	83	%	70-130		50	04/26/16 12:00	04/26/16 18:05	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**23.8**	%	0.10	0.10	1		04/29/16 15:32		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30180277

Sample: PZ101 (16.0-18.0) **Lab ID: 30180277008** Collected: 04/18/16 09:55 Received: 04/19/16 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	**24.1**	ug/kg	8.9	0.78	1	04/22/16 14:45	04/26/16 14:06	83-32-9	
Acenaphthylene	ND	ug/kg	8.9	0.76	1	04/22/16 14:45	04/26/16 14:06	208-96-8	
Anthracene	**12.3**	ug/kg	8.9	0.86	1	04/22/16 14:45	04/26/16 14:06	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.9	2.3	1	04/22/16 14:45	04/26/16 14:06	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.9	0.85	1	04/22/16 14:45	04/26/16 14:06	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.9	0.78	1	04/22/16 14:45	04/26/16 14:06	205-99-2	ip
Benzo(g,h,i)perylene	ND	ug/kg	8.9	1.4	1	04/22/16 14:45	04/26/16 14:06	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.9	0.84	1	04/22/16 14:45	04/26/16 14:06	207-08-9	ip
Chrysene	ND	ug/kg	8.9	0.58	1	04/22/16 14:45	04/26/16 14:06	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.9	1.2	1	04/22/16 14:45	04/26/16 14:06	53-70-3	
Fluoranthene	**16.4**	ug/kg	8.9	0.58	1	04/22/16 14:45	04/26/16 14:06	206-44-0	
Fluorene	**31.4**	ug/kg	8.9	0.77	1	04/22/16 14:45	04/26/16 14:06	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.9	1.0	1	04/22/16 14:45	04/26/16 14:06	193-39-5	
Phenanthrene	**43.6**	ug/kg	8.9	0.89	1	04/22/16 14:45	04/26/16 14:06	85-01-8	
Pyrene	**20.2**	ug/kg	8.9	0.72	1	04/22/16 14:45	04/26/16 14:06	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	49	%	35-141		1	04/22/16 14:45	04/26/16 14:06	321-60-8	
Terphenyl-d14 (S)	69	%	64-141		1	04/22/16 14:45	04/26/16 14:06	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**57.4**	ug/kg	5.4	1.5	1	04/26/16 12:00	04/26/16 16:20	71-43-2	1c
n-Butylbenzene	**19.8**	ug/kg	5.4	2.6	1	04/26/16 12:00	04/26/16 16:20	104-51-8	1c
sec-Butylbenzene	**7.1**	ug/kg	5.4	2.7	1	04/26/16 12:00	04/26/16 16:20	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	5.4	2.6	1	04/26/16 12:00	04/26/16 16:20	98-06-6	1c
Ethanol	ND	ug/kg	215	61.0	1	04/26/16 12:00	04/26/16 16:20	64-17-5	1c
Ethylbenzene	**1030**	ug/kg	318	64.2	50	04/27/16 12:28	04/27/16 17:06	100-41-4	1c
Isopropylbenzene (Cumene)	**29.8**	ug/kg	5.4	1.9	1	04/26/16 12:00	04/26/16 16:20	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	5.4	2.3	1	04/26/16 12:00	04/26/16 16:20	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	5.4	2.6	1	04/26/16 12:00	04/26/16 16:20	1634-04-4	1c
Naphthalene	**191**	ug/kg	5.4	1.0	1	04/26/16 12:00	04/26/16 16:20	91-20-3	1c
n-Propylbenzene	**92.2**	ug/kg	5.4	1.9	1	04/26/16 12:00	04/26/16 16:20	103-65-1	1c
Toluene	**5950**	ug/kg	318	99.1	50	04/27/16 12:28	04/27/16 17:06	108-88-3	1c
1,2,4-Trimethylbenzene	**2320**	ug/kg	318	90.8	50	04/27/16 12:28	04/27/16 17:06	95-63-6	1c
1,3,5-Trimethylbenzene	**201**	ug/kg	5.4	1.8	1	04/26/16 12:00	04/26/16 16:20	108-67-8	1c
m&p-Xylene	**4200**	ug/kg	635	118	50	04/27/16 12:28	04/27/16 17:06	179601-23-1	1c
o-Xylene	**1720**	ug/kg	318	62.9	50	04/27/16 12:28	04/27/16 17:06	95-47-6	1c
Surrogates									
Toluene-d8 (S)	100	%	68-135		1	04/26/16 12:00	04/26/16 16:20	2037-26-5	
4-Bromofluorobenzene (S)	104	%	65-146		1	04/26/16 12:00	04/26/16 16:20	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	69-137		1	04/26/16 12:00	04/26/16 16:20	17060-07-0	
Dibromofluoromethane (S)	84	%	70-130		1	04/26/16 12:00	04/26/16 16:20	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.6**	%	0.10	0.10	1		04/29/16 15:32		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Lysander, NY
Pace Project No.: 30180277

Sample: PZ101 (20.0-22.0) **Lab ID: 30180277009** Collected: 04/18/16 10:30 Received: 04/19/16 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV PAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	8.5	0.75	1	04/28/16 16:36	04/29/16 12:58	83-32-9	
Acenaphthylene	ND	ug/kg	8.5	0.72	1	04/28/16 16:36	04/29/16 12:58	208-96-8	
Anthracene	ND	ug/kg	8.5	0.83	1	04/28/16 16:36	04/29/16 12:58	120-12-7	
Benzo(a)anthracene	ND	ug/kg	8.5	2.2	1	04/28/16 16:36	04/29/16 12:58	56-55-3	
Benzo(a)pyrene	ND	ug/kg	8.5	0.81	1	04/28/16 16:36	04/29/16 12:58	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	8.5	0.75	1	04/28/16 16:36	04/29/16 12:58	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	8.5	1.3	1	04/28/16 16:36	04/29/16 12:58	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	8.5	0.80	1	04/28/16 16:36	04/29/16 12:58	207-08-9	
Chrysene	ND	ug/kg	8.5	0.56	1	04/28/16 16:36	04/29/16 12:58	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	8.5	1.1	1	04/28/16 16:36	04/29/16 12:58	53-70-3	
Fluoranthene	ND	ug/kg	8.5	0.56	1	04/28/16 16:36	04/29/16 12:58	206-44-0	
Fluorene	ND	ug/kg	8.5	0.74	1	04/28/16 16:36	04/29/16 12:58	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	8.5	1.0	1	04/28/16 16:36	04/29/16 12:58	193-39-5	
Phenanthrene	ND	ug/kg	8.5	0.85	1	04/28/16 16:36	04/29/16 12:58	85-01-8	
Pyrene	ND	ug/kg	8.5	0.69	1	04/28/16 16:36	04/29/16 12:58	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	61	%	35-141		1	04/28/16 16:36	04/29/16 12:58	321-60-8	
Terphenyl-d14 (S)	89	%	64-141		1	04/28/16 16:36	04/29/16 12:58	1718-51-0	
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A								
Benzene	**23.1**	ug/kg	7.2	2.0	1	04/26/16 12:00	04/26/16 16:47	71-43-2	1c
n-Butylbenzene	**23.1**	ug/kg	7.2	3.5	1	04/26/16 12:00	04/26/16 16:47	104-51-8	1c
sec-Butylbenzene	**7.9**	ug/kg	7.2	3.6	1	04/26/16 12:00	04/26/16 16:47	135-98-8	1c
tert-Butylbenzene	ND	ug/kg	7.2	3.5	1	04/26/16 12:00	04/26/16 16:47	98-06-6	1c
Ethanol	ND	ug/kg	288	81.7	1	04/26/16 12:00	04/26/16 16:47	64-17-5	1c
Ethylbenzene	**360**	ug/kg	7.2	1.5	1	04/26/16 12:00	04/26/16 16:47	100-41-4	1c
Isopropylbenzene (Cumene)	**30.7**	ug/kg	7.2	2.5	1	04/26/16 12:00	04/26/16 16:47	98-82-8	1c
p-Isopropyltoluene	ND	ug/kg	7.2	3.1	1	04/26/16 12:00	04/26/16 16:47	99-87-6	1c
Methyl-tert-butyl ether	ND	ug/kg	7.2	3.5	1	04/26/16 12:00	04/26/16 16:47	1634-04-4	1c
Naphthalene	**125**	ug/kg	7.2	1.4	1	04/26/16 12:00	04/26/16 16:47	91-20-3	1c
n-Propylbenzene	**92.9**	ug/kg	7.2	2.5	1	04/26/16 12:00	04/26/16 16:47	103-65-1	1c
Toluene	**1460**	ug/kg	301	93.9	50	04/27/16 12:28	04/27/16 17:32	108-88-3	1c
1,2,4-Trimethylbenzene	**772**	ug/kg	301	86.1	50	04/27/16 12:28	04/27/16 17:32	95-63-6	1c
1,3,5-Trimethylbenzene	**200**	ug/kg	7.2	2.4	1	04/26/16 12:00	04/26/16 16:47	108-67-8	1c
m&p-Xylene	**1740**	ug/kg	602	111	50	04/27/16 12:28	04/27/16 17:32	179601-23-1	1c
o-Xylene	**554**	ug/kg	7.2	1.4	1	04/26/16 12:00	04/26/16 16:47	95-47-6	1c
Surrogates									
Toluene-d8 (S)	95	%	68-135		1	04/26/16 12:00	04/26/16 16:47	2037-26-5	
4-Bromofluorobenzene (S)	104	%	65-146		1	04/26/16 12:00	04/26/16 16:47	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	69-137		1	04/26/16 12:00	04/26/16 16:47	17060-07-0	
Dibromofluoromethane (S)	86	%	70-130		1	04/26/16 12:00	04/26/16 16:47	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**22.7**	%	0.10	0.10	1		04/29/16 15:33		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30180277

QC Batch: MSV/28209 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30180277002, 30180277003, 30180277008, 30180277009

METHOD BLANK: 1065066 Matrix: Solid
Associated Lab Samples: 30180277002, 30180277003, 30180277008, 30180277009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	1.4	04/26/16 14:35	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.7	04/26/16 14:35	
Benzene	ug/kg	ND	5.0	1.4	04/26/16 14:35	
Ethanol	ug/kg	ND	200	56.7	04/26/16 14:35	
Ethylbenzene	ug/kg	ND	5.0	1.0	04/26/16 14:35	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.7	04/26/16 14:35	
m&p-Xylene	ug/kg	ND	10.0	1.8	04/26/16 14:35	
Methyl-tert-butyl ether	ug/kg	ND	5.0	2.4	04/26/16 14:35	
n-Butylbenzene	ug/kg	ND	5.0	2.4	04/26/16 14:35	
n-Propylbenzene	ug/kg	ND	5.0	1.8	04/26/16 14:35	
Naphthalene	ug/kg	ND	5.0	0.97	04/26/16 14:35	
o-Xylene	ug/kg	ND	5.0	0.99	04/26/16 14:35	
p-Isopropyltoluene	ug/kg	ND	5.0	2.1	04/26/16 14:35	
sec-Butylbenzene	ug/kg	ND	5.0	2.5	04/26/16 14:35	
tert-Butylbenzene	ug/kg	ND	5.0	2.4	04/26/16 14:35	
Toluene	ug/kg	ND	5.0	1.6	04/26/16 14:35	
1,2-Dichloroethane-d4 (S)	%	92	69-137		04/26/16 14:35	
4-Bromofluorobenzene (S)	%	104	65-146		04/26/16 14:35	
Dibromofluoromethane (S)	%	97	70-130		04/26/16 14:35	
Toluene-d8 (S)	%	102	68-135		04/26/16 14:35	

LABORATORY CONTROL SAMPLE: 1065067

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	19.0	95	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	19.4	97	74-129	
Benzene	ug/kg	20	18.0	90	71-137	
Ethanol	ug/kg	200	91.6J	46	23-168	
Ethylbenzene	ug/kg	20	19.5	97	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	18.8	94	78-133	
m&p-Xylene	ug/kg	40	39.8	100	77-129	
Methyl-tert-butyl ether	ug/kg	20	17.9	90	77-141	
n-Butylbenzene	ug/kg	20	19.5	98	74-140	
n-Propylbenzene	ug/kg	20	19.2	96	70-140	
Naphthalene	ug/kg	20	17.8	89	81-126	
o-Xylene	ug/kg	20	19.5	98	80-125	
p-Isopropyltoluene	ug/kg	20	19.6	98	74-136	
sec-Butylbenzene	ug/kg	20	19.3	97	81-132	
tert-Butylbenzene	ug/kg	20	19.5	98	77-129	
Toluene	ug/kg	20	19.9	99	72-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30180277

LABORATORY CONTROL SAMPLE: 1065067

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			90	69-137	
4-Bromofluorobenzene (S)	%			103	65-146	
Dibromofluoromethane (S)	%			97	70-130	
Toluene-d8 (S)	%			107	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30180277

QC Batch: MSV/28210 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30180277004, 30180277005, 30180277006, 30180277007

METHOD BLANK: 1065068 Matrix: Solid
Associated Lab Samples: 30180277004, 30180277005, 30180277006, 30180277007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	250	71.5	04/26/16 15:02	
1,3,5-Trimethylbenzene	ug/kg	ND	250	84.0	04/26/16 15:02	
Benzene	ug/kg	ND	250	68.0	04/26/16 15:02	
Ethanol	ug/kg	ND	10000	2840	04/26/16 15:02	
Ethylbenzene	ug/kg	ND	250	50.5	04/26/16 15:02	
Isopropylbenzene (Cumene)	ug/kg	ND	250	86.5	04/26/16 15:02	
m&p-Xylene	ug/kg	ND	500	92.5	04/26/16 15:02	
Methyl-tert-butyl ether	ug/kg	ND	250	122	04/26/16 15:02	
n-Butylbenzene	ug/kg	ND	250	122	04/26/16 15:02	
n-Propylbenzene	ug/kg	ND	250	87.5	04/26/16 15:02	
Naphthalene	ug/kg	ND	250	48.5	04/26/16 15:02	
o-Xylene	ug/kg	ND	250	49.5	04/26/16 15:02	
p-Isopropyltoluene	ug/kg	ND	250	106	04/26/16 15:02	
sec-Butylbenzene	ug/kg	ND	250	126	04/26/16 15:02	
tert-Butylbenzene	ug/kg	ND	250	120	04/26/16 15:02	
Toluene	ug/kg	ND	250	78.0	04/26/16 15:02	
1,2-Dichloroethane-d4 (S)	%	68	69-137		04/26/16 15:02	S0
4-Bromofluorobenzene (S)	%	109	65-146		04/26/16 15:02	
Dibromofluoromethane (S)	%	94	70-130		04/26/16 15:02	
Toluene-d8 (S)	%	107	68-135		04/26/16 15:02	

LABORATORY CONTROL SAMPLE: 1065069

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	19.0	95	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	19.4	97	74-129	
Benzene	ug/kg	20	18.0	90	71-137	
Ethanol	ug/kg	200	91.6J	46	23-168	
Ethylbenzene	ug/kg	20	19.5	97	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	18.8	94	78-133	
m&p-Xylene	ug/kg	40	39.8	100	77-129	
Methyl-tert-butyl ether	ug/kg	20	17.9	90	77-141	
n-Butylbenzene	ug/kg	20	19.5	98	74-140	
n-Propylbenzene	ug/kg	20	19.2	96	70-140	
Naphthalene	ug/kg	20	17.8	89	81-126	
o-Xylene	ug/kg	20	19.5	98	80-125	
p-Isopropyltoluene	ug/kg	20	19.6	98	74-136	
sec-Butylbenzene	ug/kg	20	19.3	97	81-132	
tert-Butylbenzene	ug/kg	20	19.5	98	77-129	
Toluene	ug/kg	20	19.9	99	72-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30180277

LABORATORY CONTROL SAMPLE: 1065069

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			90	69-137	
4-Bromofluorobenzene (S)	%			103	65-146	
Dibromofluoromethane (S)	%			97	70-130	
Toluene-d8 (S)	%			107	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30180277

QC Batch: MSV/28227 Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 30180277008, 30180277009

METHOD BLANK: 1065633 Matrix: Solid
Associated Lab Samples: 30180277008, 30180277009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	250	71.5	04/27/16 11:20	
Ethylbenzene	ug/kg	ND	250	50.5	04/27/16 11:20	
m&p-Xylene	ug/kg	ND	500	92.5	04/27/16 11:20	
o-Xylene	ug/kg	ND	250	49.5	04/27/16 11:20	
Toluene	ug/kg	ND	250	78.0	04/27/16 11:20	
1,2-Dichloroethane-d4 (S)	%	106	69-137		04/27/16 11:20	
4-Bromofluorobenzene (S)	%	99	65-146		04/27/16 11:20	
Dibromofluoromethane (S)	%	88	70-130		04/27/16 11:20	
Toluene-d8 (S)	%	100	68-135		04/27/16 11:20	

LABORATORY CONTROL SAMPLE: 1065634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	19.2	96	79-125	
Ethylbenzene	ug/kg	20	19.5	97	78-126	
m&p-Xylene	ug/kg	40	39.6	99	77-129	
o-Xylene	ug/kg	20	19.1	95	80-125	
Toluene	ug/kg	20	19.6	98	72-127	
1,2-Dichloroethane-d4 (S)	%			102	69-137	
4-Bromofluorobenzene (S)	%			98	65-146	
Dibromofluoromethane (S)	%			98	70-130	
Toluene-d8 (S)	%			103	68-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30180277

QC Batch: MSV/28161 Analysis Method: EPA 8260C
QC Batch Method: EPA 8260C Analysis Description: 8260C MSV
Associated Lab Samples: 30180277001

METHOD BLANK: 1062367 Matrix: Water
Associated Lab Samples: 30180277001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.12	04/21/16 13:49	M5
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.12	04/21/16 13:49	M5
Benzene	ug/L	ND	1.0	0.16	04/21/16 13:49	M5
Ethanol	ug/L	ND	200	26.1	04/21/16 13:49	M5
Ethylbenzene	ug/L	ND	1.0	0.23	04/21/16 13:49	M5
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.14	04/21/16 13:49	M5
m&p-Xylene	ug/L	ND	2.0	0.32	04/21/16 13:49	M5
Methyl-tert-butyl ether	ug/L	ND	1.0	0.17	04/21/16 13:49	M5
n-Butylbenzene	ug/L	ND	1.0	0.15	04/21/16 13:49	M5
n-Propylbenzene	ug/L	ND	1.0	0.15	04/21/16 13:49	M5
Naphthalene	ug/L	ND	2.0	0.19	04/21/16 13:49	M5
o-Xylene	ug/L	ND	1.0	0.22	04/21/16 13:49	M5
p-Isopropyltoluene	ug/L	ND	1.0	0.22	04/21/16 13:49	M5
sec-Butylbenzene	ug/L	ND	1.0	0.21	04/21/16 13:49	M5
tert-Butylbenzene	ug/L	ND	1.0	0.19	04/21/16 13:49	M5
Toluene	ug/L	ND	1.0	0.13	04/21/16 13:49	M5
1,2-Dichloroethane-d4 (S)	%	119	77-126		04/21/16 13:49	M5
4-Bromofluorobenzene (S)	%	99	81-119		04/21/16 13:49	M5
Dibromofluoromethane (S)	%	111	70-130		04/21/16 13:49	M5
Toluene-d8 (S)	%	102	84-115		04/21/16 13:49	M5

LABORATORY CONTROL SAMPLE: 1062368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	16.8	84	75-128	M5
1,3,5-Trimethylbenzene	ug/L	20	16.8	84	74-125	M5
Benzene	ug/L	20	18.0	90	69-115	M5
Ethanol	ug/L	200	323	162	10-175	M5
Ethylbenzene	ug/L	20	18.2	91	71-116	M5
Isopropylbenzene (Cumene)	ug/L	20	17.2	86	79-121	M5
m&p-Xylene	ug/L	40	36.7	92	74-118	M5
Methyl-tert-butyl ether	ug/L	20	18.5	93	83-140	M5
n-Butylbenzene	ug/L	20	17.1	86	64-128	M5
n-Propylbenzene	ug/L	20	17.2	86	70-123	M5
Naphthalene	ug/L	20	17.6	88	64-140	M5
o-Xylene	ug/L	20	18.6	93	71-119	M5
p-Isopropyltoluene	ug/L	20	18.1	90	68-129	M5
sec-Butylbenzene	ug/L	20	17.6	88	70-126	M5
tert-Butylbenzene	ug/L	20	18.0	90	72-123	M5
Toluene	ug/L	20	17.8	89	70-115	M5

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30180277

LABORATORY CONTROL SAMPLE: 1062368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			114	77-126	M5
4-Bromofluorobenzene (S)	%			103	81-119	M5
Dibromofluoromethane (S)	%			110	70-130	M5
Toluene-d8 (S)	%			96	84-115	M5

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30180277

QC Batch: OEXT/28188 Analysis Method: EPA 8270D by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270D/3546 MSSV PAH by SIM
Associated Lab Samples: 30180277002, 30180277003, 30180277005, 30180277006, 30180277007, 30180277008

METHOD BLANK: 1063168 Matrix: Solid
Associated Lab Samples: 30180277002, 30180277003, 30180277005, 30180277006, 30180277007, 30180277008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	6.7	0.59	04/25/16 16:19	
Acenaphthylene	ug/kg	ND	6.7	0.57	04/25/16 16:19	
Anthracene	ug/kg	ND	6.7	0.65	04/25/16 16:19	
Benzo(a)anthracene	ug/kg	ND	6.7	1.7	04/25/16 16:19	
Benzo(a)pyrene	ug/kg	ND	6.7	0.64	04/25/16 16:19	
Benzo(b)fluoranthene	ug/kg	ND	6.7	0.59	04/25/16 16:19	
Benzo(g,h,i)perylene	ug/kg	ND	6.7	1.0	04/25/16 16:19	
Benzo(k)fluoranthene	ug/kg	ND	6.7	0.63	04/25/16 16:19	
Chrysene	ug/kg	ND	6.7	0.44	04/25/16 16:19	
Dibenz(a,h)anthracene	ug/kg	ND	6.7	0.88	04/25/16 16:19	
Fluoranthene	ug/kg	ND	6.7	0.44	04/25/16 16:19	
Fluorene	ug/kg	ND	6.7	0.58	04/25/16 16:19	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	6.7	0.79	04/25/16 16:19	
Phenanthrene	ug/kg	ND	6.7	0.67	04/25/16 16:19	
Pyrene	ug/kg	ND	6.7	0.54	04/25/16 16:19	
2-Fluorobiphenyl (S)	%	53	35-141		04/25/16 16:19	
Terphenyl-d14 (S)	%	85	64-141		04/25/16 16:19	

LABORATORY CONTROL SAMPLE: 1063170

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	133	91.9	69	43-113	
Acenaphthylene	ug/kg	133	92.3	69	41-114	
Anthracene	ug/kg	133	97.5	73	59-115	
Benzo(a)anthracene	ug/kg	133	114	86	62-122	
Benzo(a)pyrene	ug/kg	133	118	88	56-113	
Benzo(b)fluoranthene	ug/kg	133	108	81	43-138	
Benzo(g,h,i)perylene	ug/kg	133	109	81	47-143	
Benzo(k)fluoranthene	ug/kg	133	111	83	52-138	
Chrysene	ug/kg	133	118	88	64-119	
Dibenz(a,h)anthracene	ug/kg	133	113	85	59-133	
Fluoranthene	ug/kg	133	105	78	64-122	
Fluorene	ug/kg	133	103	78	46-114	
Indeno(1,2,3-cd)pyrene	ug/kg	133	110	83	59-132	
Phenanthrene	ug/kg	133	89.5	67	42-122	
Pyrene	ug/kg	133	110	82	64-117	
2-Fluorobiphenyl (S)	%			54	35-141	
Terphenyl-d14 (S)	%			80	64-141	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30180277

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1063171 1063172

Parameter	Units	30180319001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	ND	223	226	127	172	57	76	43-113	30	20	R1
Acenaphthylene	ug/kg	ND	223	226	127	220	54	94	41-114	54	20	R1
Anthracene	ug/kg	ND	223	226	167	220	72	95	59-115	27	20	R1
Benzo(a)anthracene	ug/kg	33.5	223	226	205	291	77	114	62-122	35	20	R1
Benzo(a)pyrene	ug/kg	35.4	223	226	195	296	72	115	56-113	41	20	M1,R1
Benzo(b)fluoranthene	ug/kg	71.0	223	226	211	320	63	110	43-138	41	20	R1
Benzo(g,h,i)perylene	ug/kg	21.6	223	226	121	175	45	68	47-143	36	20	M1,R1
Benzo(k)fluoranthene	ug/kg	57.8	223	226	161	224	46	73	52-138	33	20	M1,R1
Chrysene	ug/kg	37.8	223	226	201	289	73	111	64-119	36	20	R1
Dibenz(a,h)anthracene	ug/kg	ND	223	226	125	170	54	73	59-133	30	20	M1,R1
Fluoranthene	ug/kg	58.9	223	226	253	341	87	125	64-122	30	20	M1,R1
Fluorene	ug/kg	ND	223	226	145	205	63	89	46-114	34	20	R1
Indeno(1,2,3-cd)pyrene	ug/kg	17.3	223	226	131	185	51	74	59-132	35	20	M1,R1
Phenanthrene	ug/kg	26.7	223	226	196	245	76	96	42-122	22	20	R1
Pyrene	ug/kg	59.3	223	226	254	360	88	133	64-117	34	20	M1,R1
2-Fluorobiphenyl (S)	%						36	50	35-141			
Terphenyl-d14 (S)	%						64	83	64-141			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30180277

QC Batch: OEXT/28253
QC Batch Method: EPA 3546
Analysis Method: EPA 8270D by SIM
Analysis Description: 8270D/3546 MSSV PAH by SIM
Associated Lab Samples: 30180277004, 30180277009

METHOD BLANK: 1066125
Matrix: Solid
Associated Lab Samples: 30180277004, 30180277009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	6.7	0.59	04/29/16 10:37	
Acenaphthylene	ug/kg	ND	6.7	0.57	04/29/16 10:37	
Anthracene	ug/kg	ND	6.7	0.65	04/29/16 10:37	
Benzo(a)anthracene	ug/kg	ND	6.7	1.7	04/29/16 10:37	
Benzo(a)pyrene	ug/kg	ND	6.7	0.64	04/29/16 10:37	
Benzo(b)fluoranthene	ug/kg	ND	6.7	0.59	04/29/16 10:37	
Benzo(g,h,i)perylene	ug/kg	ND	6.7	1.0	04/29/16 10:37	
Benzo(k)fluoranthene	ug/kg	ND	6.7	0.63	04/29/16 10:37	
Chrysene	ug/kg	ND	6.7	0.44	04/29/16 10:37	
Dibenz(a,h)anthracene	ug/kg	ND	6.7	0.88	04/29/16 10:37	
Fluoranthene	ug/kg	ND	6.7	0.44	04/29/16 10:37	
Fluorene	ug/kg	ND	6.7	0.58	04/29/16 10:37	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	6.7	0.79	04/29/16 10:37	
Phenanthrene	ug/kg	ND	6.7	0.67	04/29/16 10:37	
Pyrene	ug/kg	ND	6.7	0.54	04/29/16 10:37	
2-Fluorobiphenyl (S)	%	62	35-141		04/29/16 10:37	
Terphenyl-d14 (S)	%	89	64-141		04/29/16 10:37	

LABORATORY CONTROL SAMPLE: 1066126

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	133	94.4	71	43-113	
Acenaphthylene	ug/kg	133	97.6	73	41-114	
Anthracene	ug/kg	133	105	79	59-115	
Benzo(a)anthracene	ug/kg	133	129	96	62-122	
Benzo(a)pyrene	ug/kg	133	138	103	56-113	
Benzo(b)fluoranthene	ug/kg	133	129	97	43-138	
Benzo(g,h,i)perylene	ug/kg	133	130	97	47-143	
Benzo(k)fluoranthene	ug/kg	133	139	104	52-138	
Chrysene	ug/kg	133	141	106	64-119	
Dibenz(a,h)anthracene	ug/kg	133	126	94	59-133	
Fluoranthene	ug/kg	133	119	89	64-122	
Fluorene	ug/kg	133	96.0	72	46-114	
Indeno(1,2,3-cd)pyrene	ug/kg	133	127	95	59-132	
Phenanthrene	ug/kg	133	97.8	73	42-122	
Pyrene	ug/kg	133	122	92	64-117	
2-Fluorobiphenyl (S)	%			57	35-141	
Terphenyl-d14 (S)	%			86	64-141	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Lysander, NY
Pace Project No.: 30180277

QC Batch: PMST/6105 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30180277002, 30180277003, 30180277004, 30180277005, 30180277006, 30180277007, 30180277008, 30180277009

SAMPLE DUPLICATE: 1067084

Parameter	Units	30180255001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	22.7	22.4	1	20	

SAMPLE DUPLICATE: 1067085

Parameter	Units	30180277002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.2	16.4	5	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Lysander, NY
Pace Project No.: 30180277

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: MSV/28161

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28209

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28210

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/28227

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
ip	Benzo(b)fluoranthene and benzo(k)fluoranthene were separated in the check standard but did not meet the resolution criteria in SW846 Method 8270D. Whereas sample results included are reported as individual isomers, the lab and the customer must recognize them as an isomeric pair.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lysander, NY
Pace Project No.: 30180277

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30180277002	**PZ101 (4.0-6.0)**	EPA 3546	OEXT/28188	EPA 8270D by SIM	MSSV/9301
30180277003	**PZ101 (6.0-8.0)**	EPA 3546	OEXT/28188	EPA 8270D by SIM	MSSV/9301
30180277004	**PZ101 (8.0-10.0)**	EPA 3546	OEXT/28253	EPA 8270D by SIM	MSSV/9330
30180277005	**PZ101 (10.0-12.0)**	EPA 3546	OEXT/28188	EPA 8270D by SIM	MSSV/9301
30180277006	**PZ101 (12.0-14.0)**	EPA 3546	OEXT/28188	EPA 8270D by SIM	MSSV/9301
30180277007	**PZ101 (14.0-16.0)**	EPA 3546	OEXT/28188	EPA 8270D by SIM	MSSV/9301
30180277008	**PZ101 (16.0-18.0)**	EPA 3546	OEXT/28188	EPA 8270D by SIM	MSSV/9301
30180277009	**PZ101 (20.0-22.0)**	EPA 3546	OEXT/28253	EPA 8270D by SIM	MSSV/9330
30180277002	**PZ101 (4.0-6.0)**	EPA 5035A	MSV/28209	EPA 8260C	MSV/28218
30180277003	**PZ101 (6.0-8.0)**	EPA 5035A	MSV/28209	EPA 8260C	MSV/28218
30180277004	**PZ101 (8.0-10.0)**	EPA 5035A	MSV/28210	EPA 8260C	MSV/28219
30180277005	**PZ101 (10.0-12.0)**	EPA 5035A	MSV/28210	EPA 8260C	MSV/28219
30180277006	**PZ101 (12.0-14.0)**	EPA 5035A	MSV/28210	EPA 8260C	MSV/28219
30180277007	**PZ101 (14.0-16.0)**	EPA 5035A	MSV/28210	EPA 8260C	MSV/28219
30180277008	**PZ101 (16.0-18.0)**	EPA 5035A	MSV/28209	EPA 8260C	MSV/28218
30180277008	**PZ101 (16.0-18.0)**	EPA 5035A	MSV/28227	EPA 8260C	MSV/28241
30180277009	**PZ101 (20.0-22.0)**	EPA 5035A	MSV/28209	EPA 8260C	MSV/28218
30180277009	**PZ101 (20.0-22.0)**	EPA 5035A	MSV/28227	EPA 8260C	MSV/28241
30180277001	**TRIP BLANK**	EPA 8260C	MSV/28161		
30180277002	**PZ101 (4.0-6.0)**	ASTM D2974-87	PMST/6105		
30180277003	**PZ101 (6.0-8.0)**	ASTM D2974-87	PMST/6105		
30180277004	**PZ101 (8.0-10.0)**	ASTM D2974-87	PMST/6105		
30180277005	**PZ101 (10.0-12.0)**	ASTM D2974-87	PMST/6105		
30180277006	**PZ101 (12.0-14.0)**	ASTM D2974-87	PMST/6105		
30180277007	**PZ101 (14.0-16.0)**	ASTM D2974-87	PMST/6105		
30180277008	**PZ101 (16.0-18.0)**	ASTM D2974-87	PMST/6105		
30180277009	**PZ101 (20.0-22.0)**	ASTM D2974-87	PMST/6105		

Laboratory Management Program LaMP Chain of Custody Record

BP Site Node Path: _____ Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X

BP Facility No: _____ Lab Work Order Number: _____

Lab Name: Pace Analytical Serices	Facility Address: 7430 Hillside Rd,	Consultant/Contractor: Arcadis
Lab Address: 1638 Roseytown Rd, Greensburg, PA 15601	City, State, ZIP Code: Lysand	Consultant/Contractor Project No:
Lab PM: Tina Sayer	Lead Regulatory Agency: NYS	Address: B0090004.0002.00001
Lab Phone: 317-228-3127	California Global ID No.:	Consultant/Contractor PM: Vin Maresco
Lab Shipping A Yes	Enfos Proposal No:	Phone: 315-671-9256 Email: vin.maresco@arcadis.com
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor ___

BP Project Manager (PM): John A. Frankenthal

BP PM Phone: 312.809.4117

BP PM Email: John.Frankenthal@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: CP-51 listed vols for via 8260	MTBE	Ethanal	CP-51 listed semi-vols for via 8270	Report Type & QC Level
	TRIP BLANK	4/18/16	—		X							2		X	X	X	X	001
	PZ101 (4.0-6.0)		0830	X					2					X	X	X	X	002
	PZ101 (6.0-8.0)		0835	X					2					X	X	X	X	003
	PZ101 (8.0-10.0)		0850	X					2					X	X	X	X	004
	PZ101 (10.0-12.0)		0855	X					2					X	X	X	X	005
	PZ101 (12.0-14.0)		0920	X					2					X	X	X	X	006
	PZ101 (14.0-16.0)		0925	X					2					X	X	X	X	007
	PZ101 (16.0-18.0)		0955	X					2					X	X	X	X	006 008
	PZ101 (20.0-22.0)	↓	1030	X					2					X	X	X	X	007 009

WO#:30180277

dw 4/19/16

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Ethan Ulm						
Sampler's Company: ARCADIS	[signature] / ARCADIS	4/18/16	1200	[signature] PACE	4/18/16	12:00
Shipment Method: courier pick up Ship Date:	[signature] PACE	4/18/16	16:00	[signature]	4/19/16	0950
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 4.4 °F/C | Trip Blank: (Yes) / No | MS/MSD Sample Submitted: Yes / No

BP Remediation Management COC - Effective Date: starting August 16, 2011.

BP LaMP COC Rev. 8, 24 June 2012

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Buckeye Project # 30180277

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 776132439850

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Thermometer Used 6 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 4.9 °C Correction Factor: 0.0 °C Final Temp: 4.9 °C

Temp should be above freezing to 6°C

Date and initials of person examining contents: KLL 4/19/16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WT, SL	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used: -Pace Containers Used:	X X			10.
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.			X	13.
All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics			X	Initial when completed KLL Date/time of preservation Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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